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CURVES AND TABLES OF NEUTRON CROSS SECTIONS OF FISSION PRODUCT NUCLEI IN JENDL-3

June 1992

(Ed.) Tsuneo NAKAGAWA

日 本 原 子 力 研 究 所
Japan Atomic Energy Research Institute

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Curves and Tables of Neutron Cross Sections of Fission Product Nuclei in JENDL-3

(Ed.) Tsuneo NAKAGAWA

Department of Physics
Tokai Research Establishment
Japan Atomic Energy Research Institute
Tokai-mura, Naka-gun, Ibaraki-ken

(Received April 27, 1992)

Neutron cross sections of 172 nuclei in the fission product region stored in JENDL-3 are shown in graphs and tables. The evaluation work of these nuclei was made by the Fission Product Nuclear Data Working Group of the Japanese Nuclear Data Committee, in the neutron energy region from 10^{-5} eV to 20 MeV. Almost all the cross section data are reproduced in graphs in this report. The cross sections averaged over 38 energy intervals are listed in a table. Shown in other tables are thermal cross sections, resonance integrals, Maxwellian neutron flux average cross sections, fission spectrum average cross sections, 14-MeV cross sections, one group average cross sections in neutron flux of typical types of fission reactors and average cross sections in the 30-keV Maxwellian spectrum.

Keywords: Neutron Cross Section, Fission Product Nuclide, JENDL-3, Graph, Table, Thermal Cross Section, Resonance Integral, Average Cross Section

JAERI-M 92-077

JENDL-3核分裂生成物核種の中性子断面積の図・表

日本原子力研究所東海研究所物理部
（編）中川　庸雄

（1992年4月27日受理）

JENDL-3に格納されている172核分裂生成物核種の中性子断面積を図と表で示した。データの評価はシグマ委員会のFP核データワーキンググループで行われたもので，10^{-5}eVから20MeVのエネルギー範囲でデータが与えられている。本報告には，それらのほとんど全ての断面積データを図で示した。また，38群エネルギー間隔で平均した断面積を表にした。さらに，他の表では，熱中性子断面積，共鳴積分値，マックスウェルスペクトル平均断面積，核分裂スペクトル平均断面積，14MeVの断面積，典型的な原子炉の中性子束での平均断面積および30keVのマックスウェルスペクトル平均断面積を示した。

東海研究所：〒319-11　茨城県那珂郡東海村白方字白根2-4

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1. Preface

The JENDL-3 general purpose file (JENDL-3.0) was released in 1989 with the evaluated data for 171 nuclei.[1] In 1991, it was revised to JENDL-3.1 by adding the data for 172 nuclei in the fission product region evaluated by the Fission Product Nuclear Data Working Group[2] of the Japanese Nuclear Data Committee, and by correcting some minor errors. The part of JENDL-3 for the 172 nuclei in the fission product region is sometimes called as the JENDL-3 Fission Product Nuclear Data File (or Library). Finally, JENDL-3 contains the evaluated data for 324 nuclei[a]. The 172 nuclei in the fission product region are listed in Table 1 together with their MAT numbers, abundance of stable nuclei or half-lives of unstable ones, their spin and parity of ground state, and energy boundaries of the resolved and unresolved resonance regions. The data of abundance or half-life, spin and parity were taken from the wallet cards compiled by Tuli[3] which are based on the Evaluated Nuclear Structure Data File (ENSDF) as of March 1990.

This document provides graphs and tables concerning neutron induced reaction cross sections of the 172 nuclei in the fission product region stored in JENDL-3.1. The format of the graphs and tables is almost the same as that of JAERI-M 90-099[4] which shows the data of 171 nuclei in JENDL-3.0.

The figures of the cross sections are given in Chapter 2, and the tables in Chapters 3 to 6, which are briefly explained in the following sections. To make the graphs and tables of the cross sections, the data were processed first with RESENDD[5] to make pointwise cross-section files by reconstructing the cross sections at 0 K in the resonance region with an accuracy of 1.0 %. Therefore, it should be noted that the accuracy of data listed in the present tables is better than 1.0 % but not much better than 1.0 %, except the 2200-m/s cross sections which were calculated exactly at 0.0253 eV.

1.1 Figures

Three kinds of figures are given in Chapter 2 for each nuclide.

(1) Figures containing the total, elastic and inelastic scattering, and capture cross sections

Curves of these cross sections are given in the energy range from 10^{-2} eV to 20 MeV.

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[a] The data for 19 nuclei are compiled in the both parts of the JENDL-3 general purpose file for 171 nuclei and the JENDL-3 Fission Product Nuclear Data File.

These graphs were made from the pointwise cross-section files constructed with RESENDD.

(2) Figures of average values of the total, elastic scattering and capture cross sections

The cross sections in the resonance region are overlapped in the graphs made from the pointwise files. In order to show average tendencies of cross section curves, the cross sections averaged over the 70 energy intervals from 0.32242 eV to 10 MeV with a constant weight are shown in the figures in the energy range from 10^{-2} eV to 10 MeV.

For some nuclei, the (n,α) cross section is not small even in the thermal neutron energy region. For such nuclei, the (n,α) cross section is also given in these graphs. They are ^{123}Te, ^{143}Nd, ^{145}Nd, ^{147}Sm, ^{149}Sm, ^{151}Eu, ^{153}Eu, ^{152}Gd, ^{155}Gd and ^{157}Gd. The nuclide of ^{109}Ag has also the (n,α) cross section in the thermal cross section. However, it is not given in the graph because it is too small as is listed in the table of 38-energy interval average cross sections.

(3) Figures of threshold reactions

All the threshold reaction cross sections having values larger than 0.1 mb are displayed on the figures.

1.2 Tables

The following four kinds of tables are made. They are given in Chapters 3 to 6, respectively.

(1) Tables of cross sections averaged over energy intervals in 38-energy group structure from 10^{-5} eV to 20 MeV

The cross sections were averaged with a constant weight, namely,

$$\overline{\sigma_i} = \frac{1}{E_{i+1}-E_i} \int_{E_i}^{E_{i+1}} \sigma(E)dE \ .$$

Each decade of energies was divided into four intervals expect for the energy region below 10^{-2} eV where was only one energy interval. The last interval from 10 to 20 MeV is too wide to know the shape of the threshold reaction cross sections. In such cases, the third figure of each nuclide is helpful for users to get the information of shape and magnitude of the threshold reaction cross sections.

(2) A table of the 2200-m/s and 14-MeV cross sections, resonance integral, Maxwellian and fission spectrum average cross sections

The 2200-m/s cross sections were taken from the pointwise cross sections at 0 K calculated with RESENDD. The Maxwellian neutron flux average cross sections were calculated in the energy interval from 10^{-5} eV to 3.0 eV with the neutron flux at the temperature of 0.0253 eV. The resonance integral was calculated from the pointwise cross sections by assuming a cut-off energy of 0.5 eV, except for the total and elastic scattering cross sections. For the reactions whose Q-values are negative, their threshold energies are given in the place of these thermal data.

The 14-MeV cross sections are listed for all the reactions. The fission spectrum average cross sections were obtained by using the Watt-type spectrum of the ^{235}U thermal neutron induced fission given in the ENDF/B-V standard data file[6]:

$$\chi(E) = \sqrt{4/(\pi a^3 b)} \times \exp(-ab/4 - E/a) \times \sinh\sqrt{bE} ,$$

where a and b are 0.988 MeV and 2.249 MeV^{-1}, respectively. This spectrum is the same as that used to make a corresponding table in JAERI-M 90-099. The integral was performed in the energy range from 10^{-5} eV to 20 MeV.

(3) A table of one-group average cross sections

The one-group cross sections were simply calculated as

$$\bar{\sigma} = \frac{\int \varphi(E)\sigma(E)dE}{\int \varphi(E)dE},$$

where $\varphi(E)$ is neutron flux. Five kinds of neutron flux data of the following typical reactors were used.

- o BWR

  40 % void ratio, temperature = 286 K, no burn-up.

- o PWR

  UO_2 fuel, the volume ratio of moderator to fuel = 1.9.

- o High Conversion Light Water Reactor (HCLWR (Vm/Vf=1.4))

  UO_2-PuO_2(MOX) fuel, the volume ratio of moderator to fuel = 1.4.

- High Conversion Light Water Reactor (HCLWR (Vm/Vf=0.5))
  UO_2-PuO_2(MOX) fuel, the volume ratio of moderator to fuel = 0.5.
- Large liquid metal fast breeder reactor (LMFBR)
  MOX fuel, reactor power = 2600 MWt.

The neutron flux for BWR was calculated by Ando[7]. Cell average flux of BWR was used in the present work. The other 4 spectra were obtained by Akie[8] by means of 90-group lattice calculation with SRAC system[9] based on JENDL-2[10].

These neutron flux data were originally provided in a multi-group structure. In the present calculation, however, they were changed into a pointwise form by simply selecting the energy points of the root-mean square of the energy boundaries, and connecting them by linear interpolation in a log-log scale.

$$E_{c,i} = \sqrt{E_i \times E_{i+1}} ,$$

where E_i and E_{i+1} are lower and upper boundaries of the i-th interval. In the lowest energy intervals, the neutron flux was extrapolated to 10^{-5} eV by assuming the neutron flux in the Maxwellian shape. Above 10 MeV, the values are not defined in the original flux data. Therefore, the fission spectra of ^{235}U and ^{239}Pu in JENDL-3 which were based on the recommendation of Madland and Nix[12] were used tentatively in this energy region. The neutron flux of the BWR, PWR and HCLWR(Vm/Vf=1.4) was connected to the ^{235}U thermal fission spectrum, the neutron flux of the HCLWR(Vm/Vf=0.5) to the ^{239}Pu thermal fission spectrum, and the neutron flux of the large LMFBR to the ^{239}Pu fast fission spectrum for the incident neutron energy of 1 MeV. Those neutron flux data used in the present work are shown in Figs. 1 to 5 together with the originally given multi-group ones. The numerical data of the fluxes are listed in Tables 2 to 6.

(4) A table of 30-keV Maxwellian spectrum average capture cross sections

The capture cross sections averaged with a 30-keV Maxwellian spectrum are of importance for astronomy in order to study a slow capture process (s process). The average cross sections were obtained as follows:

$$\bar{\sigma} = \frac{2}{\sqrt{\pi}} \frac{\int_{E_1}^{E_2} \sigma(E) E \exp(-E/kT) dE}{\int_{E_1}^{E_2} E \exp(-E/kT) dE},$$

where, kT = 30 keV, and E_1 and E_2 are 100 eV and 1 MeV. In the table, the average values are compared with those recommended by Bao and Kaeppler[11].

Acknowledgements

This report is one of products of the Fission Product Nuclear Data Working Group of the Japanese Nuclear Data Committee. The editor appreciates all the members of the working group for their great efforts of the data evaluation and for many valuable comments on this report. He also appreciates Dr. R. Ando of Toshiba Corp. and Dr. H. Akie of JAERI for preparation of the neutron flux data of BWR, PWR, HCLWR and LMFBR.

He thanks Miss S. Ishibashi for her efforts in rearranging the figures.

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Table 1 Nuclei in the fission product region stored in JENDL-3

No	Nuclide	MAT	Abundance* or $T_{1/2}$	spin* parity	Resonance region (eV)** E_1	E_2	E_3
1	33-As- 75	3301	100 %	3/2-	1.0E-5	9.7000E+3	1.0E+5
2	34-Se- 74	3401	0.89 %	0 +	1.0E-5	2.6000E+3	1.0E+5
3	34-Se- 76	3402	9.36 %	0 +	1.0E-5	9.0000E+3	1.0E+5
4	34-Se- 77	3403	7.63 %	1/2-	1.0E-5	2.7000E+3	1.0E+5
5	34-Se- 78	3404	23.78 %	0 +	1.0E-5	1.2000E+4	1.0E+5
6	34-Se- 79	3405	< 6.5E+4y	7/2+	no RRP	3.8000E+1	1.0E+5
7	34-Se- 80	3406	49.61 %	0 +	1.0E-5	3.5000E+4	1.0E+5
8	34-Se- 82	3407	1.4E+20y 8.73 %	0 +	1.0E-5	1.8000E+4	1.0E+5
9	35-Br- 79	3501	50.69 %	3/2-	1.0E-5	5.5000E+3	1.0E+5
10	35-Br- 81	3502	49.31 %	3/2-	1.0E-5	1.3000E+4	1.0E+5
11	36-Kr- 78	3601	0.35 %	0 +	1.0E-5	8.0000E+2	1.0E+5
12	36-Kr- 80	3602	2.25 %	0 +	1.0E-5	1.0000E+3	1.0E+5
13	36-Kr- 82	3603	11.6 %	0 +	1.0E-5	4.0000E+2	1.0E+5
14	36-Kr- 83	3604	11.5 %	9/2+	1.0E-5	2.7200E+2	1.0E+5
15	36-Kr- 84	3605	57.0 %	0 +	1.0E-5	2.4800E+3	1.0E+5
16	36-Kr- 85	3606	10.756 y	9/2+	no RRP	1.0000E+3	1.0E+5
17	36-Kr- 86	3607	17.3 %	0 +	1.0E-5	6.4000E+5	no URP
18	37-Rb- 85	3701	72.17 %	5/2-	1.0E-5	8.4680E+3	1.0E+5
19	37-Rb- 87	3702	4.75E+10y 27.83 %	3/2-	1.0E-5	1.2460E+4	1.0E+5
20	38-Sr- 86	3801	9.86 %	0 +	1.0E-5	3.7120E+4	1.0E+5
21	38-Sr- 87	3802	7.00 %	9/2+	1.0E-5	1.4080E+4	1.0E+5
22	38-Sr- 88	3803	82.58 %	0 +	1.0E-5	3.0000E+5	no URP
23	38-Sr- 89	3804	50.53 d	5/2+	no RRP	1.4000E+3	1.0E+5
24	38-Sr- 90	3805	29.1 y	0 +	no RRP	6.0000E+3	1.0E+5
25	39-Y - 89	3901	100 %	1/2-	1.0E-5	4.8000E+4	1.0E+5
26	39-Y - 91	3902	58.51 d	1/2-	no RRP	3.8000E+2	1.0E+5
27	40-Zr- 90	4001	51.45 %	0 +	1.0E-5	1.7100E+5	no URP
28	40-Zr- 91	4002	11.22 %	5/2+	1.0E-5	3.0160E+4	1.0E+5
29	40-Zr- 92	4003	17.15 %	0 +	1.0E-5	7.1000E+4	1.0E+5
30	40-Zr- 93	4004	1.53E+6y	5/2+	1.0E-5	1.7000E+3	1.0E+5
31	40-Zr- 94	4005	17.38 %	0 +	1.0E-5	5.3500E+4	1.0E+5
32	40-Zr- 95	4006	64.02 d	5/2+	no RRP	1.2500E+2	1.0E+5
33	40-Zr- 96	4007	>3.56E+17y 2.80 %	0 +	1.0E-5	1.0000E+5	no URP
34	41-Nb- 93	4101	100 %	9/2+	1.0E-5	7.0000E+3	1.0E+5
35	41-Nb- 94	4102	2.03E+4y	(6)+	1.0E-5	2.8000E+1	1.0E+5
36	41-Nb- 95	4103	34.97 d	9/2+	no RRP	2.5000E+1	1.0E+5
37	42-Mo- 92	4201	14.84 %	0 +	1.0E-5	5.0000E+4	1.0E+5
38	42-Mo- 94	4202	9.25 %	0 +	1.0E-5	2.0000E+4	1.0E+5
39	42-Mo- 95	4203	15.92 %	5/2+	1.0E-5	2.0000E+3	1.0E+5
40	42-Mo- 96	4204	16.68 %	0 +	1.0E-5	1.9000E+4	1.0E+5

* Abundance, $T_{1/2}$, spin and parity are taken from the nuclear Wallet Cards, J.K. Tuli (1990).

** E_1 : Lower boundary of the resolved resonance region.
E_2 : Upper boundary of the resolved resonance region (= lower boundary of the unresolved resonance region).
E_3 : Upper boundary of the unresolved resonance region.
no RRP: no resolved resonance parameters.
no URP: no unresolved resonance parameters.

Table 1 (continued)

No	Nuclide	MAT	Abundance* or $T_{1/2}$	spin* parity	Resonance region (eV)** E_1	E_2	E_3
41	42-Mo- 97	4205	9.55 %	5/2+	1.0E-5	1.8000E+3	1.0E+5
42	42-Mo- 98	4206	24.13 %	0 +	1.0E-5	3.2000E+4	1.0E+5
43	42-Mo- 99	4207	65.94 h	1/2+	no RRP	2.4000E+1	1.0E+5
44	42-Mo-100	4208	9.63 %	0 +	1.0E-5	2.6000E+4	1.0E+5
45	43-Tc- 99	4301	2.111E+5y	9/2+	1.0E-5	4.2190E+3	1.0E+5
46	44-Ru- 96	4401	5.54 %	0 +	no RRP	2.0000E+2	1.0E+5
47	44-Ru- 98	4402	1.86 %	0 +	no RRP	1.4000E+2	1.0E+5
48	44-Ru- 99	4403	12.7 %	5/2+	1.0E-5	1.0000E+3	1.0E+5
49	44-Ru-100	4404	12.6 %	0 +	1.0E-5	1.1890E+4	1.0E+5
50	44-Ru-101	4405	17.1 %	5/2+	1.0E-5	1.0600E+3	1.0E+5
51	44-Ru-102	4406	31.6 %	0 +	1.0E-5	1.3400E+4	1.0E+5
52	44-Ru-103	4407	39.26 d	(3/2)+	no RRP	1.1050E+1	1.0E+5
53	44-Ru-104	4408	18.6 %	0 +	1.0E-5	1.1120E+4	1.0E+5
54	44-Ru-106	4409	373.59 d	0 +	no RRP	5.0000E+2	1.0E+5
55	45-Rh-103	4501	100 %	1/2-	1.0E-5	3.5800E+3	1.0E+5
56	45-Rh-105	4502	35.36 h	7/2+	1.0E-5	7.5000E+0	1.0E+5
57	46-Pd-102	4601	1.02 %	0 +	1.0E-5	2.5000E+2	1.0E+5
58	46-Pd-104	4602	11.14 %	0 +	1.0E-5	2.7900E+2	1.0E+5
59	46-Pd-105	4603	22.33 %	5/2+	1.0E-5	2.0485E+3	1.0E+5
60	46-Pd-106	4604	27.33 %	0 +	1.0E-5	4.2300E+2	1.0E+5
61	46-Pd-107	4605	6.5E+6 y	5/2+	1.0E-5	3.5250E+3	1.0E+5
62	46-Pd-108	4606	26.46 %	0 +	1.0E-5	9.0000E+3	1.0E+5
63	46-Pd-110	4607	11.72 %	0 +	1.0E-5	8.0000E+3	1.0E+5
64	47-Ag-107	4701	51.839%	1/2-	1.0E-5	7.0095E+3	1.0E+5
65	47-Ag-109	4702	48.161%	1/2-	1.0E-5	7.0095E+3	1.0E+5
66	47-Ag-110m	4703	249.76 d	6 +	1.0E-5	1.2500E+2	1.0E+5
67	48-Cd-106	4801	1.25 %	0 +	1.0E-5	7.0000E+2	1.0E+5
68	48-Cd-108	4802	0.89 %	0 +	1.0E-5	3.8000E+2	1.0E+5
69	48-Cd-110	4803	12.49 %	0 +	1.0E-5	7.0000E+3	1.0E+5
70	48-Cd-111	4804	12.80 %	1/2+	1.0E-5	1.8000E+3	1.0E+5
71	48-Cd-112	4805	24.13 %	0 +	1.0E-5	7.0000E+3	1.0E+5
72	48-Cd-113	4806	9.3E+15y	1/2+	1.0E-5	2.0000E+3	1.0E+5
			12.22 %				
73	48-Cd-114	4807	28.73 %	0 +	1.0E-5	8.0000E+3	1.0E+5
74	48-Cd-116	4808	7.49 %	0 +	1.0E-5	9.0000E+3	1.0E+5
75	49-In-113	4901	4.3 %	9/2+	1.0E-5	8.3000E+2	1.0E+5
76	49-In-115	4902	4.41E+14y	9/2+	1.0E-5	2.0000E+3	1.0E+5
			95.7 %				
77	50-Sn-112	5001	0.97 %	0 +	1.0E-5	1.5000E+3	1.0E+5
78	50-Sn-114	5002	0.65 %	0 +	1.0E-5	2.5000E+3	1.0E+5
79	50-Sn-115	5003	0.36 %	1/2+	1.0E-5	9.5000E+2	1.0E+5
80	50-Sn-116	5004	14.53 %	0 +	1.0E-5	2.0000E+3	1.0E+5
81	50-Sn-117	5005	7.68 %	1/2+	1.0E-5	2.3500E+3	1.0E+5
82	50-Sn-118	5006	24.22 %	0 +	1.0E-5	4.8000E+3	1.0E+5
83	50-Sn-119	5007	8.58 %	1/2+	1.0E-5	1.3000E+3	1.0E+5
84	50-Sn-120	5008	32.59 %	0 +	1.0E-5	7.0000E+4	1.0E+5
85	50-Sn-122	5009	4.63 %	0 +	1.0E-5	2.9000E+4	1.0E+5
86	50-Sn-123	5010	129.2 d	11/2-	no RRP	2.2000E+1	1.0E+5
87	50-Sn-124	5011	5.79 %	0 +	1.0E-5	1.0700E+4	1.0E+5
88	50-Sn-126	5012	1.E+5 y	0 +	no RRP	2.0000E+3	1.0E+5
89	51-Sb-121	5101	57.36 %	5/2+	1.0E-5	2.0000E+3	1.0E+5
90	51-Sb-123	5102	42.64 %	7/2+	1.0E-5	2.5000E+3	1.0E+5

Table 1 (continued)

No	Nuclide	MAT	Abundance* or $T_{1/2}$	spin* parity	Resonance region (eV)** E_1	E_2	E_3
91	51-Sb-124	5103	60.2 d	3 -	no RRP	2.5400E+0	1.0E+5
92	51-Sb-125	5104	2.73 y	7/2+	no RRP	1.4000E+1	1.0E+5
93	52-Te-120	5201	0.095%	0 +	no RRP	6.8000E+1	1.0E+5
94	52-Te-122	5202	2.59 %	0 +	1.0E-5	5.0000E+3	1.0E+5
95	52-Te-123	5203	1.3E+13y 0.905%	1/2+	1.0E-5	7.0000E+2	1.0E+5
96	52-Te-124	5204	4.79 %	0 +	1.0E-5	7.0000E+3	1.0E+5
97	52-Te-125	5205	7.12 %	1/2+	1.0E-5	3.0000E+3	1.0E+5
98	52-Te-126	5206	18.93 %	0 +	1.0E-5	1.4700E+4	1.0E+5
99	52-Te-127m	5207	109 d	11/2-	no RRP	5.3000E+0	1.0E+5
100	52-Te-128	5208	>8.E+24y 31.70 %	0 +	1.0E-5	8.0000E+3	1.0E+5
101	52-Te-129m	5209	33.6 d	11/2-	no RRP	7.2000E+0	1.0E+5
102	52-Te-130	5210	<1.25E+21y 33.87 %	0 +	1.0E-5	3.0500E+4	1.0E+5
103	53-I -127	5301	100 %	5/2+	1.0E-5	4.2520E+3	1.0E+5
104	53-I -129	5302	1.57E+7y	7/2+	1.0E-5	3.3910E+3	1.0E+5
105	53-I -131	5303	8.04 d	7/2+	no RRP	3.0000E+1	1.0E+5
106	54-Xe-124	5401	0.10 %	0 +	1.0E-5	2.9000E+2	1.0E+5
107	54-Xe-126	5402	0.09 %	0 +	1.0E-5	4.8500E+2	1.0E+5
108	54-Xe-128	5403	1.91 %	0 +	1.0E-5	1.7000E+3	1.0E+5
109	54-Xe-129	5404	26.4 %	1/2+	1.0E-5	2.7000E+3	1.0E+5
110	54-Xe-130	5405	4.1 %	0 +	1.0E-5	3.6000E+3	1.0E+5
111	54-Xe-131	5406	21.2 %	3/2+	1.0E-5	2.2500E+3	1.0E+5
112	54-Xe-132	5407	26.9 %	0 +	1.0E-5	4.4000E+3	1.0E+5
113	54-Xe-133	5408	5.243 d	3/2+	no RRP	8.0500E+1	1.0E+5
114	54-Xe-134	5409	10.4 %	0 +	1.0E-5	1.0324E+4	1.0E+5
115	54-Xe-135	5410	9.14 h	3/2+	1.0E-5	1.9000E+2	1.0E+5
116	54-Xe-136	5411	>2.36E+21y 8.9 %	0 +	1.0E-5	4.9000E+5	no URP
117	55-Cs-133	5501	100 %	7/2+	1.0E-5	5.9800E+3	1.0E+5
118	55-Cs-134	5502	2.062 y	4 +	1.0E-5	1.7900E+2	1.0E+5
119	55-Cs-135	5503	2.3E+6 y	7/2+	1.0E-5	8.8000E+1	1.0E+5
120	55-Cs-136	5504	13.16 d	5 +	no RRP	2.9000E+1	1.0E+5
121	55-Cs-137	5505	30.1 y	7/2+	1.0E-5	1.5900E+3	1.0E+5
122	56-Ba-130	5601	0.106%	0 +	1.0E-5	2.5300E+3	1.0E+5
123	56-Ba-132	5602	0.101%	0 +	no RRP	6.8000E+1	1.0E+5
124	56-Ba-134	5603	2.42 %	0 +	1.0E-5	1.0575E+4	1.0E+5
125	56-Ba-135	5604	6.593%	3/2+	1.0E-5	5.9600E+3	1.0E+5
126	56-Ba-136	5605	7.85 %	0 +	1.0E-5	3.4490E+4	1.0E+5
127	56-Ba-137	5606	11.23 %	3/2+	1.0E-5	1.1885E+4	1.0E+5
128	56-Ba-138	5607	71.70 %	0 +	1.0E-5	1.0000E+5	no URP
129	56-Ba-140	5608	12.752 d	0 +	no RRP	1.4000E+4	1.0E+5
130	57-La-138	5701	1.05E+11y 0.0902%	5 +	1.0E-5	3.3000E+2	1.0E+5
131	57-La-139	5702	99.9098%	7/2+	1.0E-5	2.5900E+4	1.0E+5
132	58-Ce-140	5801	88.43 %	0 +	1.0E-5	2.0000E+5	no URP
133	58-Ce-141	5802	32.501 d	7/2-	1.0E-5	3.5000E+2	1.0E+5
134	58-Ce-142	5803	> 5.E+16y 11.13 %	0 +	1.0E-5	2.6000E+4	1.0E+5

Table 1 (continued)

No	Nuclide	MAT	Abundance* or $T_{1/2}$	spin* parity	Resonance region (eV)** E_1	E_2	E_3
135	58-Ce-144	5804	284.893d	0 +	no RRP	5.0000E+1	1.0E+5
136	59-Pr-141	5901	100 %	5/2+	1.0E-5	1.3226E+4	1.0E+5
137	59-Pr-143	5902	13.57 d	7/2+	no RRP	4.0000E+0	1.0E+5
138	60-Nd-142	6001	27.13 %	0 +	1.0E-5	2.6000E+4	1.0E+5
139	60-Nd-143	6002	12.18 %	7/2-	1.0E-5	5.0000E+3	1.0E+5
140	60-Nd-144	6003	2.29E+15y 23.80 %	0 +	1.0E-5	1.2000E+4	1.0E+5
141	60-Nd-145	6004	8.30 %	7/2-	1.0E-5	4.0000E+3	1.0E+5
142	60-Nd-146	6005	17.19 %	0 +	1.0E-5	1.0000E+4	1.0E+5
143	60-Nd-147	6006	10.98 d	5/2-	1.0E-5	3.6000E+1	1.0E+5
144	60-Nd-148	6007	5.76 %	0 +	1.0E-5	8.0000E+3	1.0E+5
145	60-Nd-150	6008	> 1.E+18y	0 +	1.0E-5	1.3690E+4	1.0E+5
146	61-Pm-147	6101	2.6234 y	7/2+	1.0E-5	1.0200E+2	1.0E+5
147	61-Pm-148	6102	5.370 d	1 -	no RRP	1.1000E+0	1.0E+5
148	61-Pm-148m	6103	41.29 d	6 -	1.0E-5	6.0000E-1	1.0E+5
149	61-Pm-149	6104	53.08 h	7/2+	no RRP	2.6000E+0	1.0E+5
150	62-Sm-144	6201	3.1 %	0 +	no RRP	3.0000E+1	1.0E+5
151	62-Sm-147	6202	1.06E+11y 15.0 %	7/2-	1.0E-5	1.9900E+3	1.0E+5
152	62-Sm-148	6203	7.E+15 y 11.3 %	0 +	1.0E-5	8.0000E+3	1.0E+5
153	62-Sm-149	6204	> 2.E+15 y 13.8 %	7/2-	1.0E-5	5.2000E+2	1.0E+5
154	62-Sm-150	6205	7.4 %	0 +	1.0E-5	1.5380E+3	1.0E+5
155	62-Sm-151	6206	90 y	5/2-	1.0E-5	2.4610E+2	1.0E+5
156	62-Sm-152	6207	26.7 %	0 +	1.0E-5	5.0290E+3	1.0E+5
157	62-Sm-153	6208	46.27 h	3/2+	no RRP	4.4000E+0	1.0E+5
158	62-Sm-154	6209	22.7 %	0 +	1.0E-5	4.6540E+3	1.0E+5
159	63-Eu-151	6301	47.8 %	5/2+	1.0E-5	9.8200E+1	1.0E+5
160	63-Eu-152	6302	13.542 y	3 -	1.0E-5	6.5500E+0	1.0E+5
161	63-Eu-153	6303	52.2 %	5/2+	1.0E-5	9.7200E+1	1.0E+5
162	63-Eu-154	6304	8.592 y	3 -	1.0E-5	2.6200E+1	1.0E+5
163	63-Eu-155	6305	4.68 y	5/2+	1.0E-5	2.9700E+1	1.0E+5
164	63-Eu-156	6306	15.19 d	0 +	no RRP	1.0000E+0	1.0E+5
165	64-Gd-152	6401	1.08E+14y 0.20 %	0 +	1.0E-5	2.6600E+3	1.0E+5
166	64-Gd-154	6402	2.18 %	0 +	1.0E-5	2.7600E+3	1.0E+5
167	64-Gd-155	6403	14.80 %	3/2-	1.0E-5	1.8180E+2	1.0E+5
168	64-Gd-156	6404	20.47 %	0 +	1.0E-5	2.2140E+3	1.0E+5
169	64-Gd-157	6405	15.67 %	3/2-	1.0E-5	3.0370E+2	1.0E+5
170	64-Gd-158	6406	24.84 %	0 +	1.0E-5	6.5800E+3	1.0E+5
171	64-Gd-160	6407	21.86 %	0 +	1.0E-5	4.2240E+3	1.0E+5
172	65-Tb-159	6501	100 %	3/2+	1.0E-5	1.1880E+3	1.0E+5

Table 2 Neutron flux of BWR

E(eV)	Flux	E(eV)	Flux	E(eV)	Flux
1.00000-5	9.20000-2	9.48717-4	8.37500+0	2.21349-3	1.82350+1
3.98449-3	3.13980+1	6.26149-3	4.71150+1	9.04492-3	6.45370+1
1.23336-2	8.27680+1	1.61284-2	1.00640+2	2.04287-2	1.17690+2
2.52335-2	1.32630+2	3.05483-2	1.45060+2	3.63686-2	1.54790+2
4.26934-2	1.61090+2	4.95236-2	1.64120+2	5.68585-2	1.63770+2
6.50967-2	1.60180+2	7.47579-2	1.53160+2	8.60161-2	1.42170+2
9.90530-2	1.28210+2	1.13833-1	1.11280+2	1.31056-1	9.32110+1
1.52243-1	7.34750+1	1.78688-1	5.38850+1	2.11977-1	3.62300+1
2.54097-1	2.24260+1	3.07440-1	1.32030+1	3.75025-1	7.97240+0
4.60595-1	5.28380+0	5.68625-1	3.81120+0	6.57073-1	3.20160+0
7.73454-1	2.90400+0	9.92950-1	2.19430+0	1.27500+0	1.70530+0
1.63721+0	1.32440+0	2.10205+0	1.01630+0	2.69936+0	7.85970-1
3.46637+0	6.03340-1	4.45072+0	4.66370-1	5.71476+0	3.37540-1
7.33811+0	2.55680-1	9.42360+0	2.28710-1	1.21005+1	1.81220-1
1.55337+1	1.42360-1	1.99439+1	1.02120-1	2.56096+1	8.89100-2
3.28873+1	6.71510-2	4.22300+1	5.42530-2	5.42209+1	4.37230-2
6.96204+1	3.41430-2	8.93955+1	2.89960-2	1.14800+2	1.85240-2
1.47400+2	1.66370-2	1.89266+2	1.29710-2	2.43050+2	1.02150-2
3.12060+2	7.98460-3	4.00667+2	6.31770-3	5.14428+2	4.94410-3
6.60531+2	3.86590-3	8.48165+2	3.04000-3	1.08903+3	2.38510-3
1.39853+3	1.86270-3	1.79596+3	1.45620-3	2.30596+3	1.14930-3
2.96085+3	8.95550-4	3.80131+3	7.07980-4	4.88078+3	5.56540-4
6.26747+3	4.41570-4	8.04755+3	3.43830-4	1.03336+4	2.73990-4
1.32665+4	2.18770-4	1.70317+4	1.75080-4	2.18734+4	1.39110-4
2.80903+4	1.13040-4	3.60679+4	9.23010-5	4.63126+4	7.51940-5
5.94651+4	6.24430-5	7.63526+4	5.25080-5	9.80427+4	4.44670-5
1.25868+5	3.82540-5	1.61630+5	3.31030-5	2.07578+5	2.92690-5
2.66515+5	2.64220-5	3.42177+5	2.33140-5	4.39358+5	1.57890-5
5.64187+5	1.80410-5	7.24388+5	1.68370-5	9.30120+5	1.12520-5
1.19418+6	9.30430-6	1.53347+6	7.61040-6	1.96913+6	5.64910-6
2.52820+6	4.93690-6	3.24659+6	2.82560-6	4.16888+6	1.49470-6
5.35267+6	7.66590-7	6.87272+6	2.76320-7	8.82496+6	7.50000-8
8.82496+6	7.50001-8	9.40000+6	4.70627-8	1.00000+7	2.93963-8
1.10000+7	1.33011-8	1.20000+7	5.96318-9	1.30000+7	2.65135-9
1.40000+7	1.17051-9	1.50000+7	5.13421-10	1.60000+7	2.23857-10
1.70000+7	9.73039-11	1.80000+7	4.24080-11	2.00000+7	7.89711-12

Table 3 Neutron flux of PWR

E(eV)	Flux	E(eV)	Flux	E(eV)	Flux
1.00000-5	2.90000-4	5.59920-3	1.42030-1	1.31630-2	2.83070-1
2.37740-2	4.28850-1	3.74280-2	5.46700-1	5.41370-2	6.08640-1
7.39410-2	6.08470-1	9.67460-2	5.57710-1	1.22540-1	4.75670-1
1.51440-1	3.82570-1	1.83390-1	2.93940-1	2.18390-1	2.17200-1
2.56440-1	1.60180-1	2.97540-1	1.19980-1	3.41690-1	9.57860-2
3.88890-1	7.77850-2	4.40690-1	6.63580-2	4.99370-1	5.57940-2
5.65890-1	4.84900-2	6.41250-1	4.10400-2	7.26580-1	3.59300-2
8.23290-1	3.04580-2	9.32930-1	2.68030-2	1.05700+0	2.27710-2
1.19770+0	2.07030-2	1.35730+0	1.85430-2	1.53800+0	1.64870-2
1.74260+0	1.41750-2	2.10200+0	1.18060-2	2.69940+0	9.09820-3
3.46640+0	7.29400-3	4.45070+0	5.52860-3	5.71480+0	3.92180-3
7.33810+0	2.82550-3	9.42360+0	2.71770-3	1.21010+1	2.19960-3
1.55340+1	1.75860-3	1.99440+1	1.19040-3	2.56100+1	1.11870-3
3.28870+1	8.12140-4	4.22300+1	6.97210-4	5.42210+1	5.63280-4
6.96200+1	4.36670-4	8.93950+1	3.56810-4	1.14800+2	2.64820-4
1.47400+2	2.20840-4	1.89270+2	1.72230-4	2.43050+2	1.36330-4
3.12060+2	1.07750-4	4.00670+2	8.56170-5	5.14430+2	6.71380-5
6.60530+2	5.27470-5	8.48160+2	4.17120-5	1.08900+3	3.29160-5
1.39850+3	2.58980-5	1.79600+3	2.03110-5	2.30600+3	1.60820-5
2.96080+3	1.25490-5	3.80130+3	9.90940-6	4.88080+3	7.78480-6
6.26750+3	6.20030-6	8.04760+3	4.84920-6	1.03340+4	3.88500-6
1.32670+4	3.12300-6	1.70320+4	2.45730-6	2.18730+4	1.98170-6
2.80900+4	1.59720-6	3.60680+4	1.29840-6	4.63130+4	1.05550-6
5.94650+4	8.81030-7	7.63530+4	7.30540-7	9.80430+4	6.23260-7
1.25870+5	5.39880-7	1.61630+5	4.68270-7	2.07580+5	4.14830-7
2.66520+5	3.75090-7	3.42180+5	3.28340-7	4.39360+5	2.15190-7
5.64190+5	2.43170-7	7.24430+5	2.21830-7	9.30180+5	1.45930-7
1.19420+6	1.18500-7	1.53350+6	9.56510-8	1.96910+6	7.05260-8
2.52820+6	6.18710-8	3.24660+6	3.51240-8	4.16890+6	1.87100-8
5.35270+6	9.81830-9	6.87270+6	3.62110-9	8.82500+6	8.87050-10
8.82500+6	8.87051-10	9.40000+6	5.56640-10	1.00000+7	3.47688-10
1.10000+7	1.57320-10	1.20000+7	7.05303-11	1.30000+7	3.13592-11
1.40000+7	1.38444-11	1.50000+7	6.07256-12	1.60000+7	2.64769-12
1.70000+7	1.15088-12	1.80000+7	5.02533-13	2.00000+7	9.34042-14

Table 4 Neutron flux of HCLWR(Vm/Vf=1.4)

E(eV)	Flux	E(eV)	Flux	E(eV)	Flux
1.00000-5	3.20000-5	5.59890-3	1.56550-2	1.31620-2	3.05610-2
2.37740-2	4.62250-2	3.74280-2	6.03080-2	5.41370-2	6.87350-2
7.39410-2	7.07800-2	9.67460-2	6.73830-2	1.22540-1	5.95590-2
1.51440-1	4.96170-2	1.83390-1	3.89750-2	2.18390-1	2.90730-2
2.56440-1	2.29200-2	2.97540-1	1.89800-2	3.41690-1	1.90150-2
3.88890-1	2.07580-2	4.40690-1	2.42660-2	4.99370-1	2.42970-2
5.65890-1	2.38560-2	6.41250-1	2.09670-2	7.26580-1	1.83980-2
8.23290-1	1.40560-2	9.32930-1	9.29610-3	1.05700+0	6.22380-3
1.19770+0	9.48440-3	1.35730+0	1.26560-2	1.53800+0	1.28910-2
1.74260+0	1.16100-2	2.10200+0	9.89460-3	2.69940+0	6.45830-3
3.46640+0	6.61810-3	4.45070+0	4.67610-3	5.71480+0	3.42130-3
7.33810+0	2.28420-3	9.42360+0	2.59210-3	1.21010+1	1.87620-3
1.55340+1	1.52890-3	1.99440+1	1.12660-3	2.56100+1	1.14920-3
3.28870+1	8.51550-4	4.22300+1	6.69910-4	5.42210+1	5.59070-4
6.96200+1	4.40250-4	8.93950+1	3.63160-4	1.14800+2	2.88670-4
1.47400+2	2.40130-4	1.89270+2	1.91530-4	2.43050+2	1.51390-4
3.12060+2	1.21150-4	4.00670+2	9.77260-5	5.14430+2	7.63160-5
6.60530+2	6.10450-5	8.48160+2	4.82130-5	1.08900+3	3.81690-5
1.39850+3	3.02040-5	1.79600+3	2.38670-5	2.30600+3	1.88130-5
2.96080+3	1.47050-5	3.80130+3	1.16920-5	4.88080+3	9.19120-6
6.26750+3	7.38520-6	8.04760+3	5.74520-6	1.03340+4	4.58460-6
1.32670+4	3.67860-6	1.70320+4	2.98100-6	2.18730+4	2.36500-6
2.80900+4	1.90440-6	3.60680+4	1.54860-6	4.63130+4	1.25590-6
5.94650+4	1.05310-6	7.63530+4	8.75880-7	9.80430+4	7.45580-7
1.25870+5	6.43180-7	1.61630+5	5.61030-7	2.07580+5	4.98060-7
2.66520+5	4.50190-7	3.42180+5	3.90500-7	4.39360+5	2.50540-7
5.64190+5	2.88270-7	7.24430+5	2.60620-7	9.30180+5	1.68960-7
1.19420+6	1.35080-7	1.53350+6	1.08780-7	1.96910+6	8.01180-8
2.52820+6	7.25030-8	3.24660+6	4.16850-8	4.16890+6	2.25730-8
5.35270+6	1.23340-8	6.87270+6	4.73510-9	8.82500+6	1.21410-9
8.82500+6	1.21410-9	9.40000+6	7.61870-10	1.00000+7	4.75879-10
1.10000+7	2.15324-10	1.20000+7	9.65344-11	1.30000+7	4.29211-11
1.40000+7	1.89487-11	1.50000+7	8.31147-12	1.60000+7	3.62388-12
1.70000+7	1.57520-12	1.80000+7	6.87814-13	2.00000+7	1.27842-13

Table 5 Neutron flux of HCLWR(Vm/Vf=0.5)

E(eV)	Flux	E(eV)	Flux	E(eV)	Flux
1.00000-5	3.30000-6	5.59890-3	1.63890-3	1.31620-2	3.22540-3
2.37740-2	5.01570-3	3.74280-2	7.03930-3	5.41370-2	8.44480-3
7.39410-2	9.17650-3	9.67460-2	9.37270-3	1.22540-1	8.78000-3
1.51440-1	7.74610-3	1.83390-1	6.36320-3	2.18390-1	4.82900-3
2.56440-1	4.05590-3	2.97540-1	3.44520-3	3.41690-1	3.88750-3
3.88890-1	4.76530-3	4.40690-1	6.58910-3	4.99370-1	7.25660-3
5.65890-1	7.79060-3	6.41250-1	7.03360-3	7.26580-1	6.27590-3
8.23290-1	4.50400-3	9.32930-1	2.68380-3	1.05700+0	1.60290-3
1.19770+0	3.25860-3	1.35730+0	5.58000-3	1.53800+0	6.46390-3
1.74260+0	6.09460-3	2.10200+0	5.29310-3	2.69940+0	3.21530-3
3.46640+0	3.87400-3	4.45070+0	2.58820-3	5.71480+0	1.85780-3
7.33810+0	1.19130-3	9.42360+0	1.63200-3	1.21010+1	1.13370-3
1.55340+1	9.60910-4	1.99440+1	7.25910-4	2.56100+1	8.71280-4
3.28870+1	6.40020-4	4.22300+1	5.01030-4	5.42210+1	4.36200-4
6.96200+1	3.56450-4	8.93950+1	3.05360-4	1.14800+2	2.54140-4
1.47400+2	2.21360-4	1.89270+2	1.82200-4	2.43050+2	1.47830-4
3.12060+2	1.22610-4	4.00670+2	9.49530-5	5.14430+2	7.88630-5
6.60530+2	6.50780-5	8.48160+2	5.21060-5	1.08900+3	4.14340-5
1.39850+3	3.40380-5	1.79600+3	2.75880-5	2.30600+3	2.13830-5
2.96080+3	1.69160-5	3.80130+3	1.37610-5	4.88080+3	1.08850-5
6.26750+3	8.64210-6	8.04760+3	6.60990-6	1.03340+4	5.52140-6
1.32670+4	4.53340-6	1.70320+4	3.37910-6	2.18730+4	2.90340-6
2.80900+4	2.39840-6	3.60680+4	1.85410-6	4.63130+4	1.57160-6
5.94650+4	1.29330-6	7.63530+4	1.10930-6	9.80430+4	9.31030-7
1.25870+5	8.33570-7	1.61630+5	6.87310-7	2.07580+5	6.16780-7
2.66520+5	5.55770-7	3.42180+5	4.68950-7	4.39360+5	2.73620-7
5.64190+5	3.36820-7	7.24430+5	2.91690-7	9.30180+5	1.65990-7
1.19420+6	1.27040-7	1.53350+6	9.83930-8	1.96910+6	7.02250-8
2.52820+6	6.38620-8	3.24660+6	3.42110-8	4.16890+6	1.77750-8
5.35270+6	9.43780-9	6.87270+6	3.50720-9	8.82500+6	8.83480-10
8.82500+6	8.83480-10	9.00000+6	7.54649-10	9.80000+6	4.20792-10
1.10000+7	1.73089-10	1.20000+7	8.17950-11	1.30000+7	3.83703-11
1.40000+7	1.78768-11	1.50000+7	8.28052-12	1.60000+7	3.81767-12
1.70000+7	1.75257-12	1.80000+7	7.98491-13	2.00000+7	1.66718-13

Table 6 Neutron flux of LMFBR

E(eV)	Flux	E(eV)	Flux	E(eV)	Flux
1.00000- 5	2.36380-22	1.82810- 4	2.36380-22	5.59920- 3	1.24540-21
1.31630- 2	4.01420-21	2.37740- 2	1.26070-20	3.74280- 2	4.64600-20
5.41370- 2	1.38590-19	7.39410- 2	3.35690-19	9.67460- 2	9.35220-19
1.22540- 1	1.92170-18	1.51440- 1	3.41580-18	1.83390- 1	5.55930-18
2.18390- 1	8.30150-18	2.56440- 1	1.29130-17	2.97540- 1	2.84070-17
3.41690- 1	9.68450-17	3.88890- 1	3.76890-16	4.40690- 1	1.30690-15
4.99370- 1	3.55220-15	5.65890- 1	8.36050-15	6.41250- 1	1.72920-14
7.26580- 1	3.17970-14	8.23290- 1	4.96270-14	9.32930- 1	5.23860-14
1.05700+ 0	7.61220-14	1.19770+ 0	6.69190-13	1.35730+ 0	3.28170-12
1.53800+ 0	7.26080-12	1.74260+ 0	1.14890-11	2.10200+ 0	1.51510-11
2.69940+ 0	1.90500-11	3.46640+ 0	4.74390-11	4.45070+ 0	5.29150-11
5.71480+ 0	1.07510-10	7.33810+ 0	2.55660-10	9.42360+ 0	1.26660- 9
1.21010+ 1	2.20630- 9	1.55340+ 1	5.71380- 9	1.99440+ 1	1.57330- 8
2.56100+ 1	5.42170- 8	3.28870+ 1	7.86790- 8	4.22300+ 1	1.18300- 7
5.42210+ 1	2.73980- 7	6.96200+ 1	5.12980- 7	8.93950+ 1	1.21000- 6
1.14800+ 2	1.89400- 6	1.47400+ 2	3.44250- 6	1.89270+ 2	5.15680- 6
2.43050+ 2	6.98800- 6	3.12060+ 2	9.09940- 6	4.00670+ 2	9.16360- 6
5.14430+ 2	1.36080- 5	6.60530+ 2	1.73710- 5	8.48160+ 2	1.94890- 5
1.08900+ 3	2.09500- 5	1.39850+ 3	2.35270- 5	1.79600+ 3	2.10100- 5
2.30600+ 3	1.13740- 5	2.96080+ 3	2.34260- 6	3.80130+ 3	6.61760- 6
4.88080+ 3	8.97050- 6	6.26750+ 3	8.61050- 6	8.04760+ 3	7.21260- 6
1.03340+ 4	8.09680- 6	1.32670+ 4	7.13280- 6	1.70320+ 4	5.14690- 6
2.18730+ 4	6.00780- 6	2.80900+ 4	5.51410- 6	3.60680+ 4	3.97550- 6
4.63130+ 4	3.79570- 6	5.94650+ 4	2.43760- 6	7.63530+ 4	2.68370- 6
9.80430+ 4	2.12830- 6	1.25870+ 5	1.87920- 6	1.61630+ 5	1.27740- 6
2.07580+ 5	1.05500- 6	2.66520+ 5	8.19930- 7	3.42180+ 5	6.21020- 7
4.39360+ 5	3.11390- 7	5.64190+ 5	3.87050- 7	7.24430+ 5	2.38340- 7
9.30180+ 5	1.18810- 7	1.19420+ 6	8.46150- 8	1.53350+ 6	6.21150- 8
1.96910+ 6	4.09800- 8	2.52820+ 6	3.19490- 8	3.24660+ 6	1.60410- 8
4.16890+ 6	7.86650- 9	5.35270+ 6	3.82370- 9	6.87270+ 6	1.37460- 9
8.82500+ 6	3.53690-10	8.82500+ 6	3.53690-10	9.00000+ 6	3.04666-10
9.80000+ 6	1.71501-10	1.10000+ 7	7.15838-11	1.20000+ 7	3.42460-11
1.30000+ 7	1.62657-11	1.40000+ 7	7.67491-12	1.50000+ 7	3.60059-12
1.60000+ 7	1.68221-12	1.70000+ 7	7.81738-13	2.00000+ 7	7.81164-14

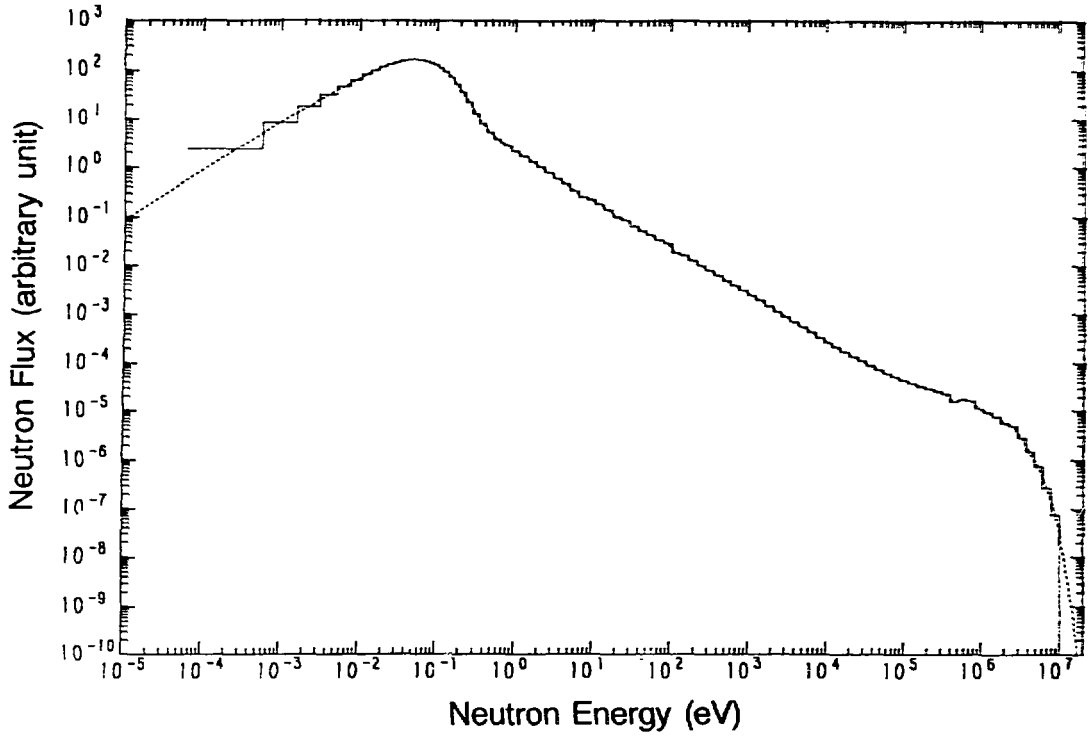


Fig. 1 Neutron flux of BWR

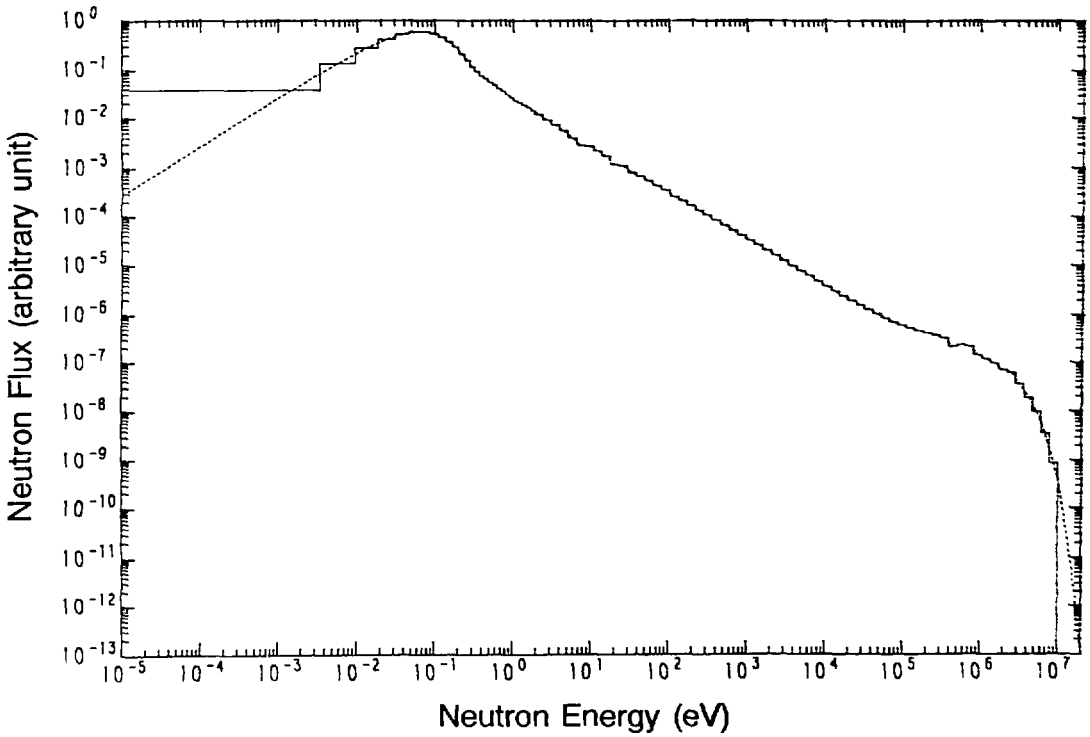


Fig. 2 Neutron flux of PWR

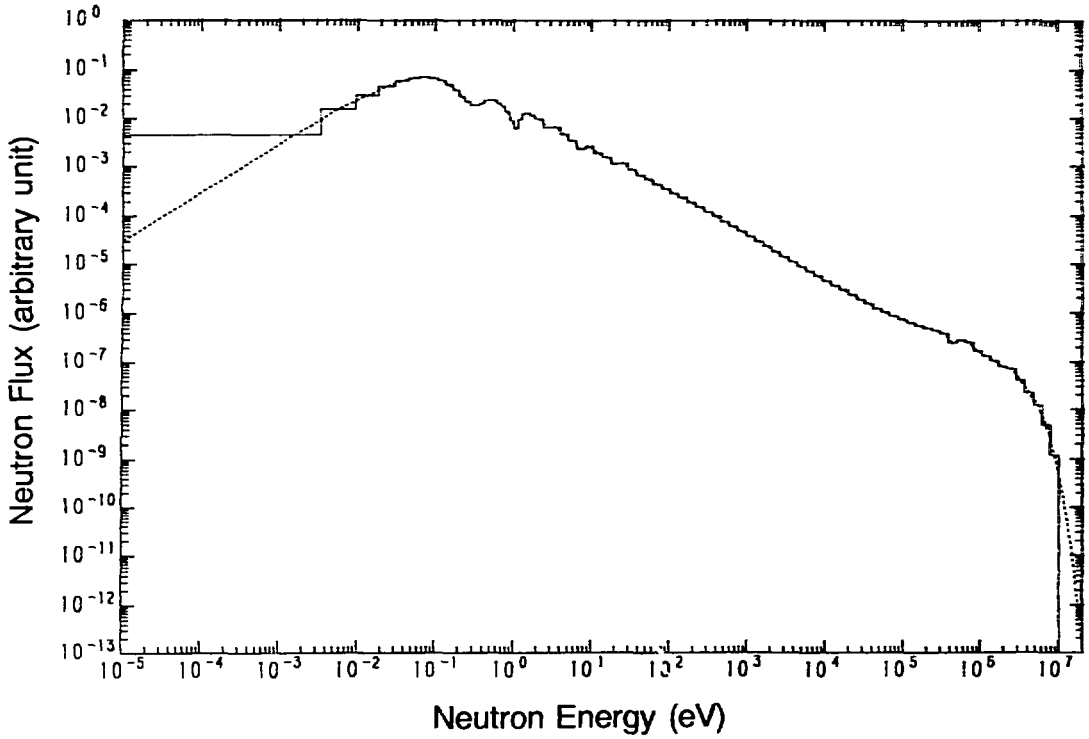


Fig. 3 Neutron flux of HCLWR (Vm/Vf=1.4)

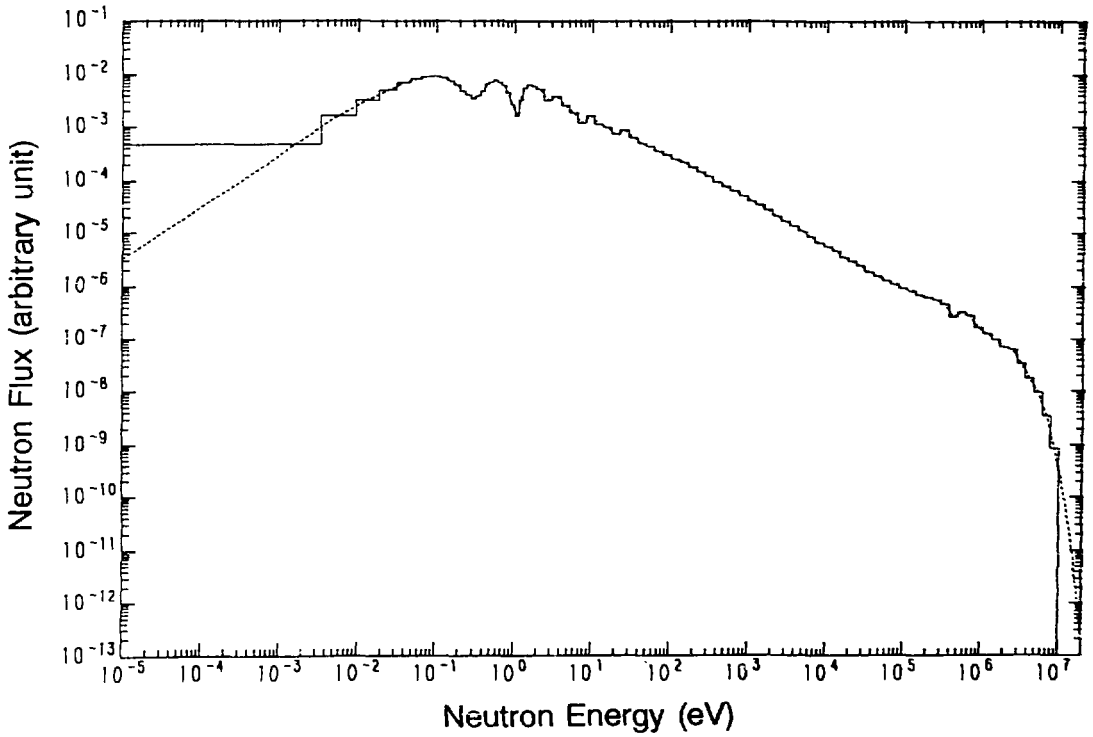


Fig. 4 Neutron flux of HCLWR (Vm/Vf=0.5)

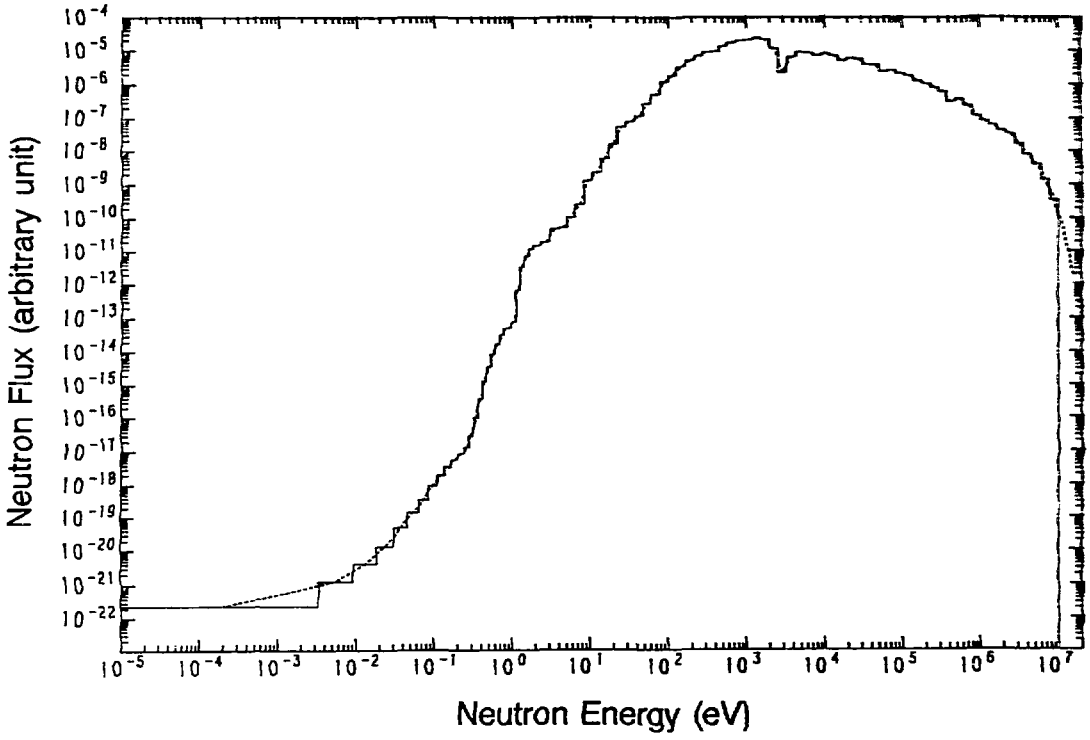
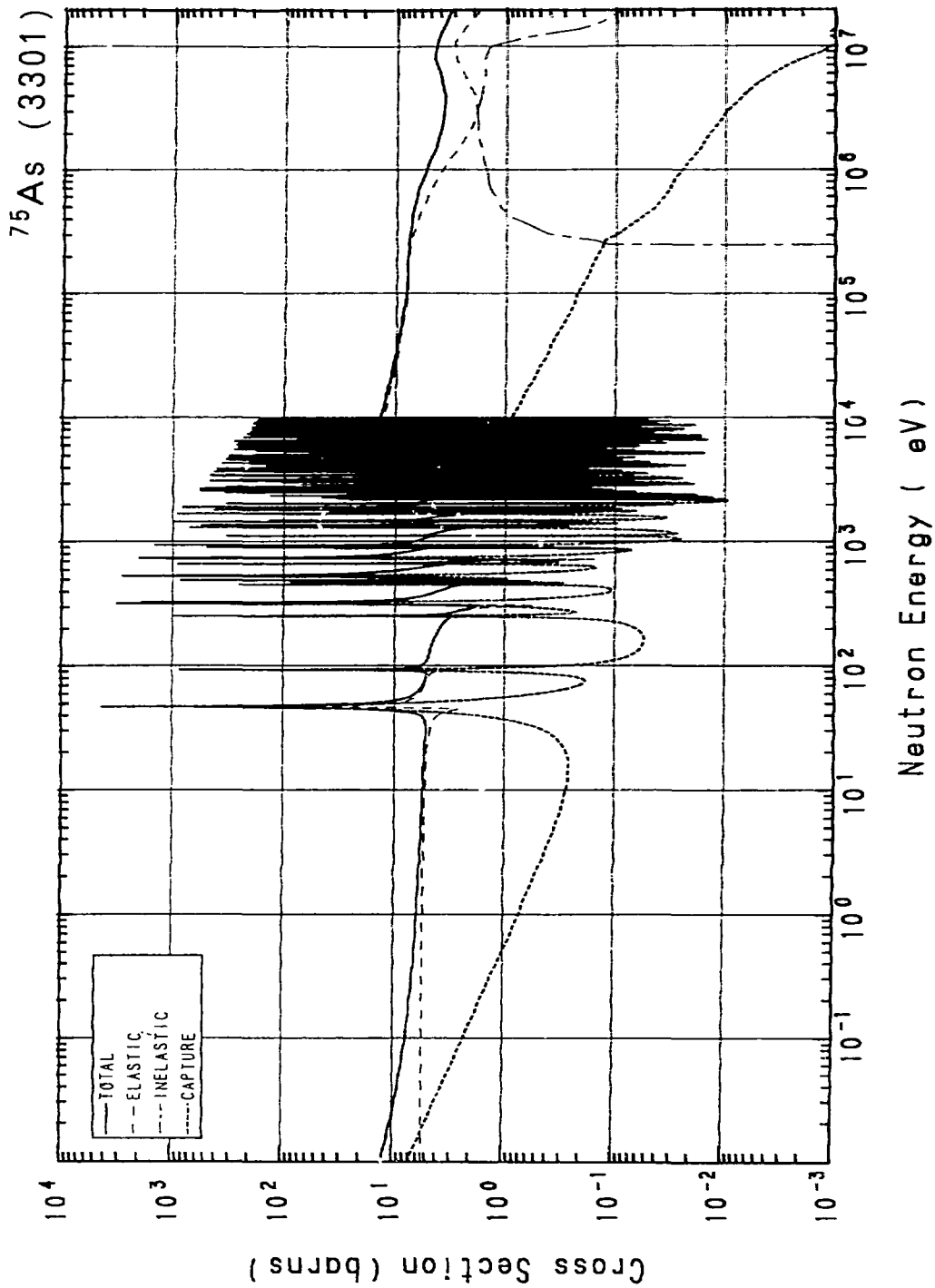
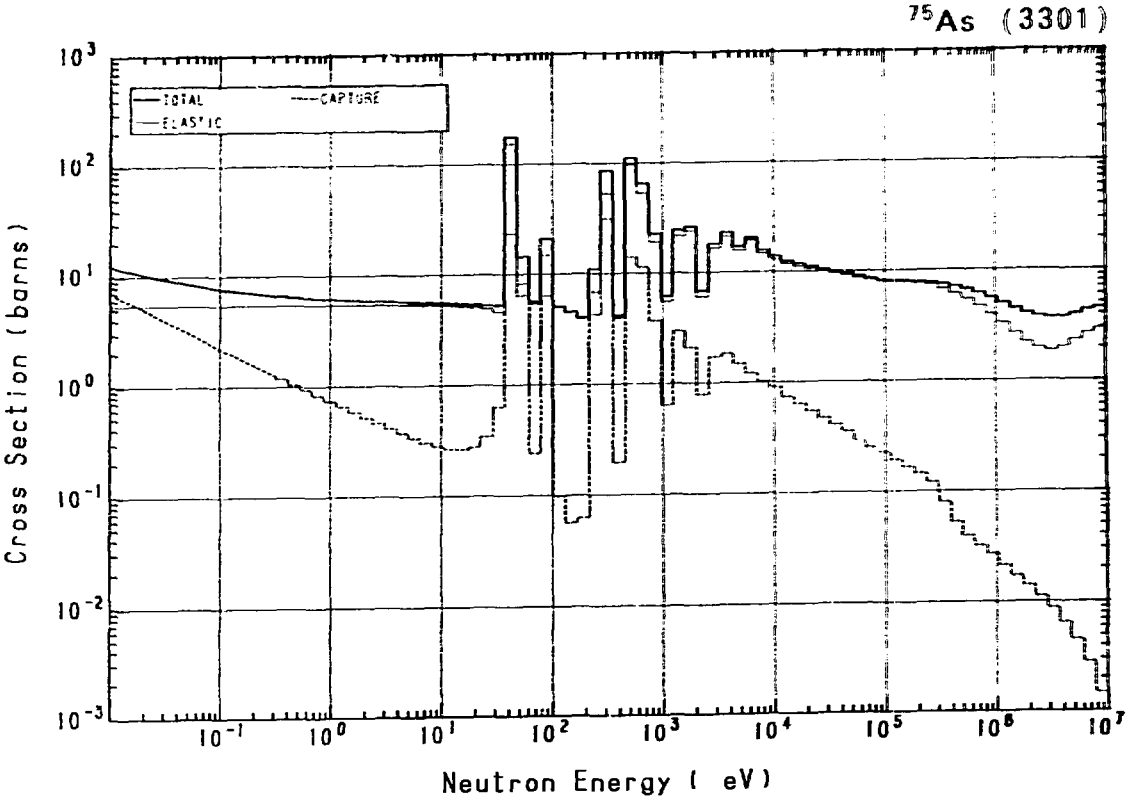
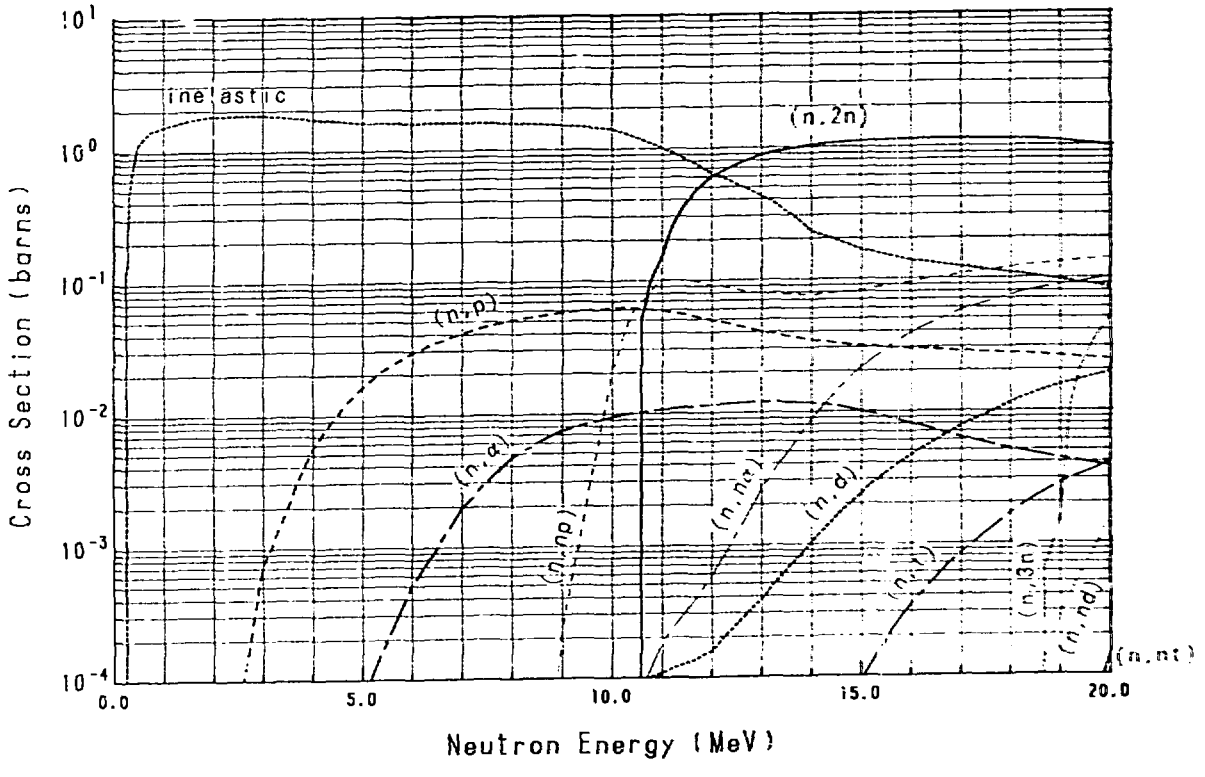


Fig. 5 Neutron flux of LMFBR

2. Cross Section Curves


^{75}As (3301)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}


^{75}As (3301)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)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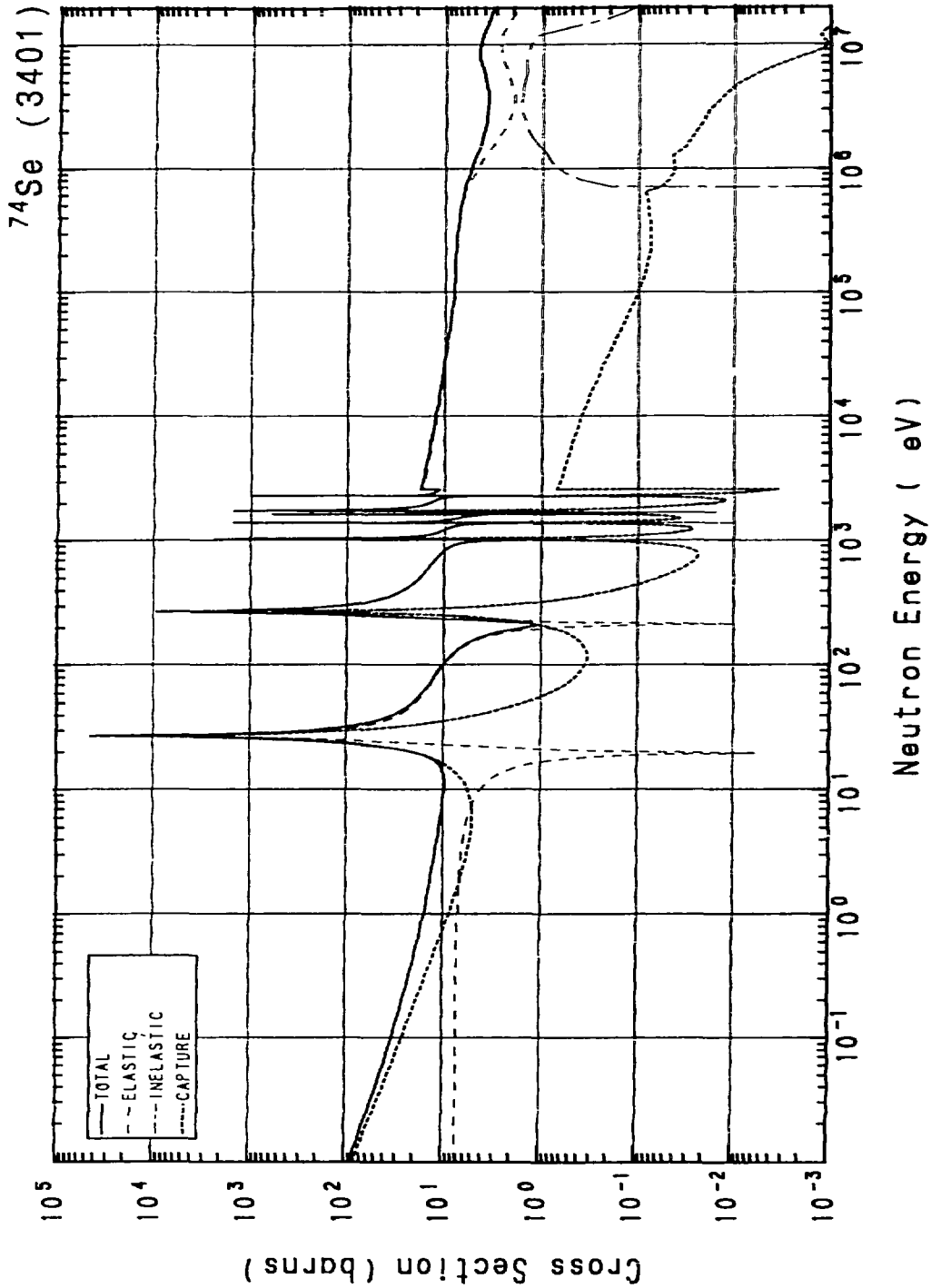
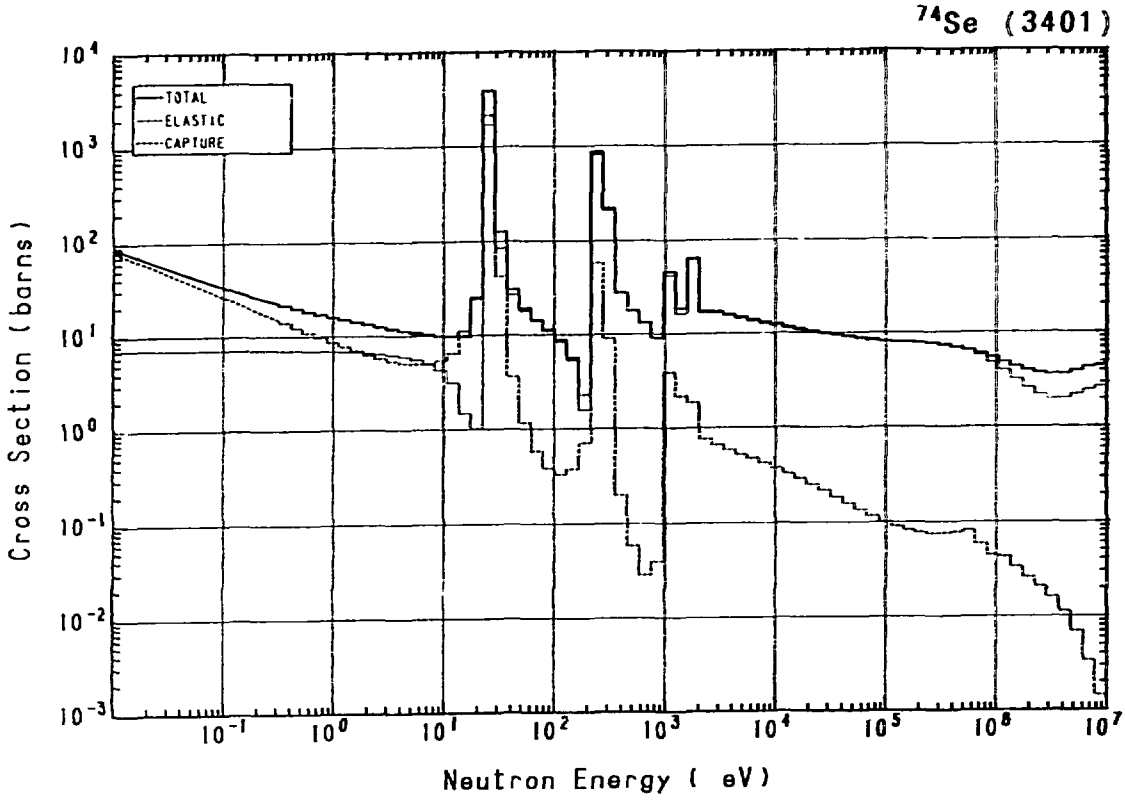
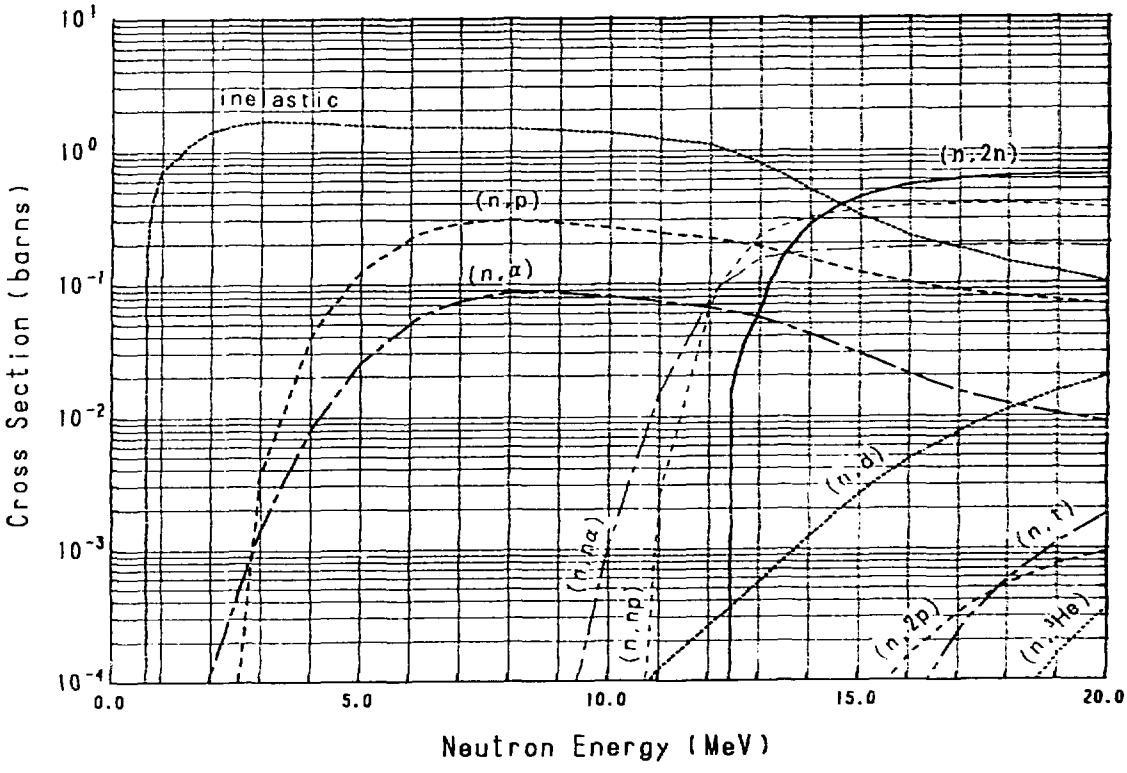
(n,p)
(n,α)
(n,np)
(n,nα)
(n,d)
(n,γ)
(n,3n)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)


^{74}Se (3401)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}


^{74}Se (3401)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)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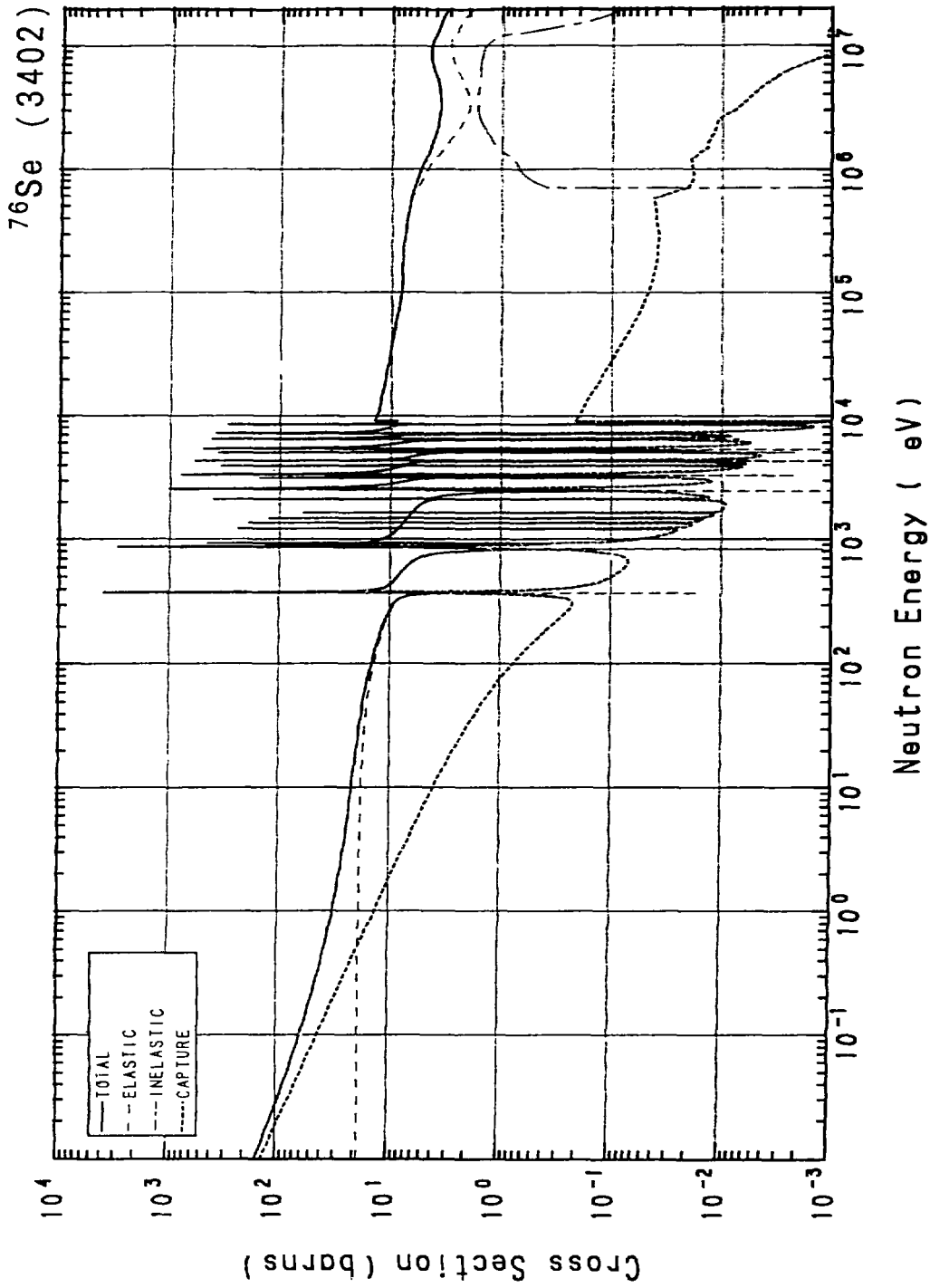
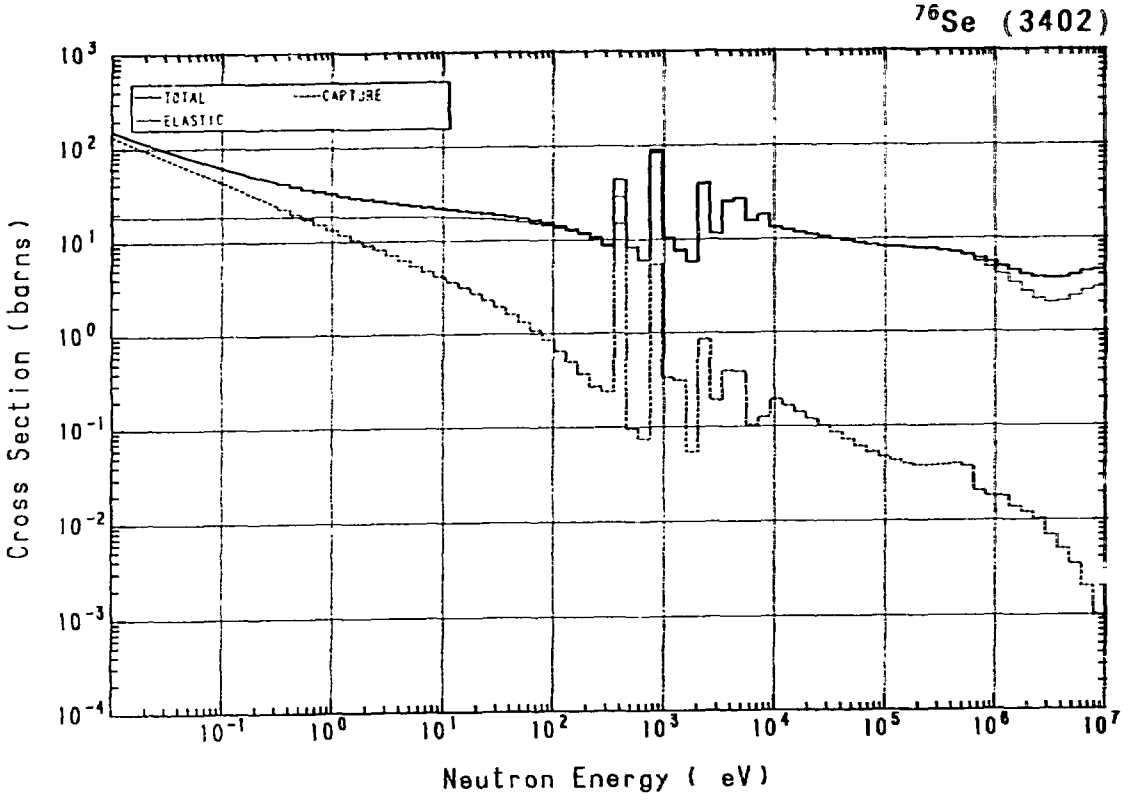
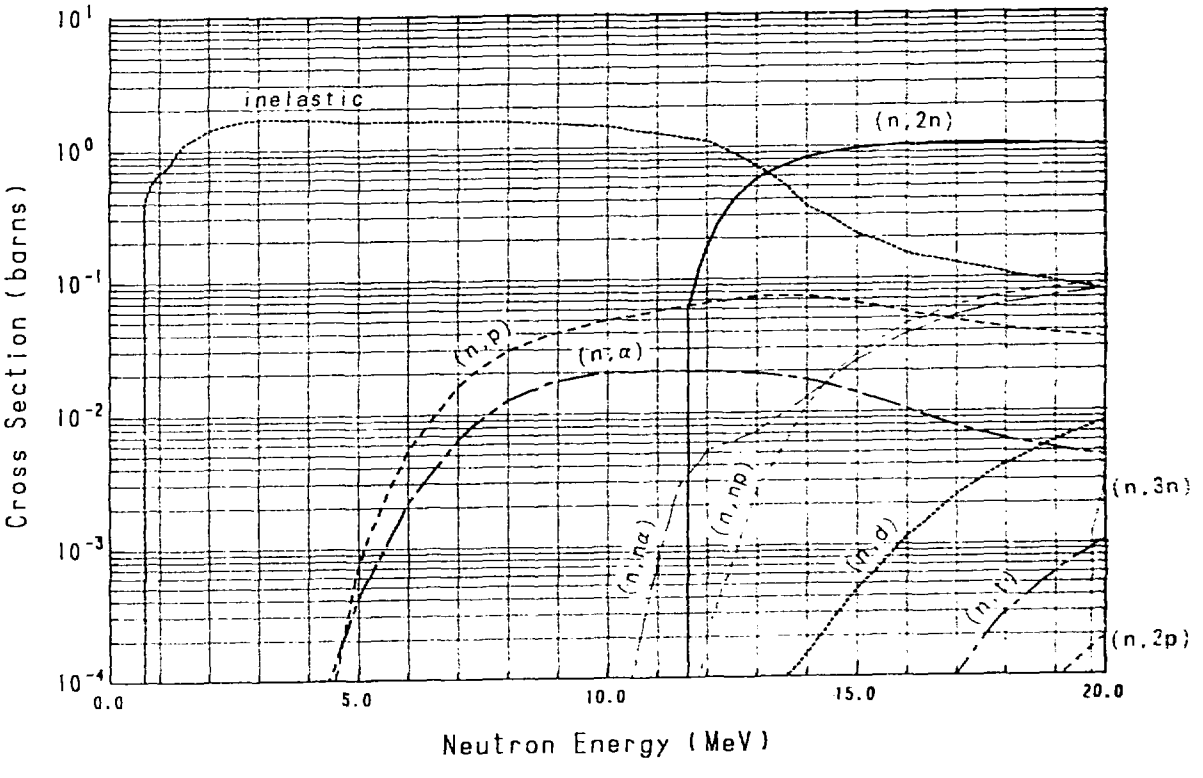
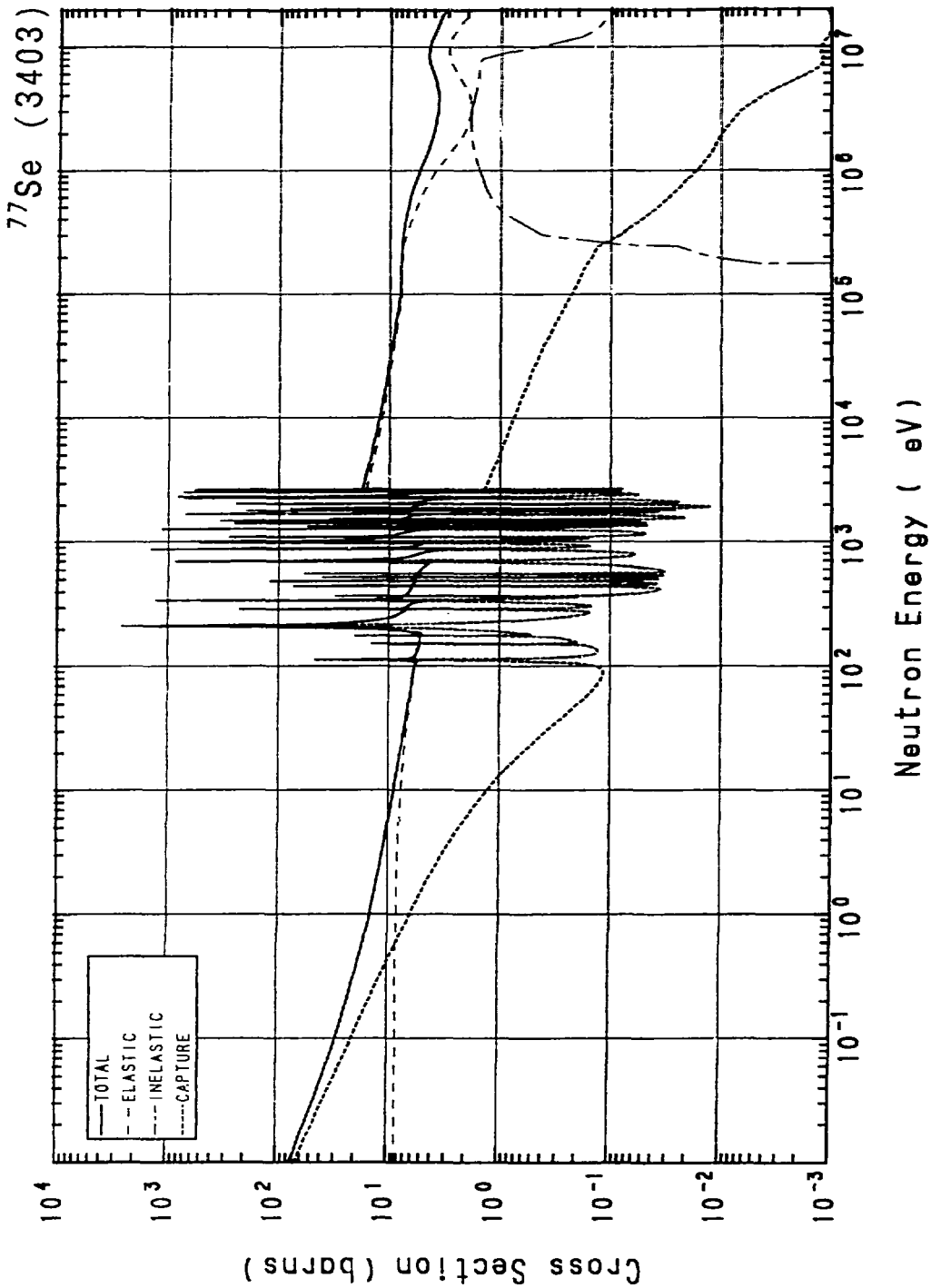
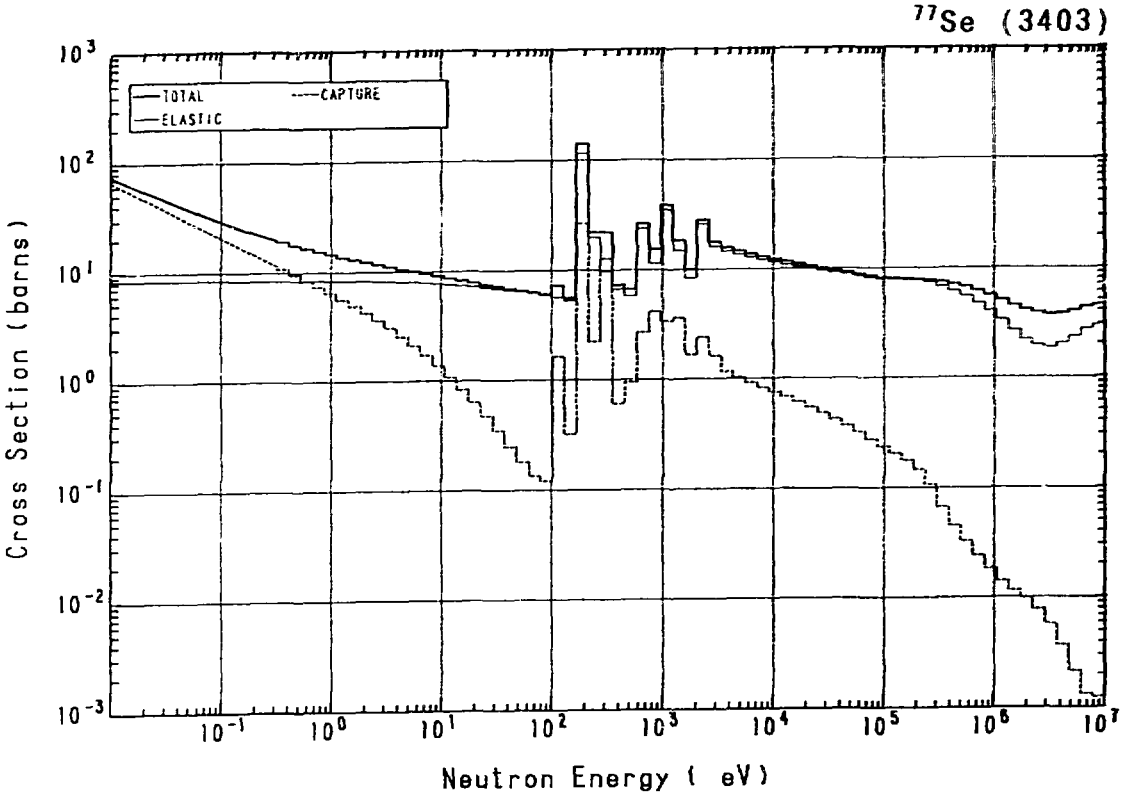
(n,p)
(n,α)
(n,d)
(n,t)
(n,nα)
(n,np)
(n,2p)
(n,3He)
Cross Section (barns)
Neutron Energy (MeV)

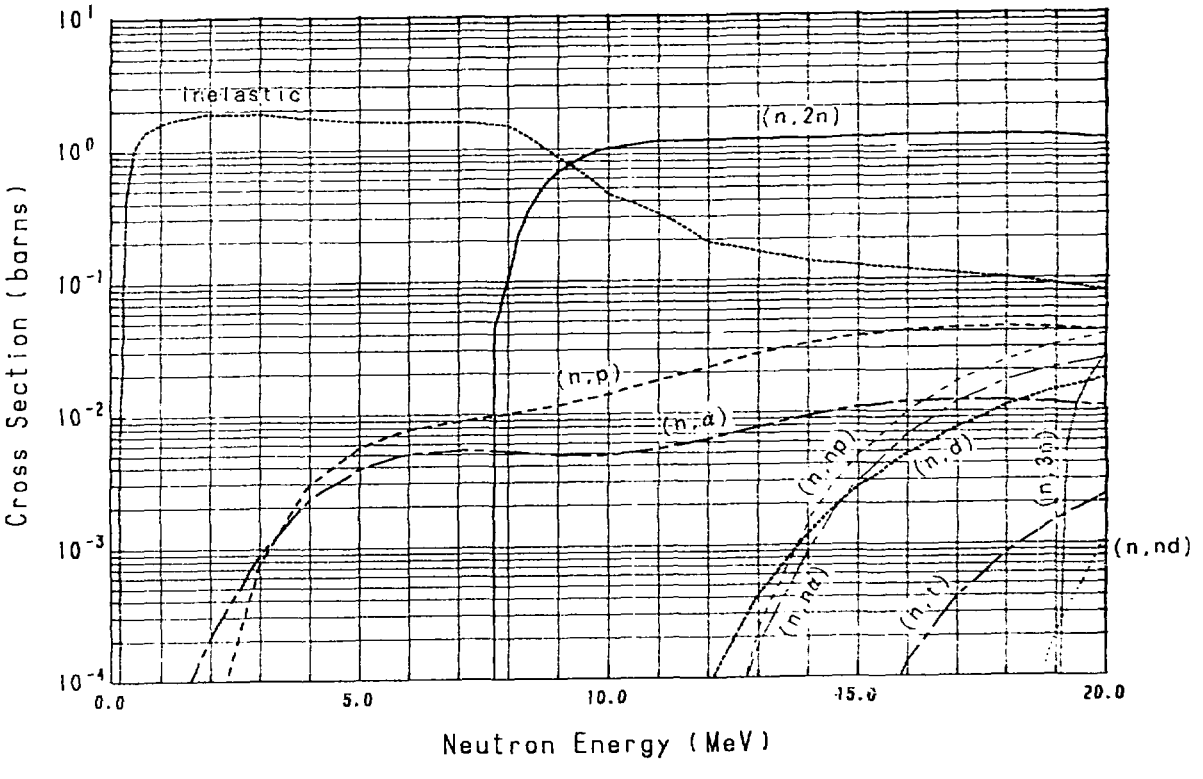

76Se (3402)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

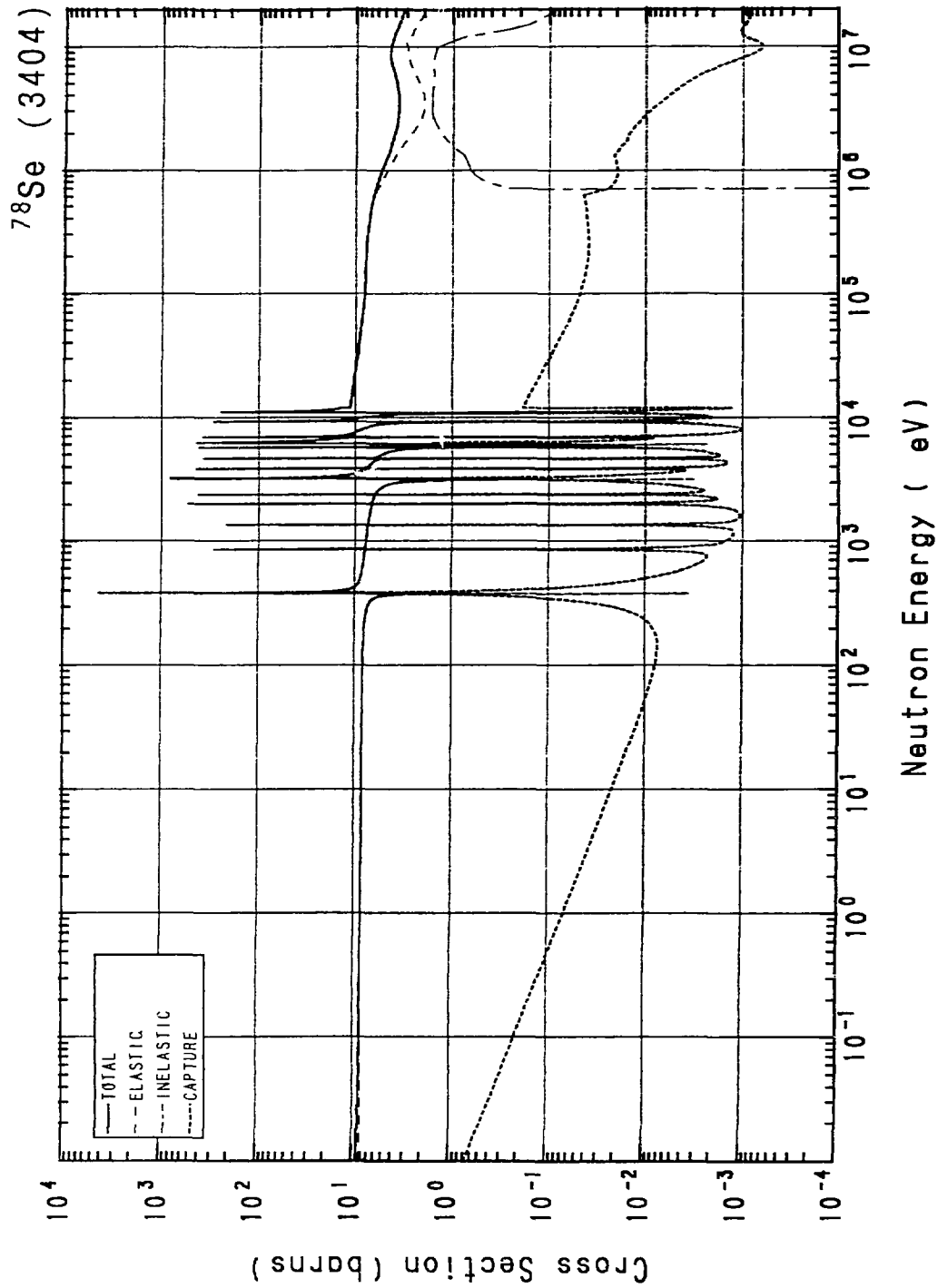

76Se (3402)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

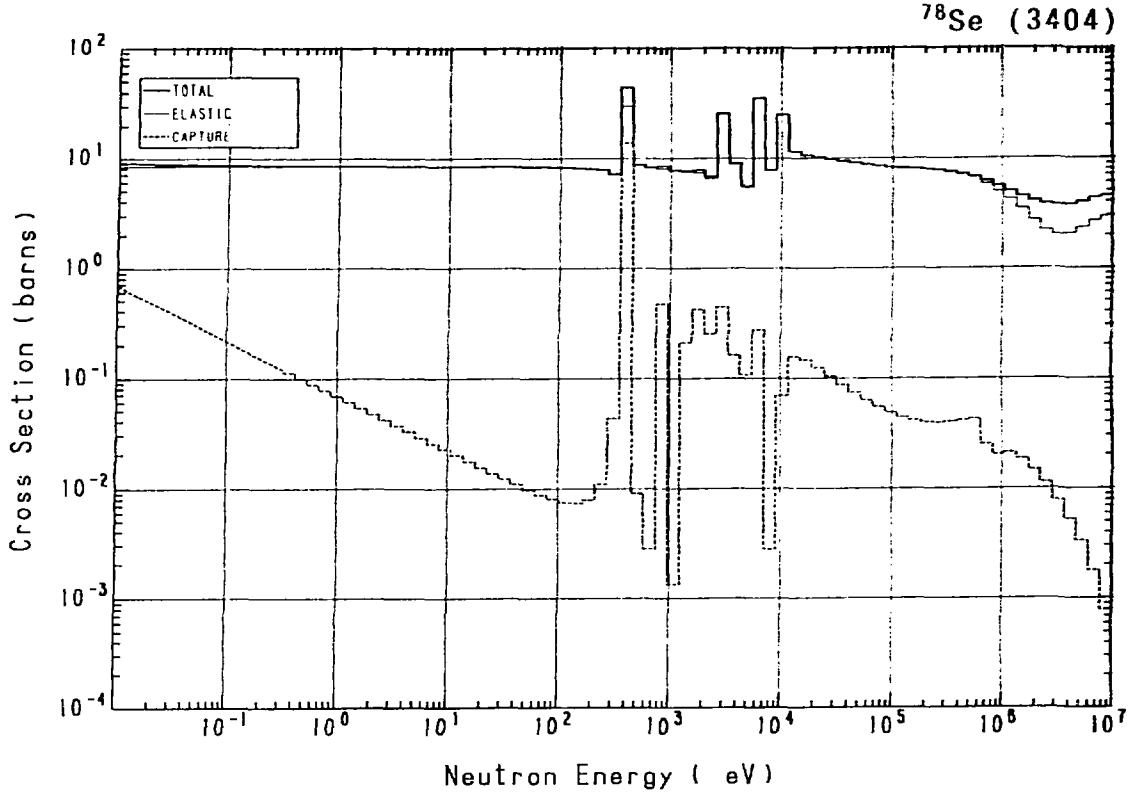

inelastic
(n,2n)
(n,p)
(n,α)
(n,nα)
(n,np)
(n,d)
(n,t)
(n,3n)
(n,2p)
Cross Section (barns)
Neutron Energy (MeV)

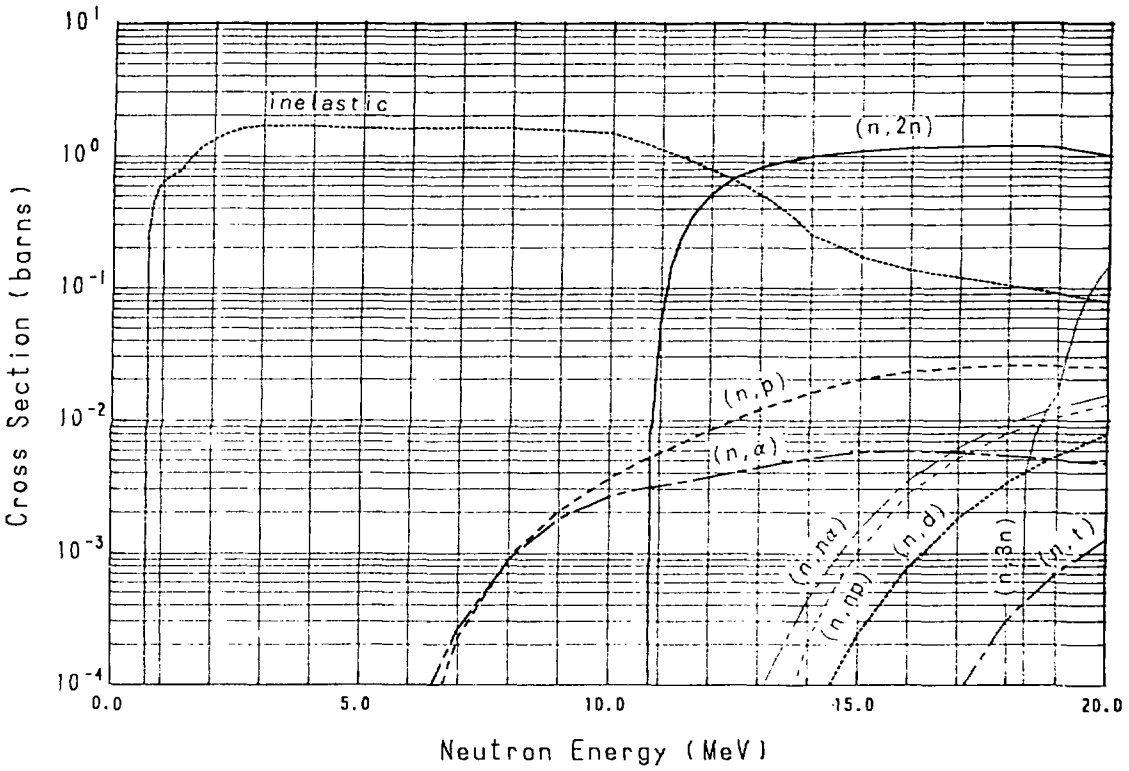

^{77}Se (3403)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}


^{77}Se (3403)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)


Inelastic
(n,2n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,3n)
(n,nd)
(n,nα)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)


78Se (3404)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)


78Se (3404)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)


inelastic
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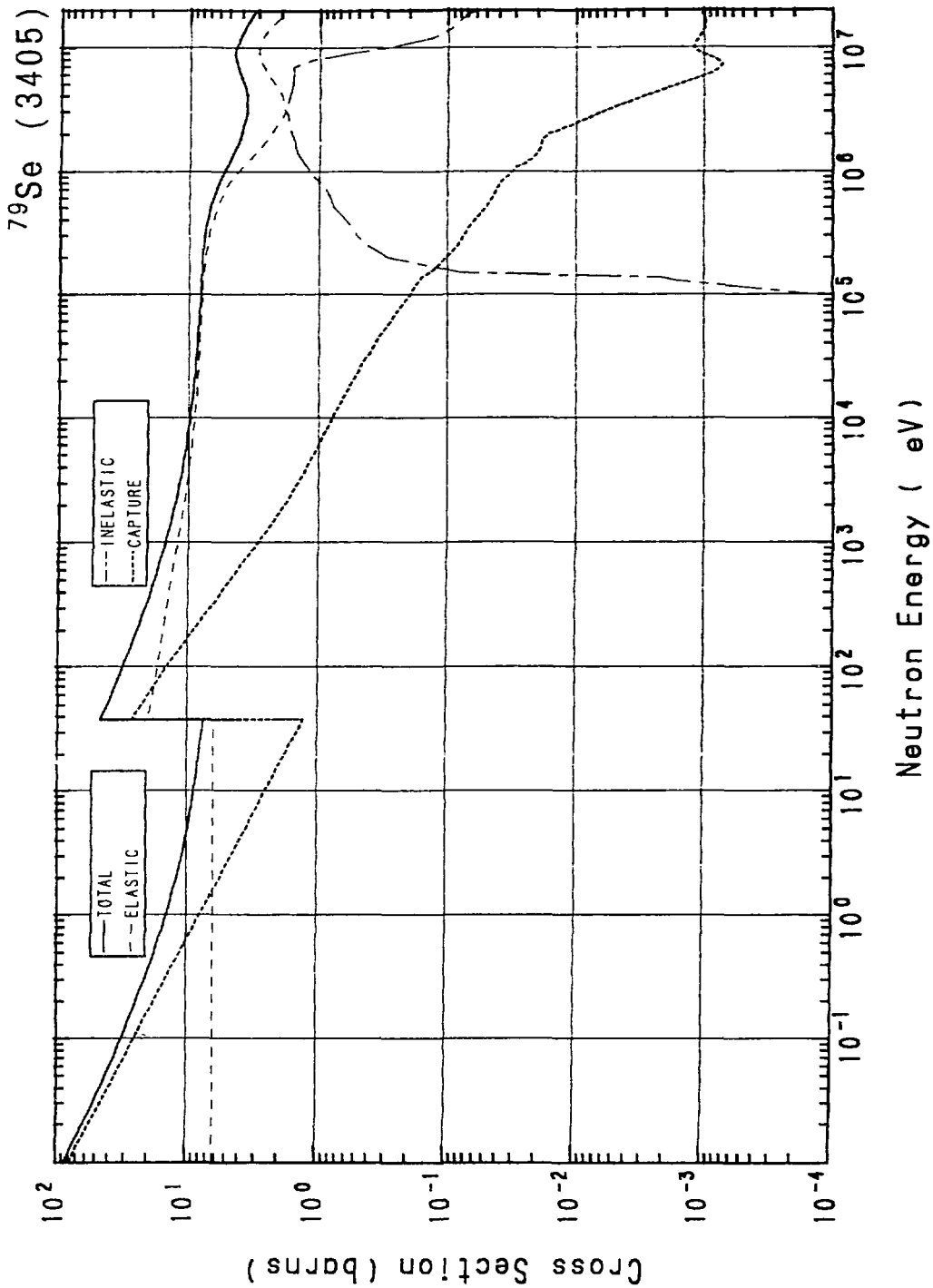
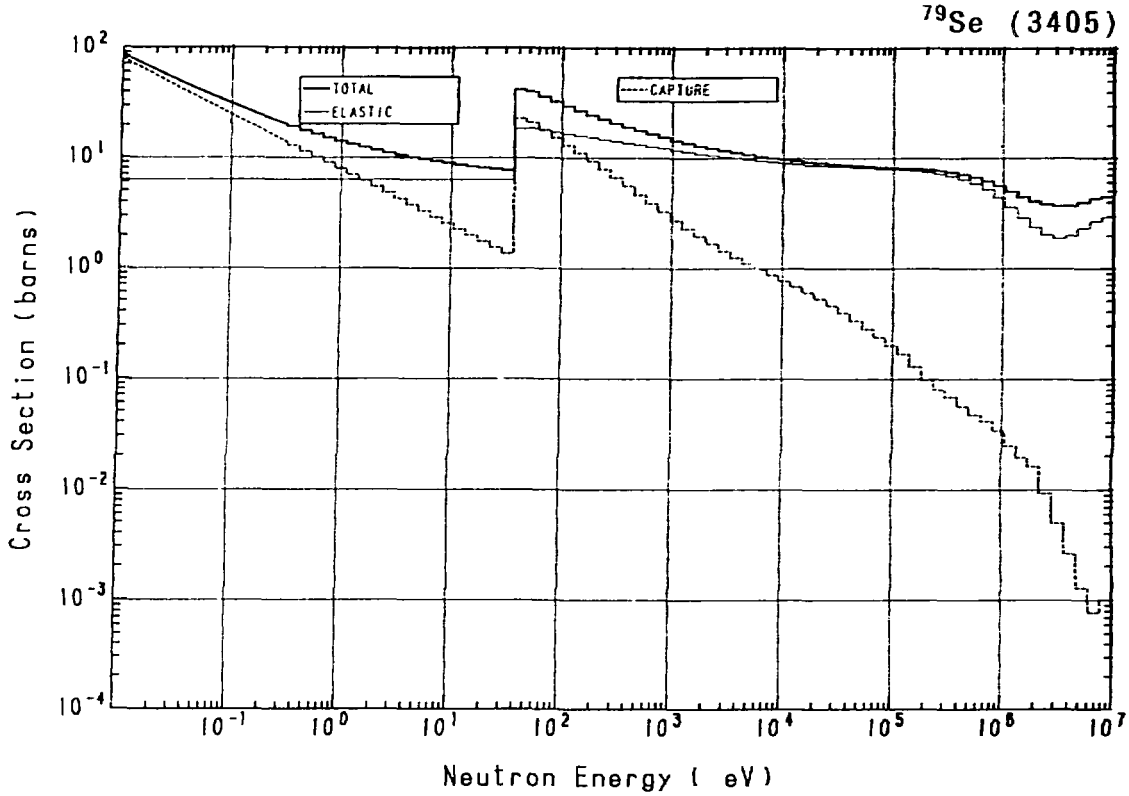
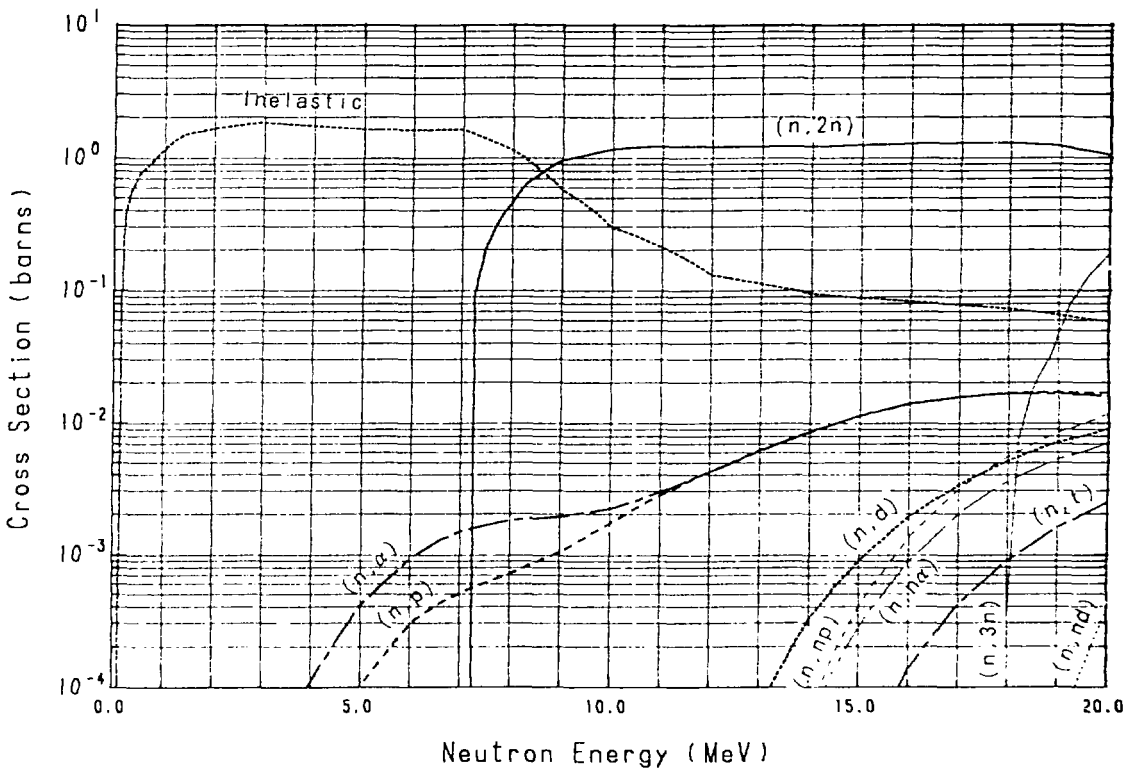
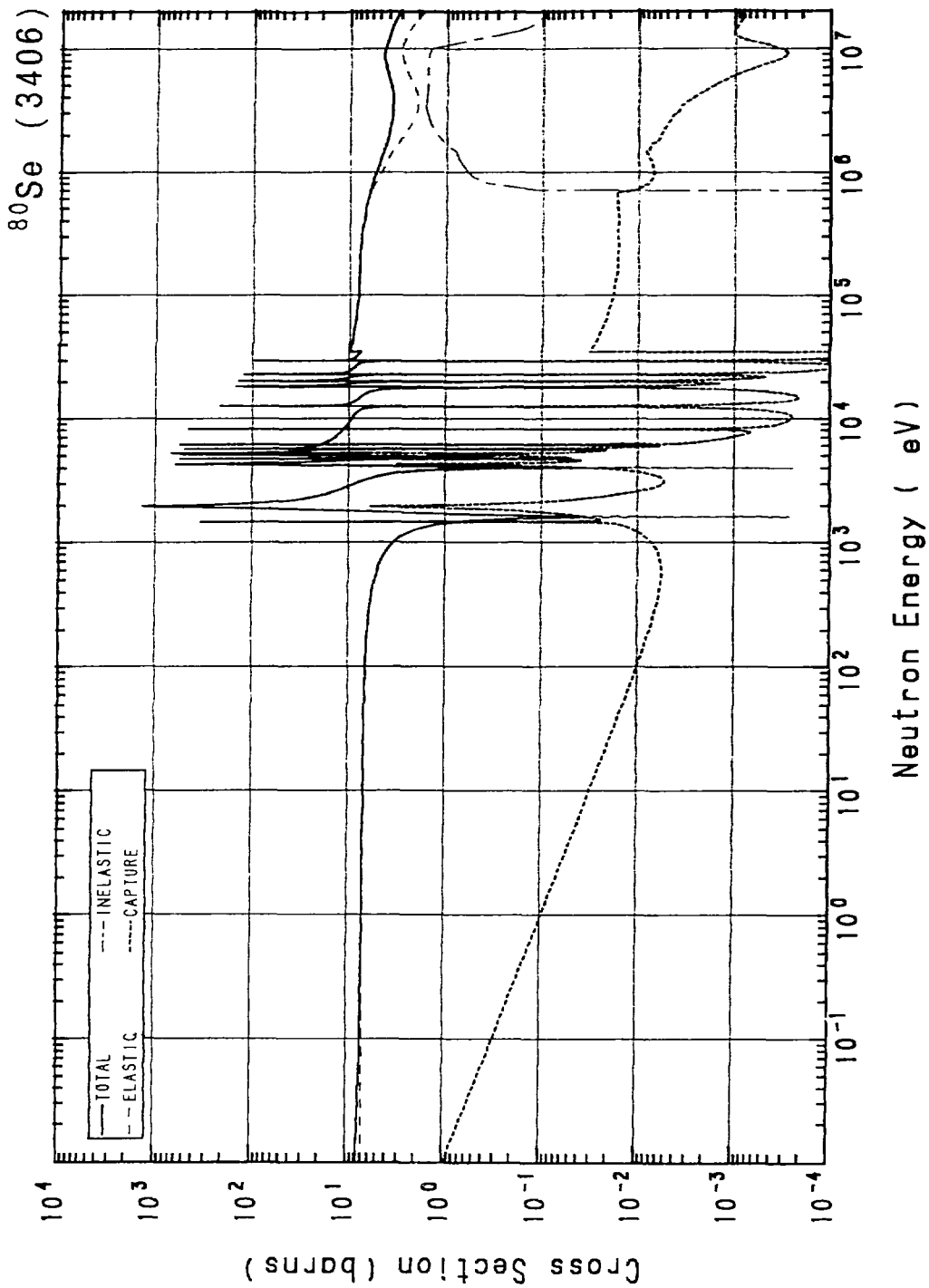
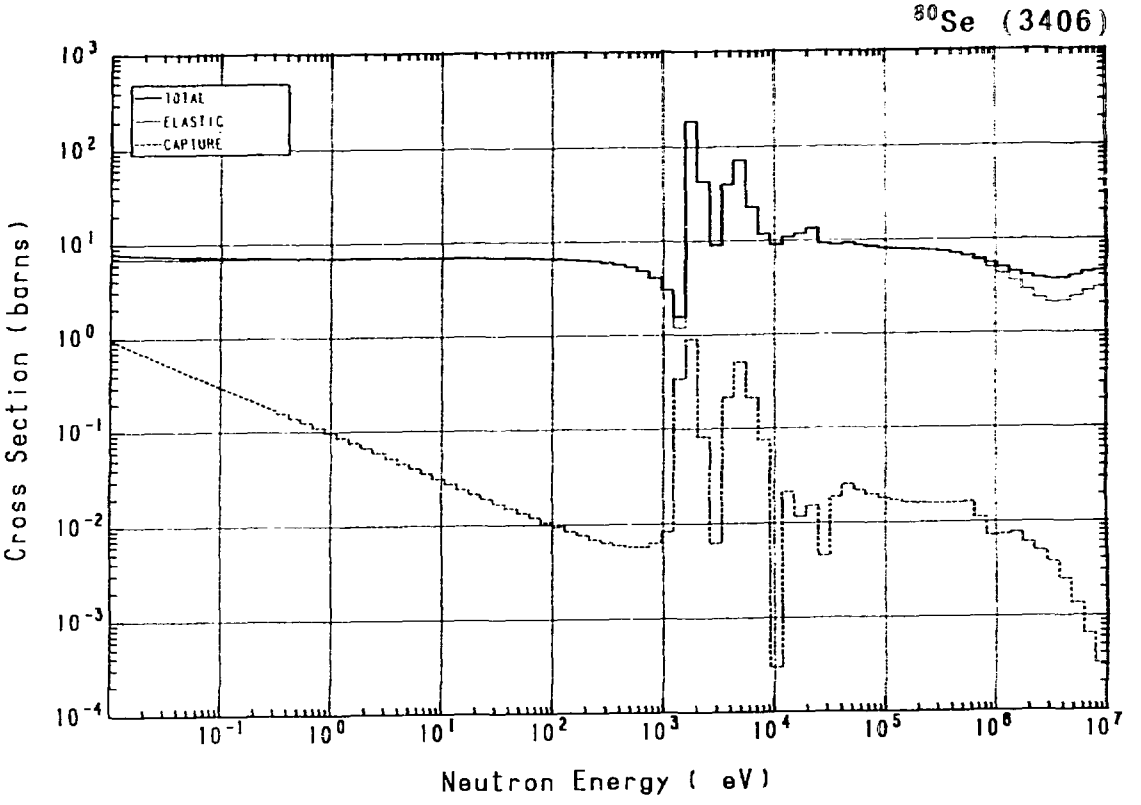
(n,p)
(n,α)
(n,nα)
(n,np)
(n,d)
(n,3n)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

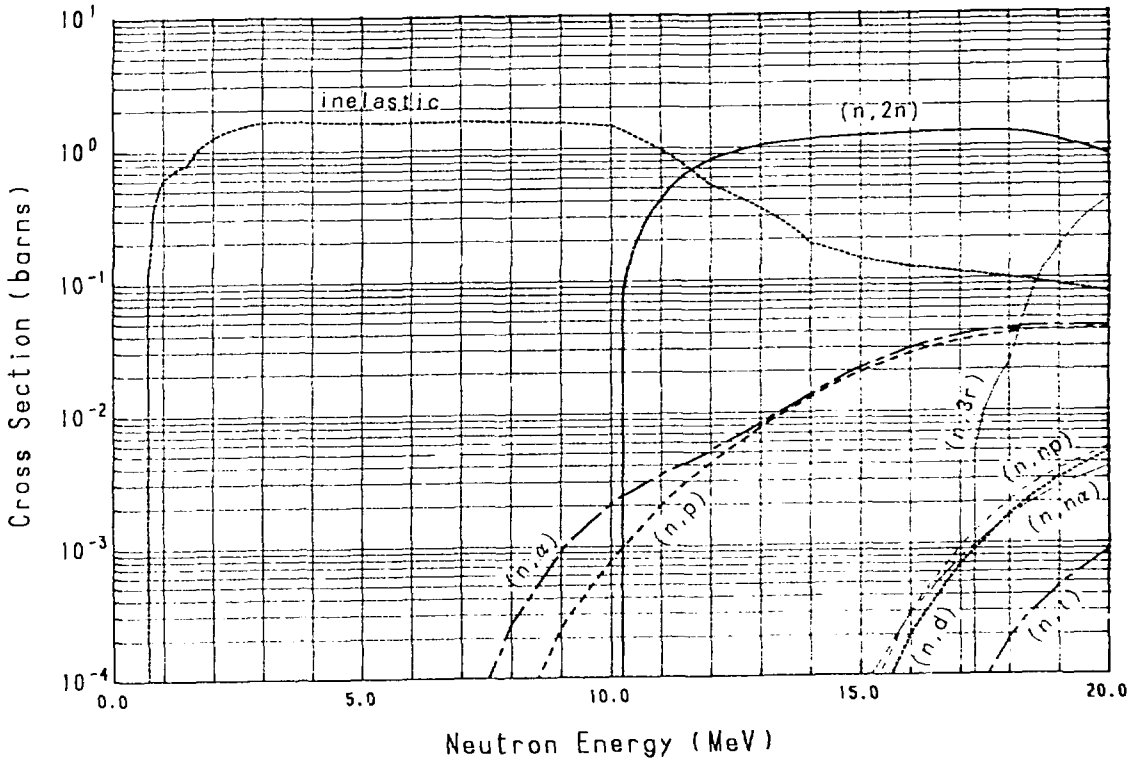

79Se (3405)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

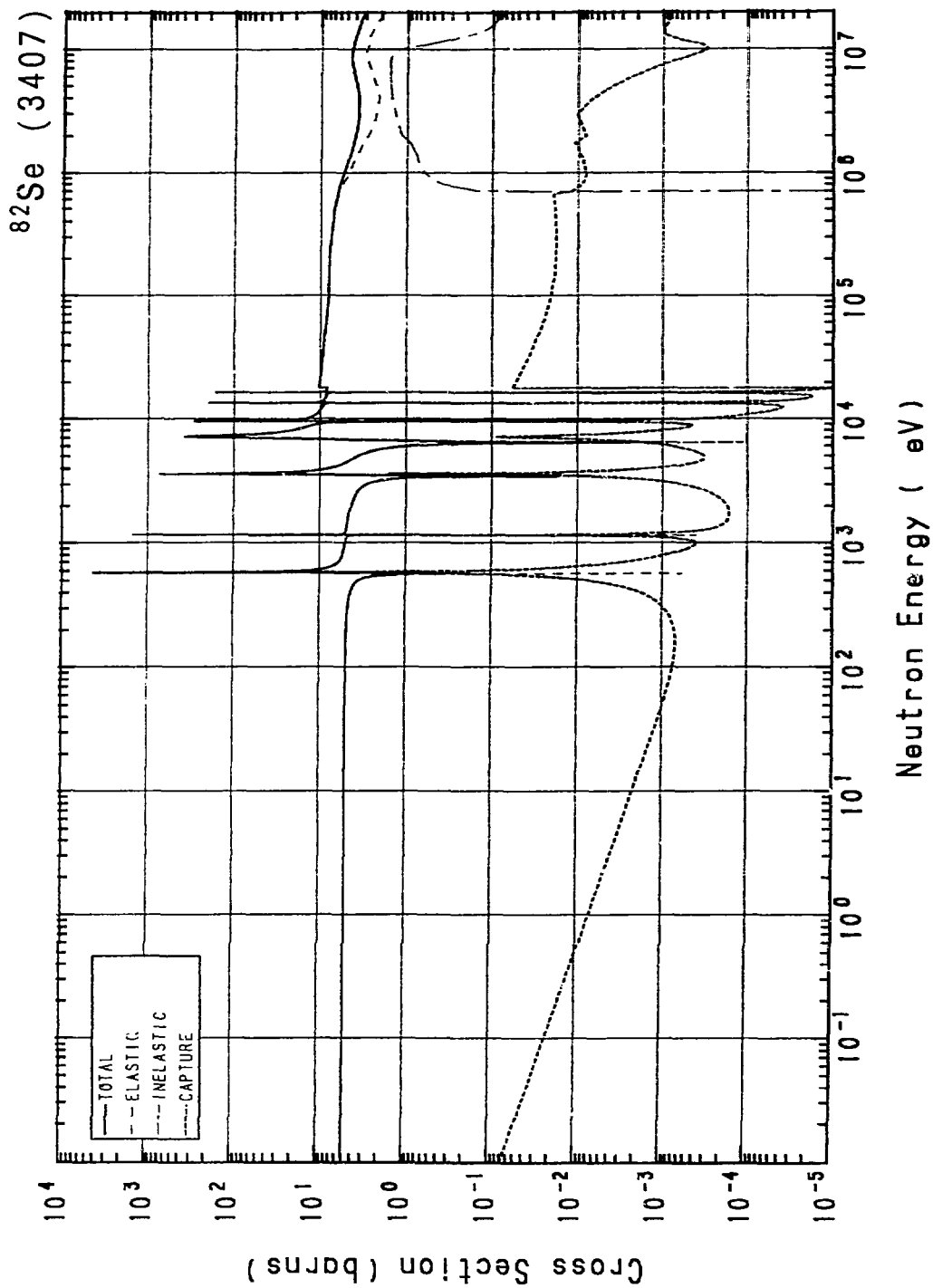

79Se (3405)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

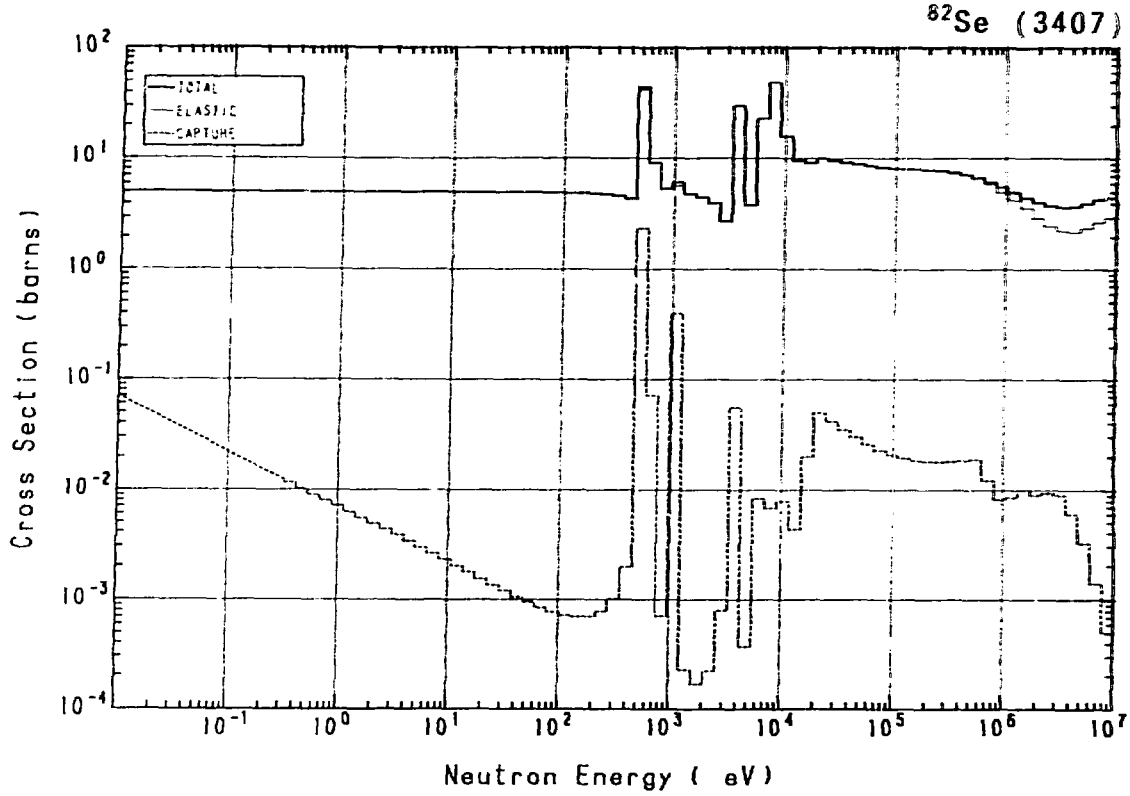

Inelastic
(n,2n)
(n,α)
(n,p)
(n,d)
(n,nα)
(n,np)
(n,3n)
(n,γ)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

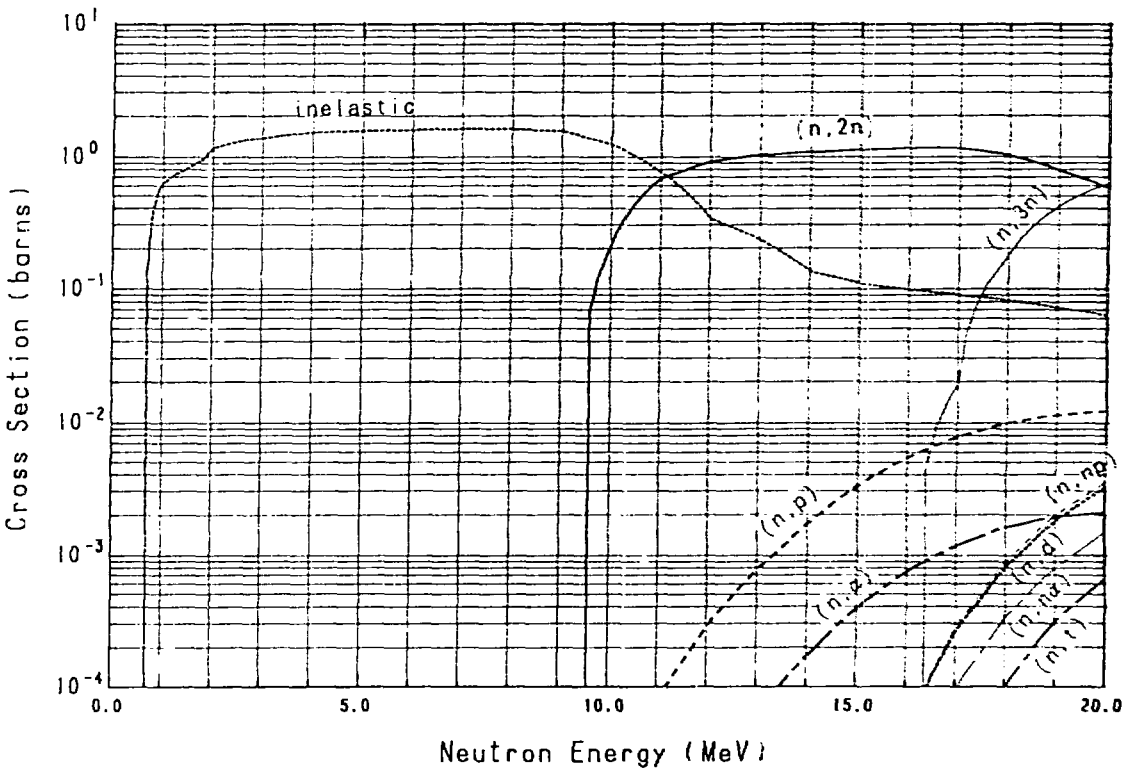

^{80}Se (3406)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

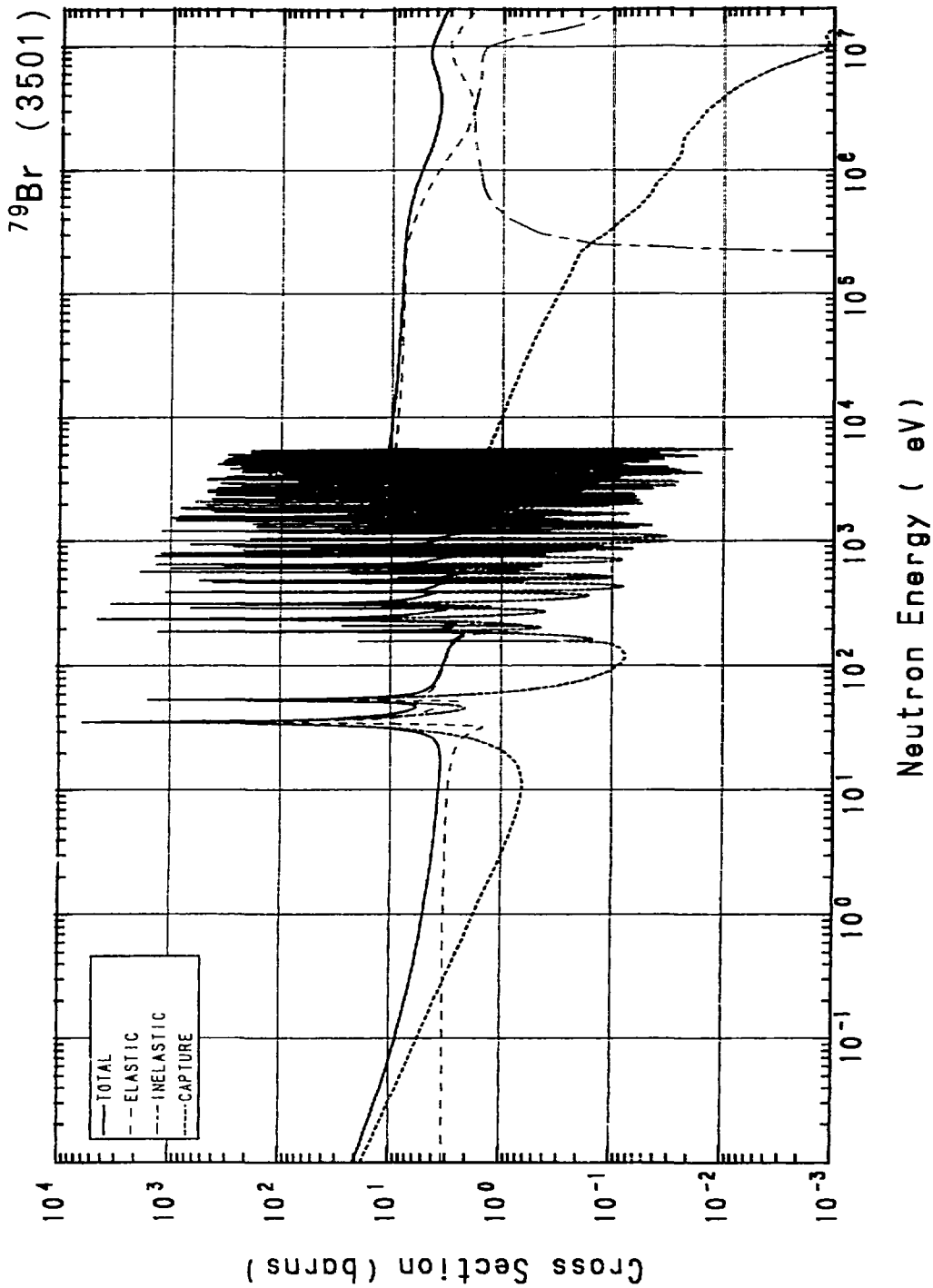

^{80}Se (3406)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

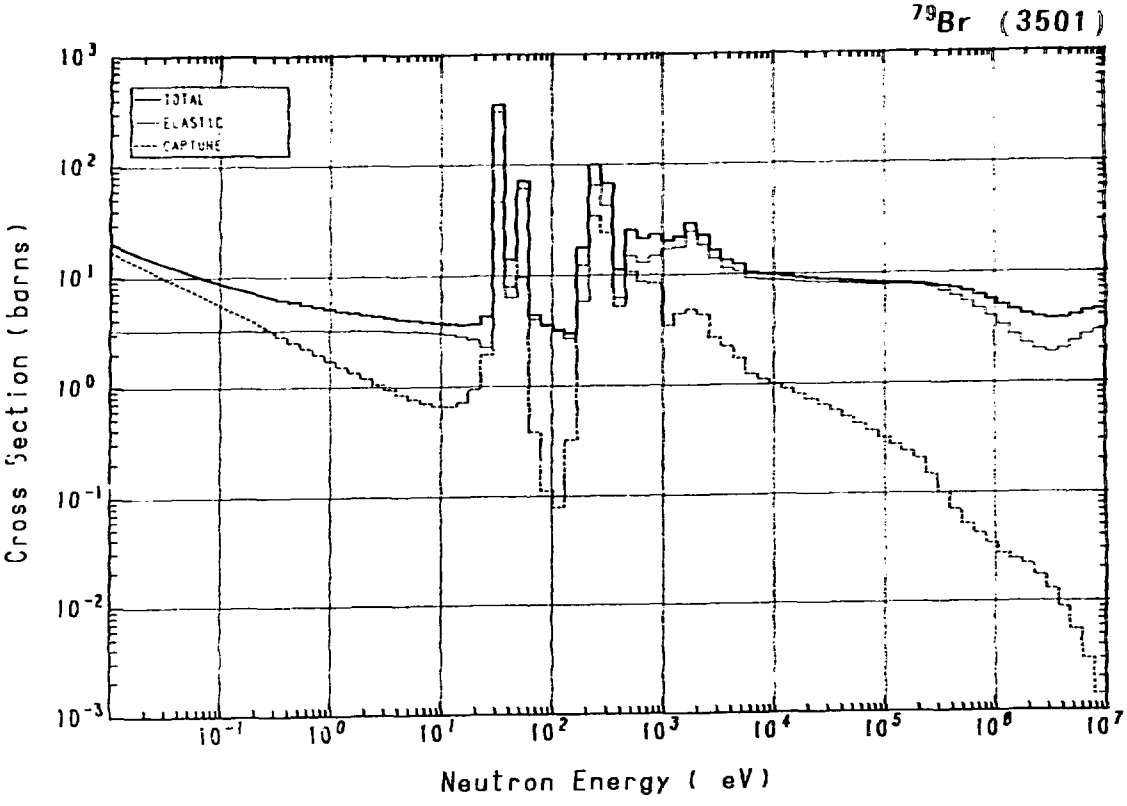

inelastic
(n,2n)
(n,α)
(n,p)
(n,3r)
(n,np)
(n,nα)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

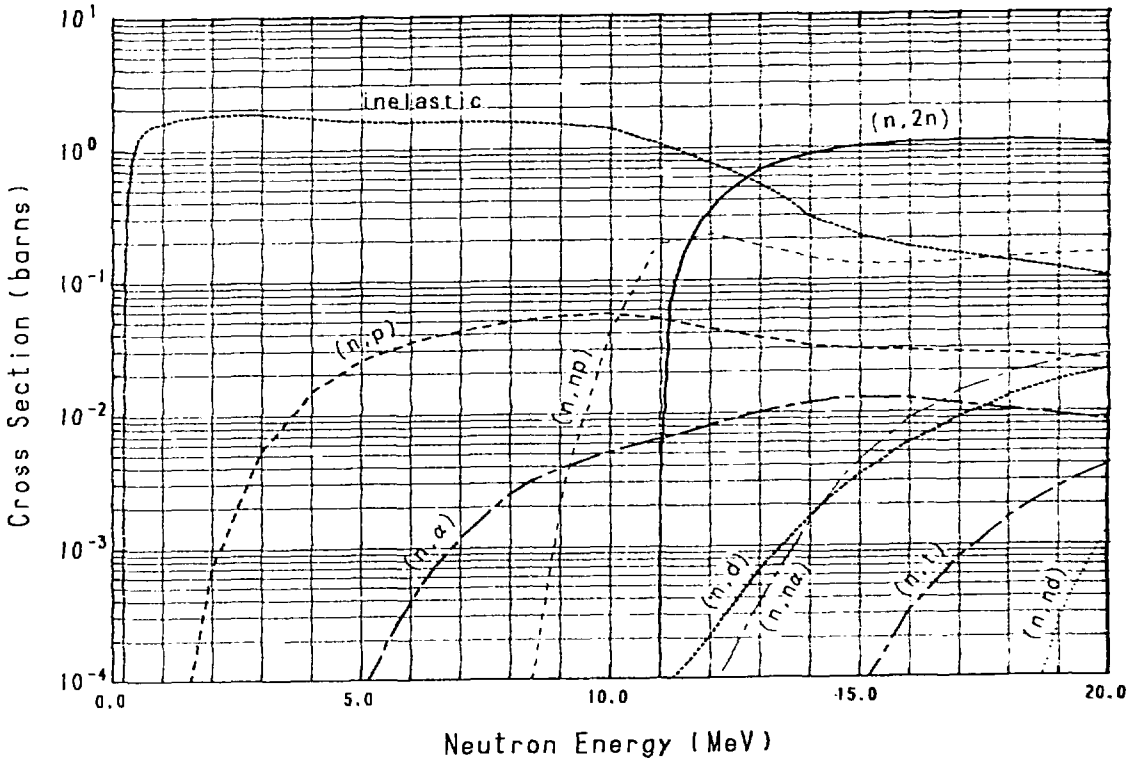

82Se (3407)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

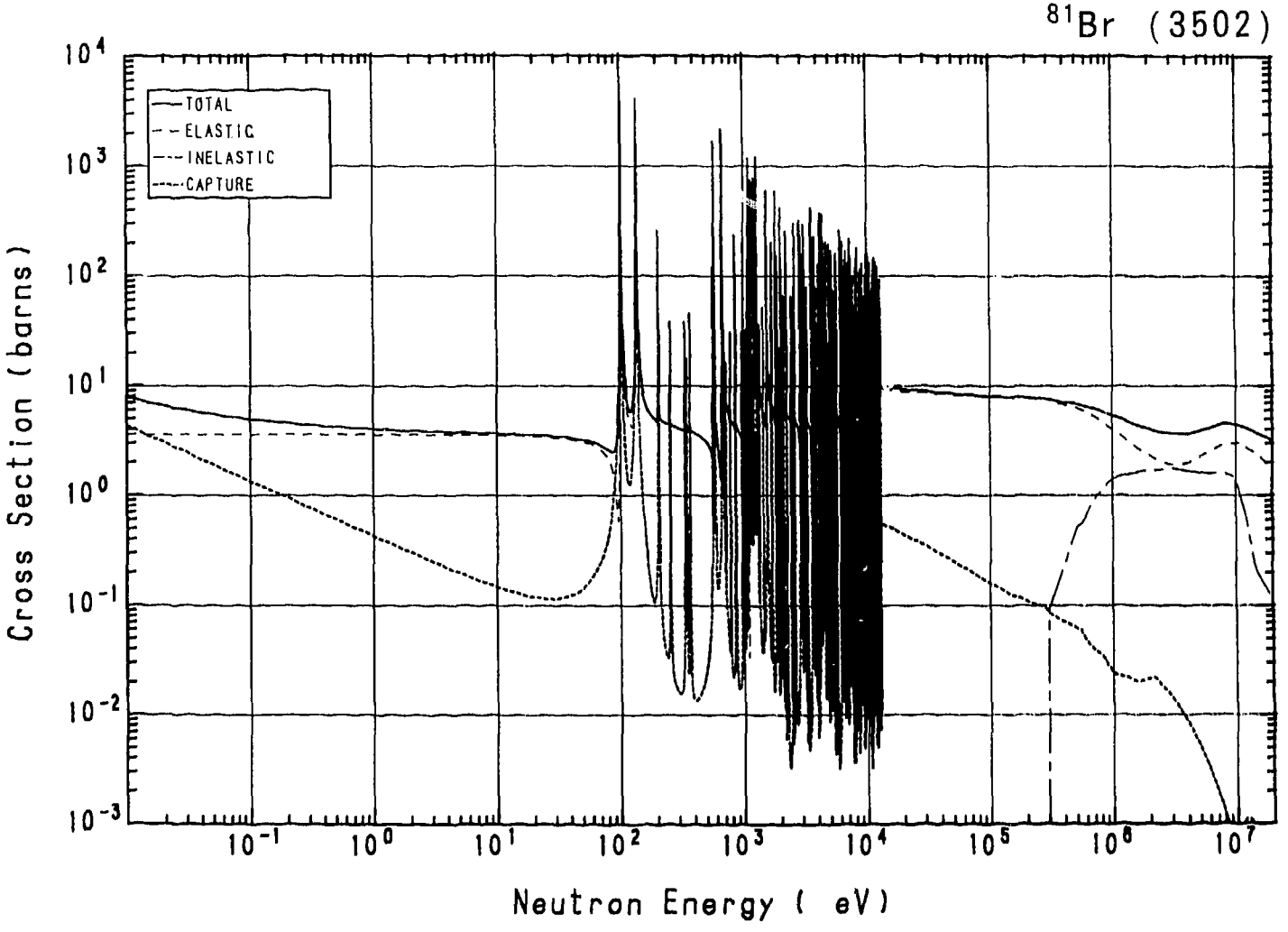

82Se (3407)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

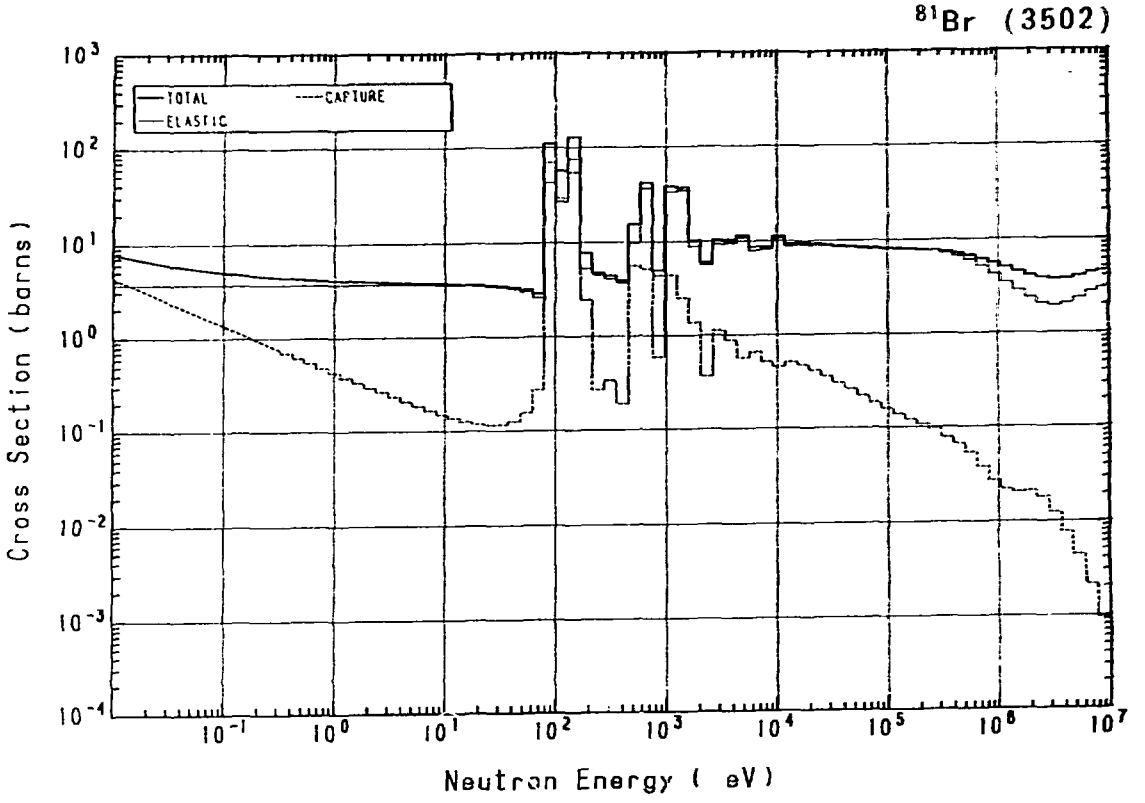

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,nα)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

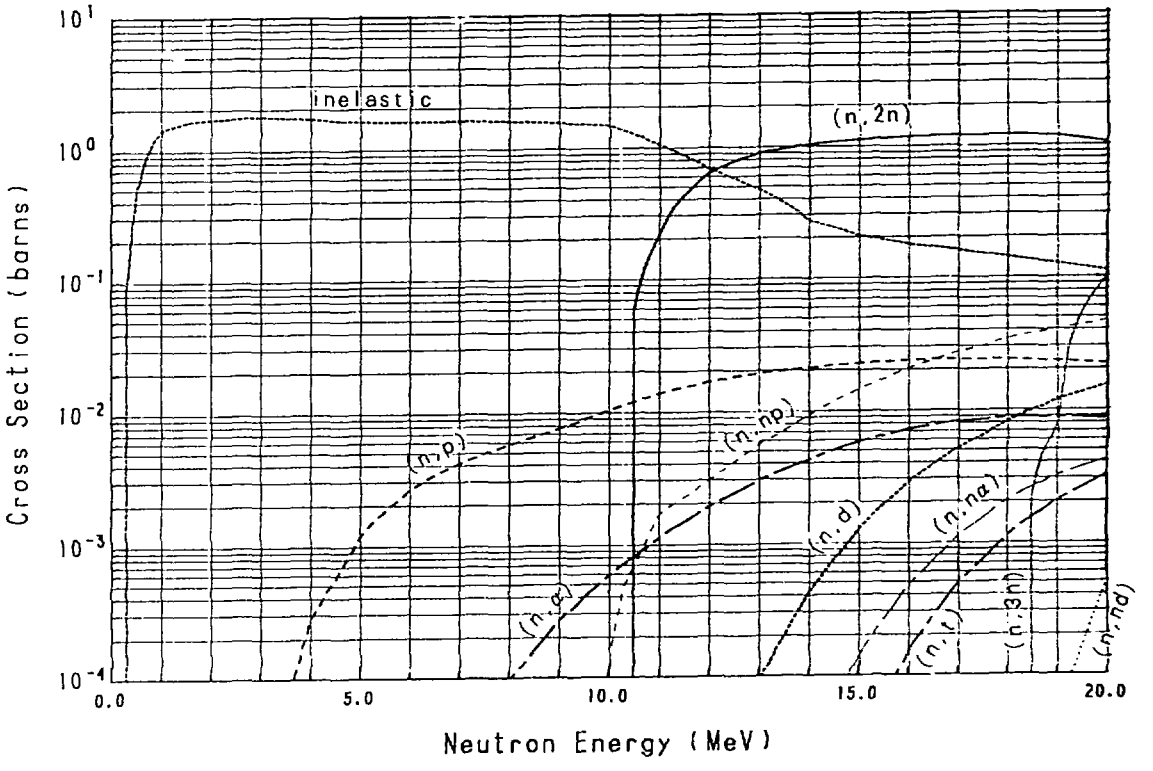

79Br (3501)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

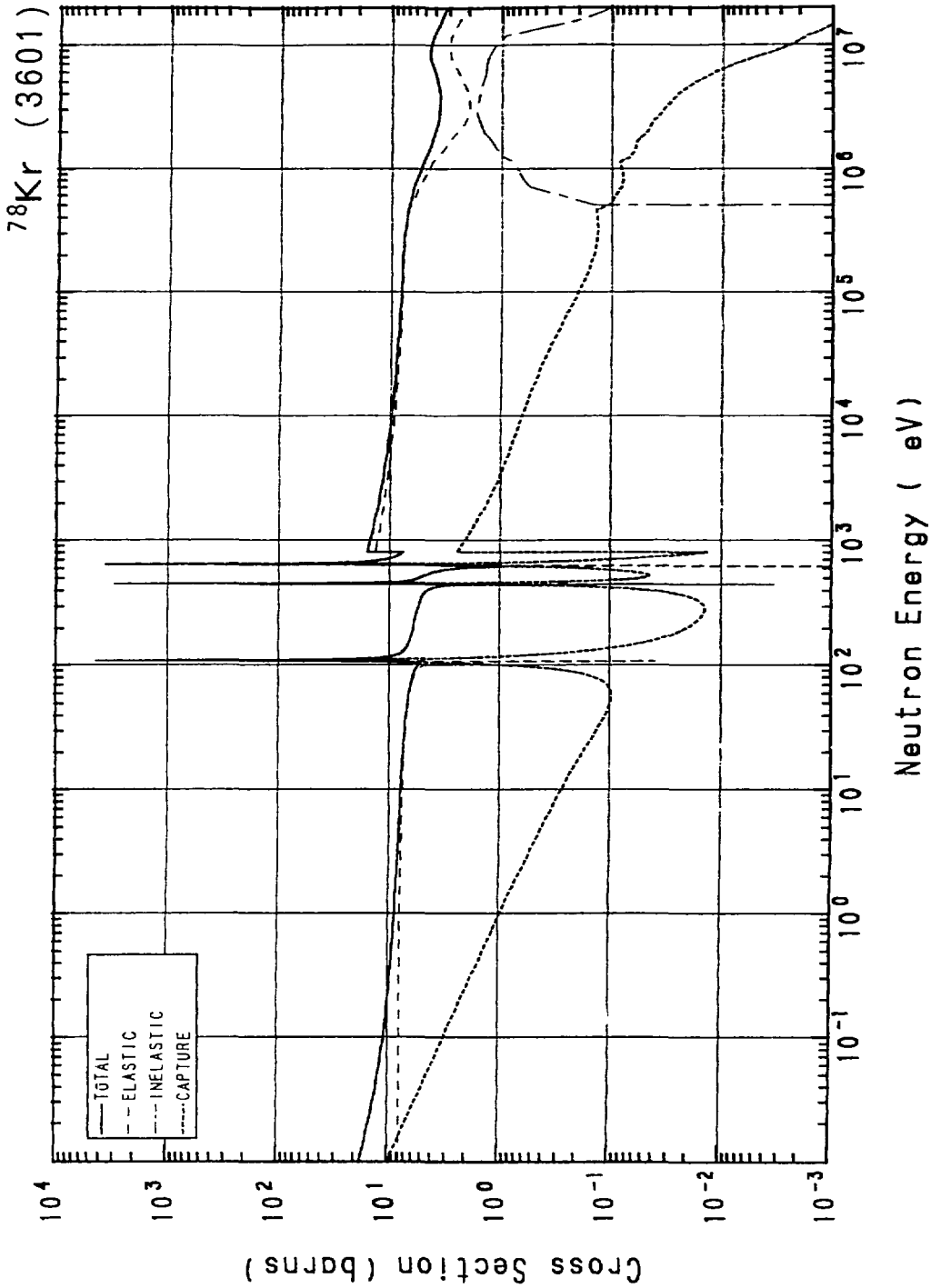

79Br (3501)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

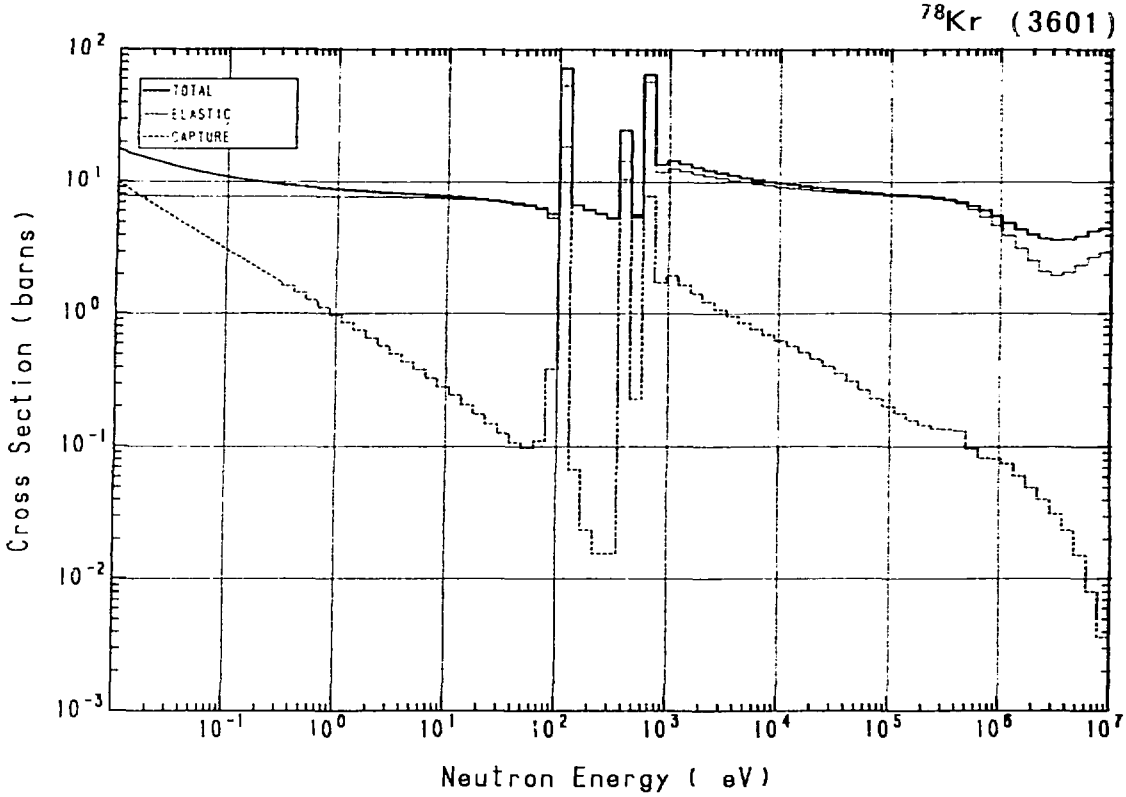

inelastic
(n,2n)
(n,p)
(n,np)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

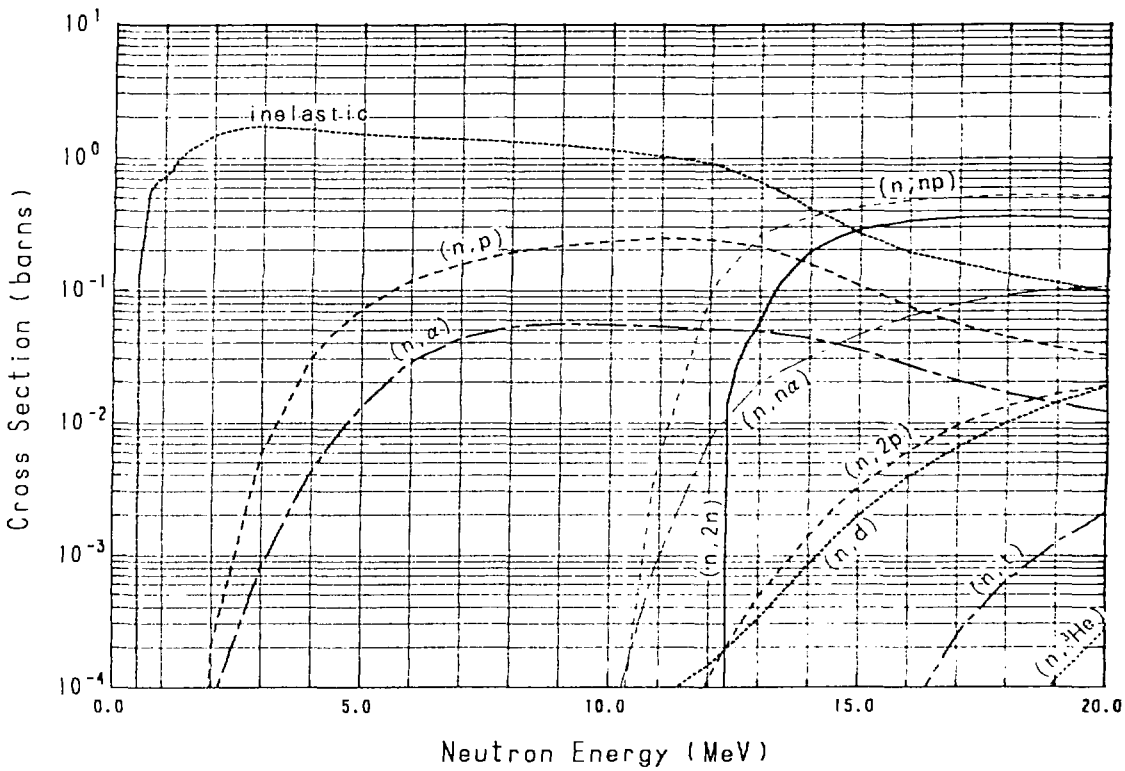

^{81}Br (3502)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

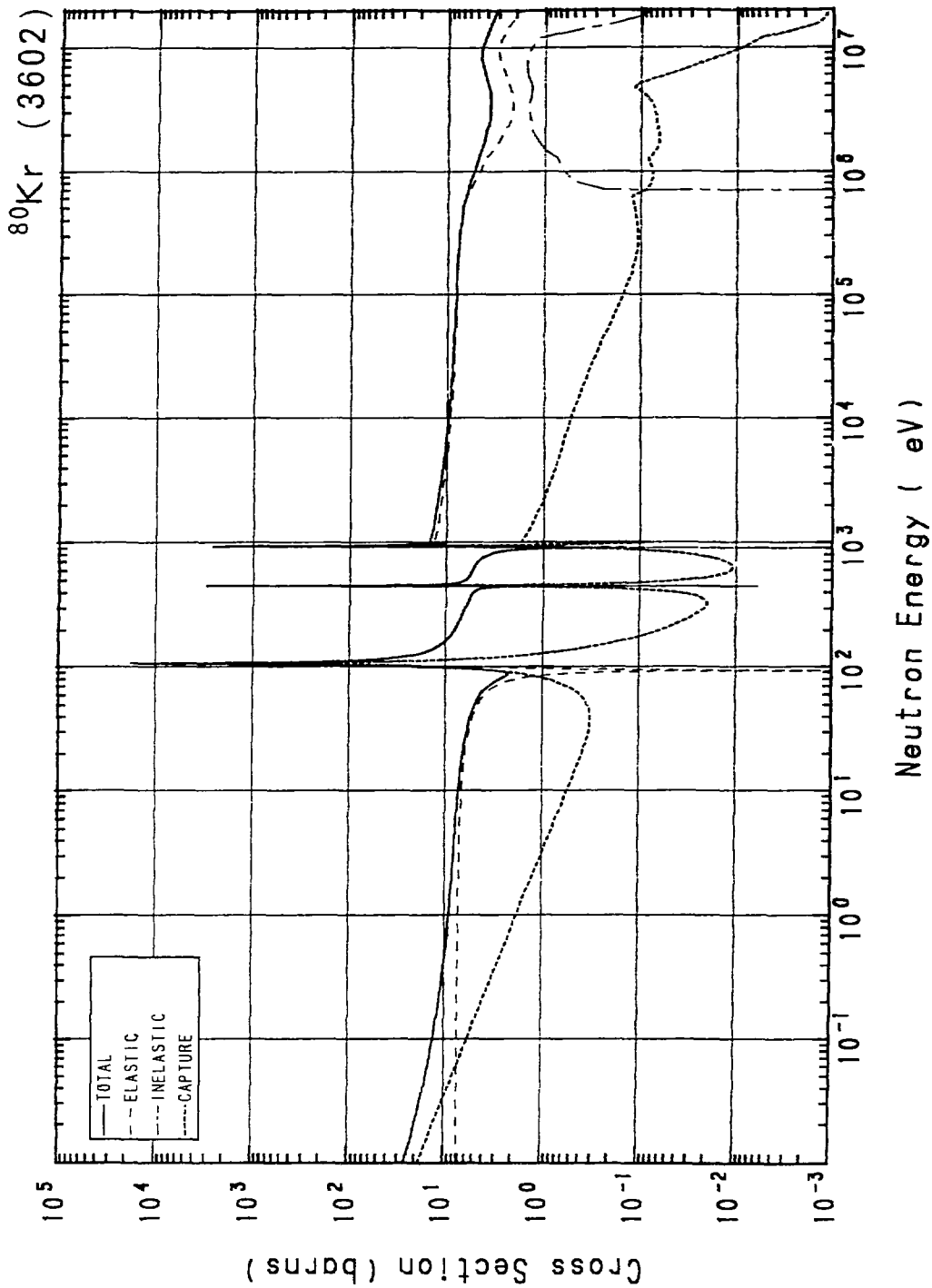

^{81}Br (3502)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

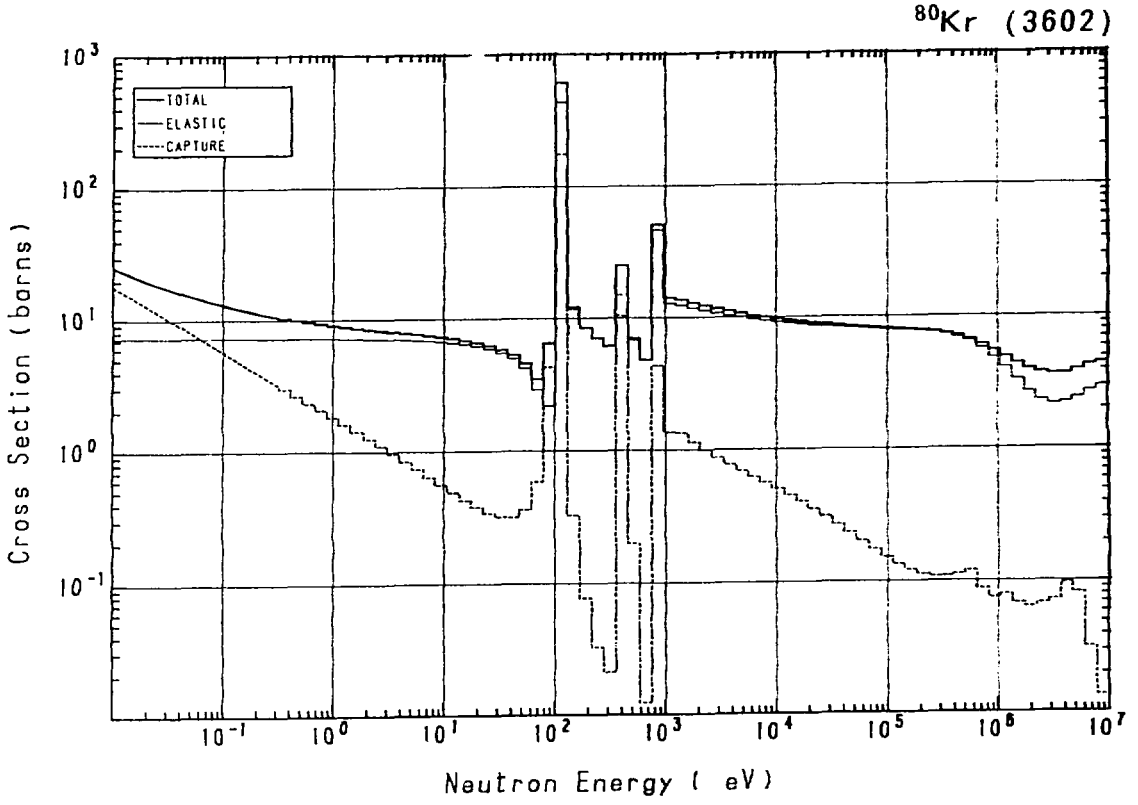

inelastic
(n,2n)
(n,p)
(n,np)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,3n)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

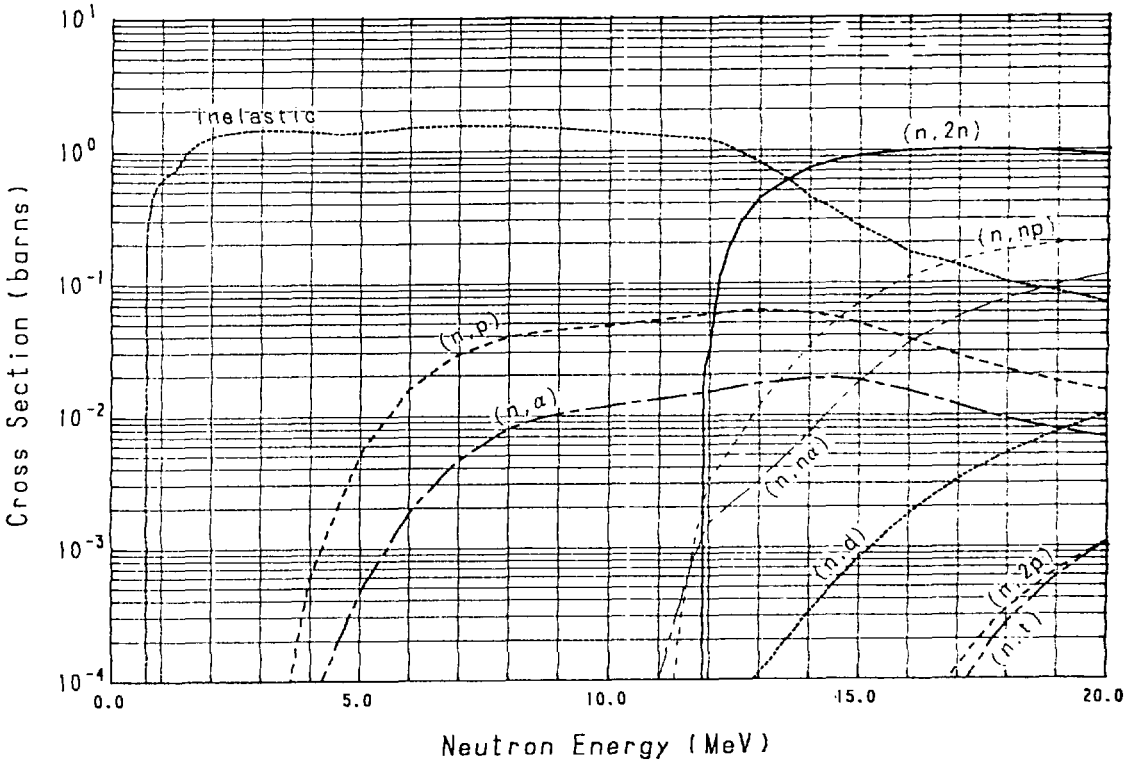

78Kr (3601)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

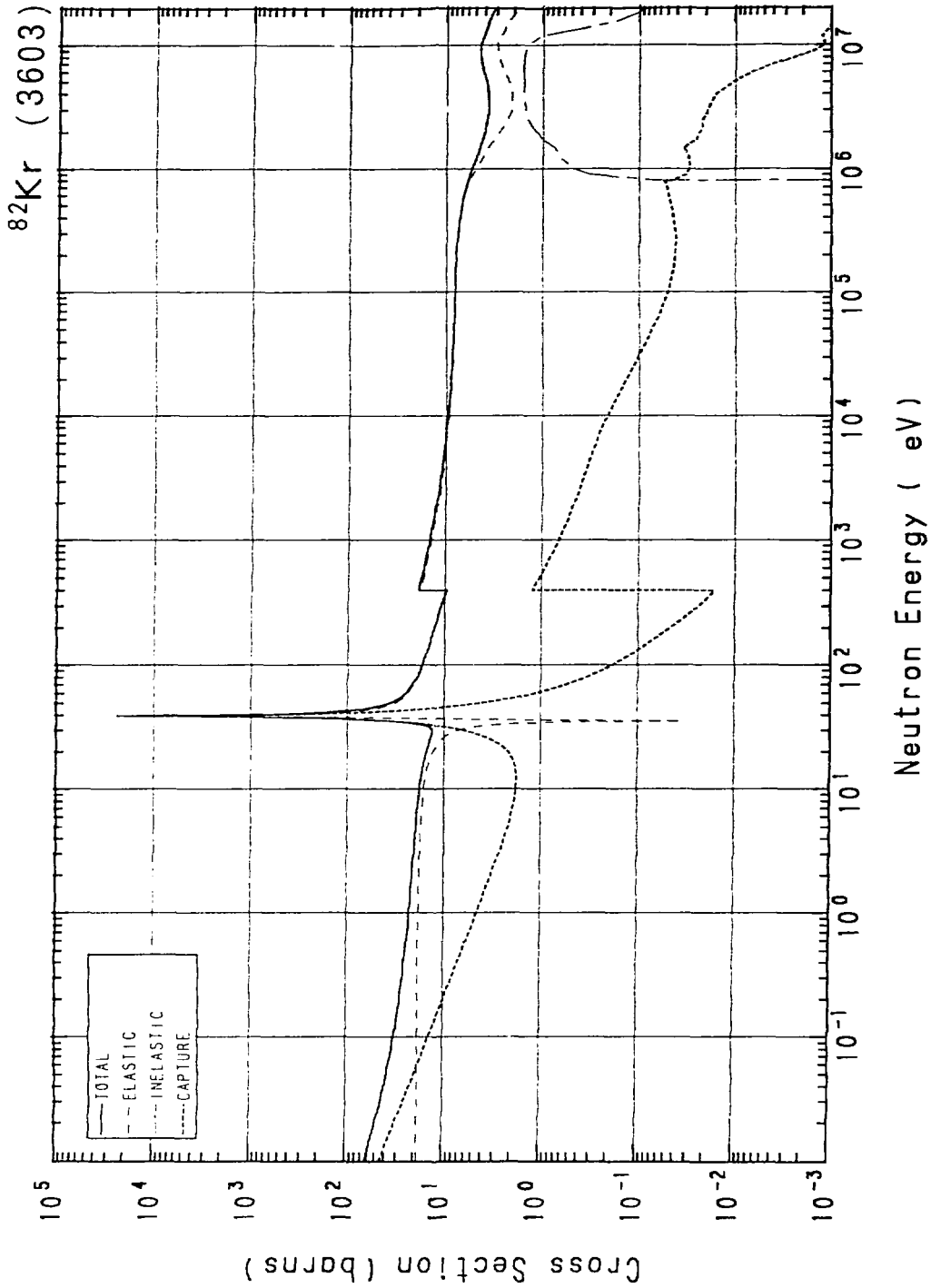

78Kr (3601)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

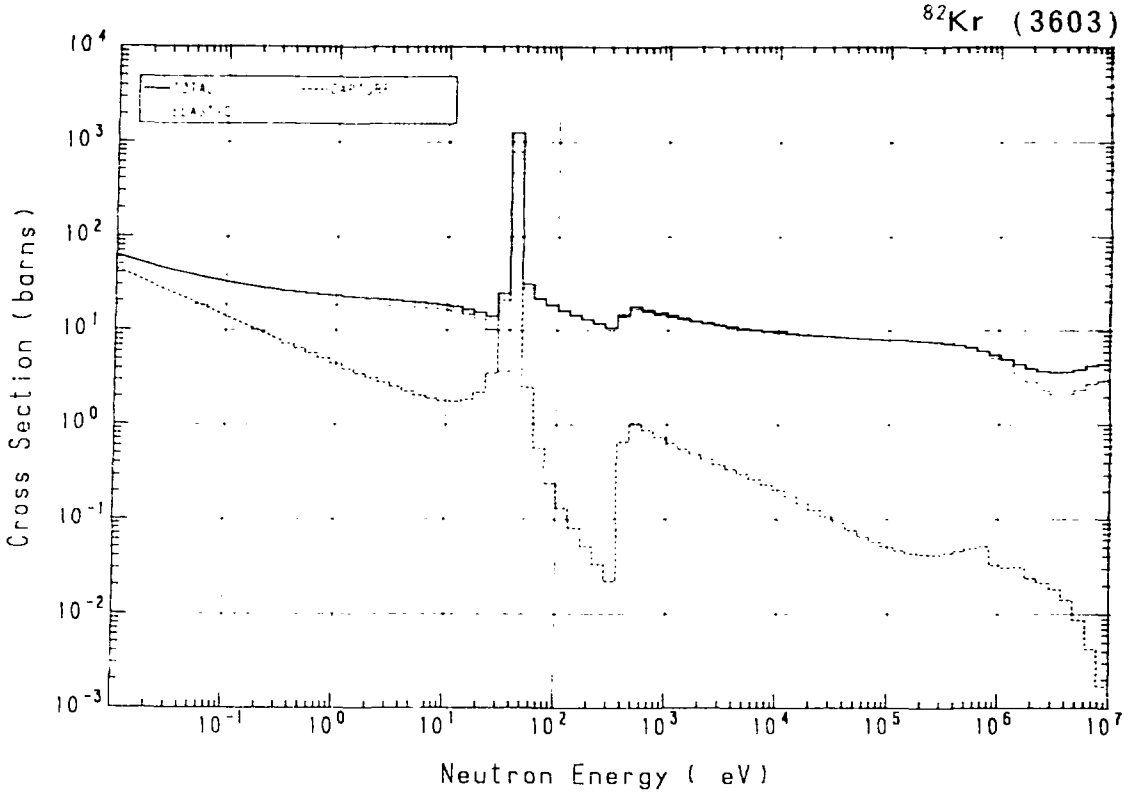

inelastic
(n,np)
(n,p)
(n,α)
(n,nα)
(n,2p)
(n,2n)
(n,d)
(n,t)
(n,3He)
Cross Section (barns)
Neutron Energy (MeV)

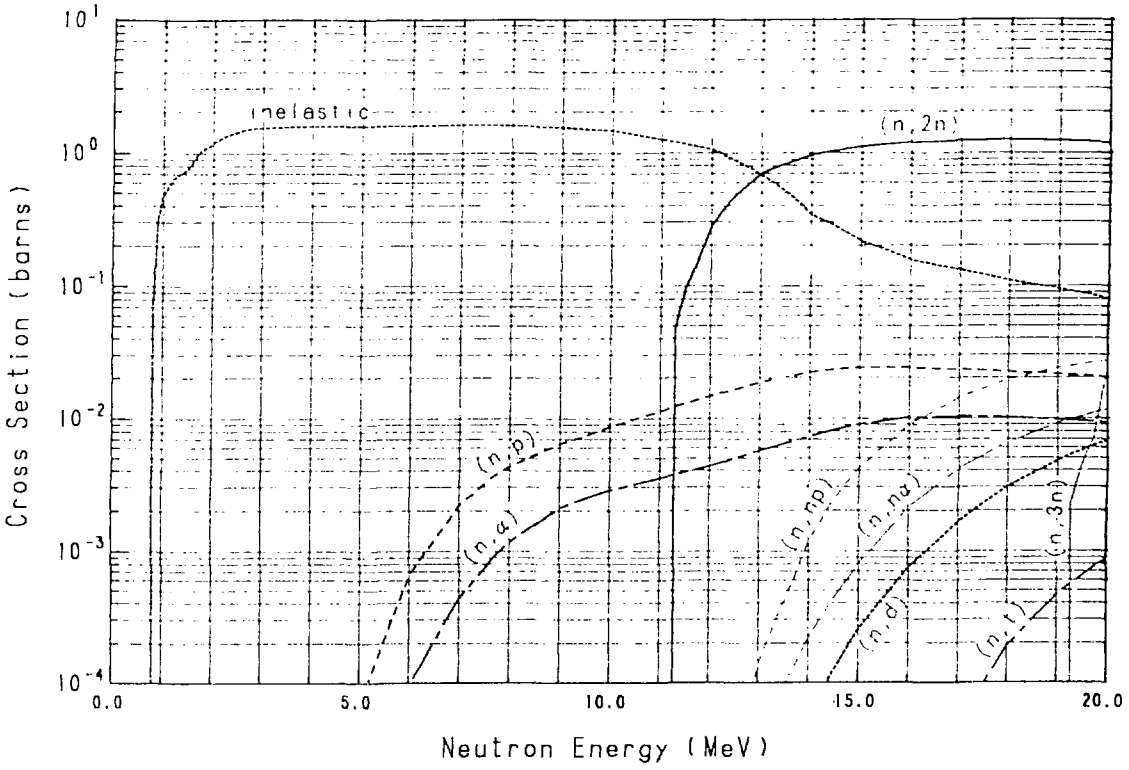

80Kr (3602)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

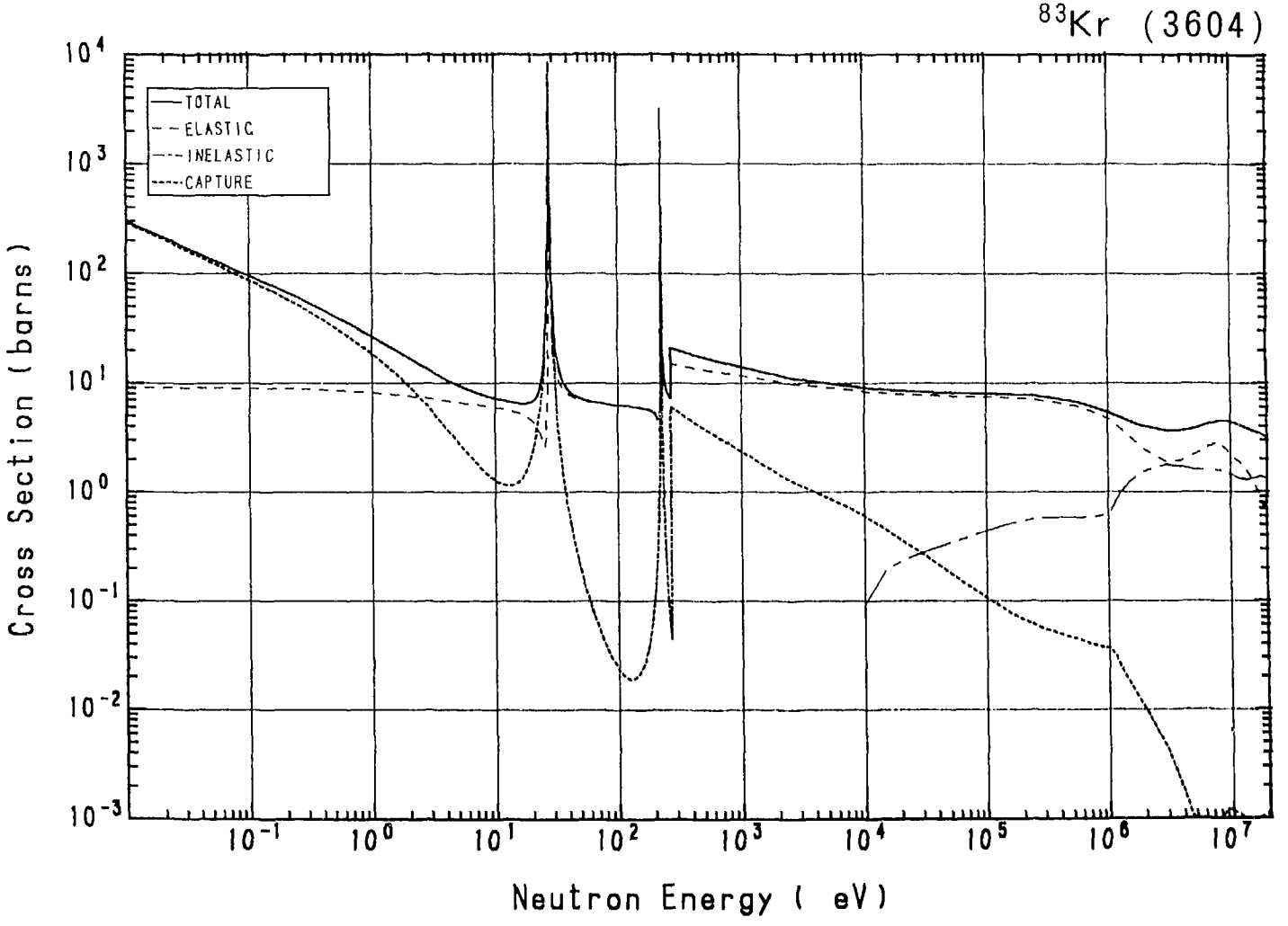

80Kr (3602)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

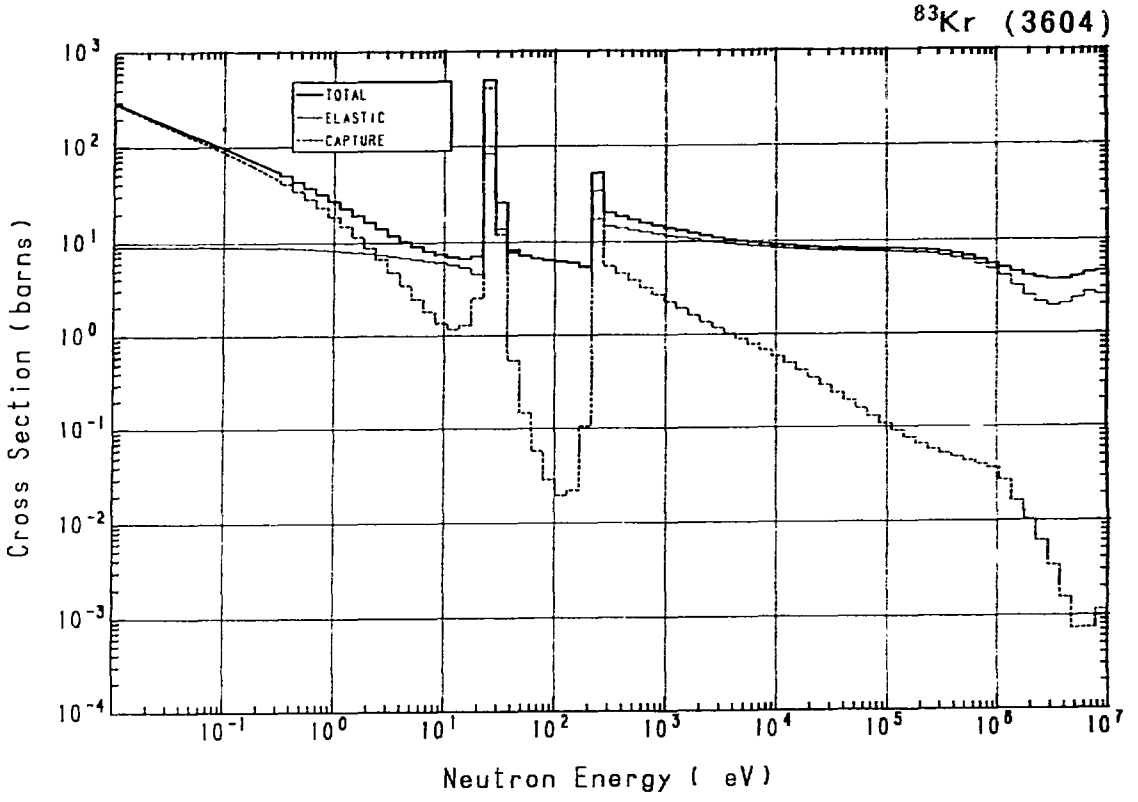

inelastic
(n,2n)
(n,np)
(n,p)
(n,α)
(n,nα)
(n,d)
(n,2p)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

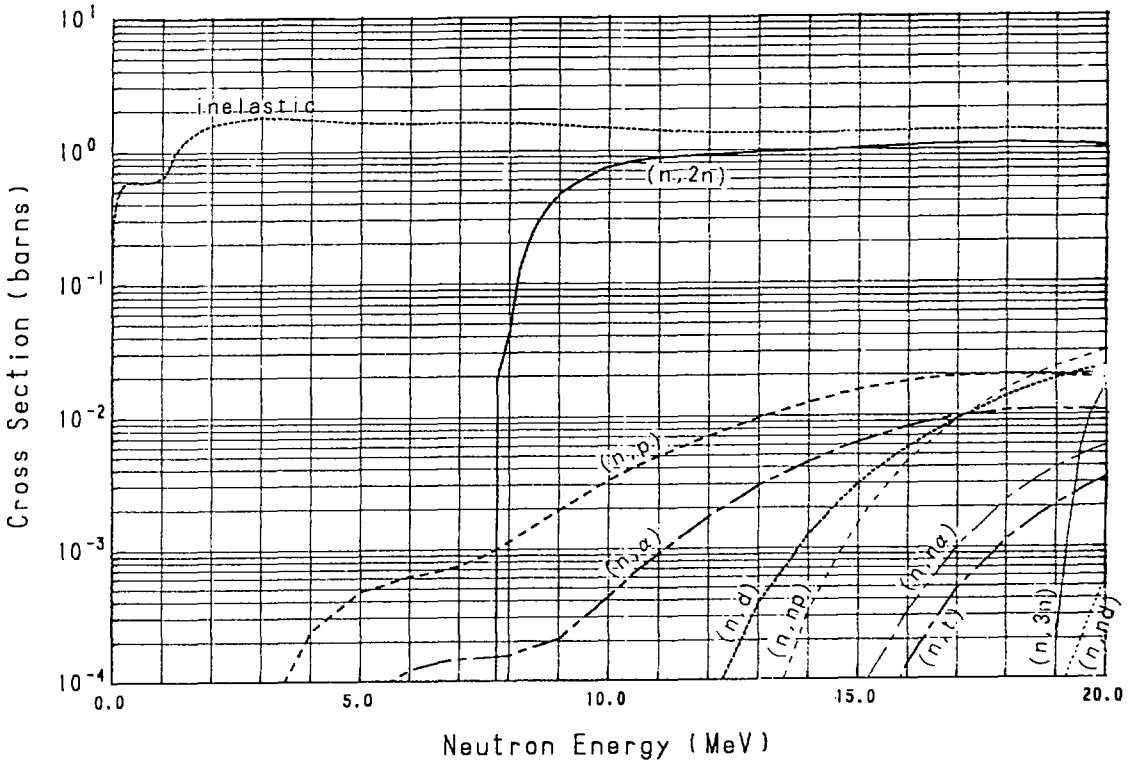

82Kr (3603)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

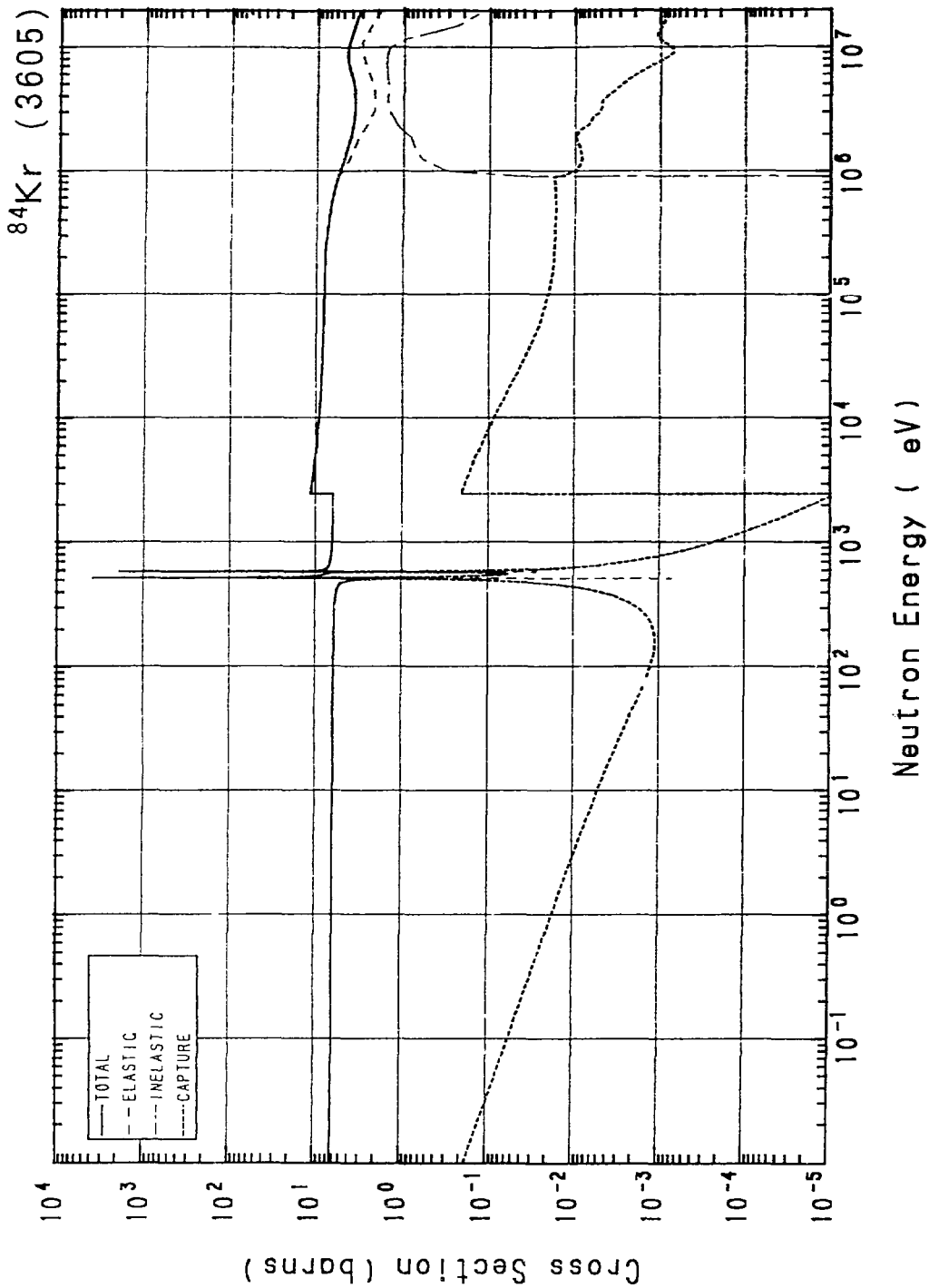

^{82}Kr (3603)
Cross Section (barns)
Neutron Energy (eV)

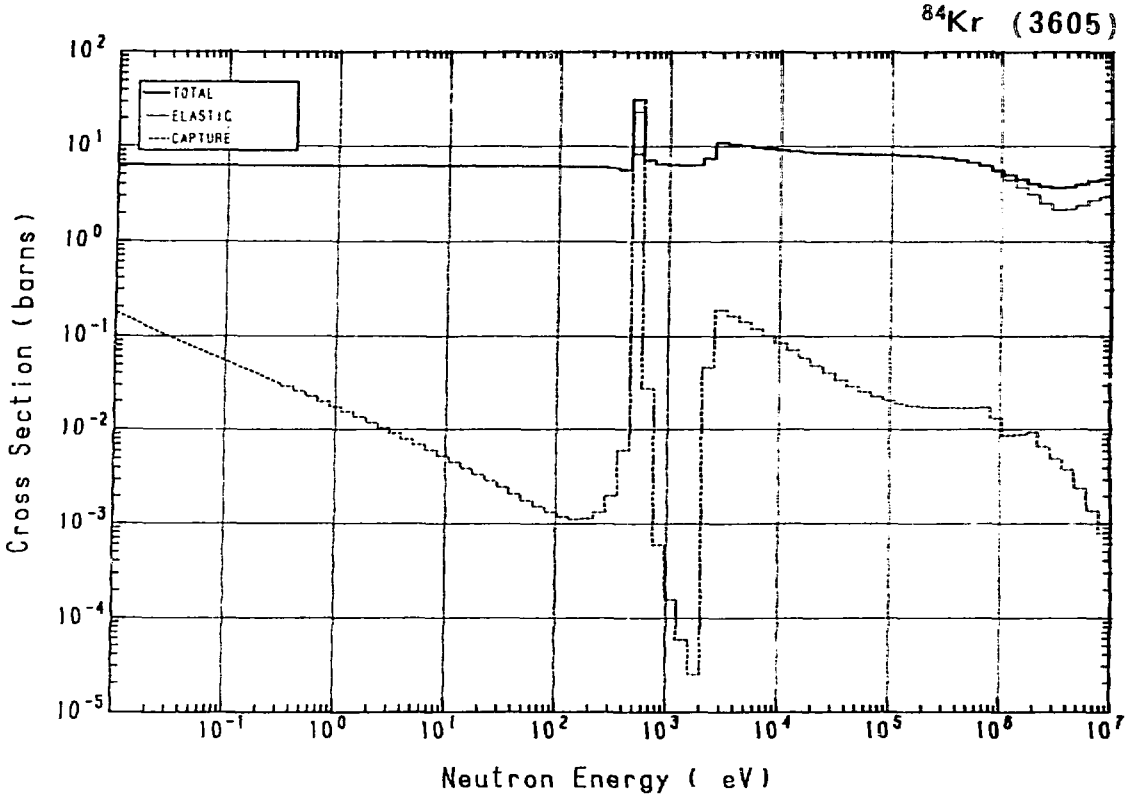

inelastic
(n,2n)
(n,p)
(n,α)
(n,np)
(n,nα)
(n,d)
(n,t)
(n,3n)
Cross Section (barns)
Neutron Energy (MeV)

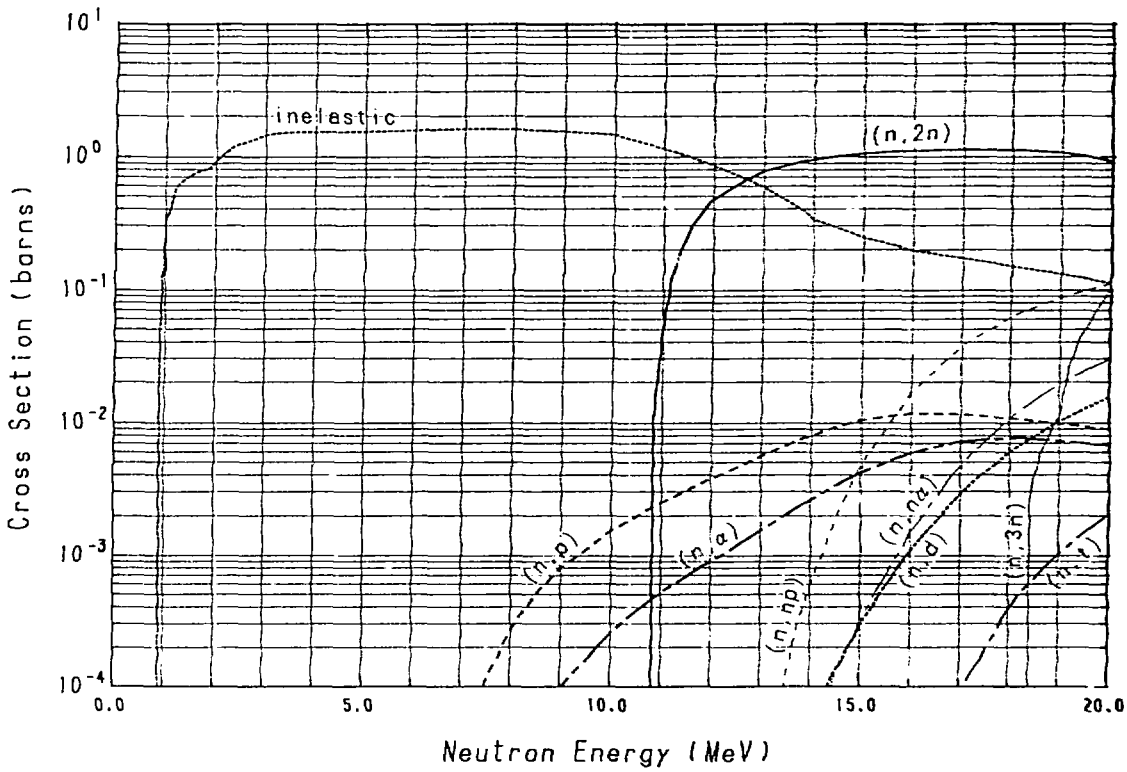

^{83}Kr (3604)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

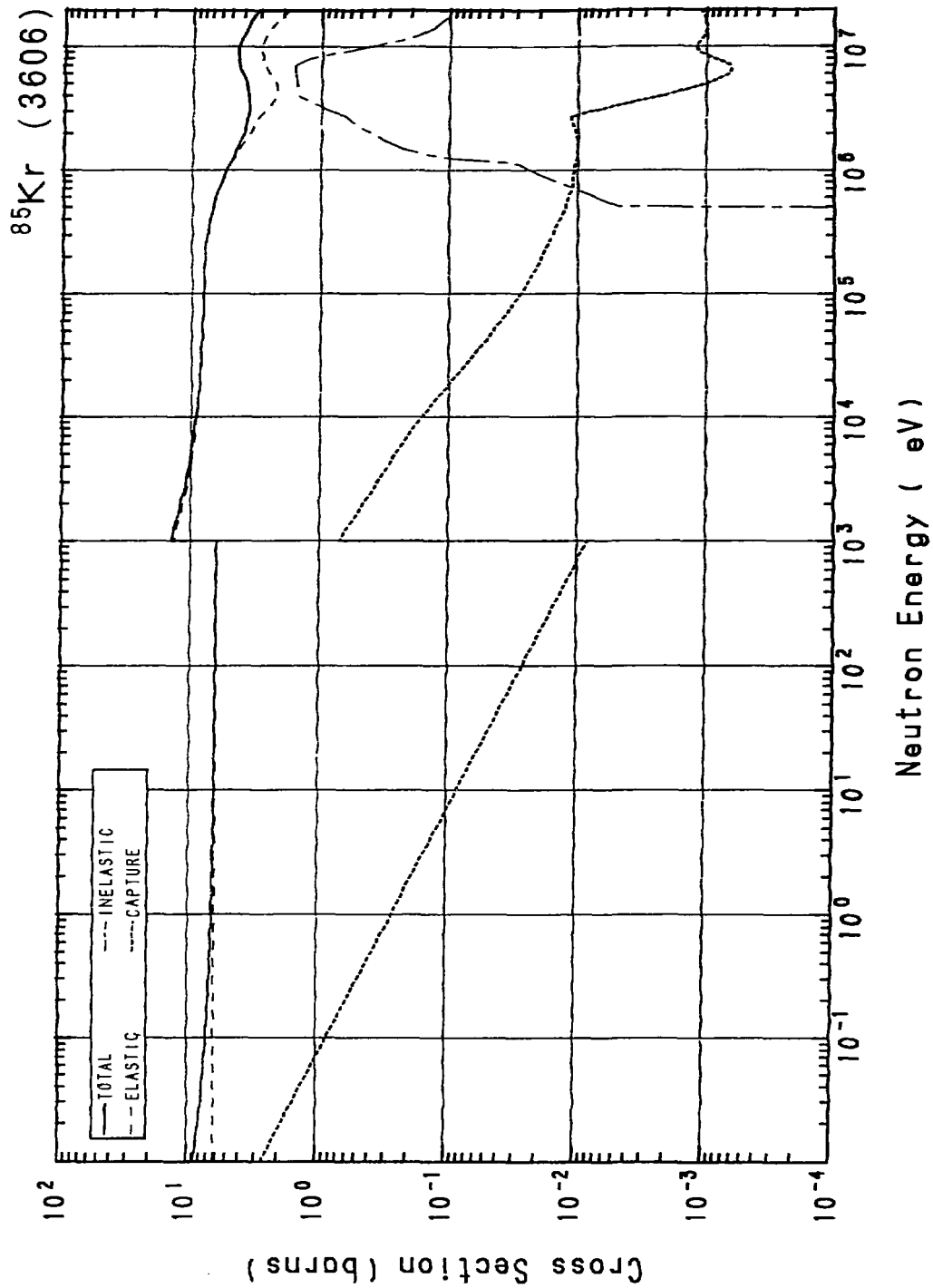

^{83}Kr (3604)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

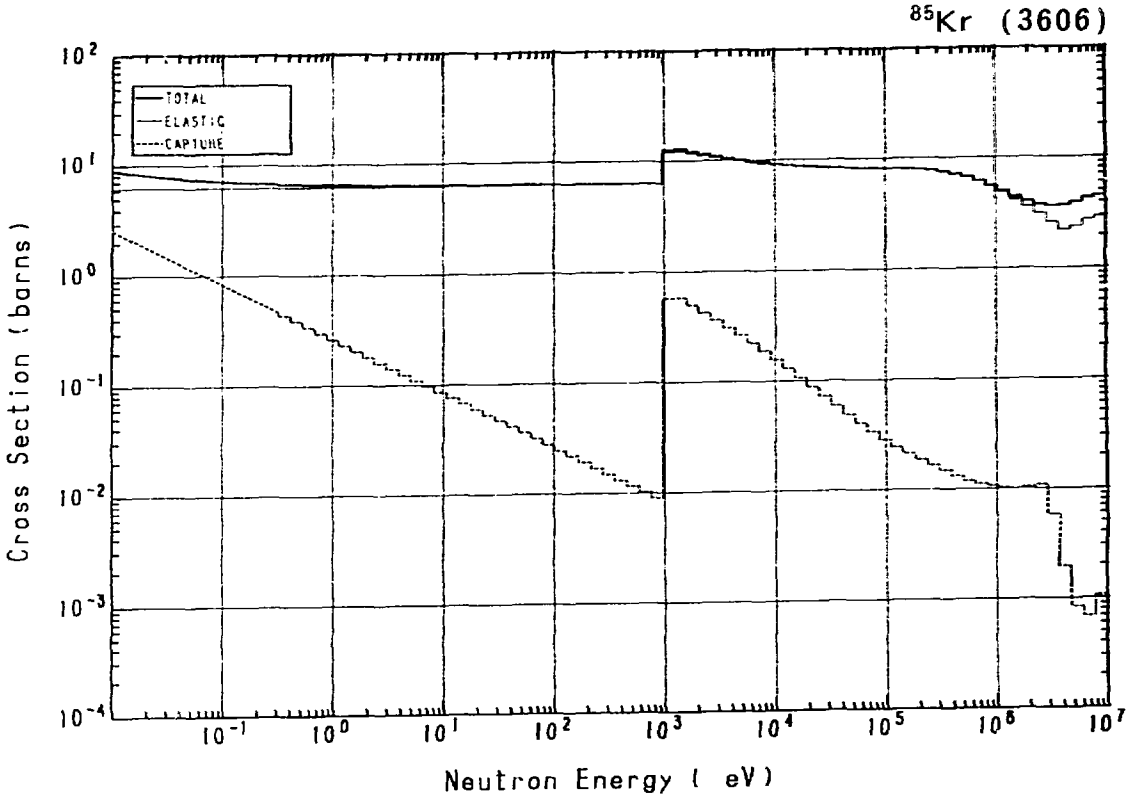

inelastic
(n,2n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,t)
(n,3n)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

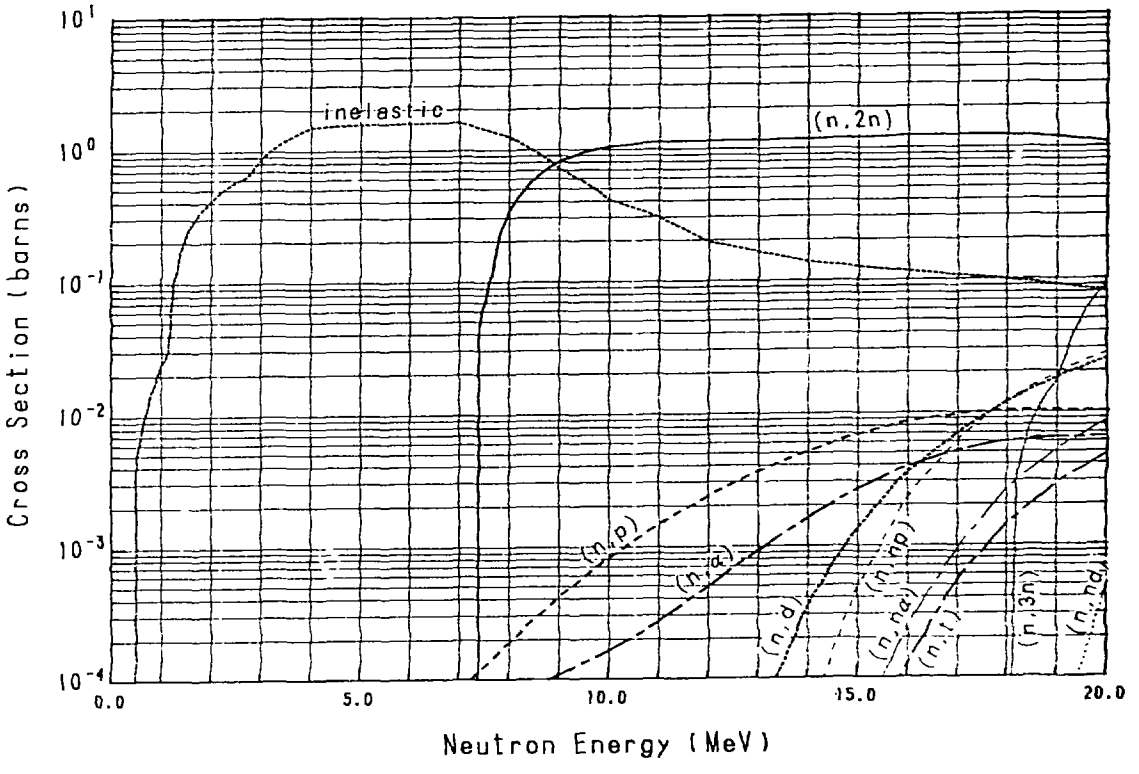

84Kr (3605)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

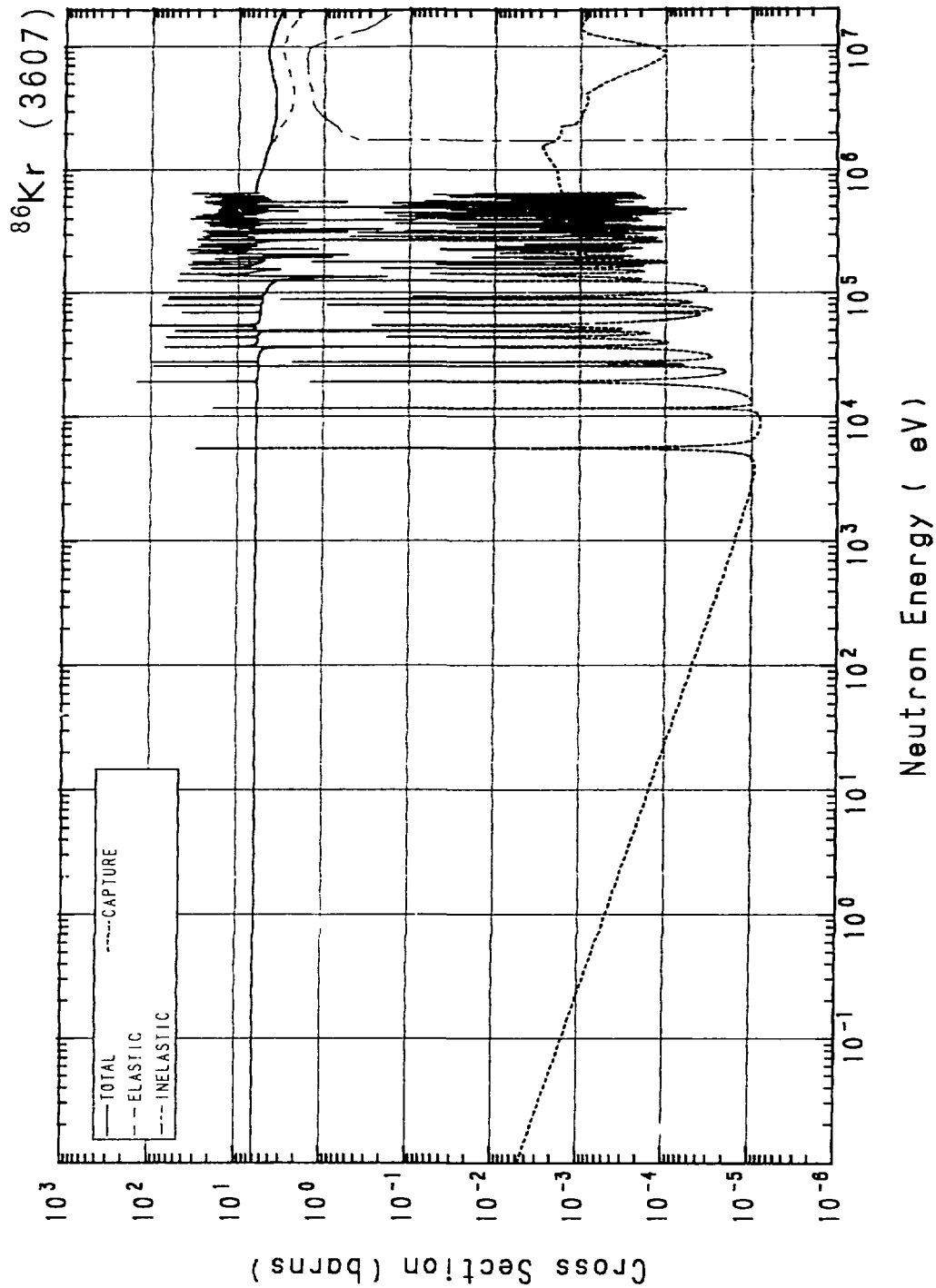

^{84}Kr (3605)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

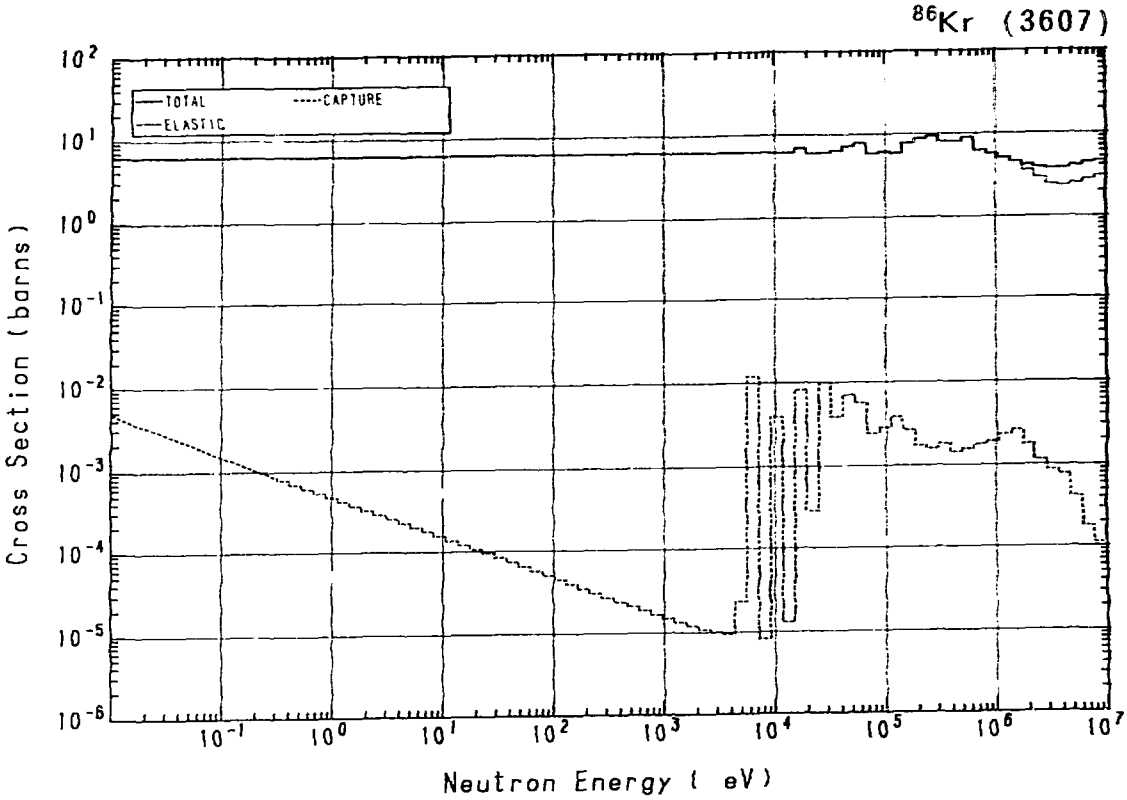

inelastic
(n,2n)
(n,p)
(n,α)
(n,np)
(n,nα)
(n,d)
(n,3n)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

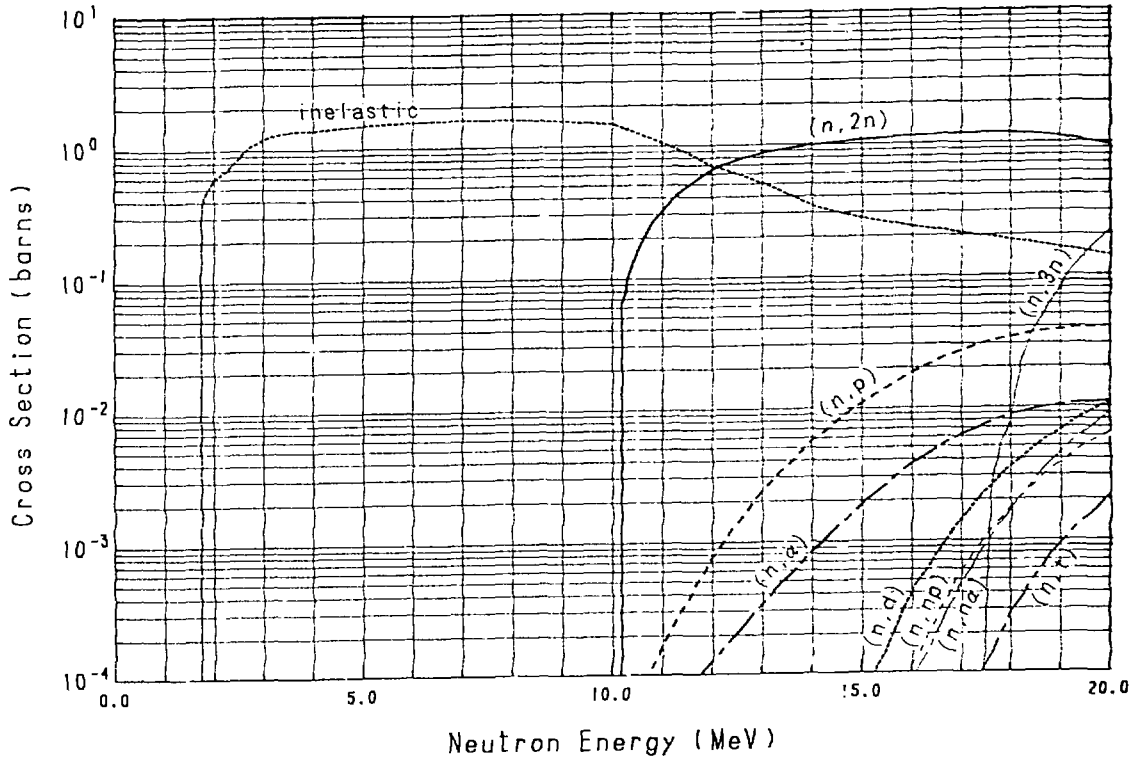

85Kr (3606)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

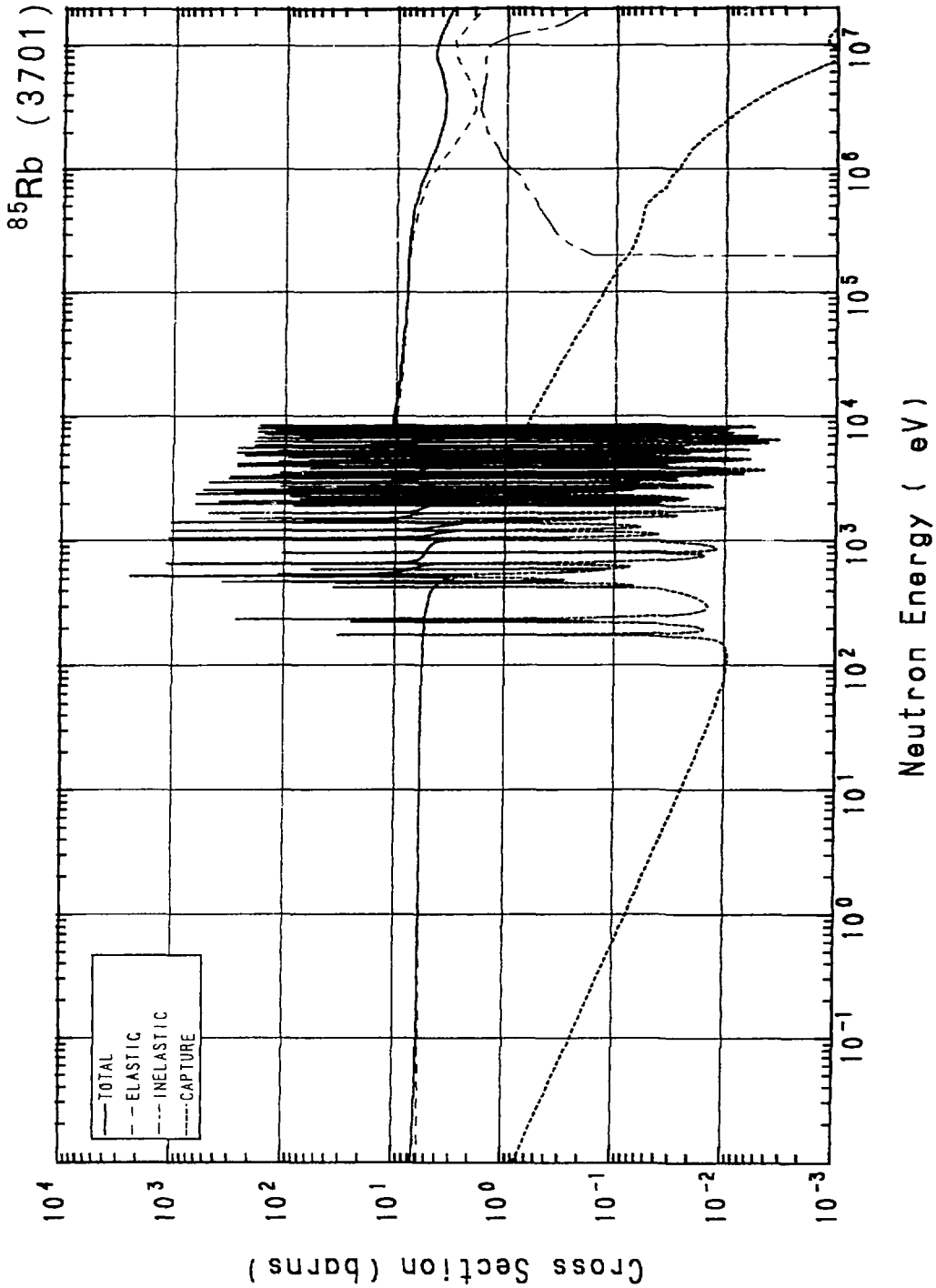

85Kr (3606)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

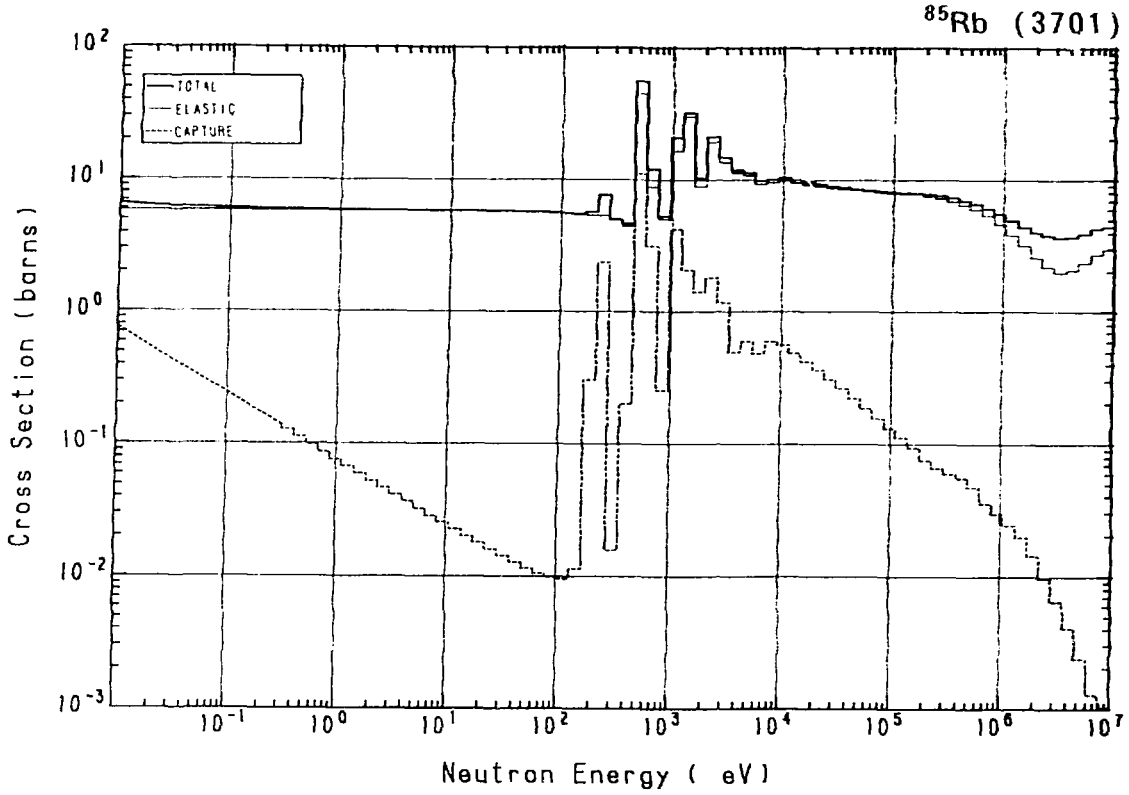

inelastic
(n,2n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,t)
(n,3n)
(n,nα)
Cross Section (barns)
Neutron Energy (MeV)

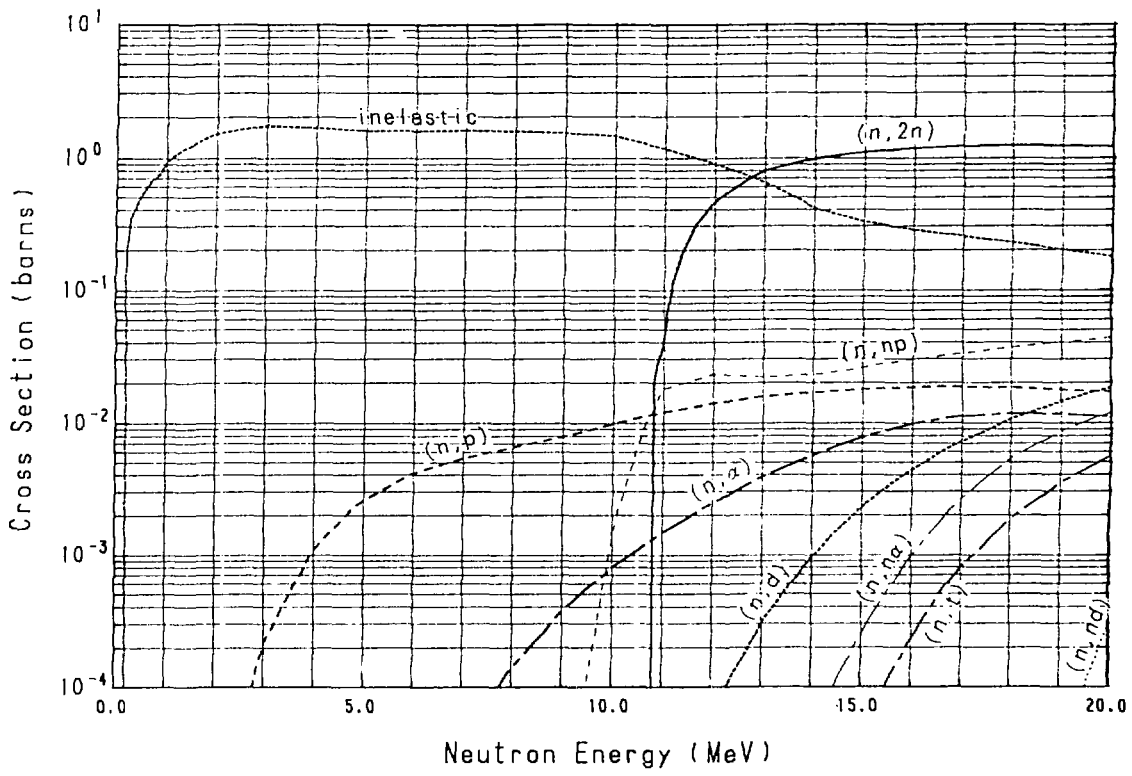

86Kr (3607)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

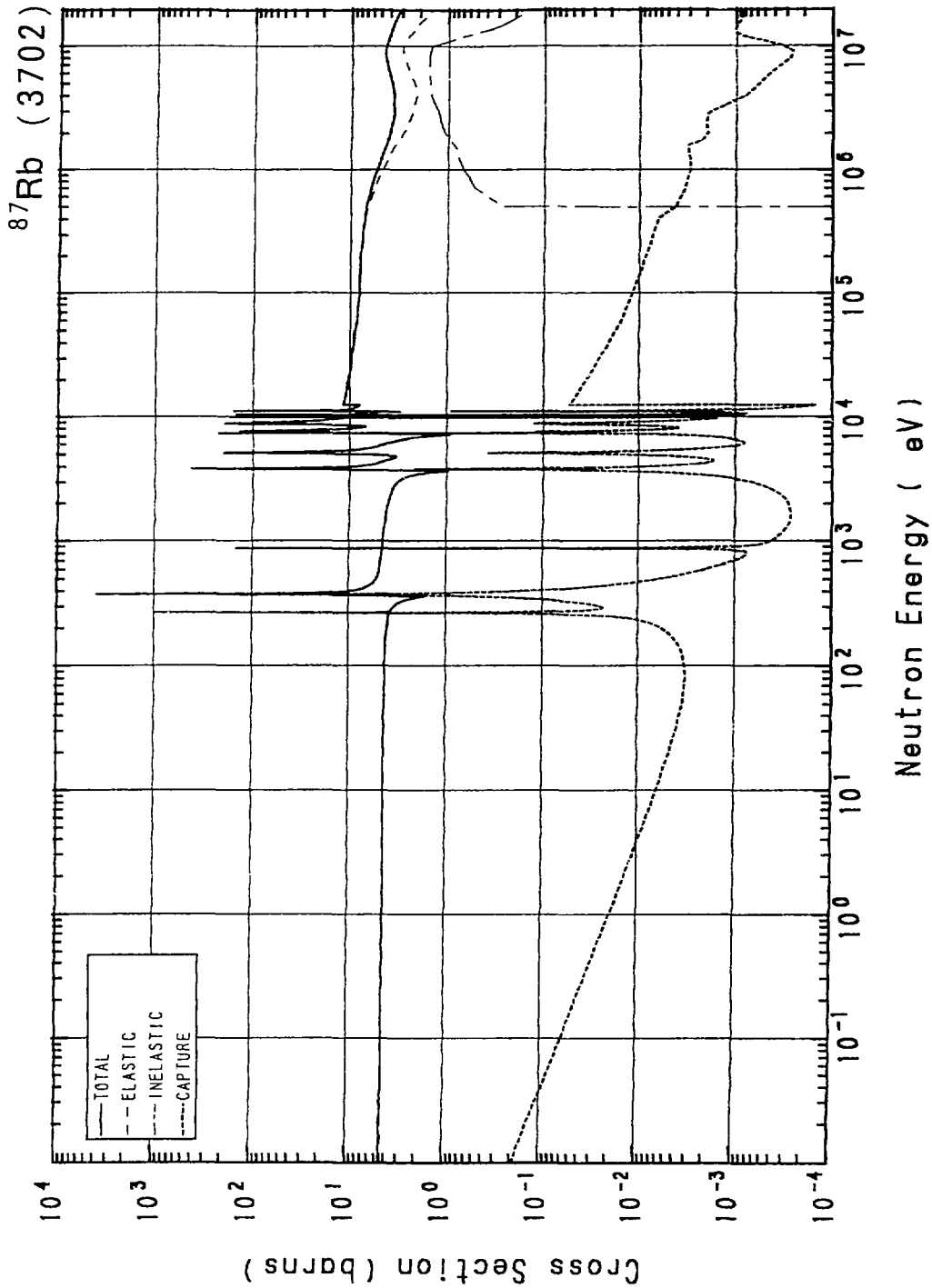

86Kr (3607)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

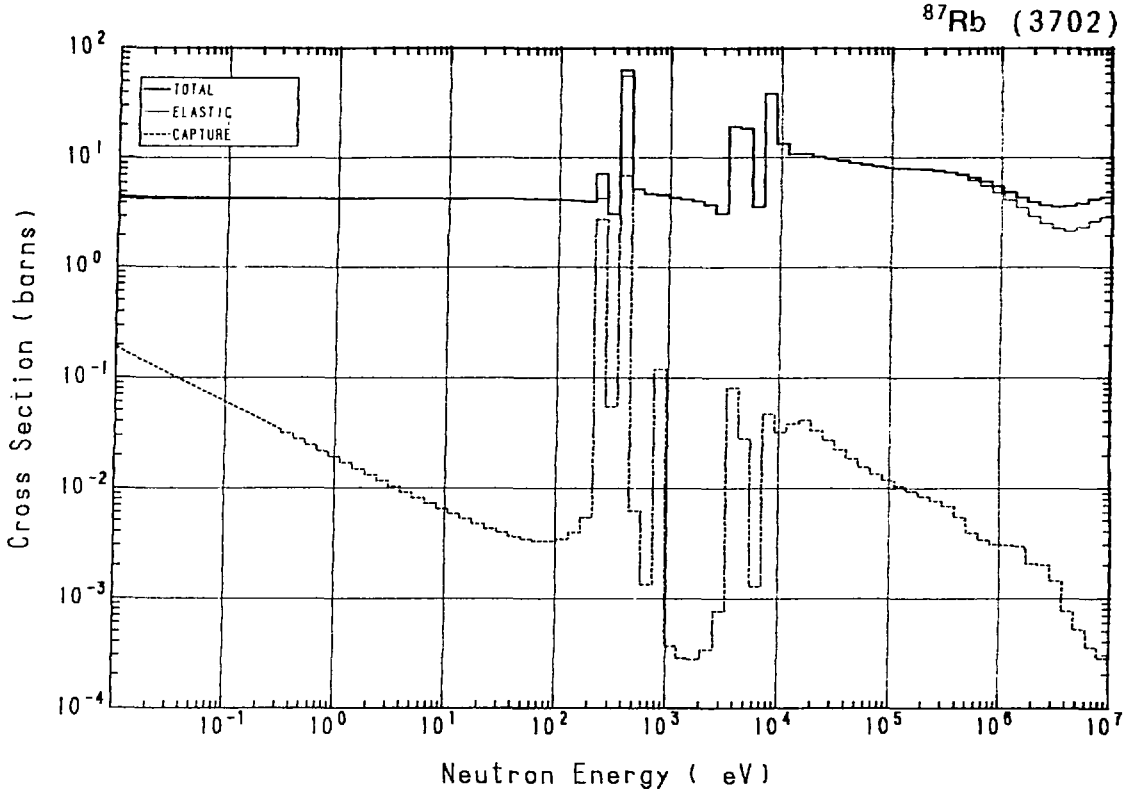

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

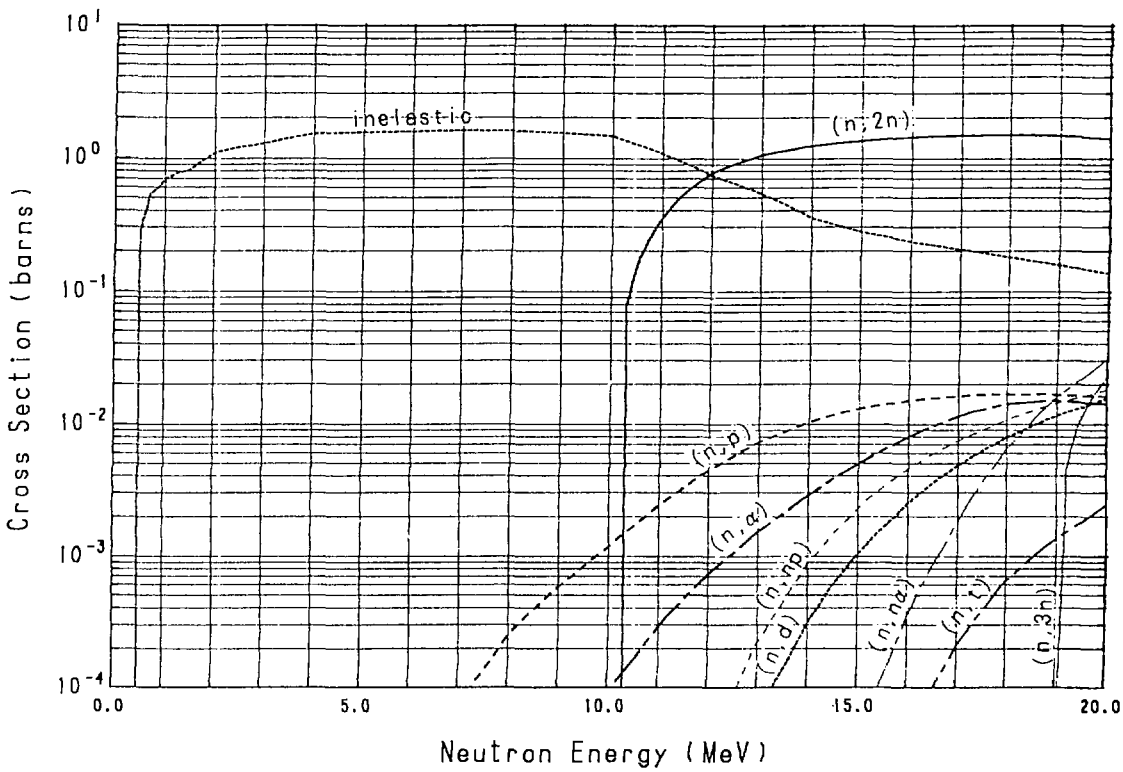

85Rb (3701)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

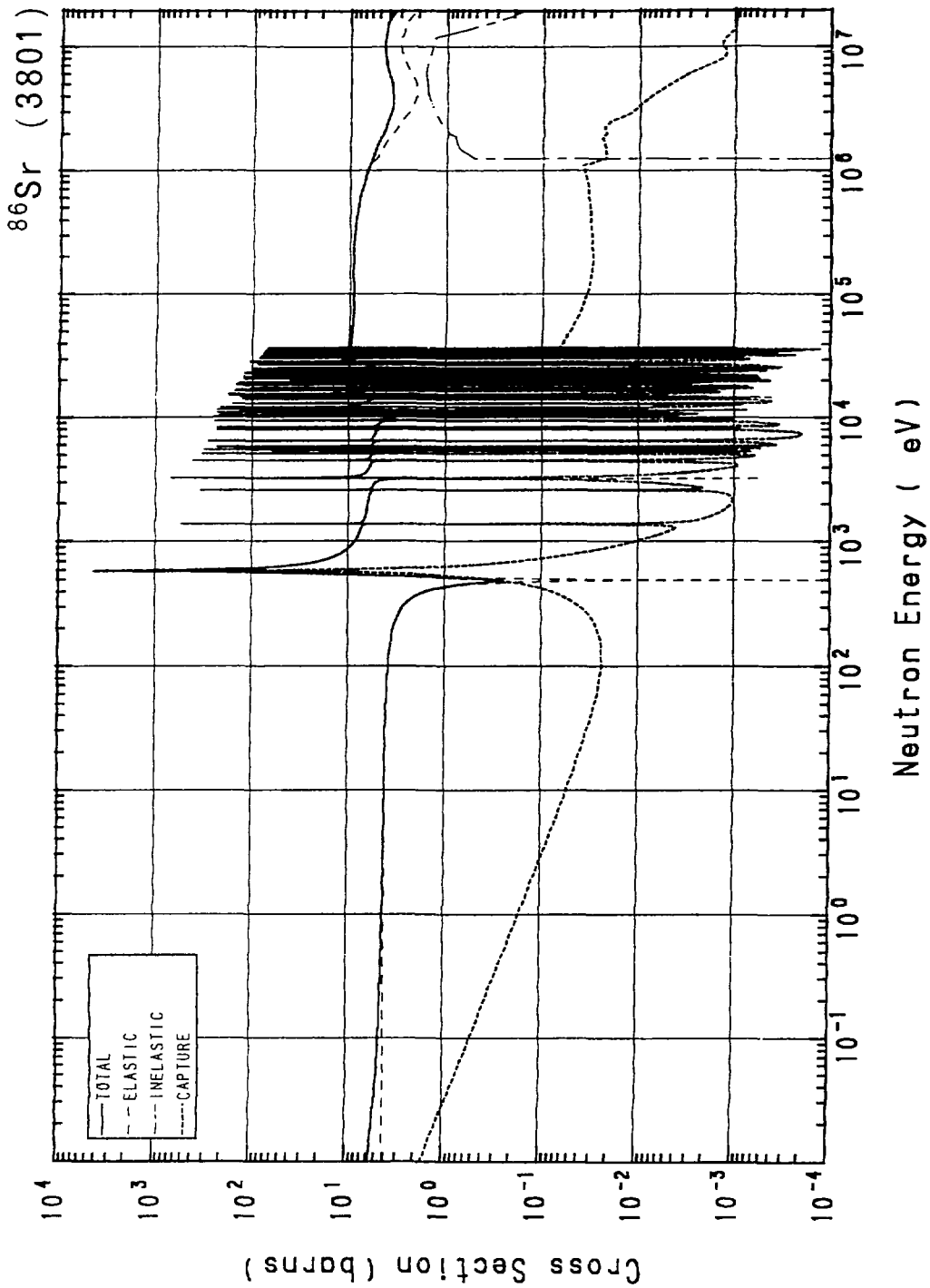

85Rb (3701)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

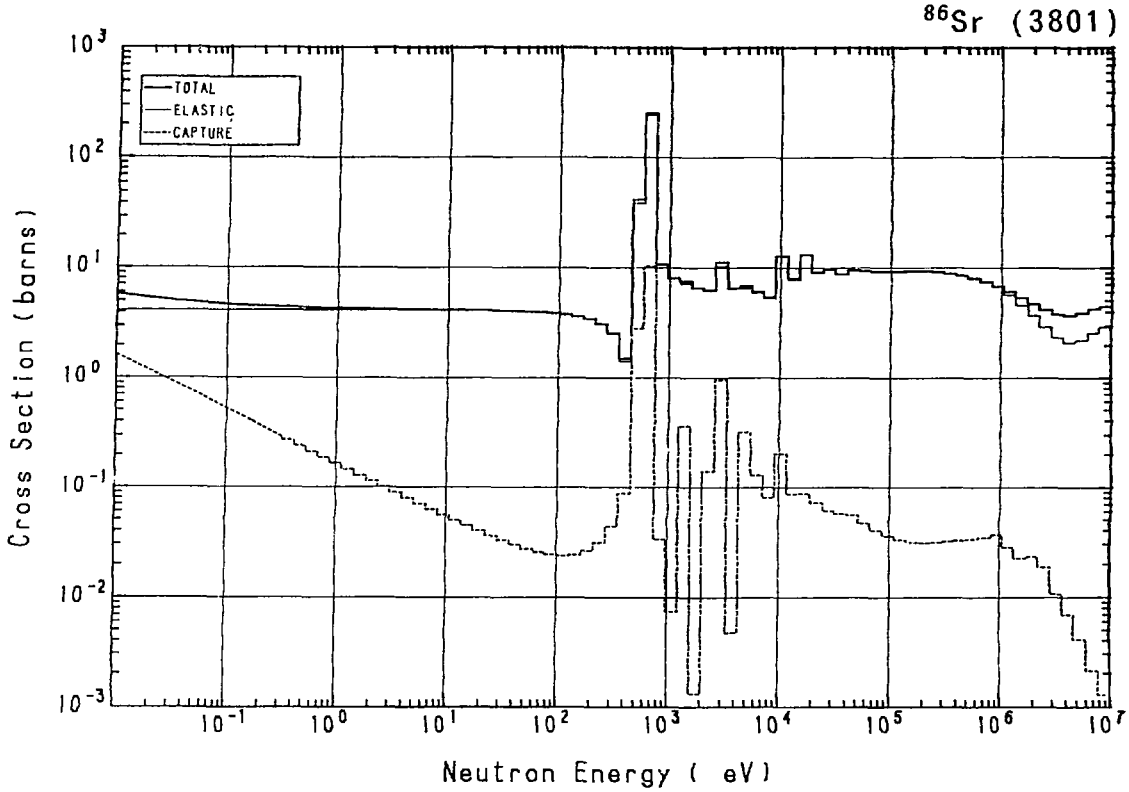

inelastic
(n,2n)
(n,np)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,γ)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

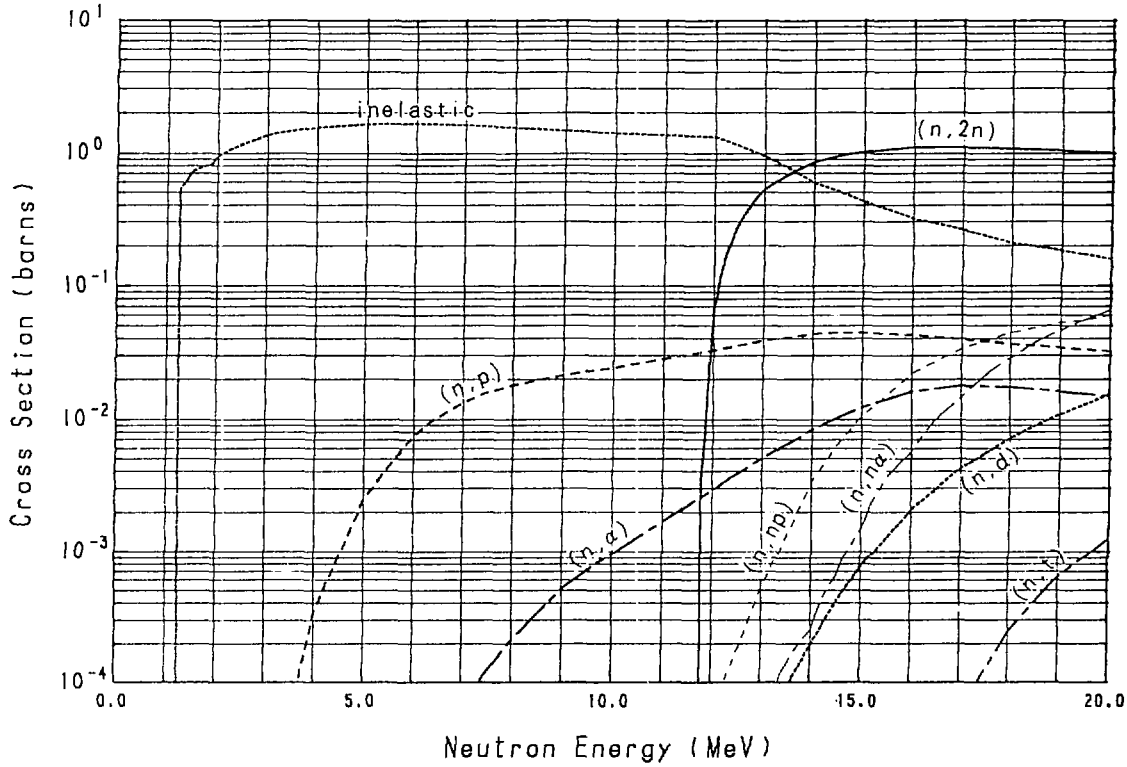

87Rb (3702)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

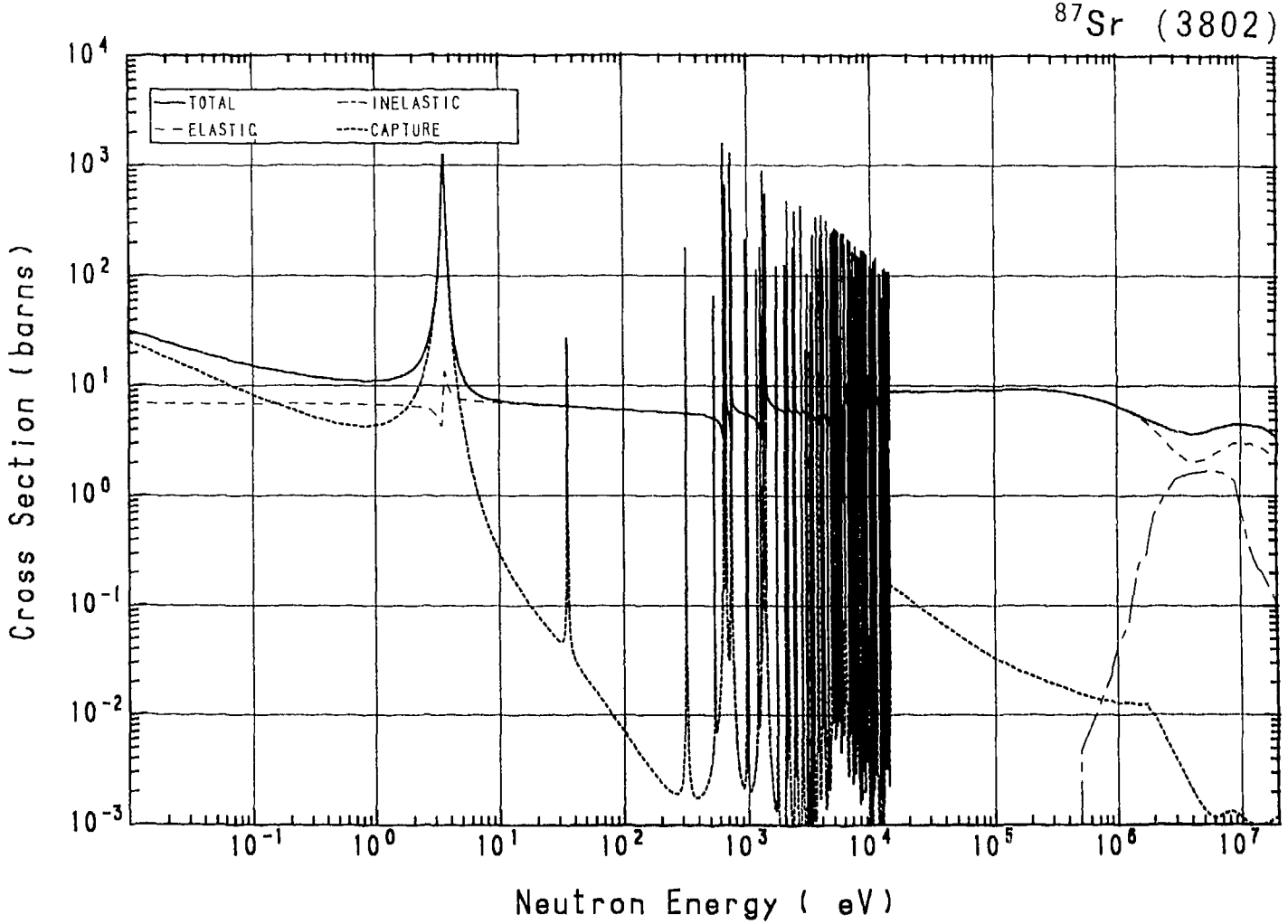

^{87}Rb (3702)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

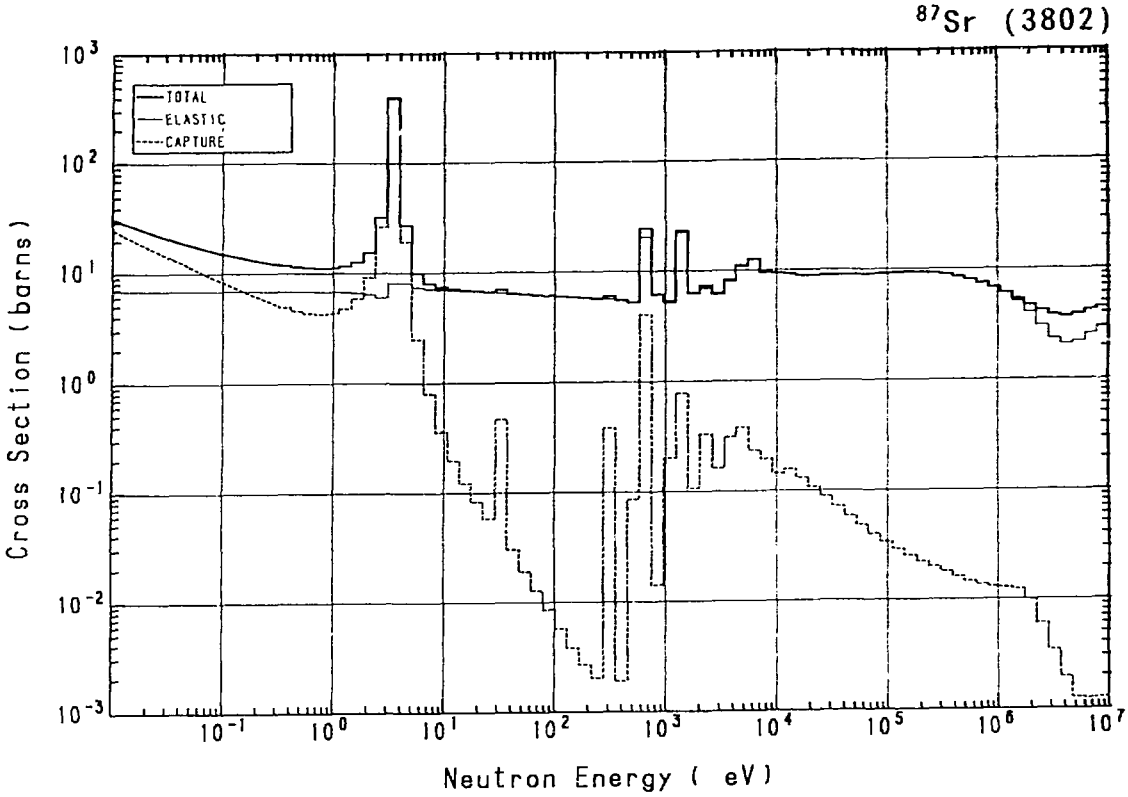

inelastic
(n,2n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,nα)
(n,t)
(n,3n)
Cross Section (barns)
Neutron Energy (MeV)

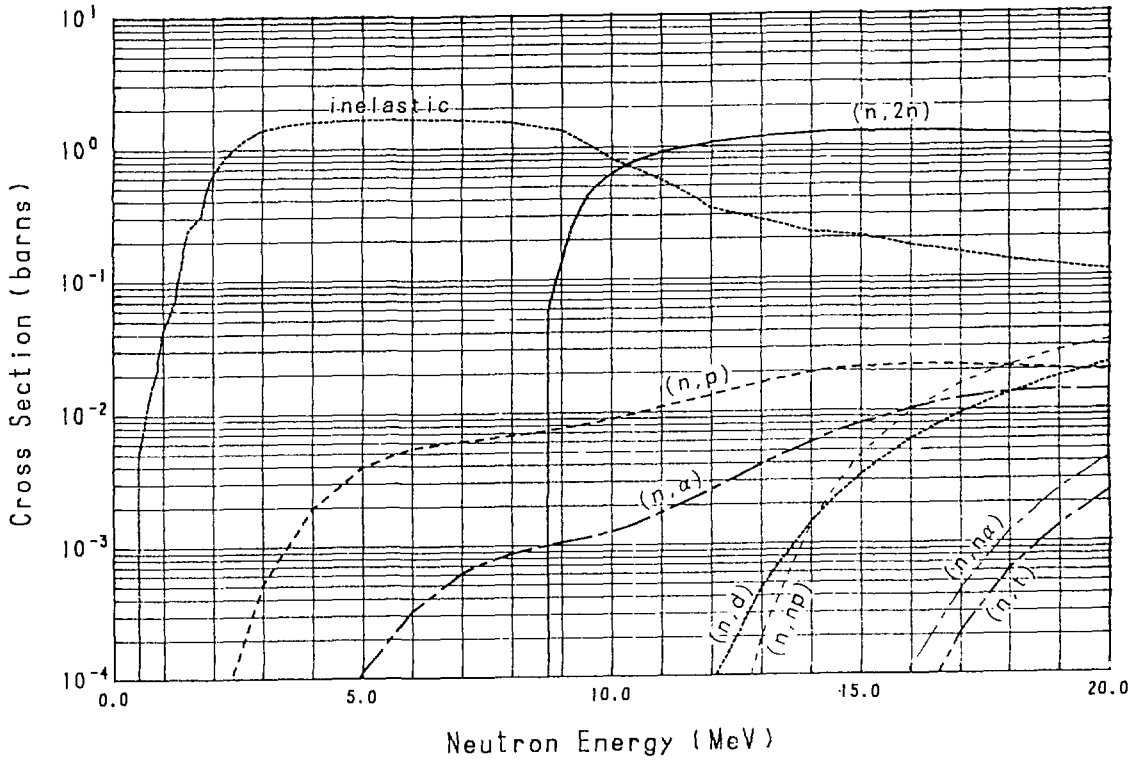

86Sr (3801)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

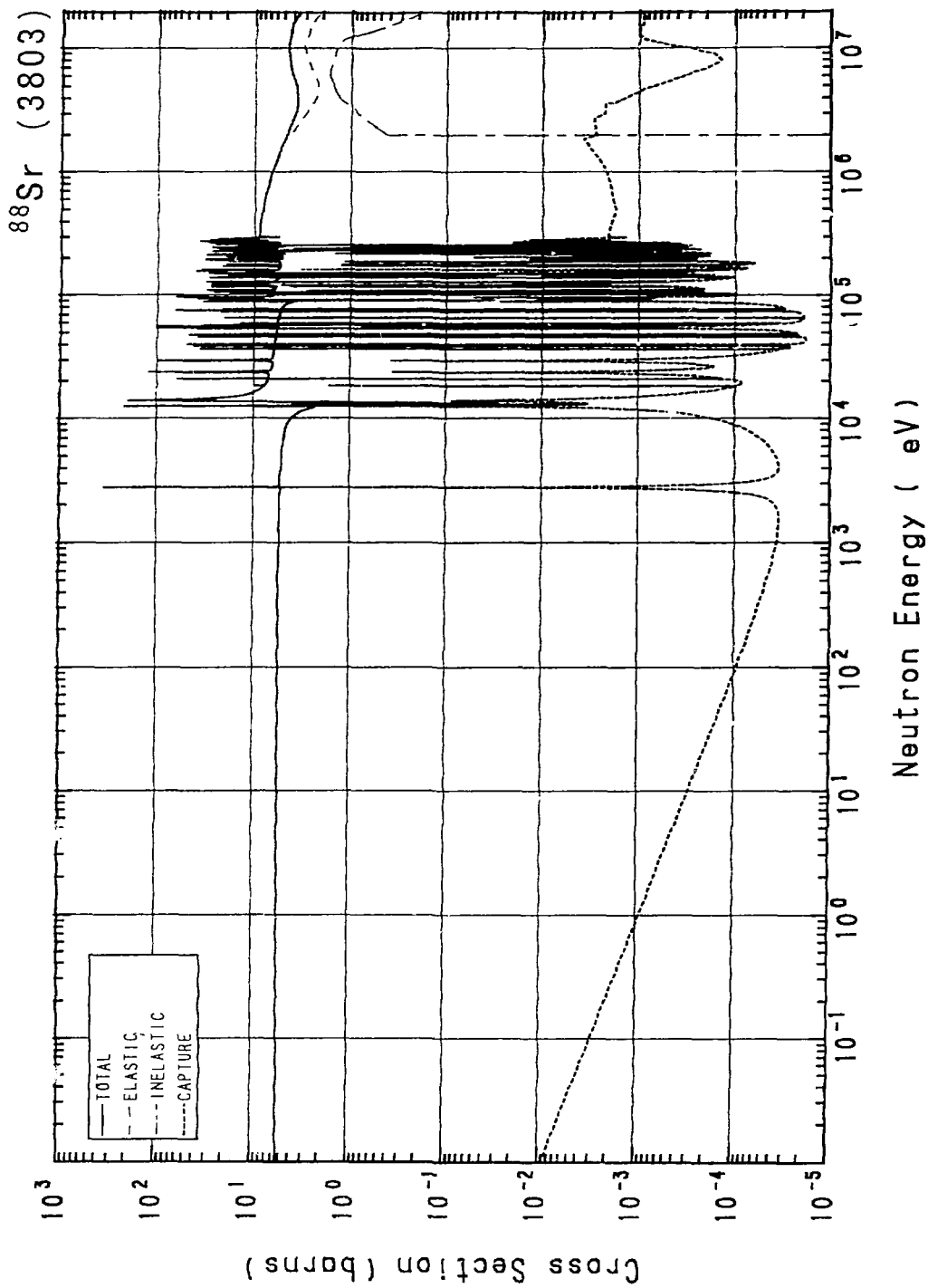

86Sr (3801)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

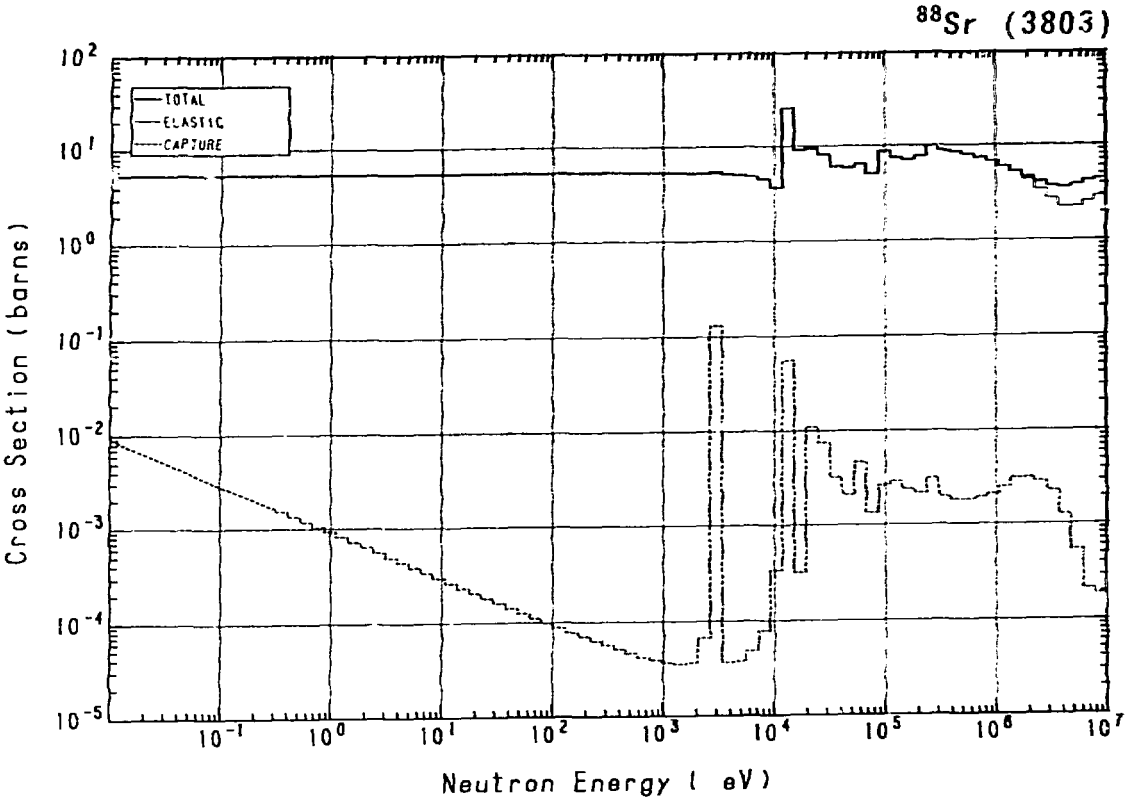

inelastic
(n,2n)
(n,p)
(n,α)
(n,np)
(n,nα)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

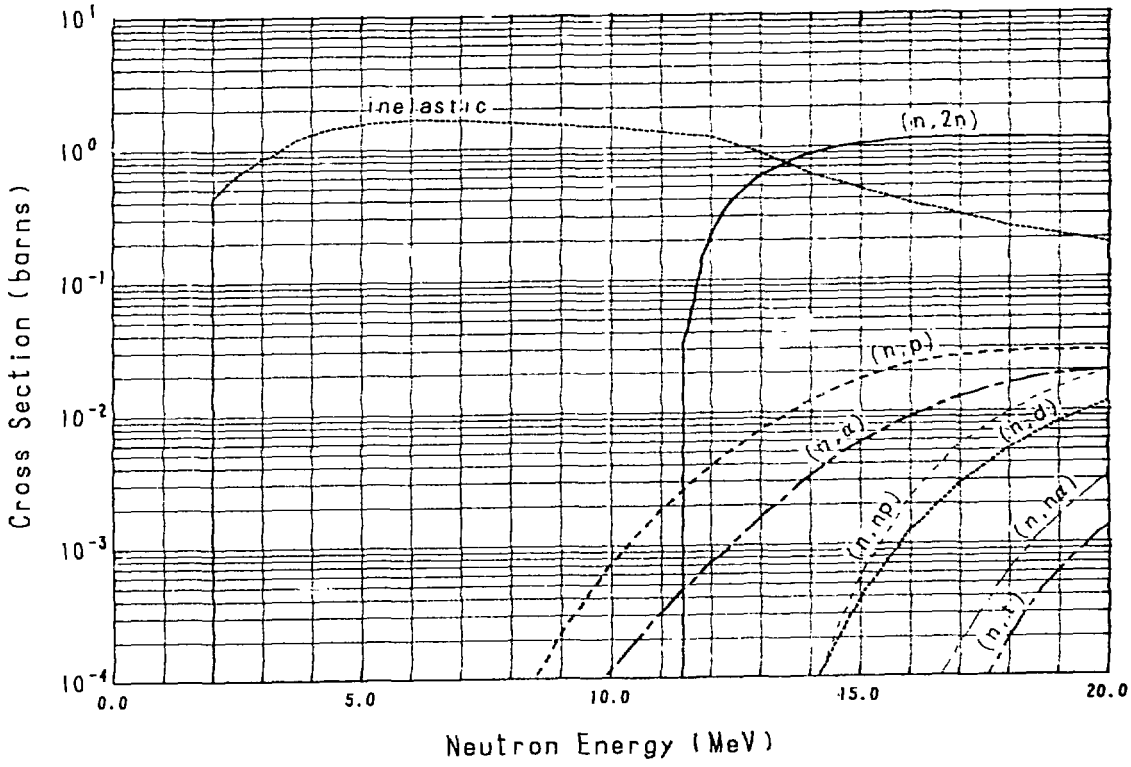

^{87}Sr (3802)
TOTAL
INELASTIC
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

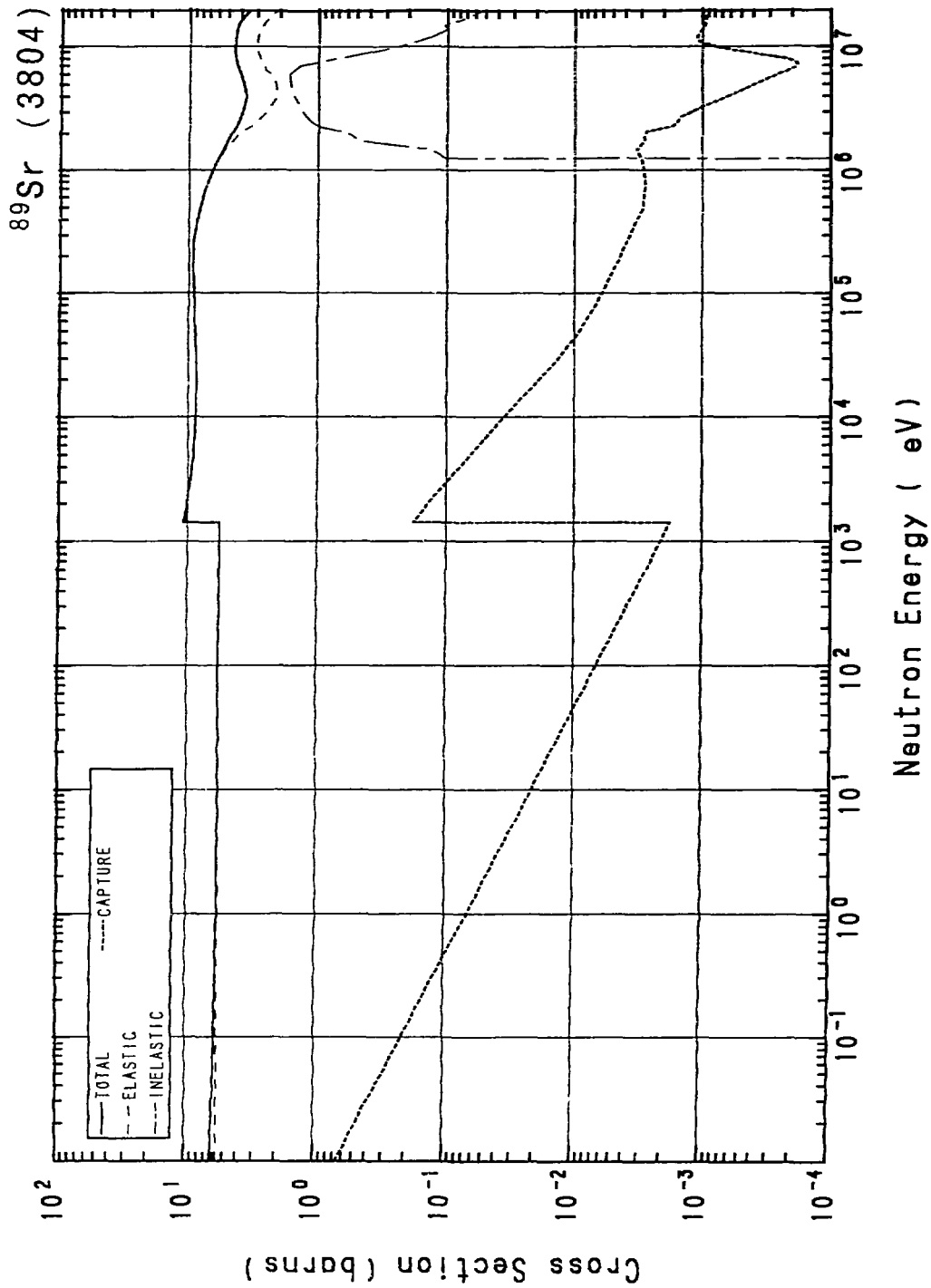

^{87}Sr (3802)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

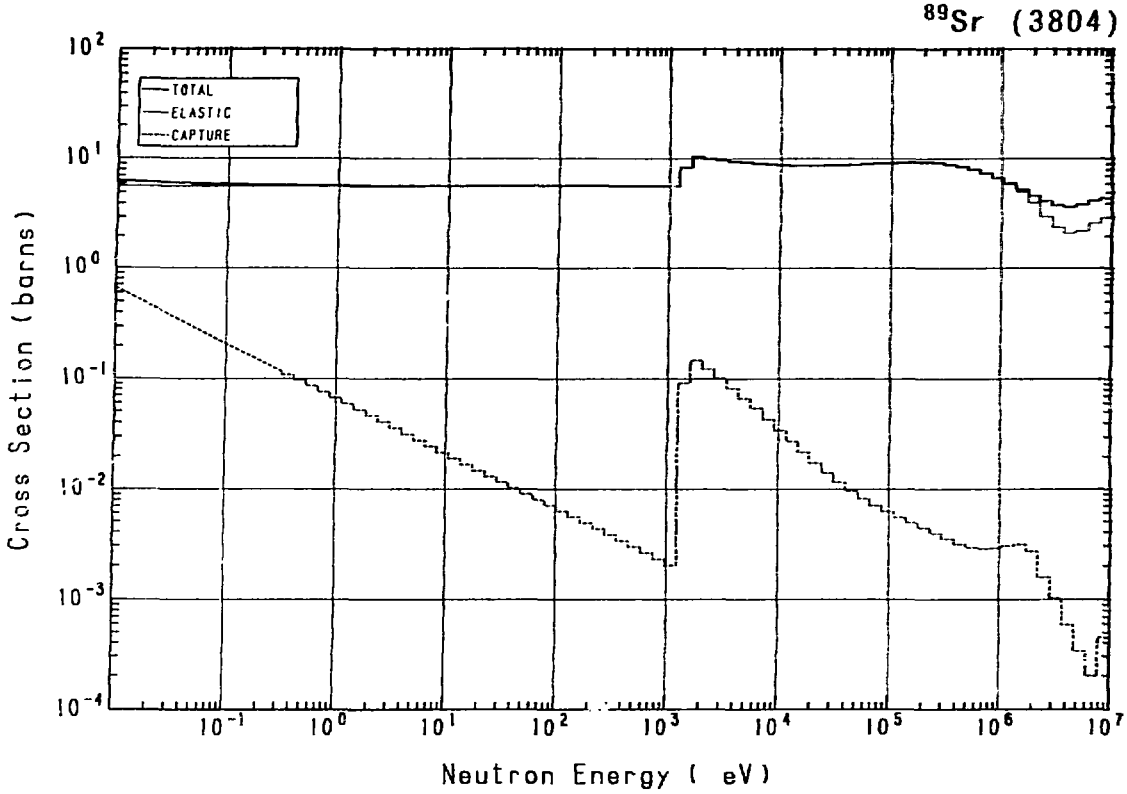

inelastic
(n,2n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

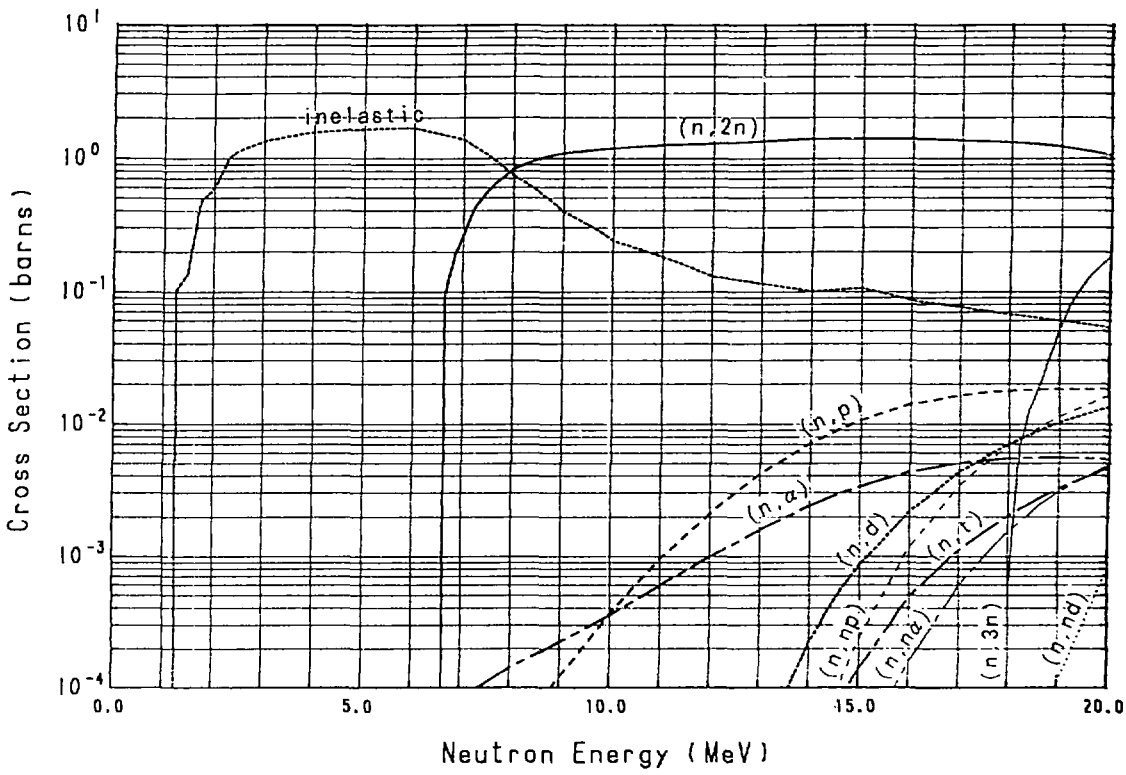

^{88}Sr (3803)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

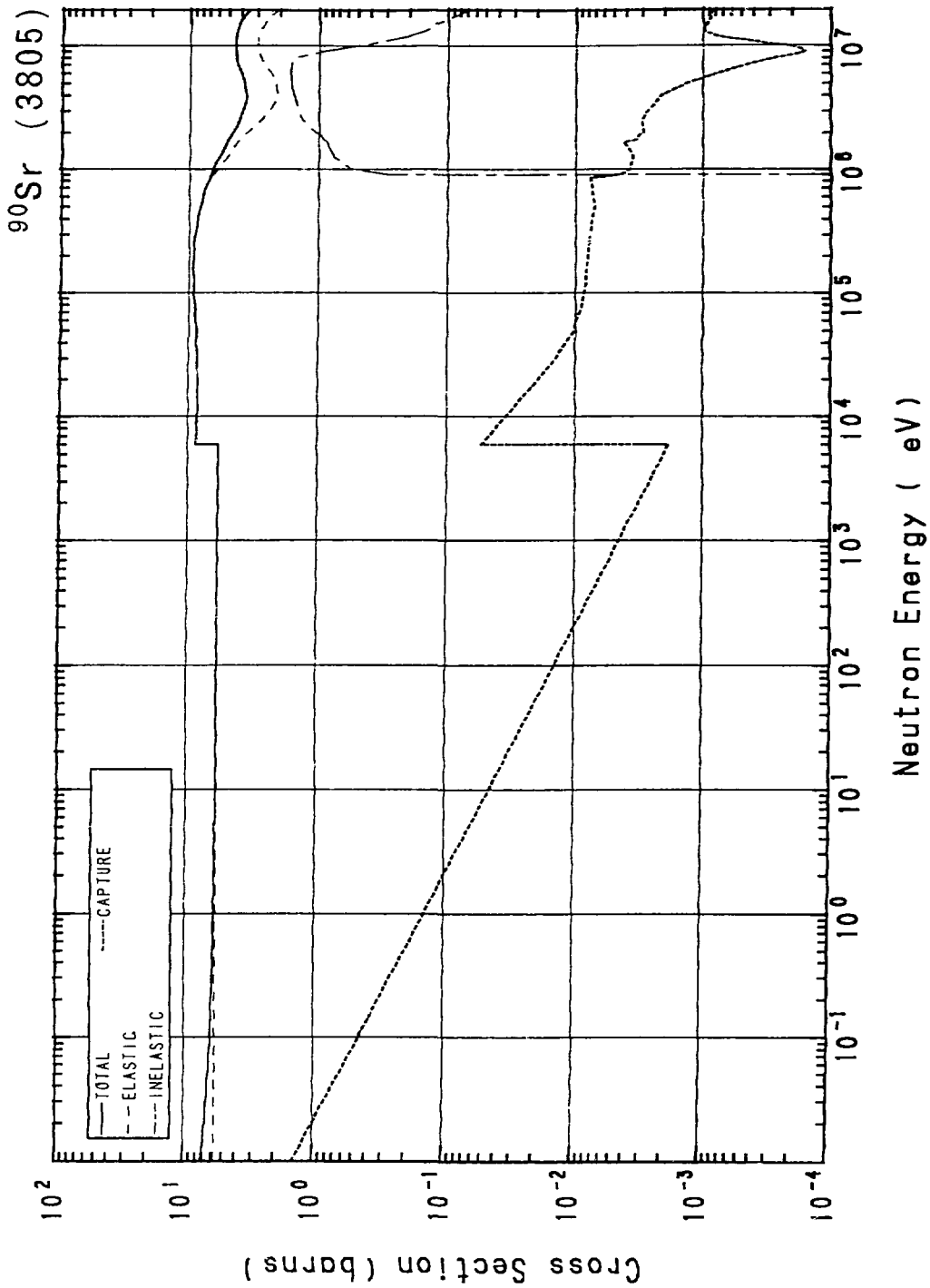

88Sr (3803)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

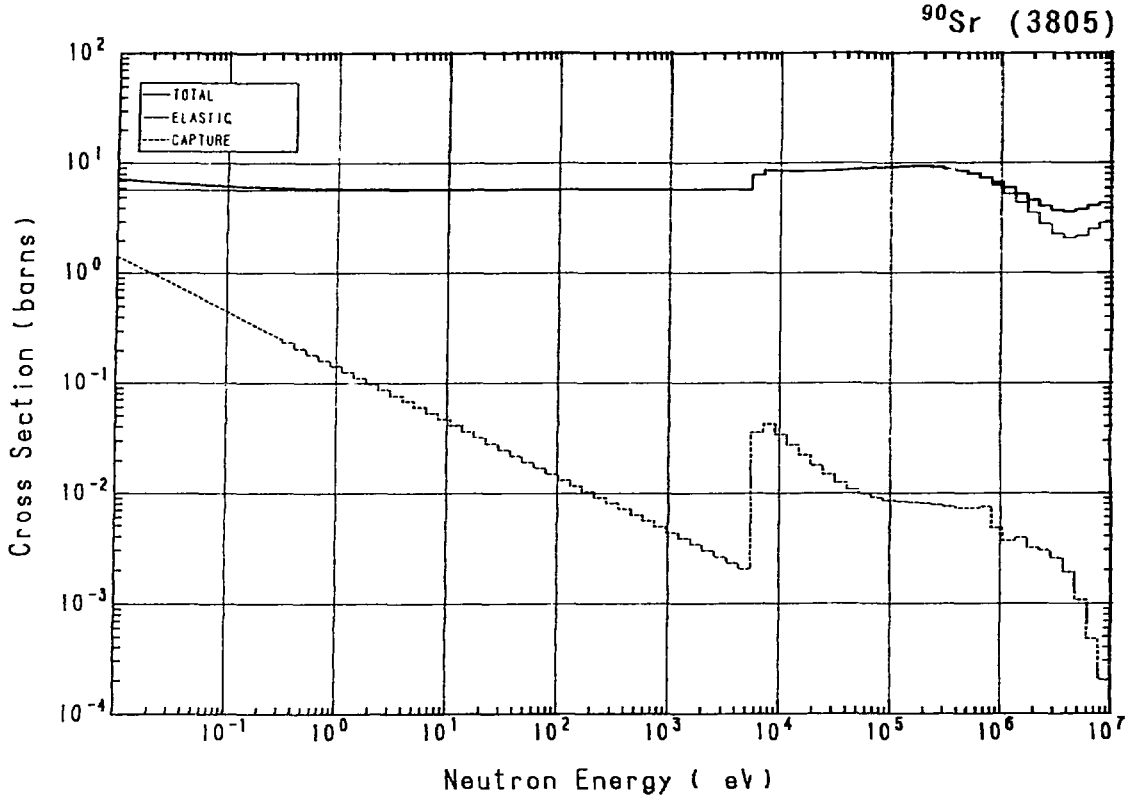

inelastic
(n,2n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nd)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

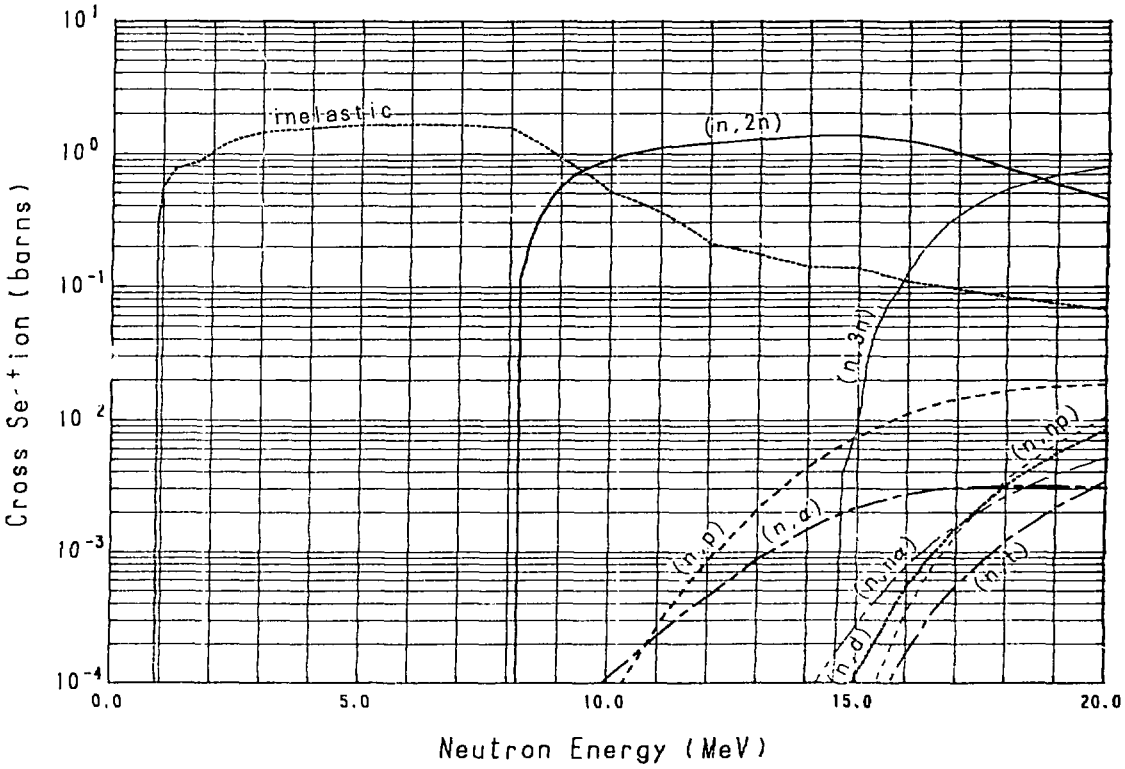

^{89}Sr (3804)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

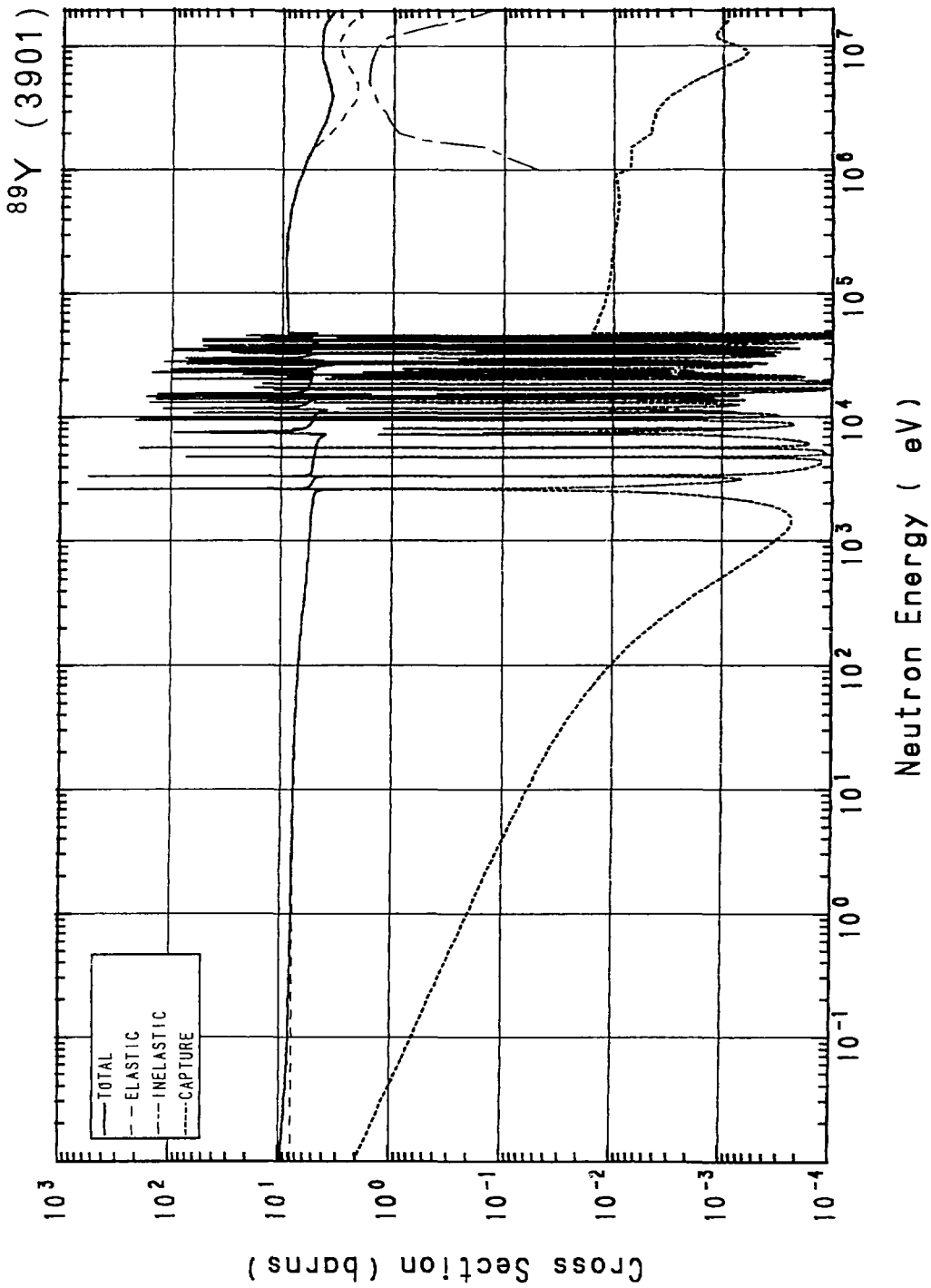

^{89}Sr (3804)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

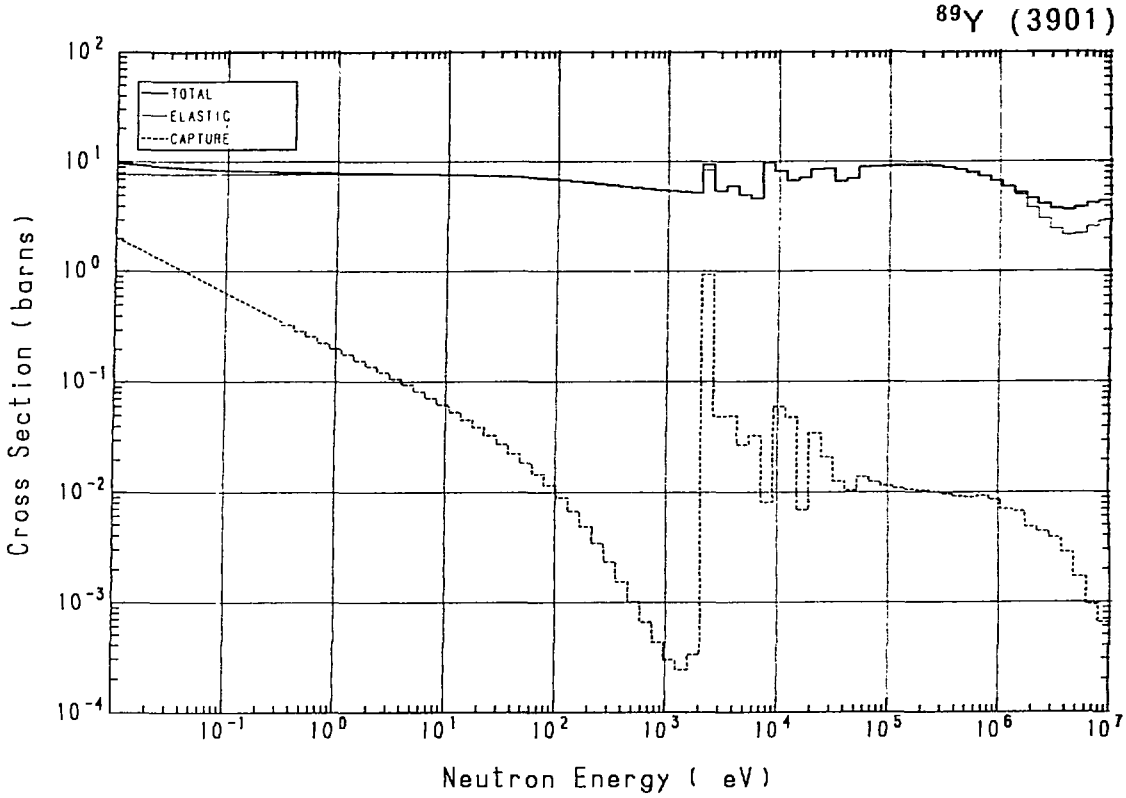

inelastic
(n,2n)
(n,p)
(n,α)
(n,d)
(n,t)
(n,np)
(n,nα)
(n,3n)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

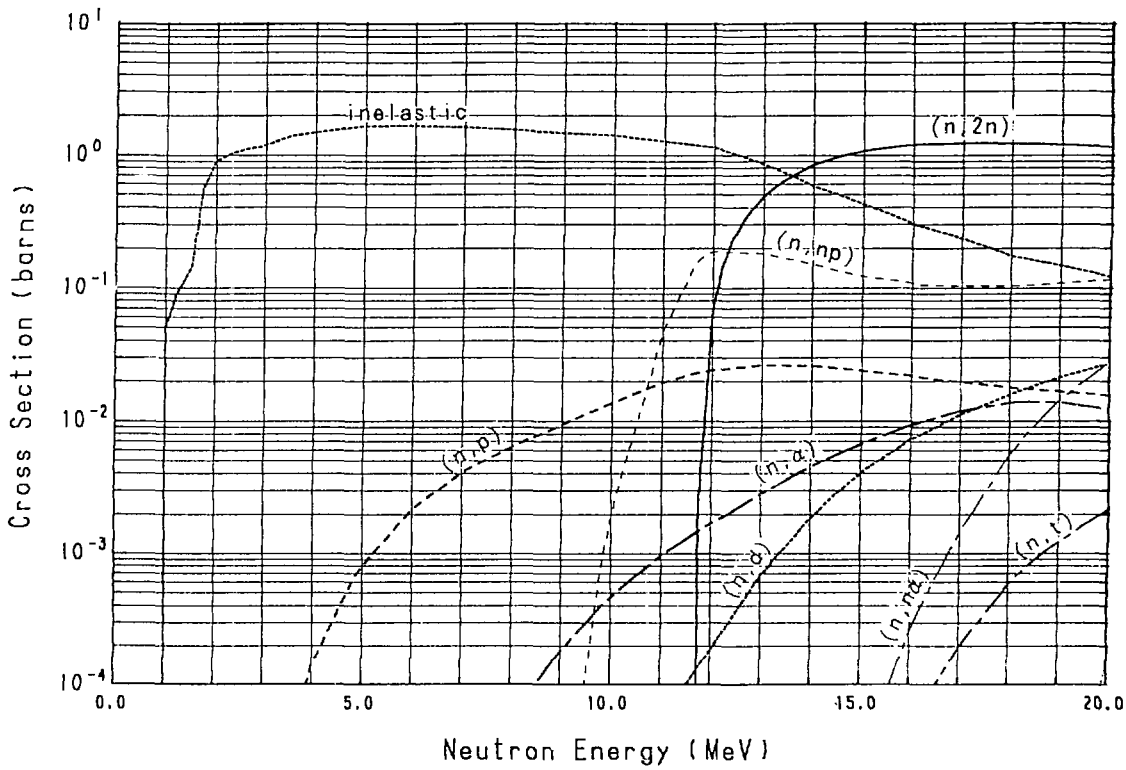

^{90}Sr (3805)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

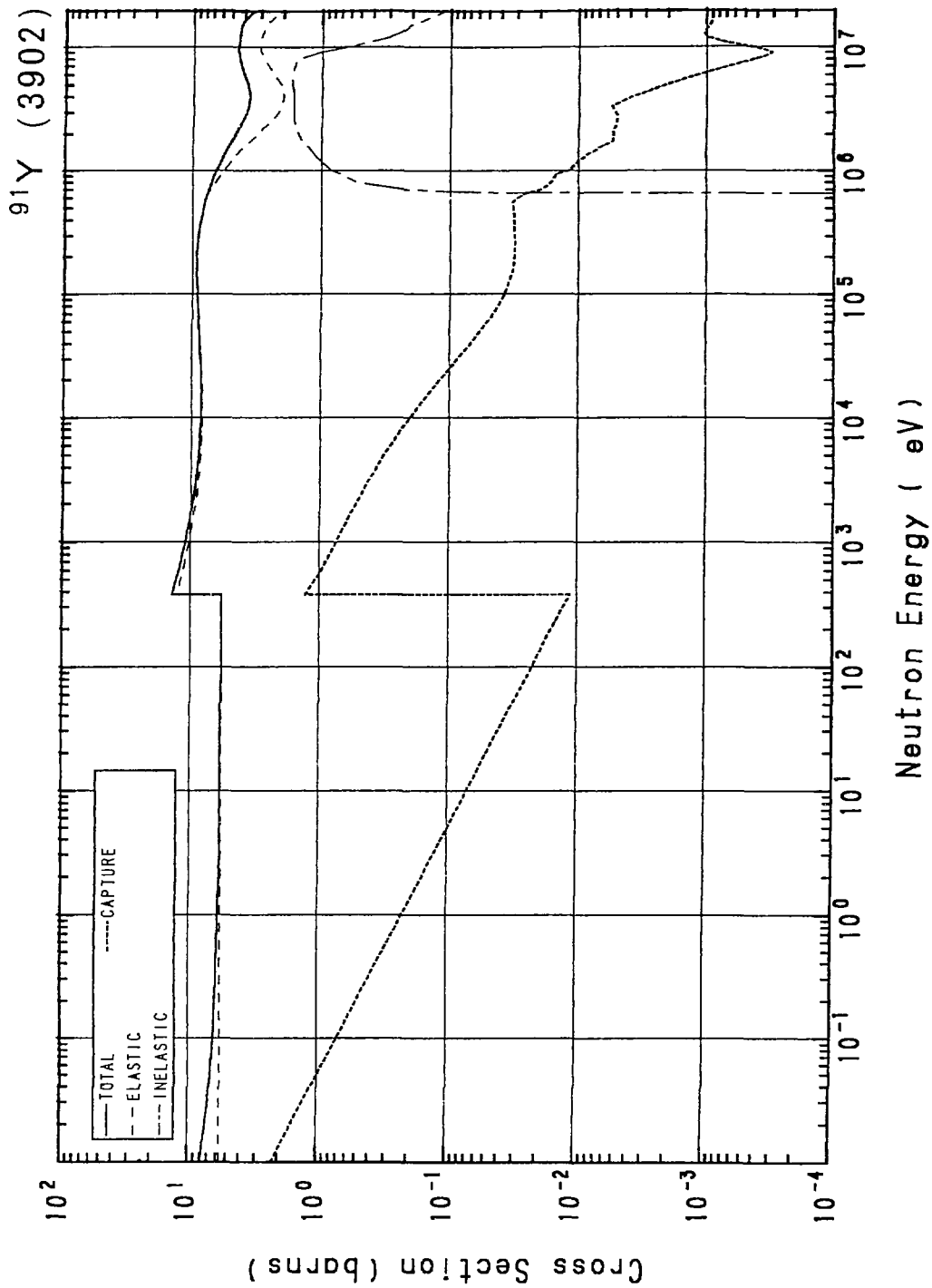

^{90}Sr (3805)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

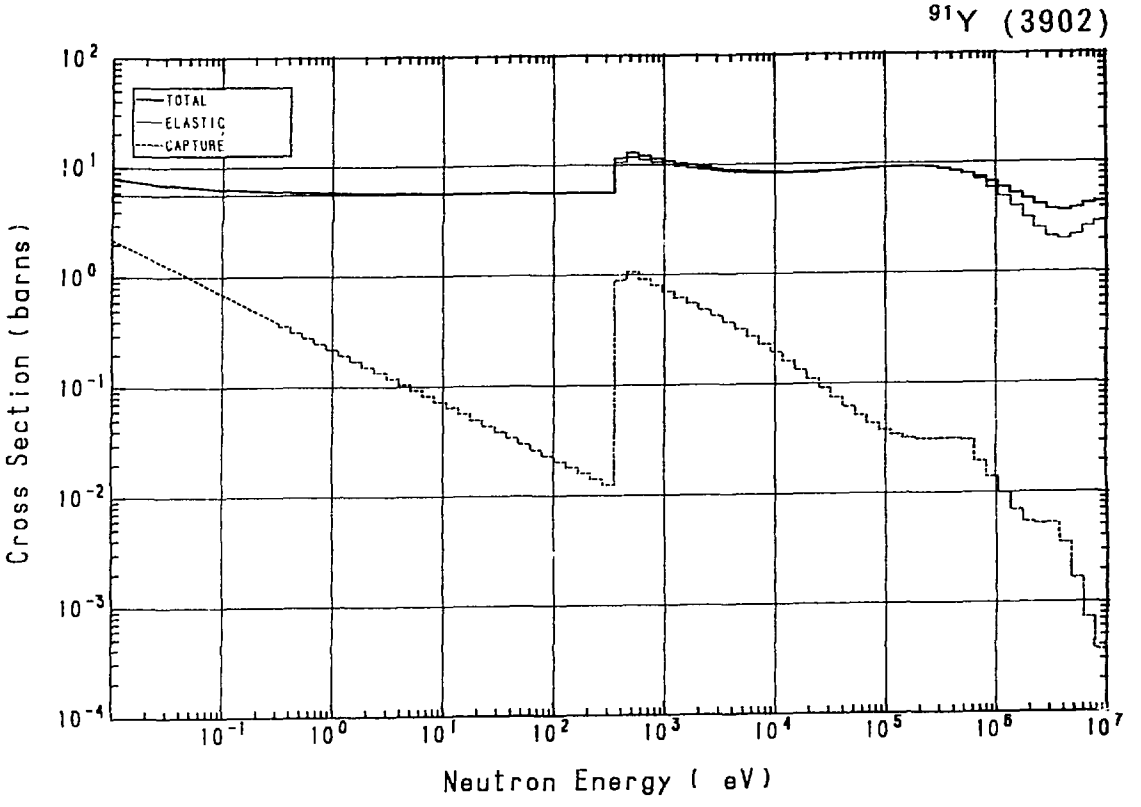

inelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,α)
(n,nα)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

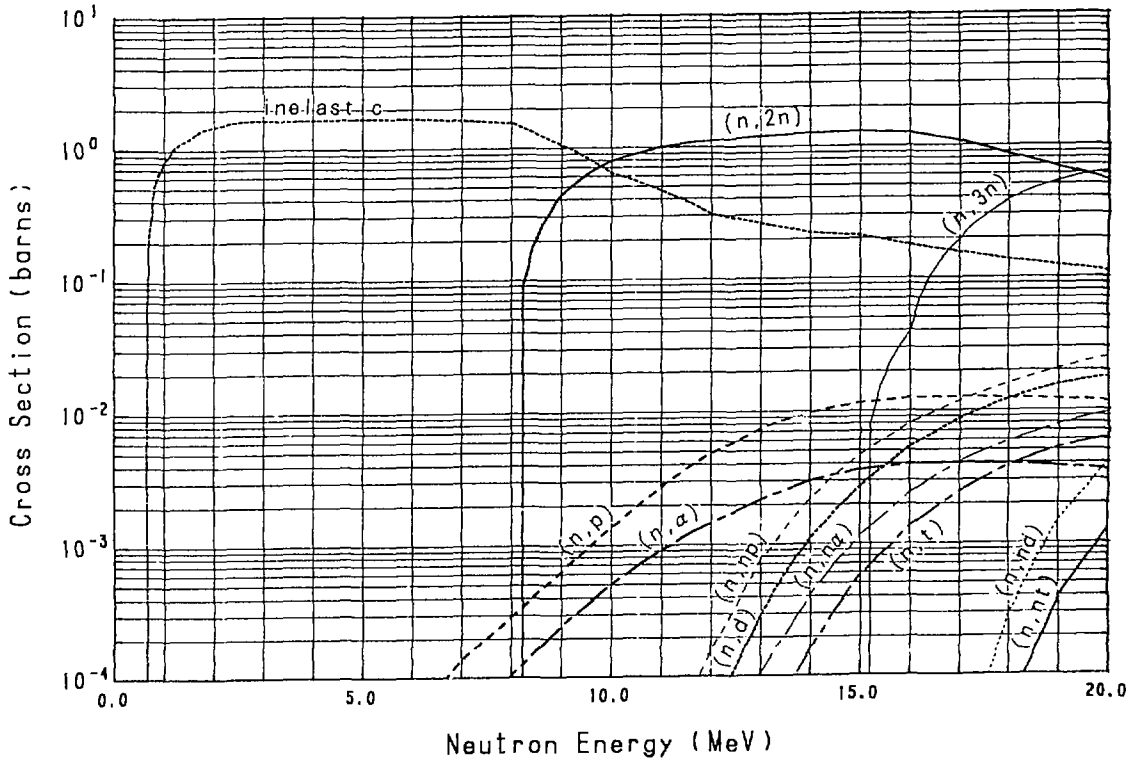

89Y (3901)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

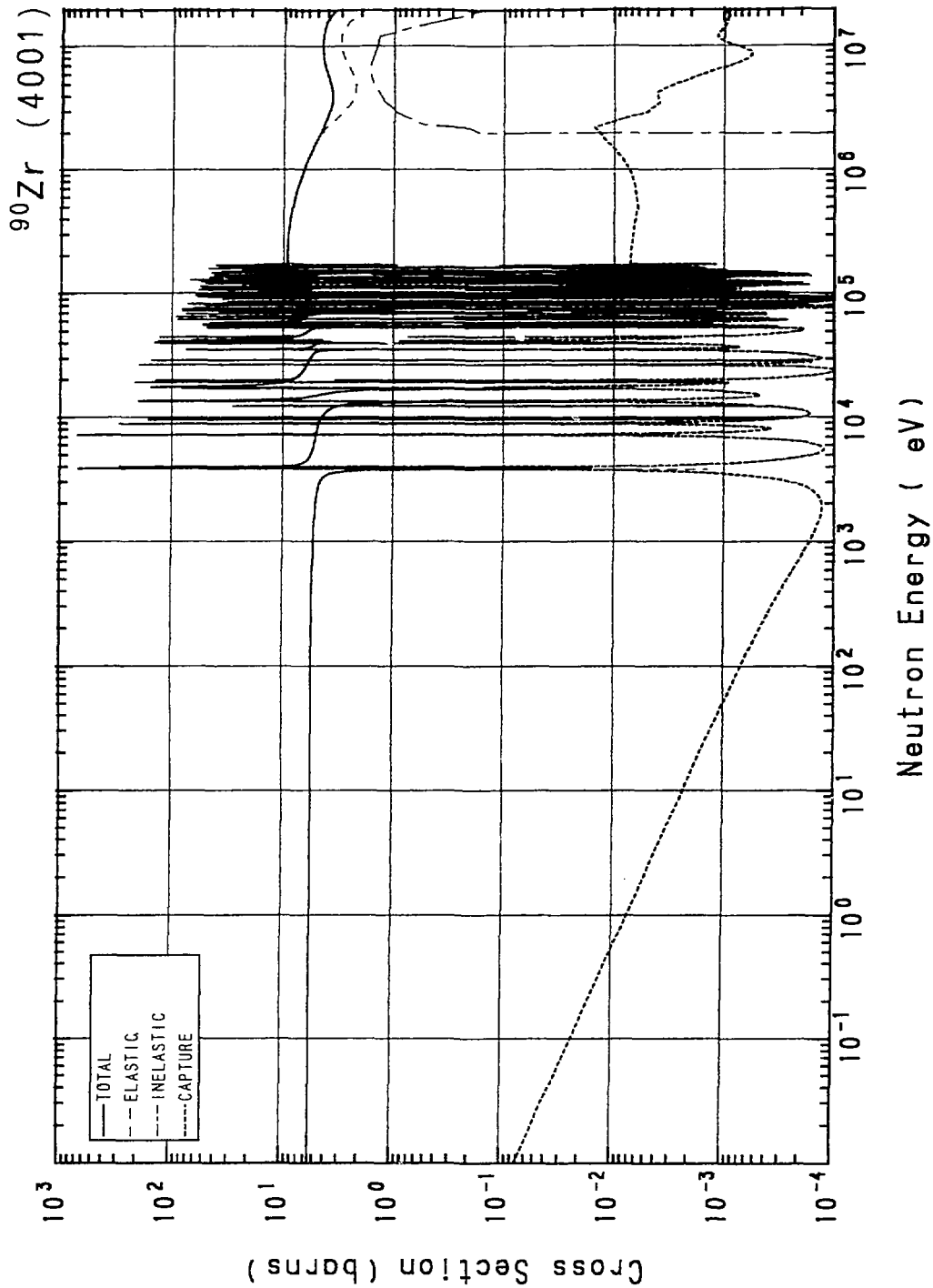

^{89}Y (3901)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

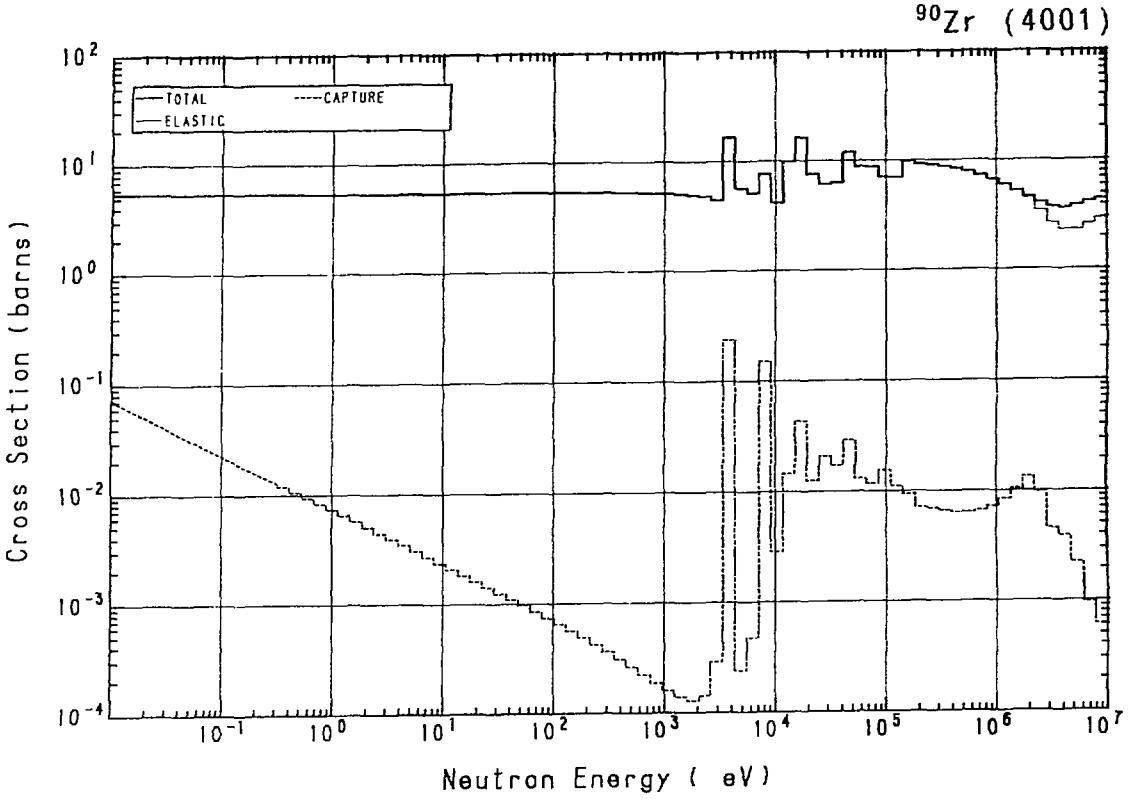

inelastic
(n,2n)
(n,np)
(n,p)
(n,α)
(n,d)
(n,nd)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

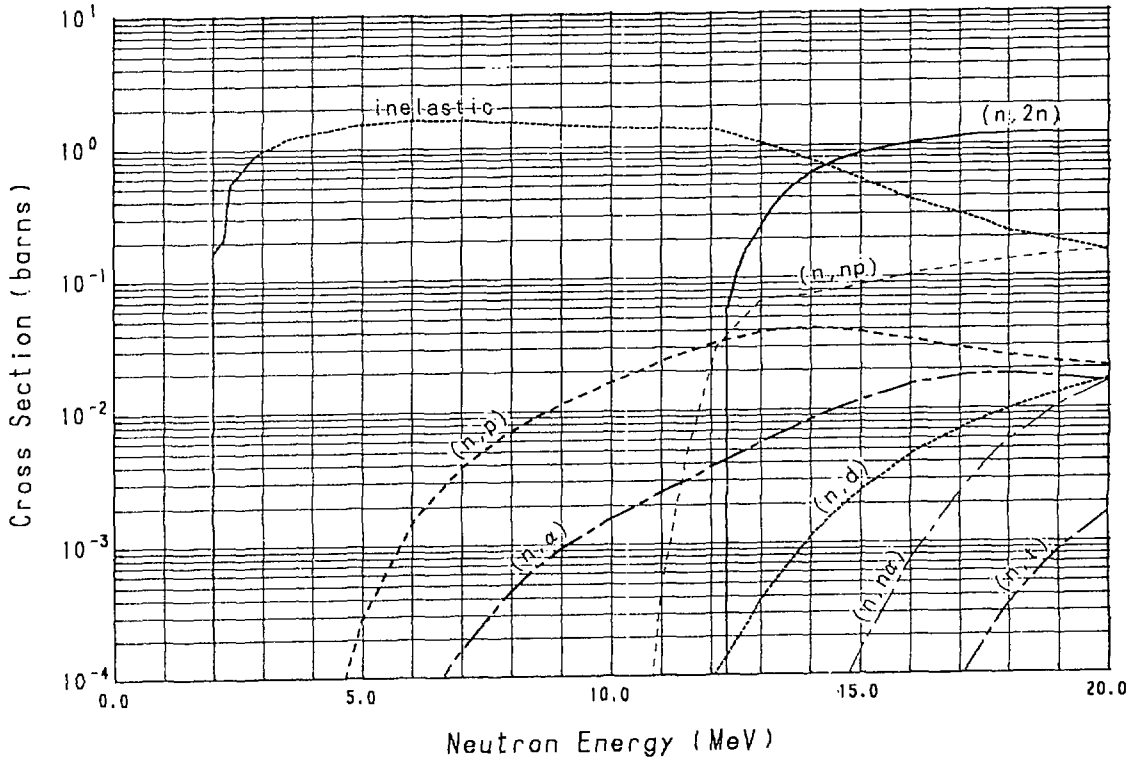

^{91}Y (3902)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

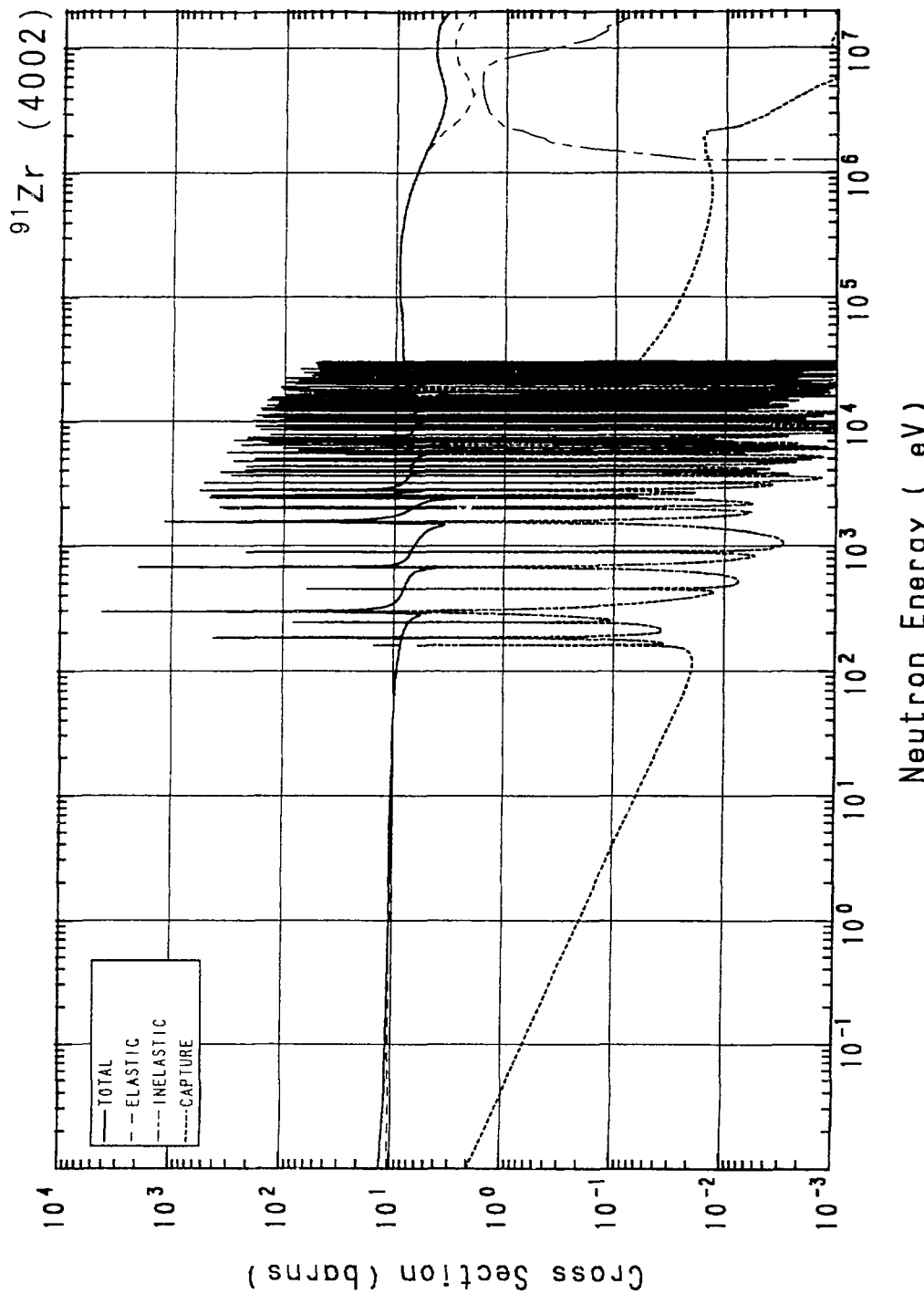

91Y (3902)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

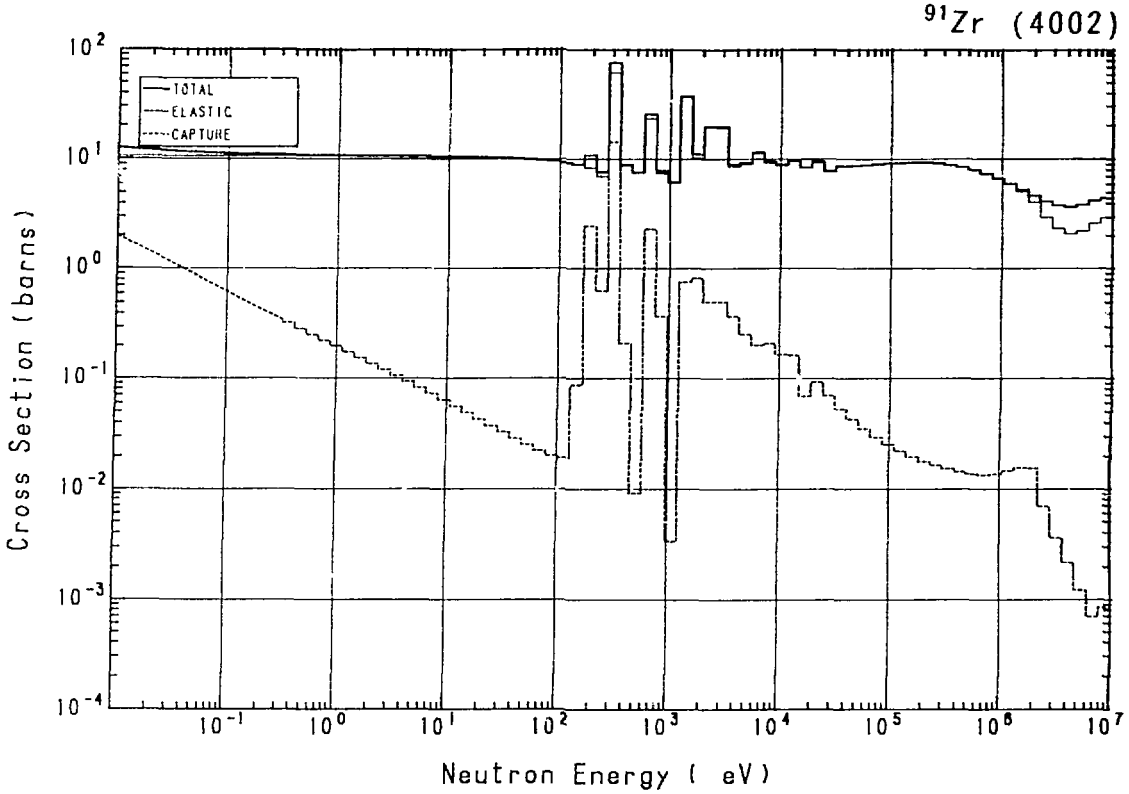

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,nα)
(n,t)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

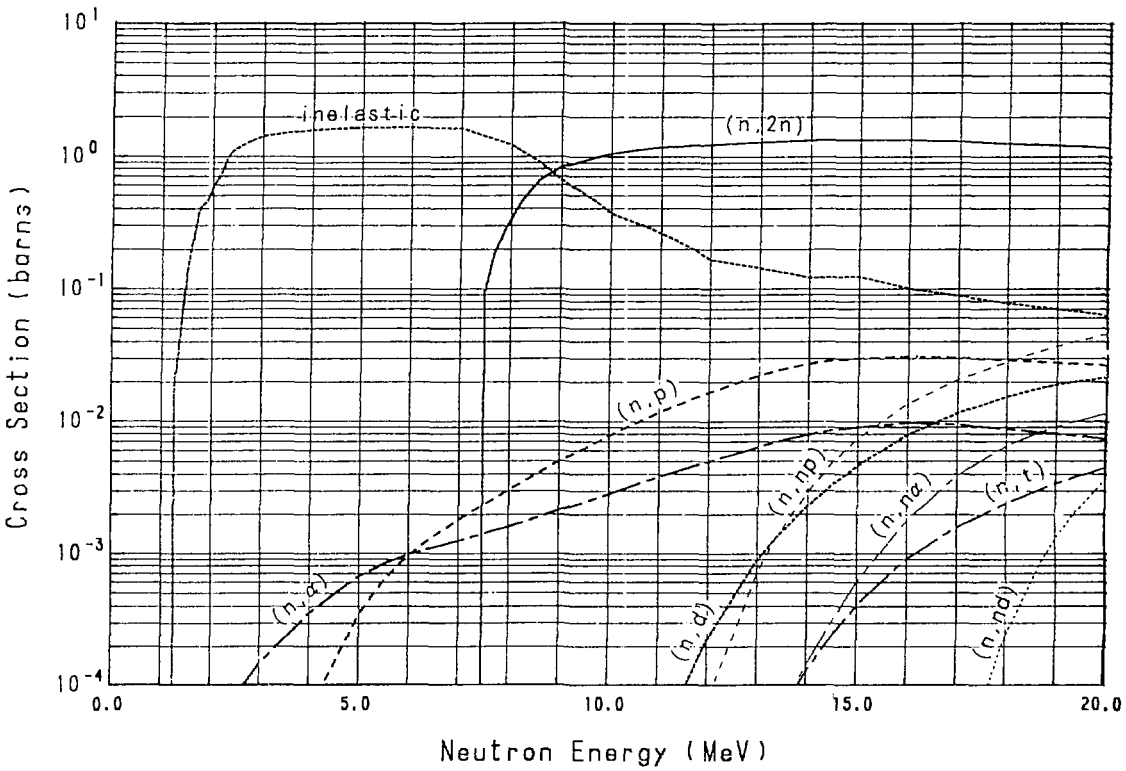

^{90}Zr (4001)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

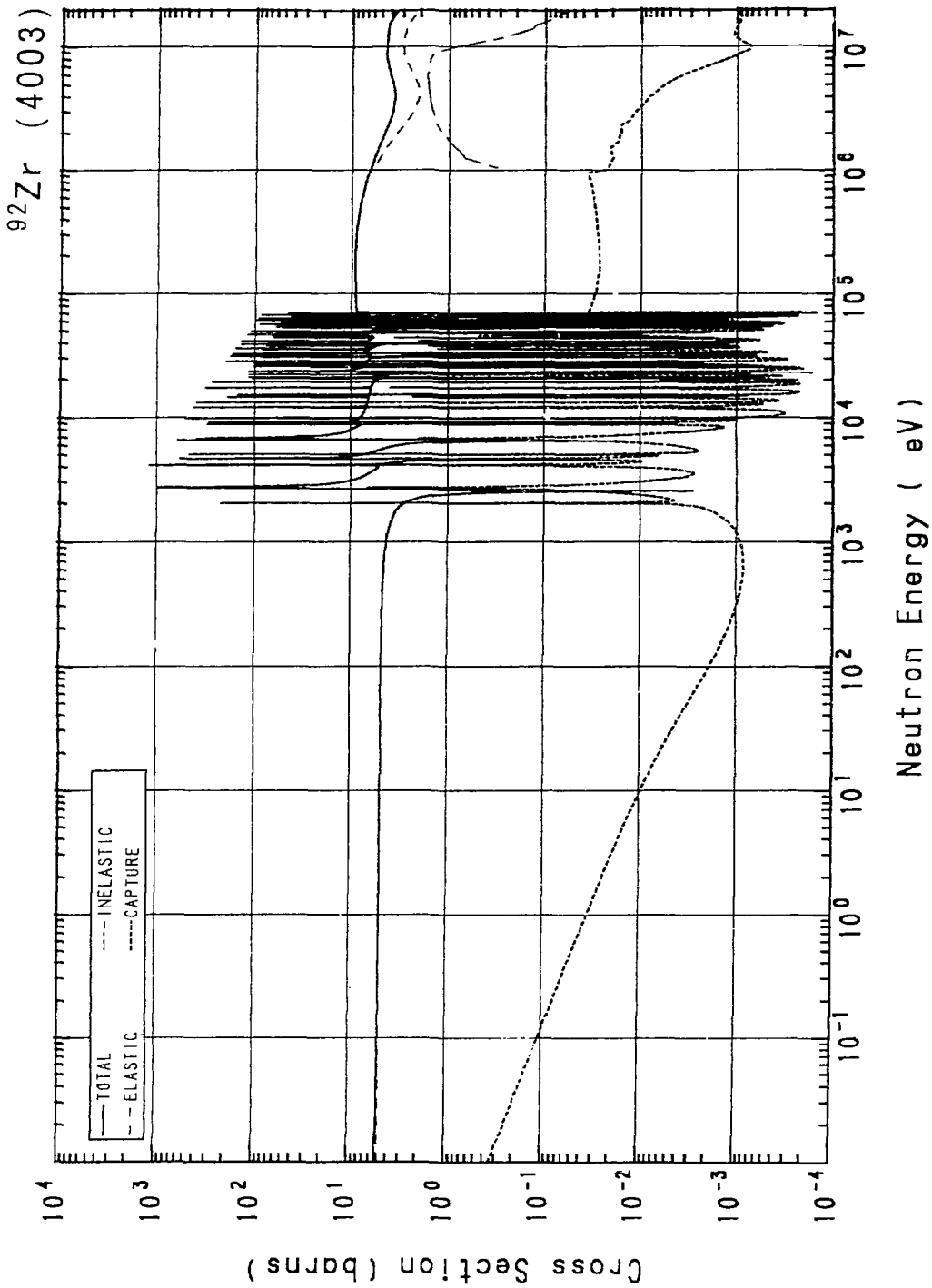

^{90}Zr (4001)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

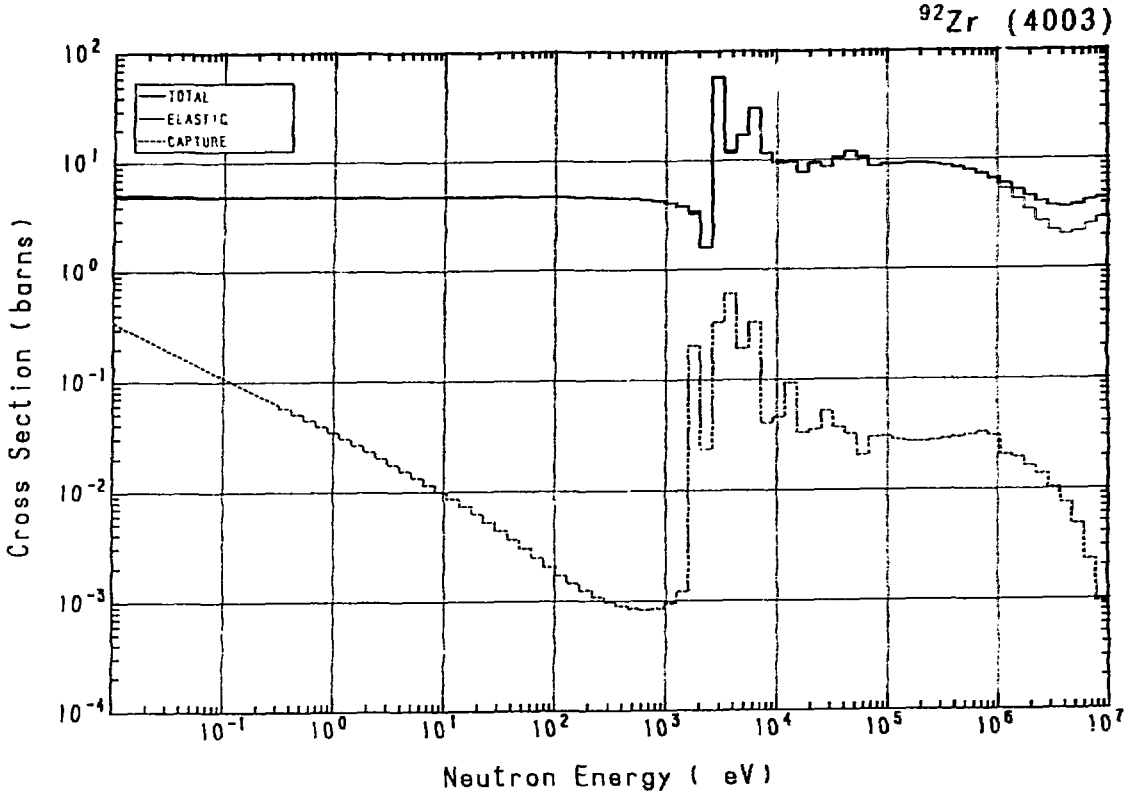

inelastic
(n,2n)
(n,np)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

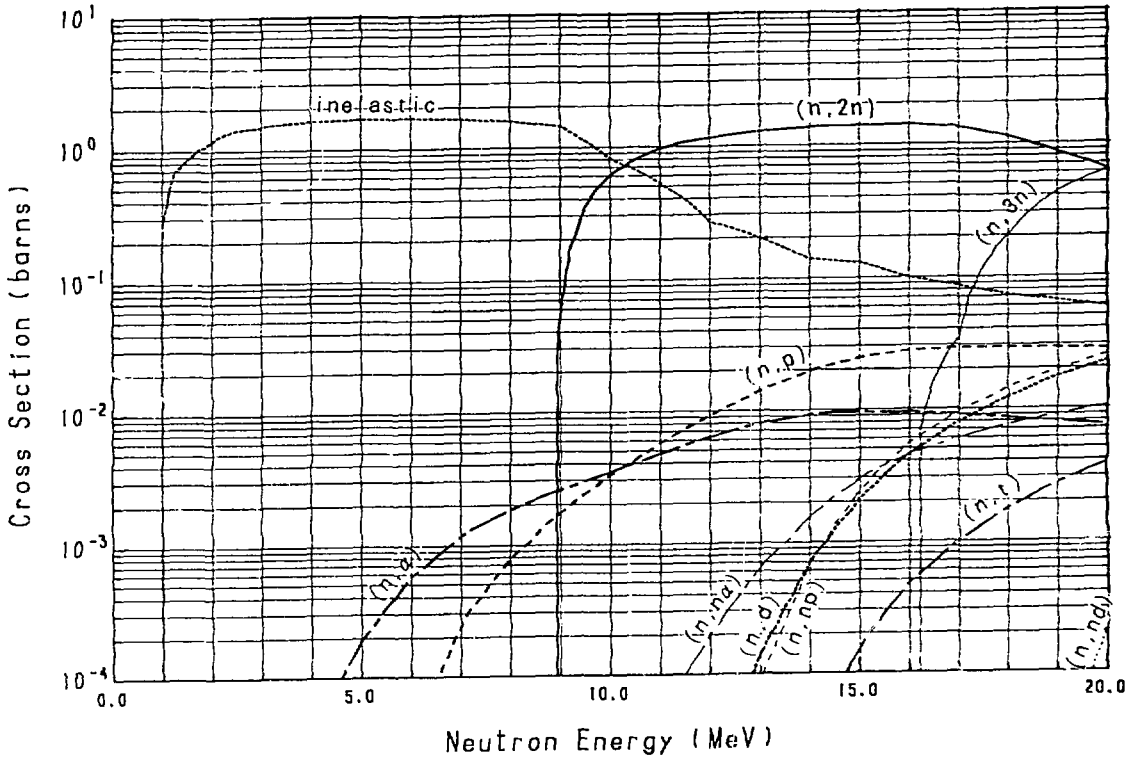

^{91}Zr (4002)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

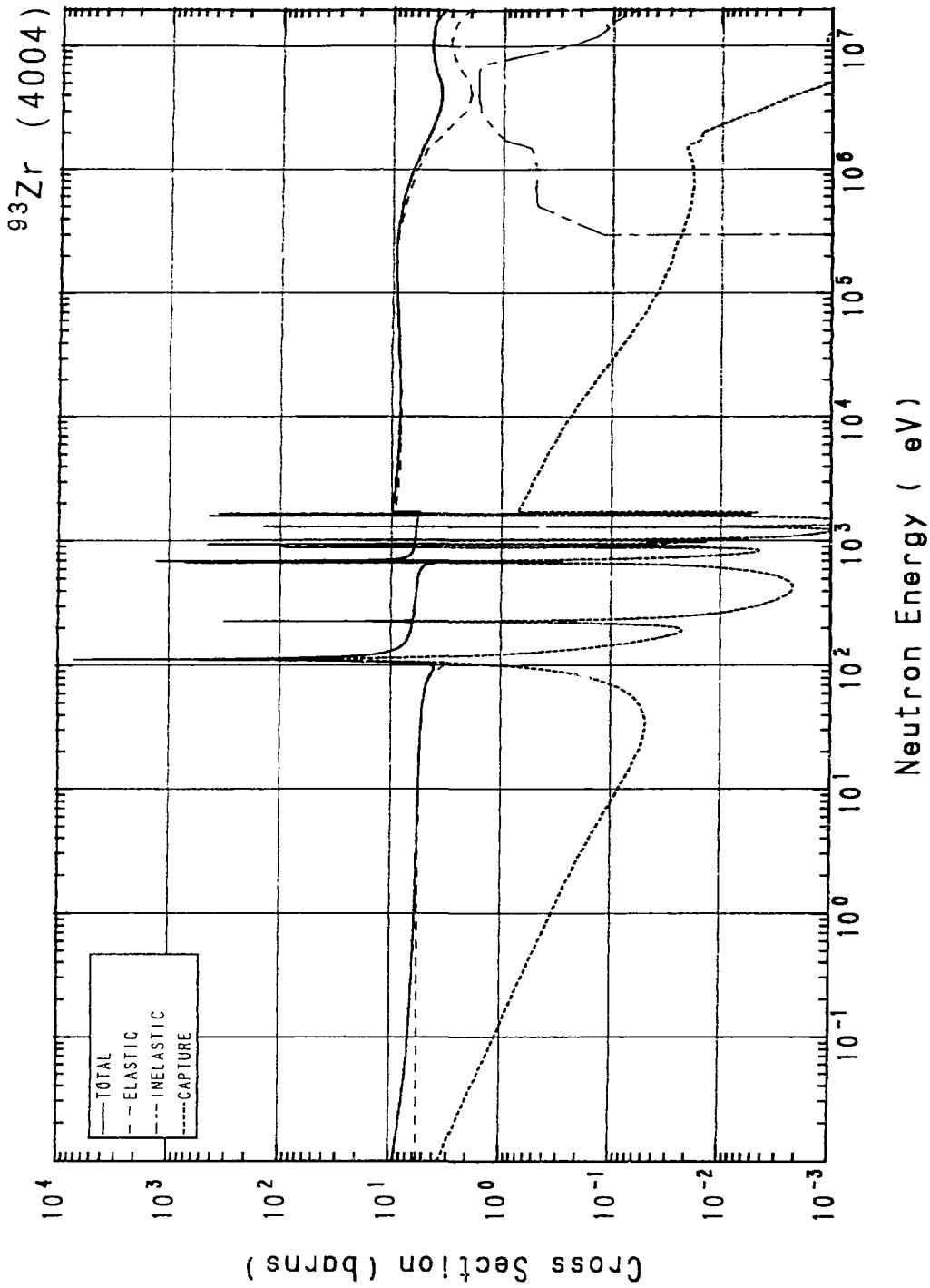

^{91}Zr (4002)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

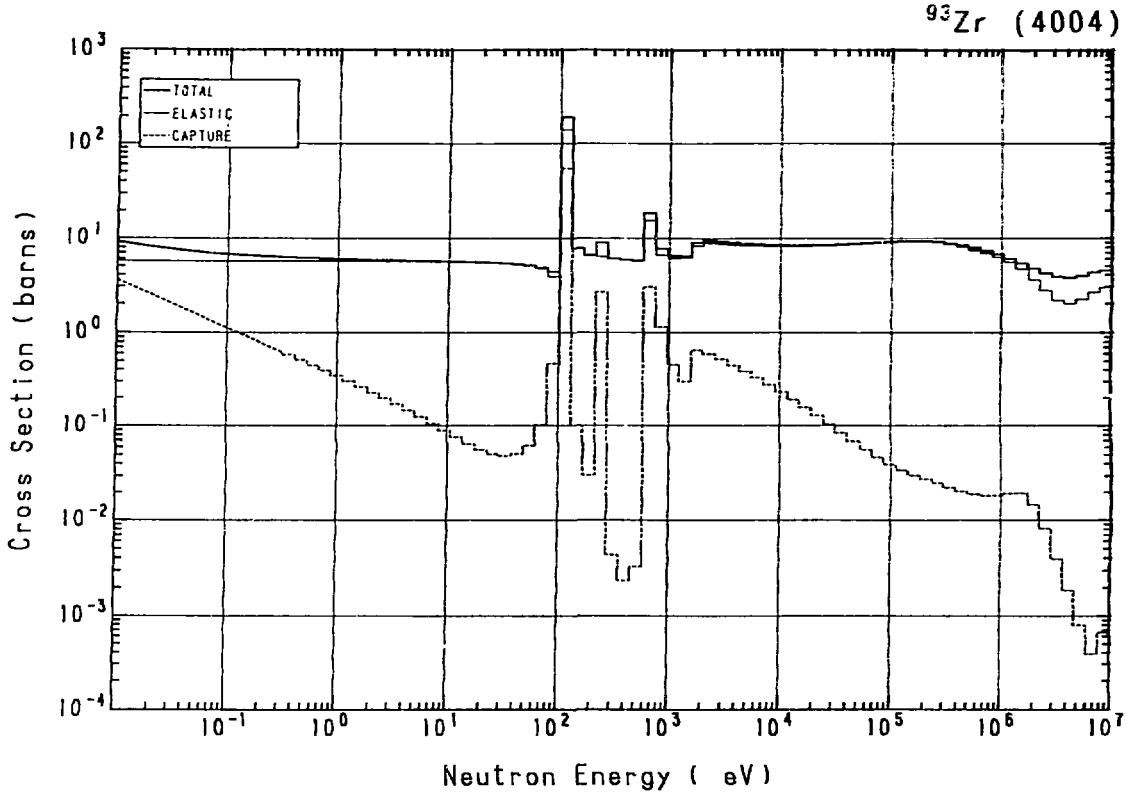

inelastic
(n,2n)
(n,p)
(n,np)
(n,nα)
(n,t)
(n,α)
(n,d)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

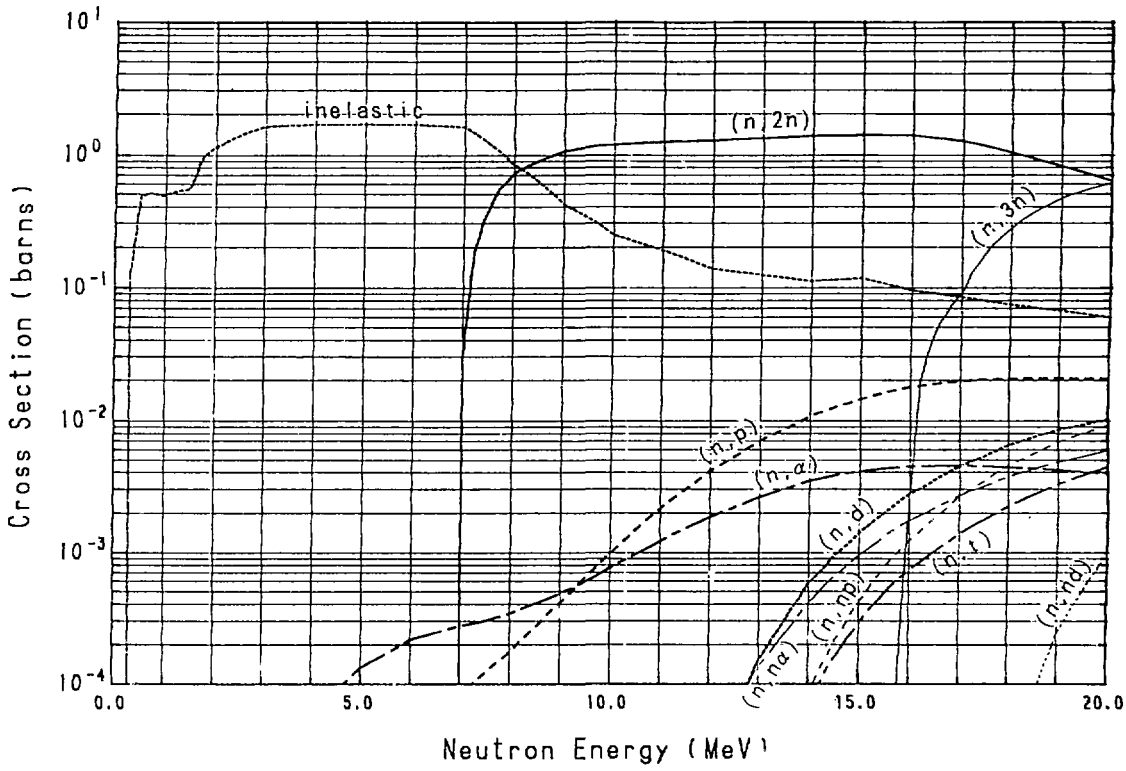

92Zr (4003)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

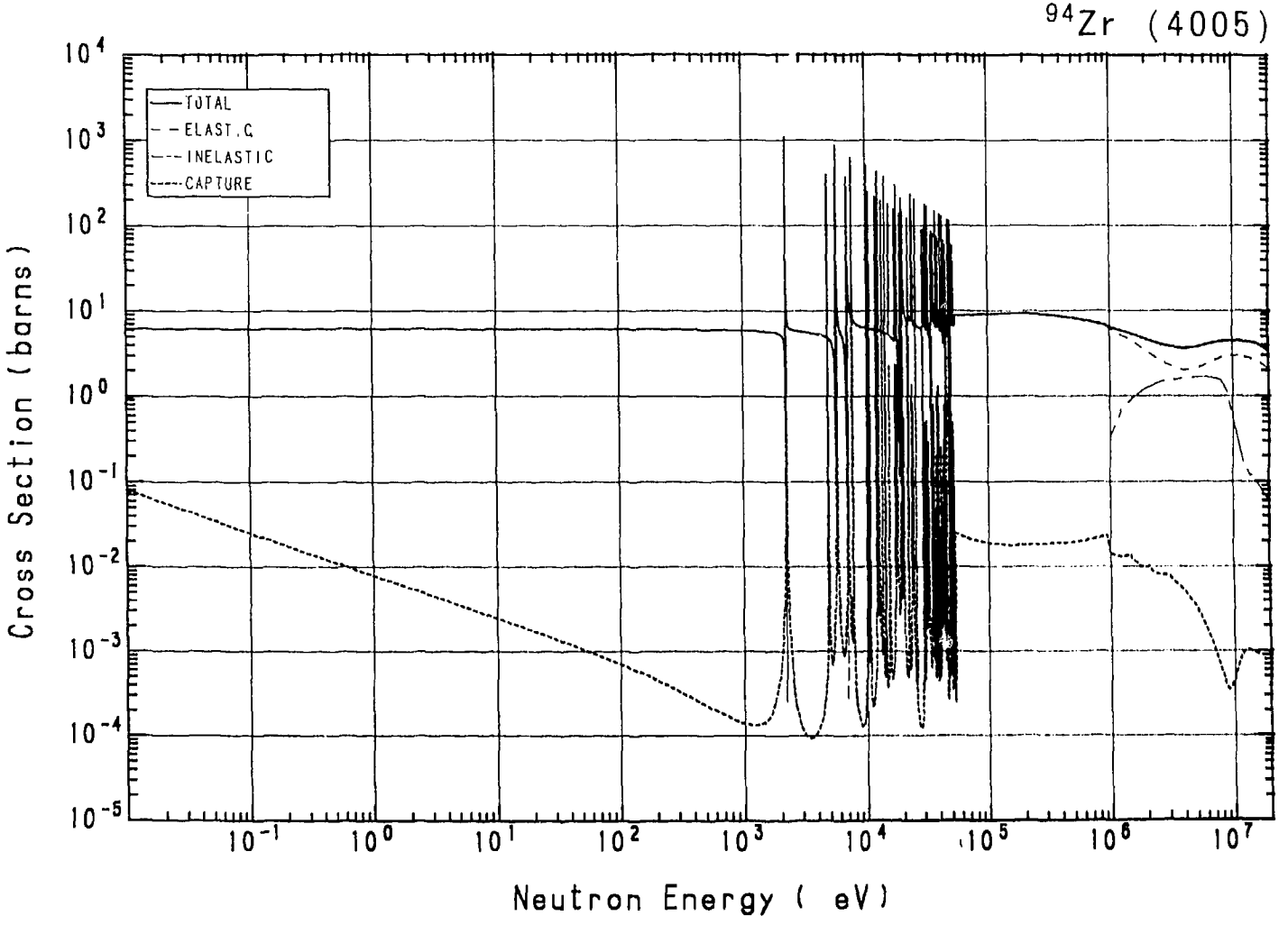

92Zr (4003)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

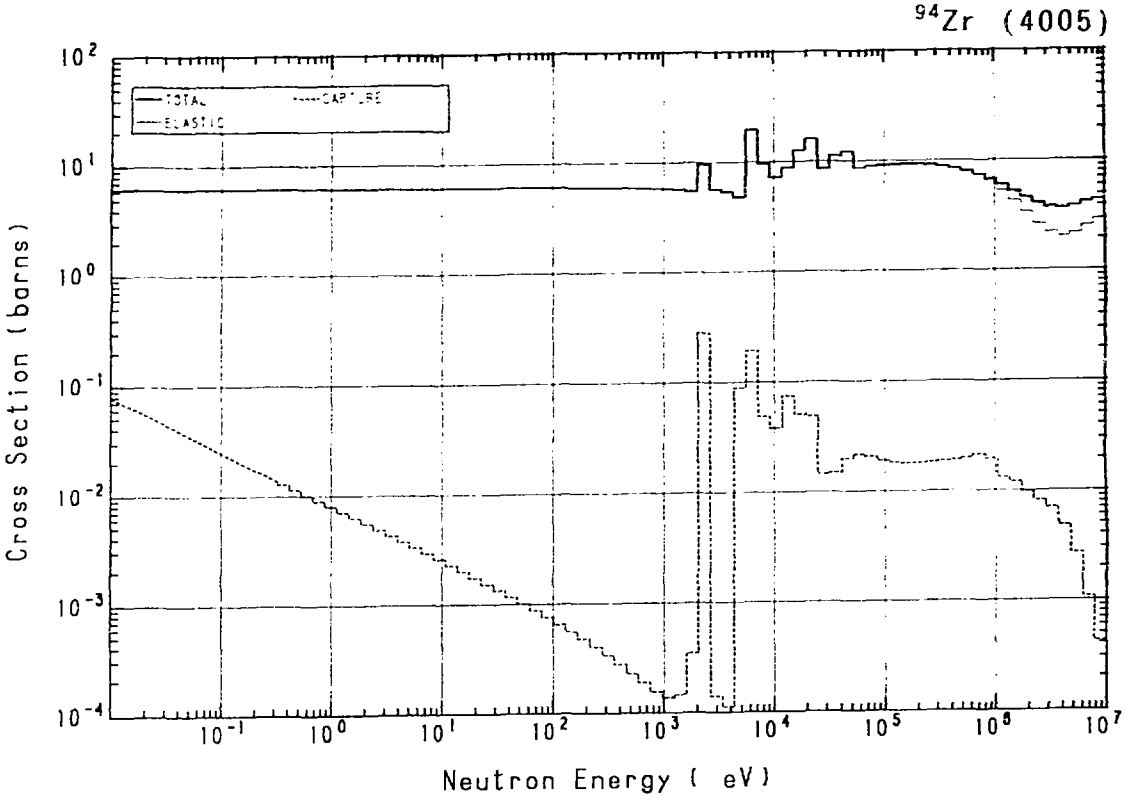

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,nα)
(n,d)
(n,np)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

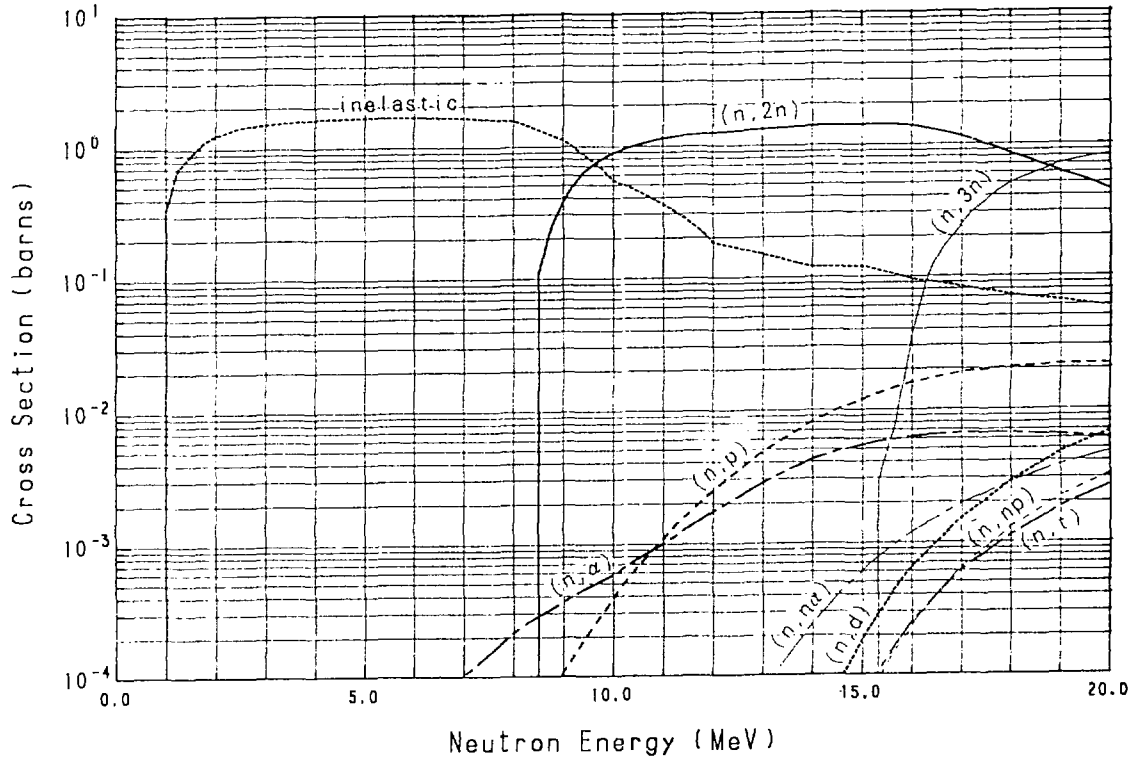

^{93}Zr (4004)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

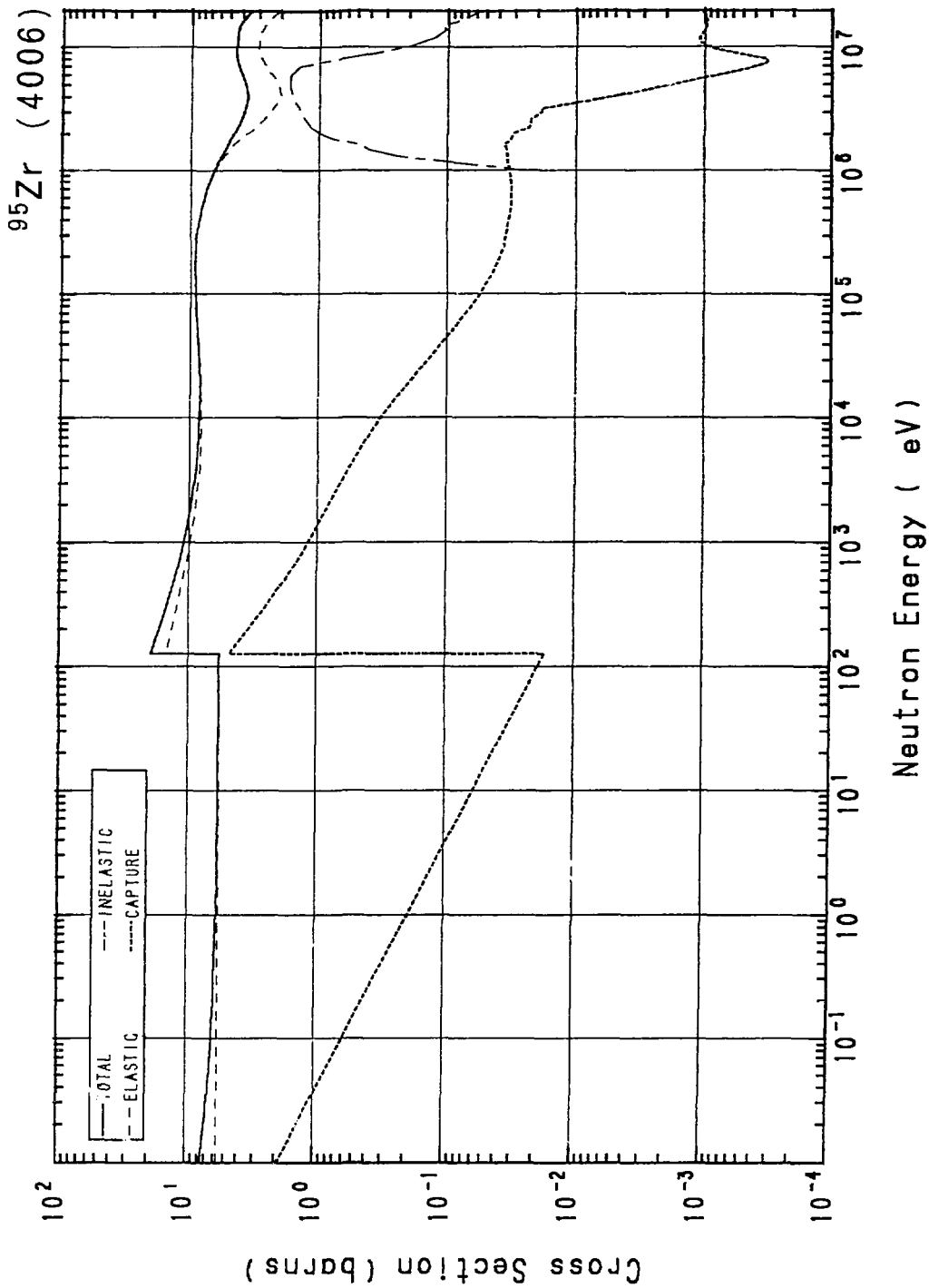

^{93}Zr (4004)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

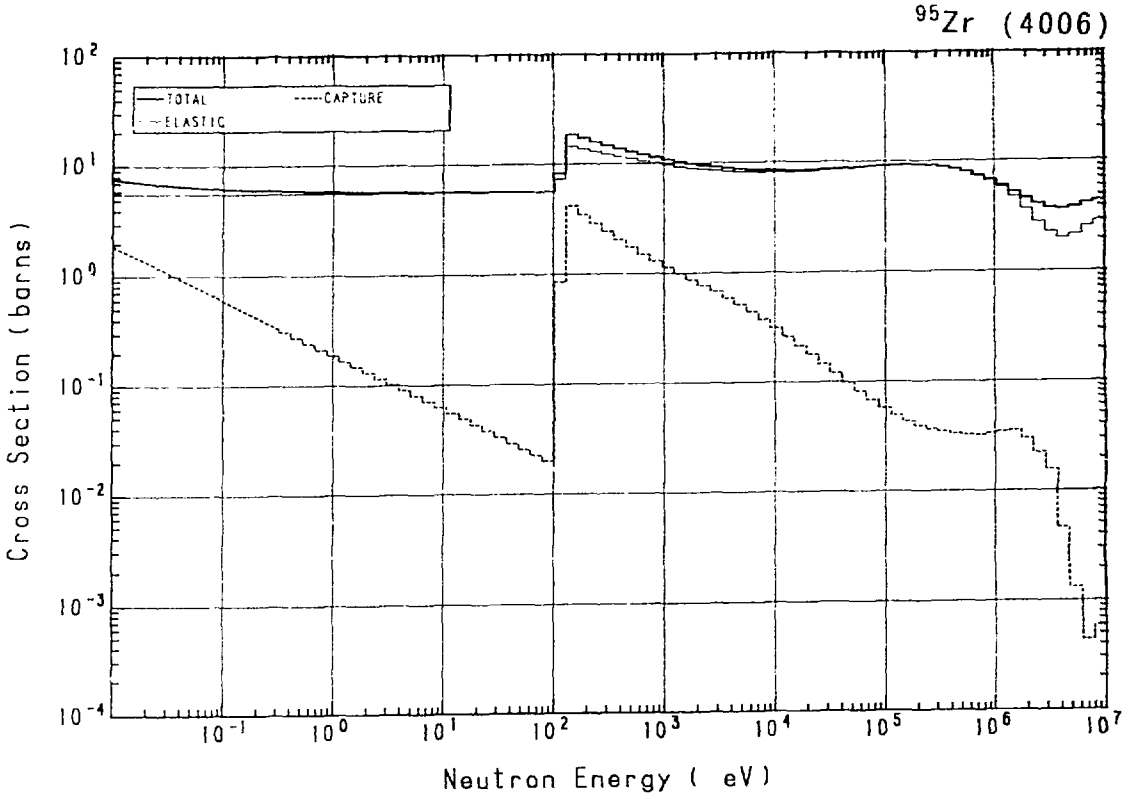

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,t)
(n,np)
(n,nα)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

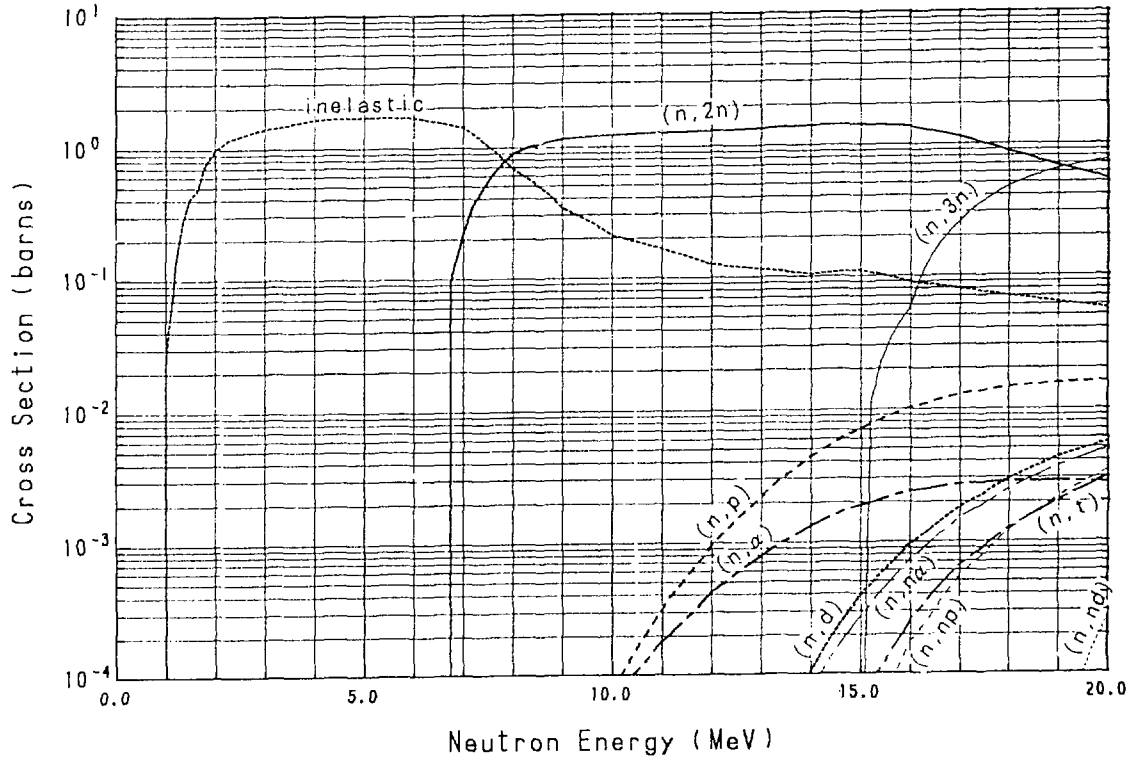

^{94}Zr (4005)
TOTAL
ELAST.C
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

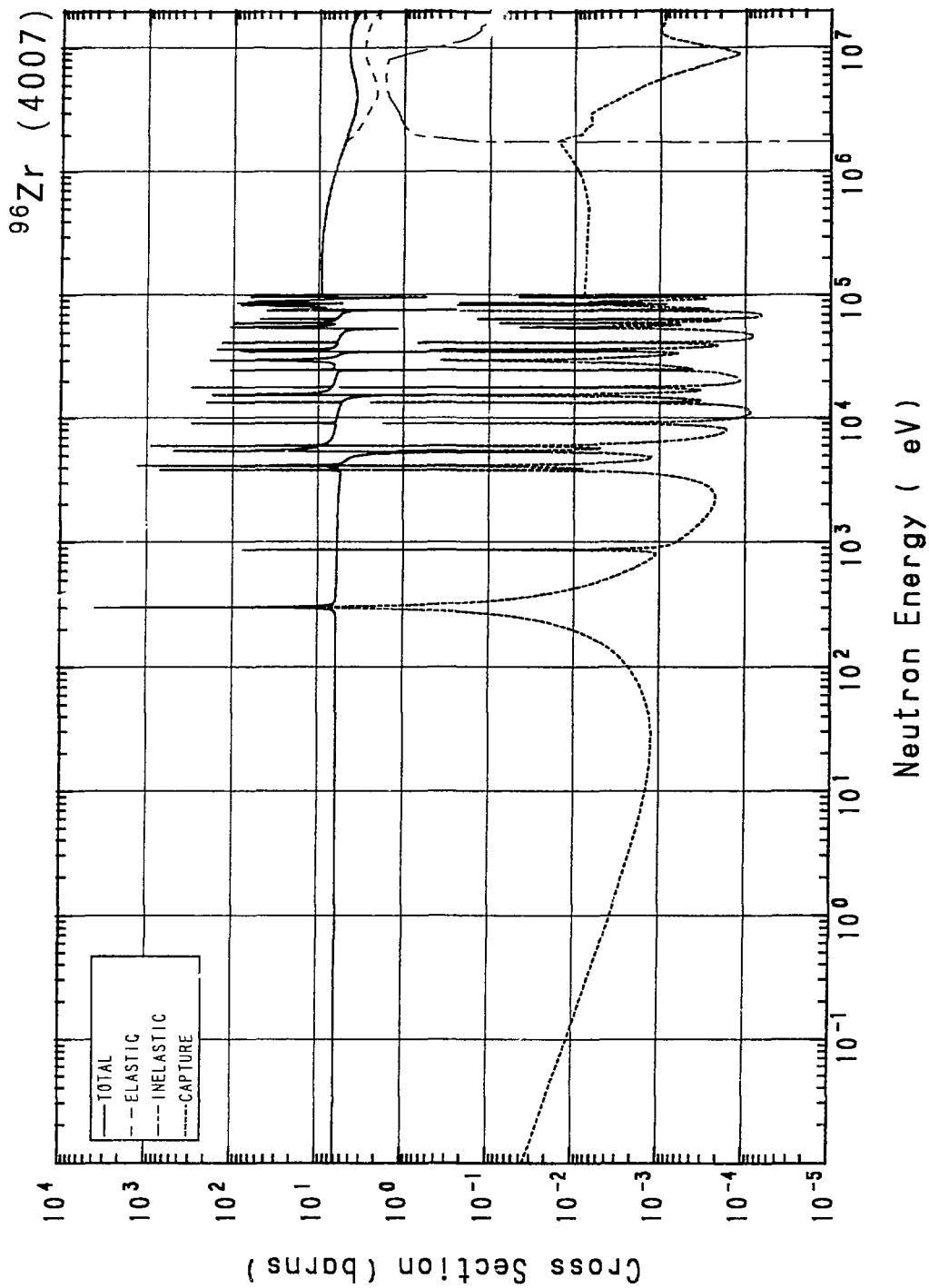

^{94}Zr (4005)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

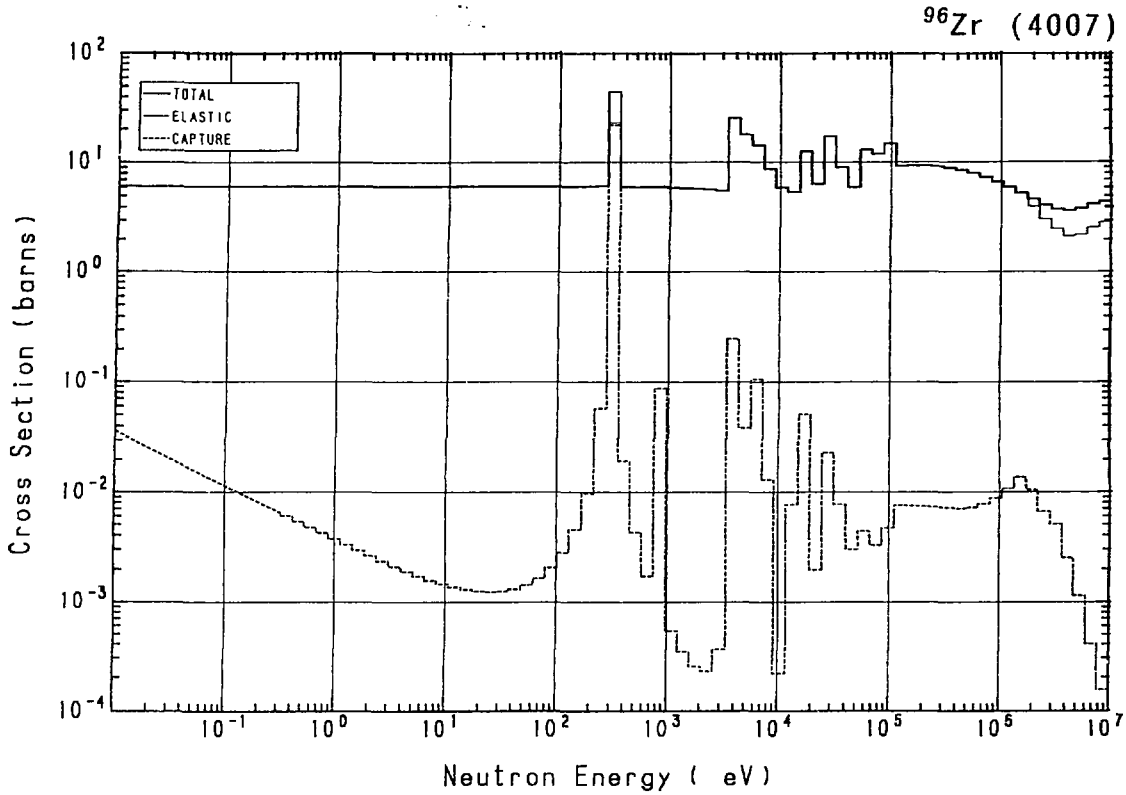

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,t)
(n,d)
Cross Section (barns)
Neutron Energy (MeV)

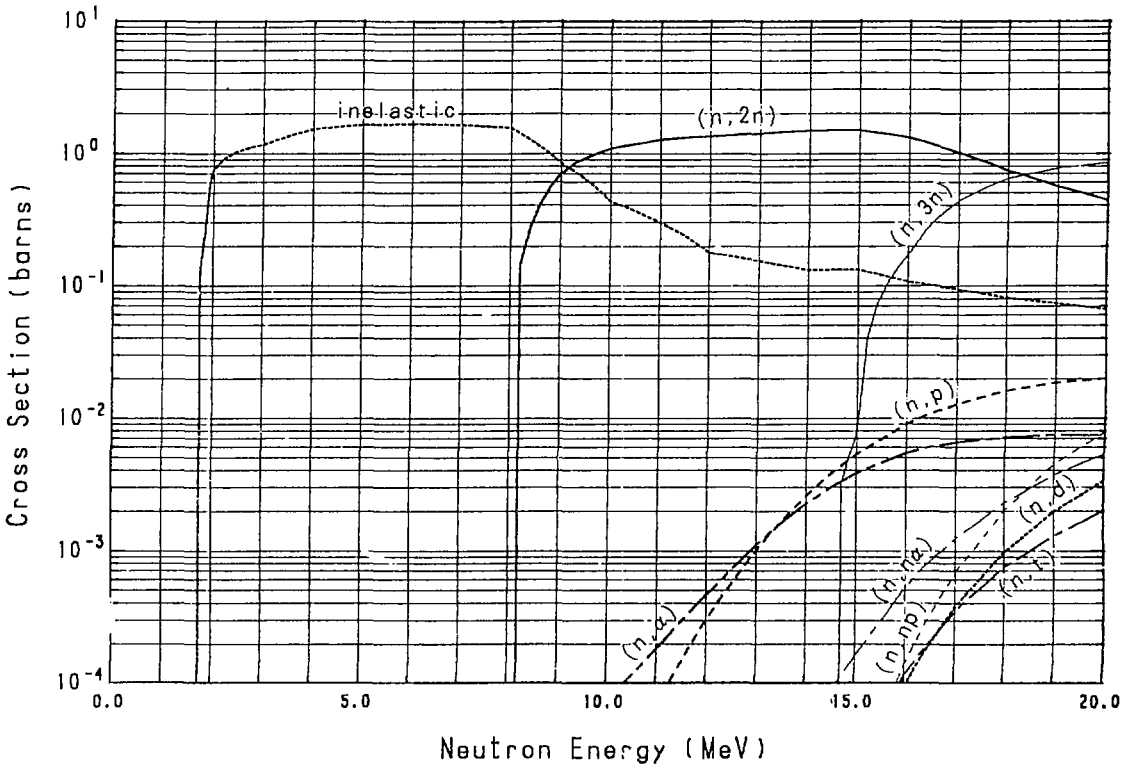

95Zr (4006)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

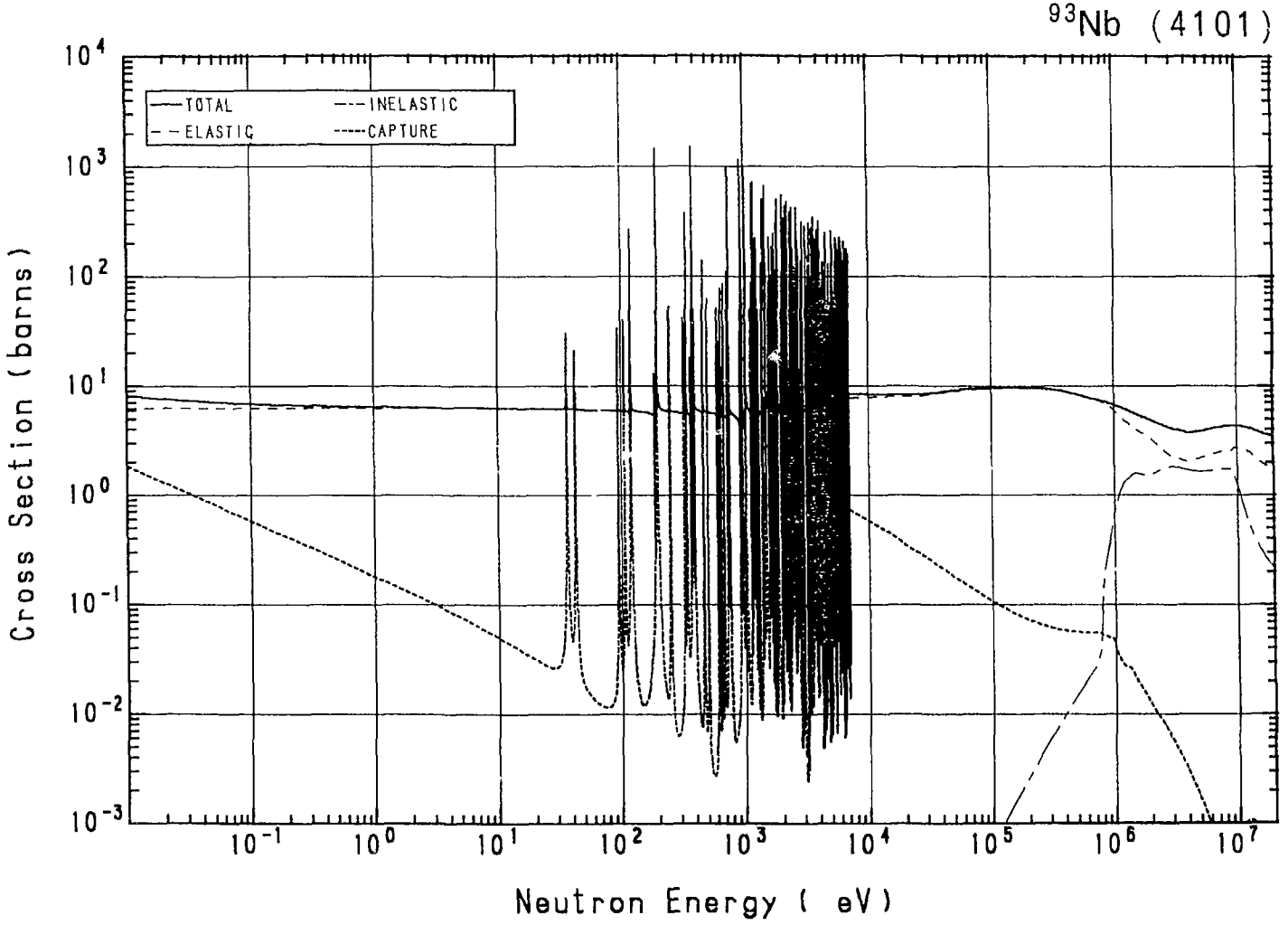

95Zr (4006)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

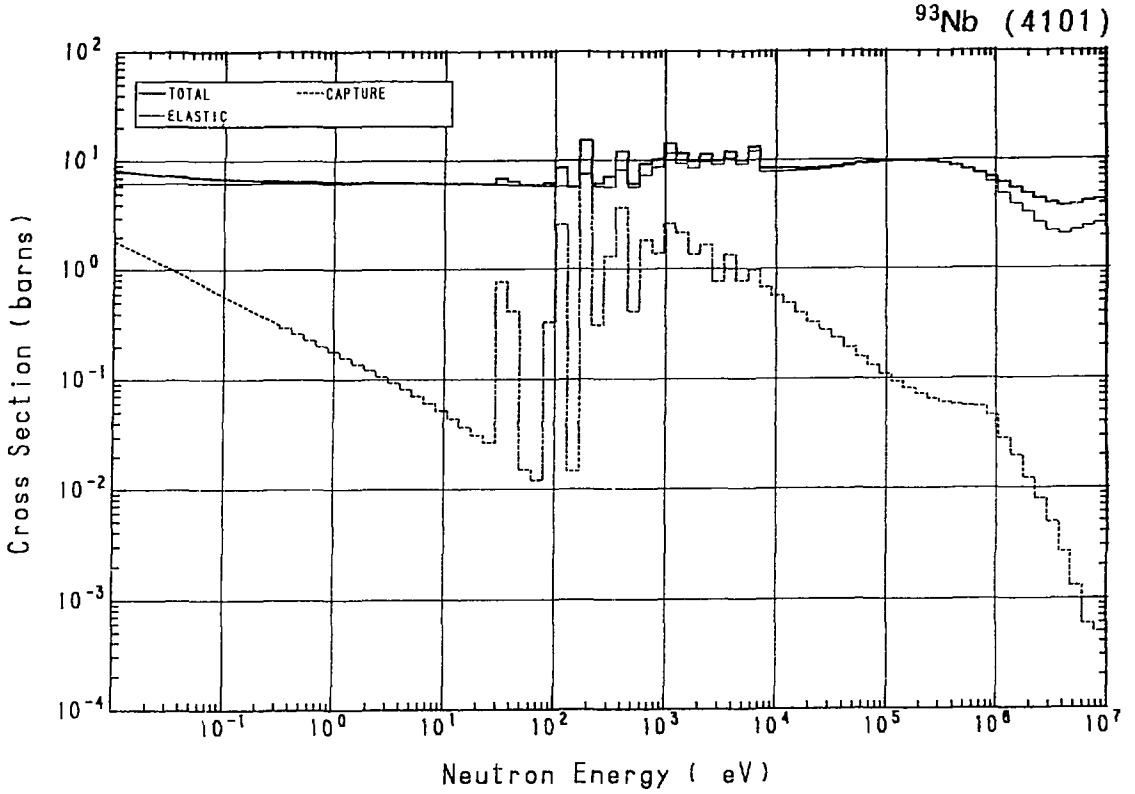

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,np)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

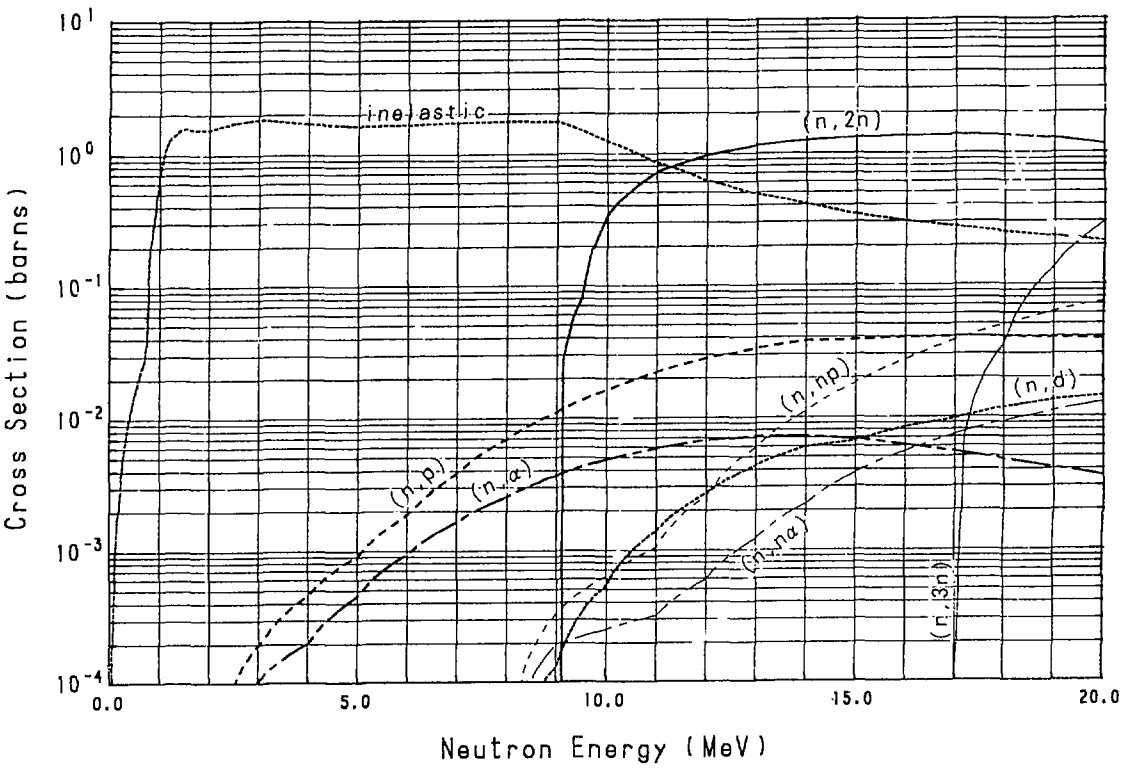

^{96}Zr (4007)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

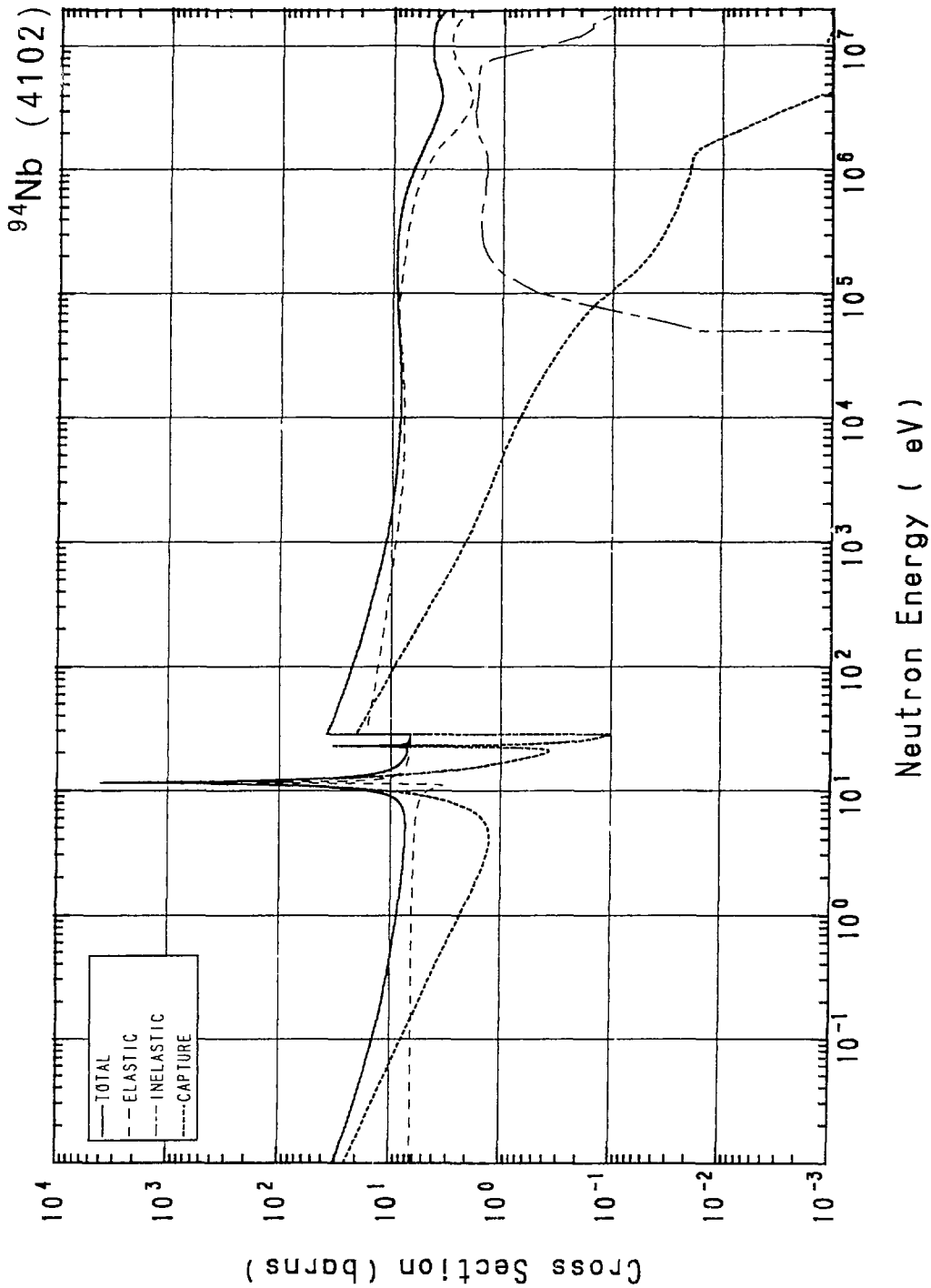

96Zr (4007)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

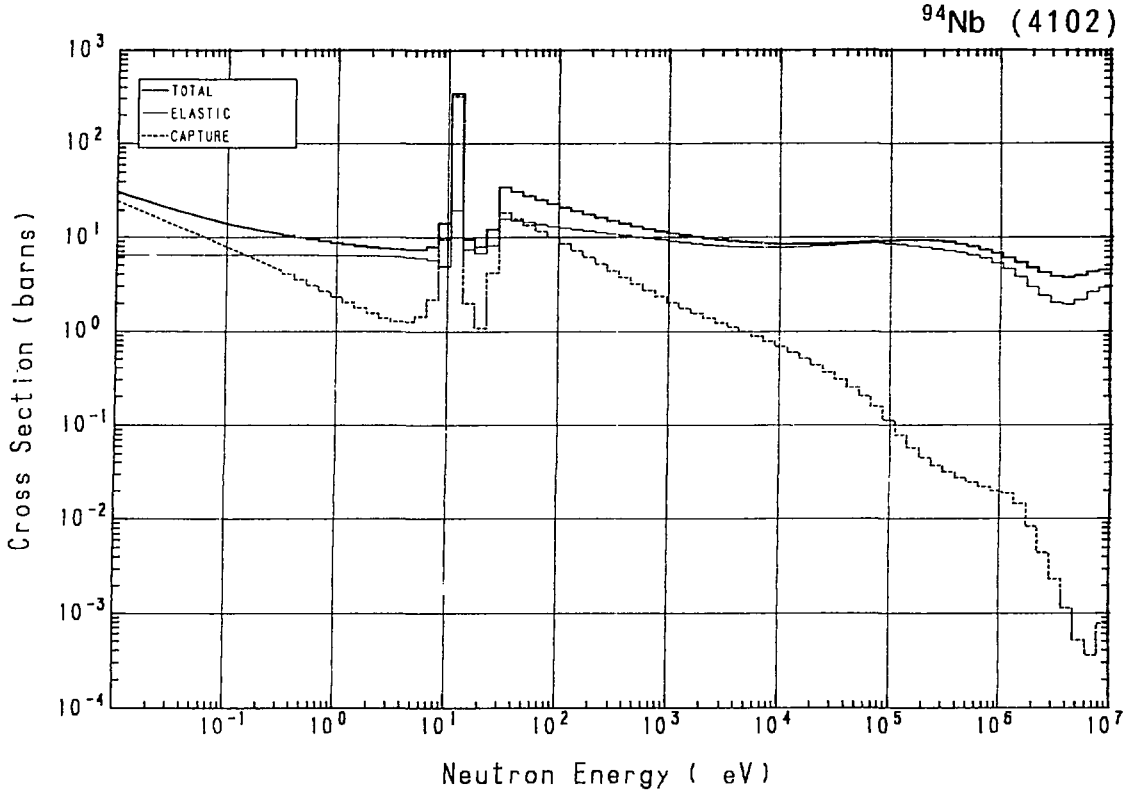

inelastic
(n,2n)
(n,3n)
(n,p)
(n,d)
(n,t)
(n,α)
(n,np)
(n,α)
Cross Section (barns)
Neutron Energy (MeV)

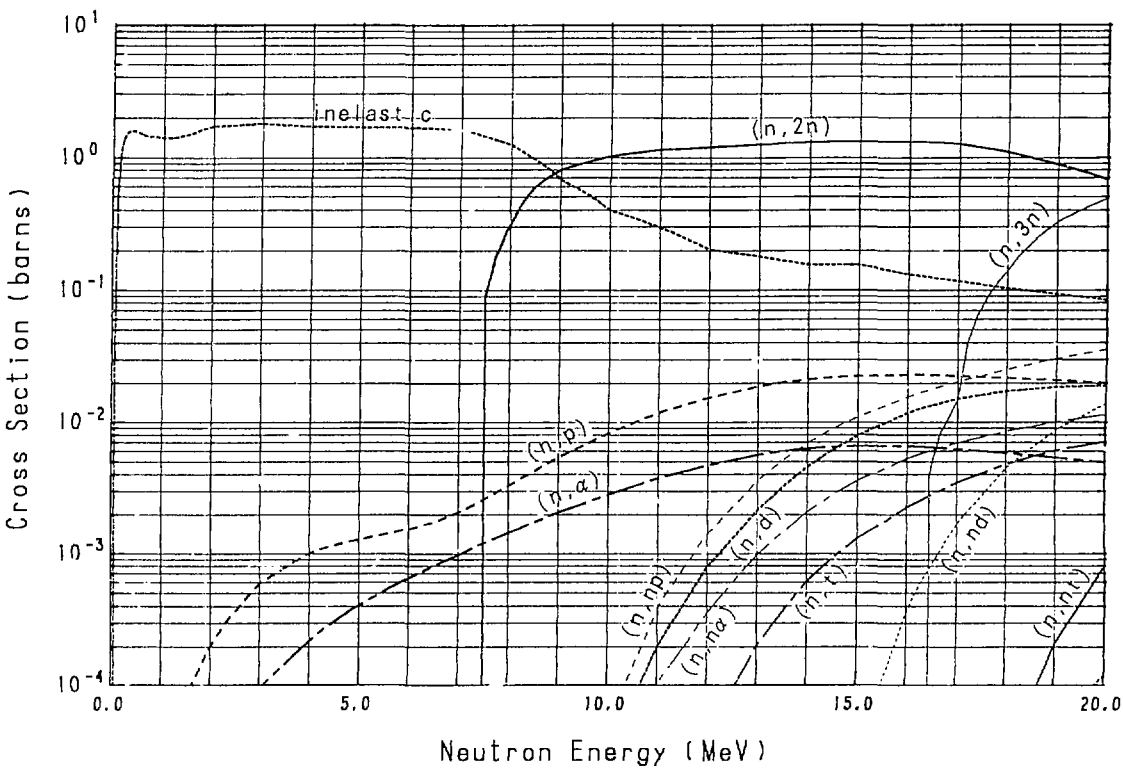

^{93}Nb (4101)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

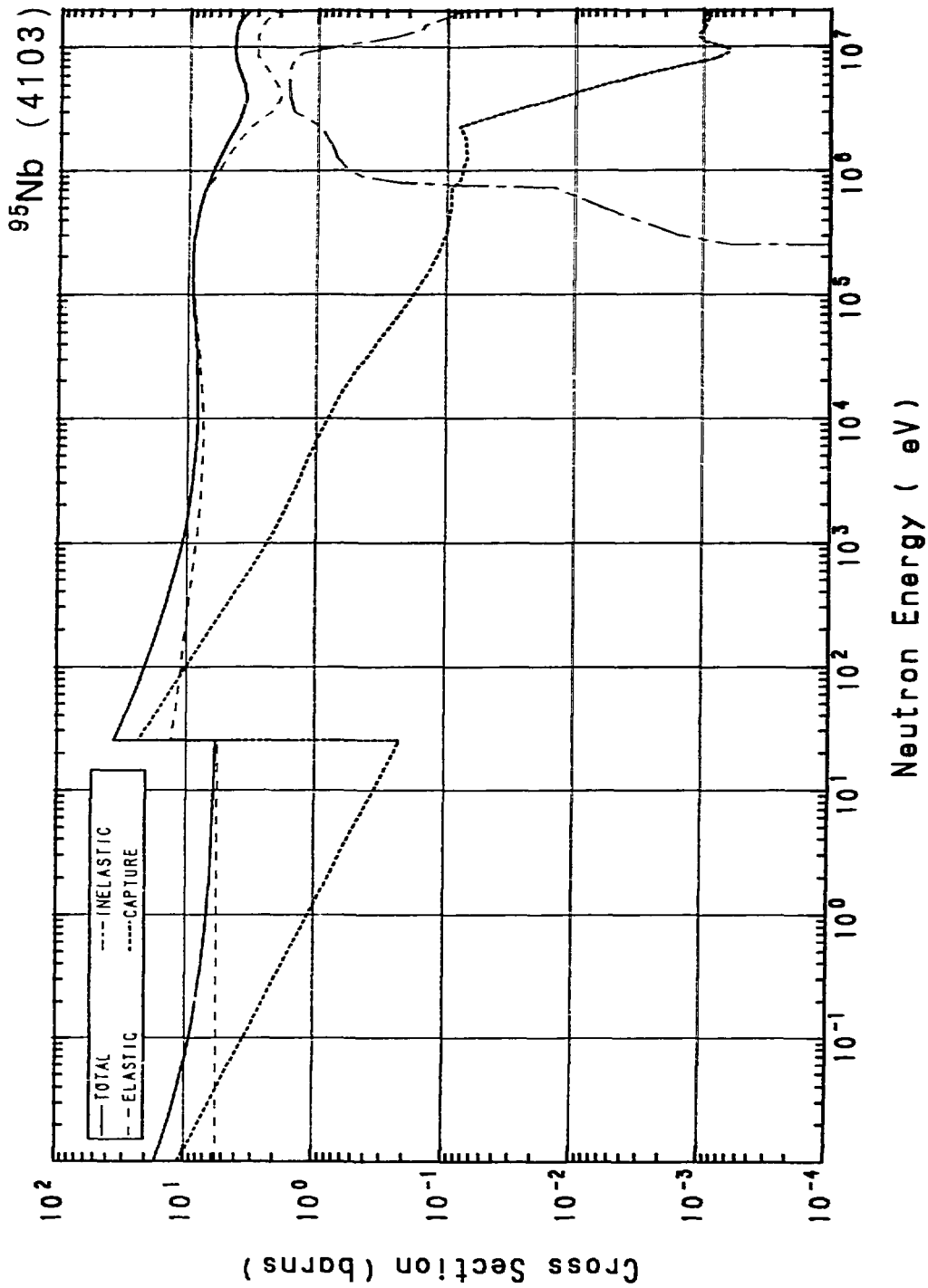

93Nb (4101)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

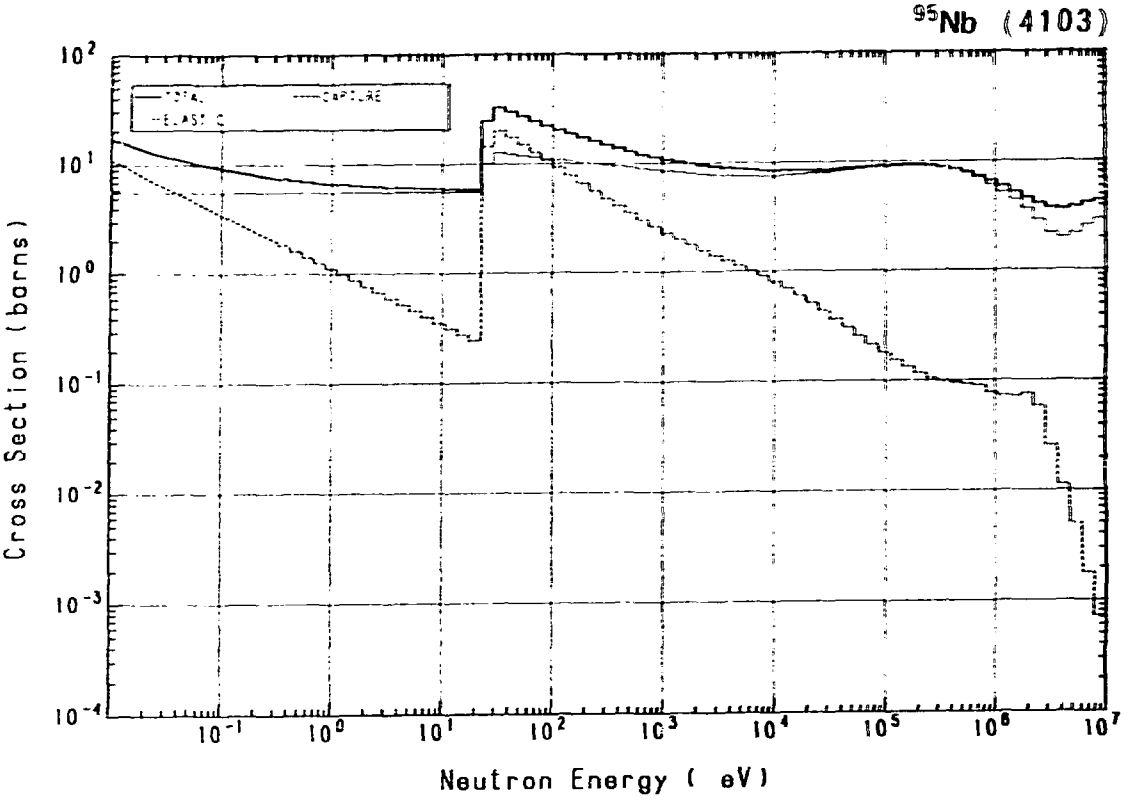

inelastic
(n,2n)
(n,np)
(n,d)
(n,p)
(n,α)
(n,nα)
(n,3n)
Cross Section (barns)
Neutron Energy (MeV)

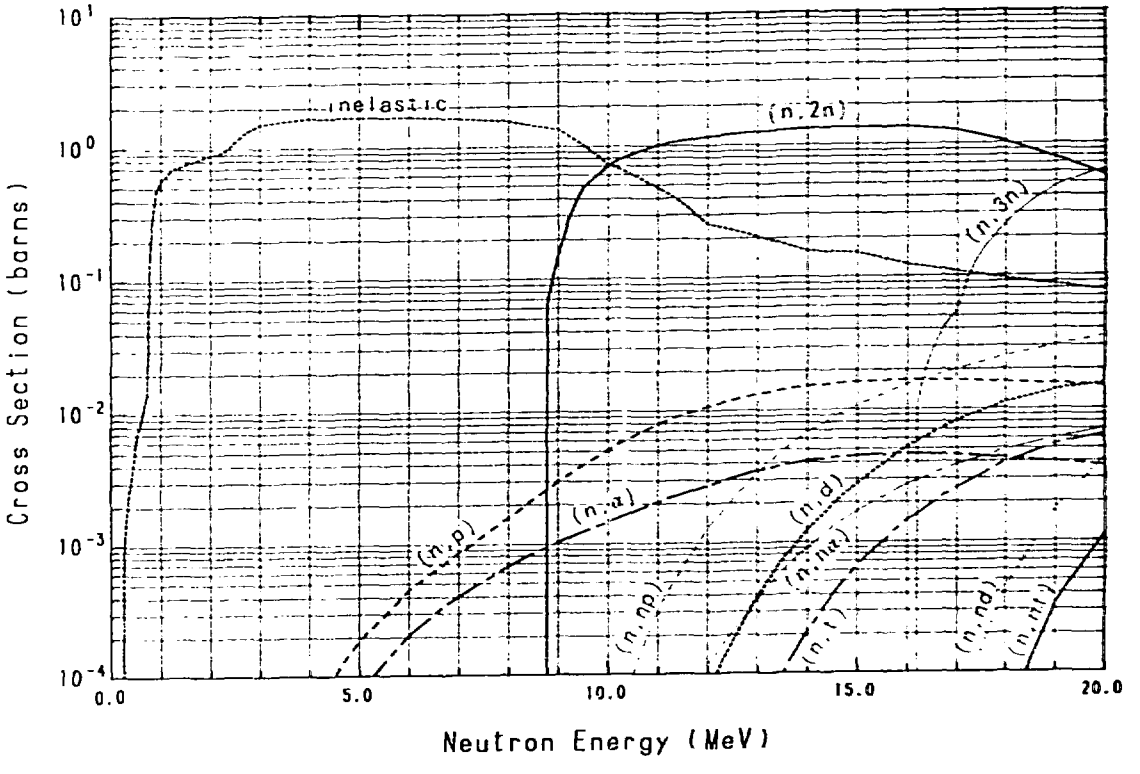

^{94}Nb (4102)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

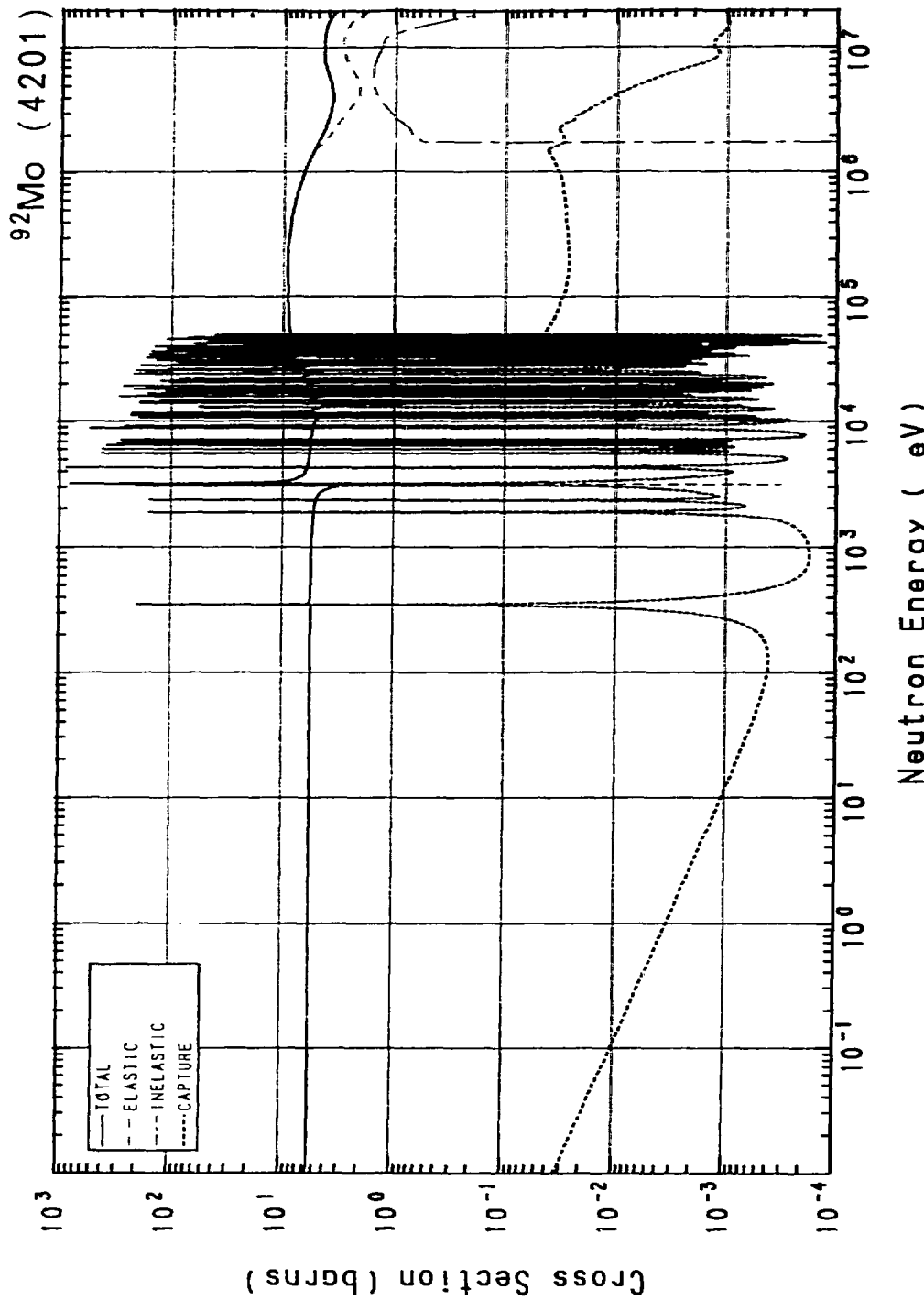

94Nb (4102)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

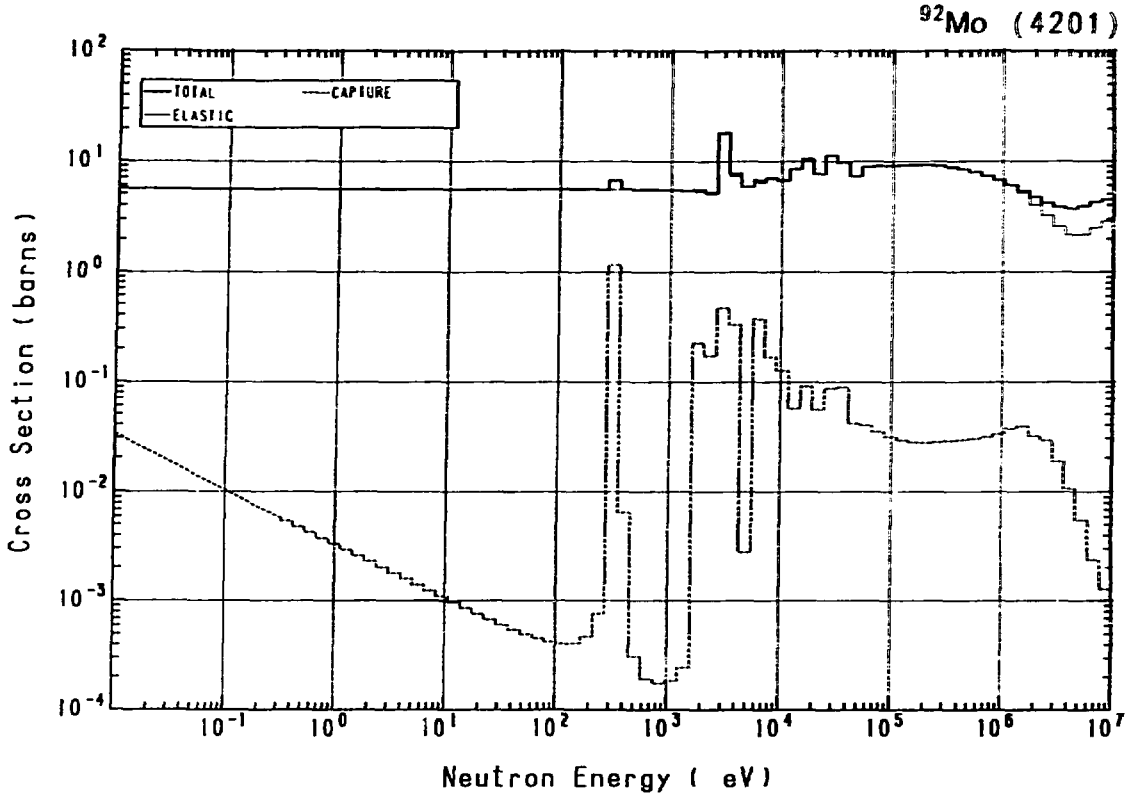

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,nα)
(n,t)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

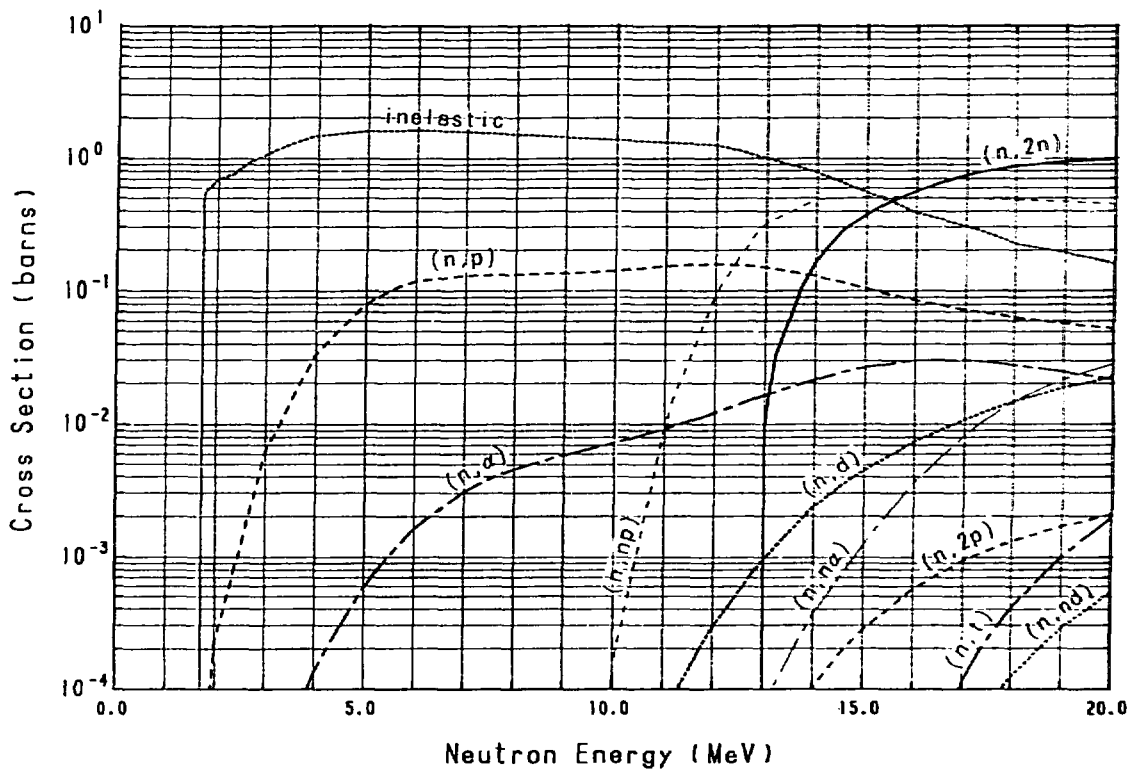

95Nb (4103)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

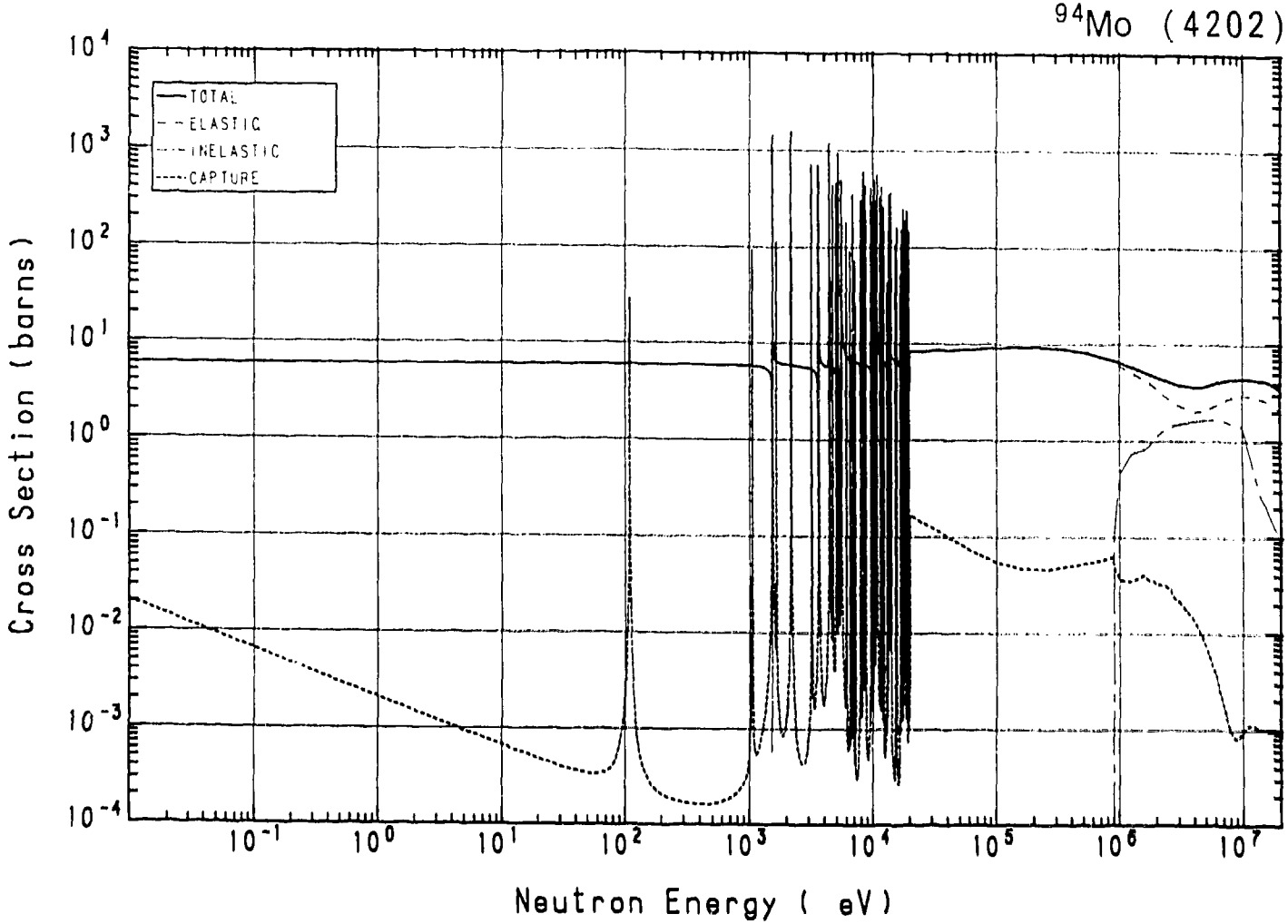

^{95}Nb (4103)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

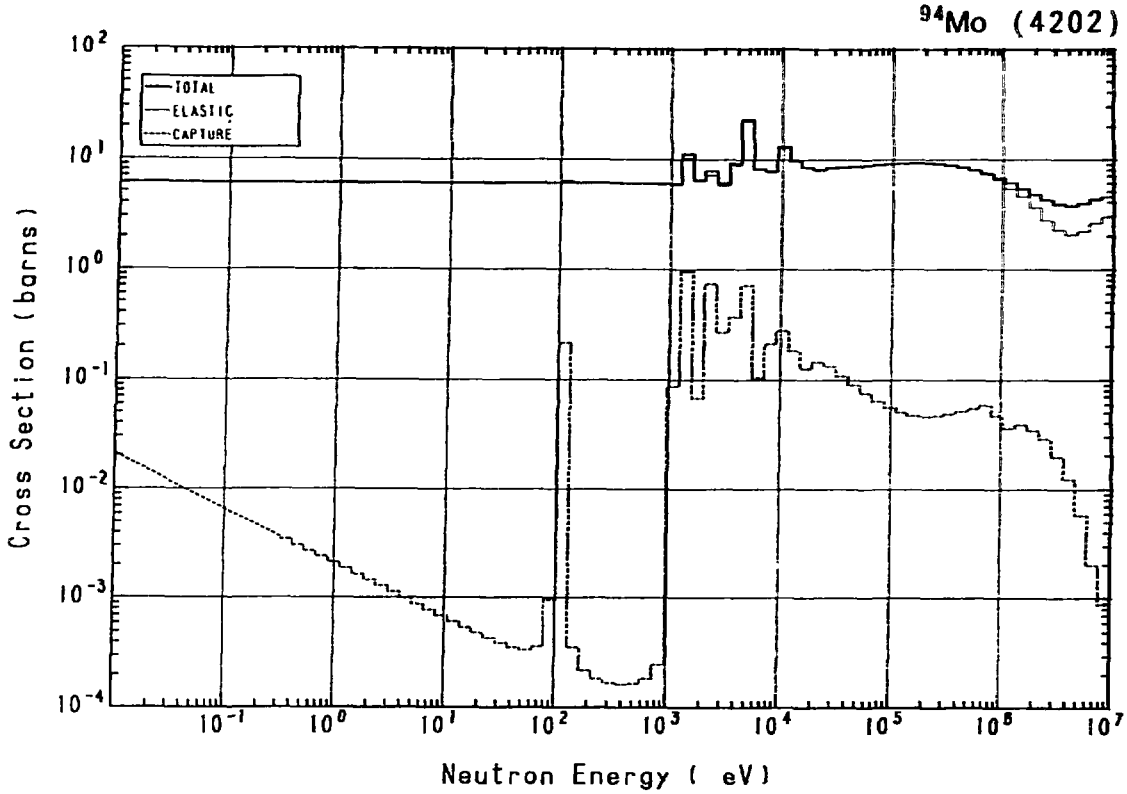

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,nα)
(n,t)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

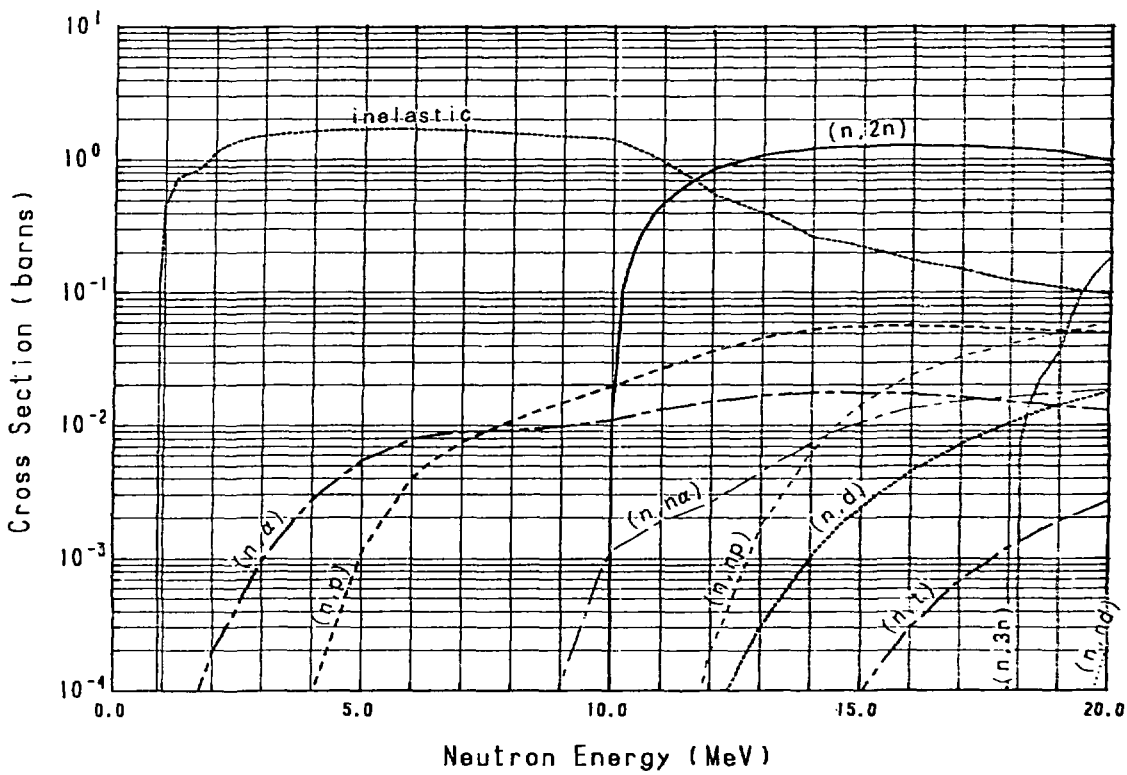

92Mo (4201)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

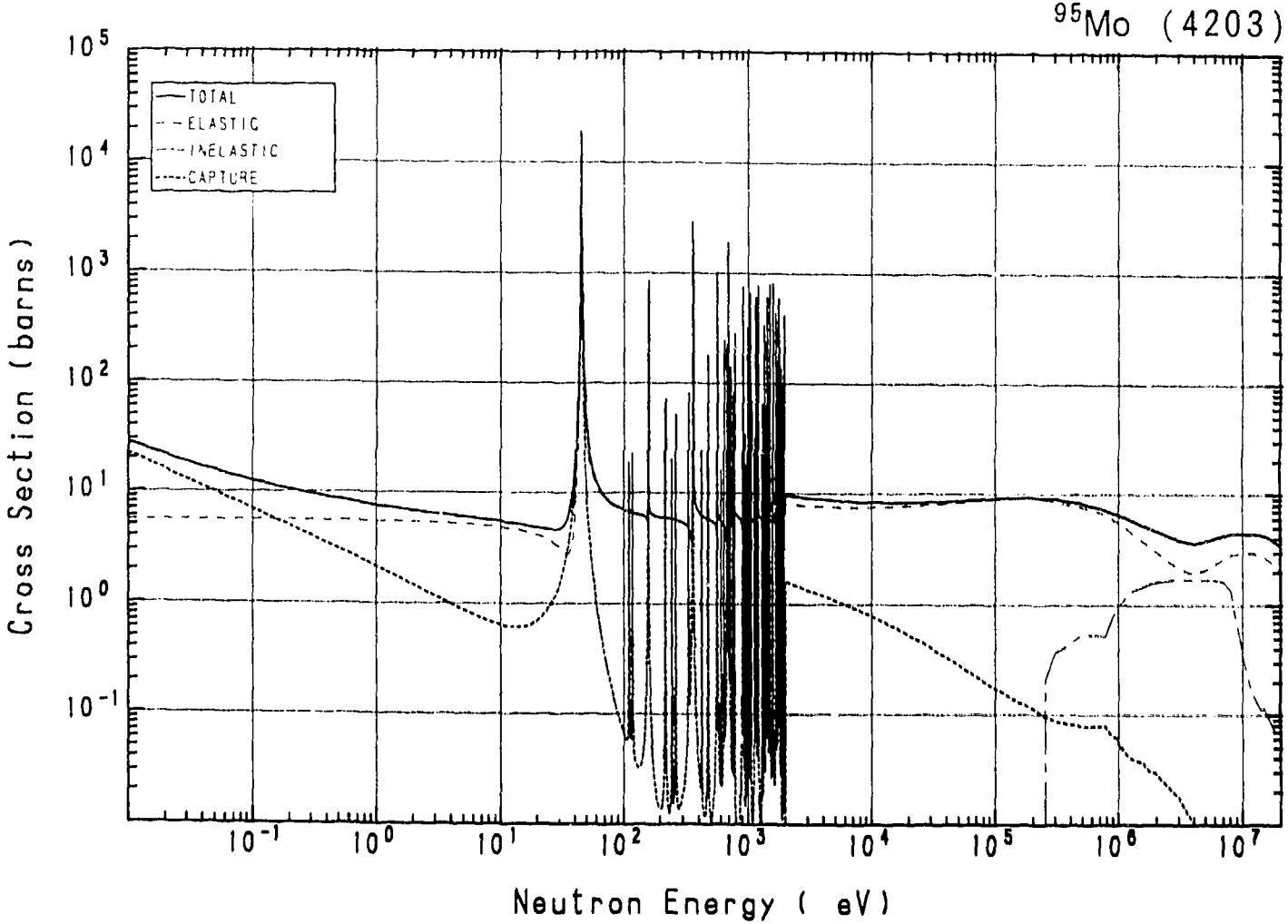

92Mo (4201)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

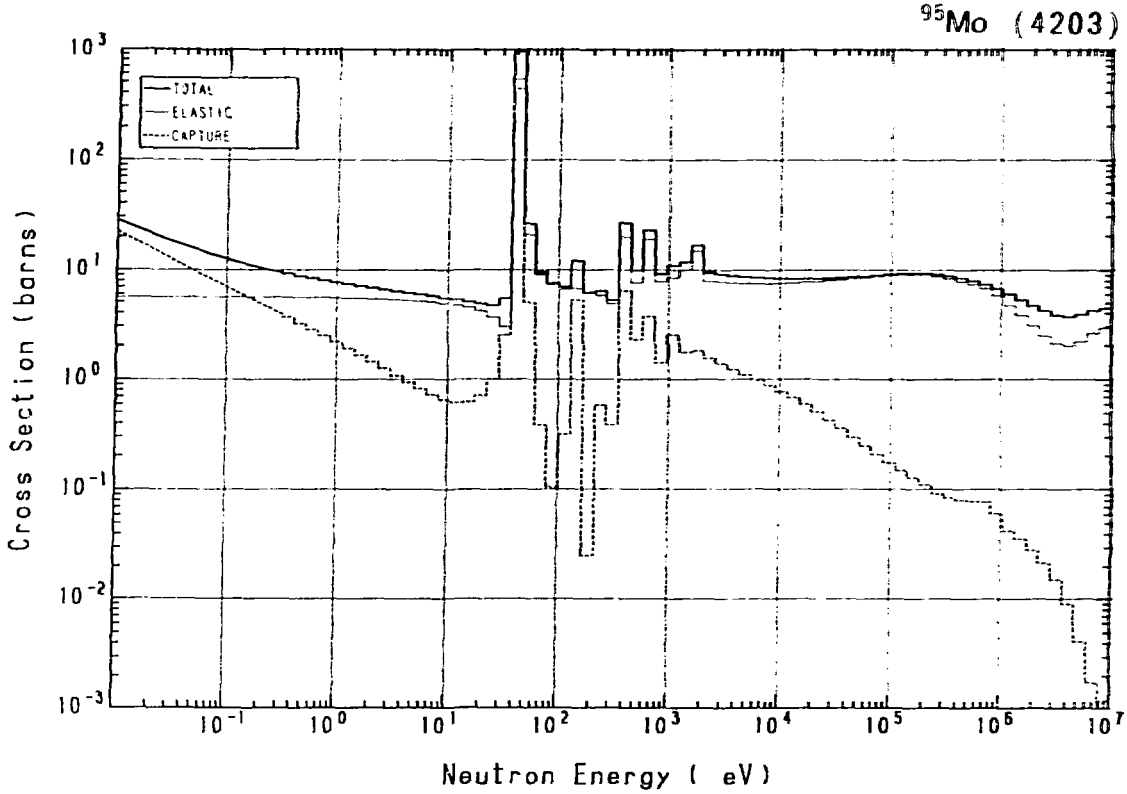

inelastic
(n,2n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,nα)
(n,2p)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

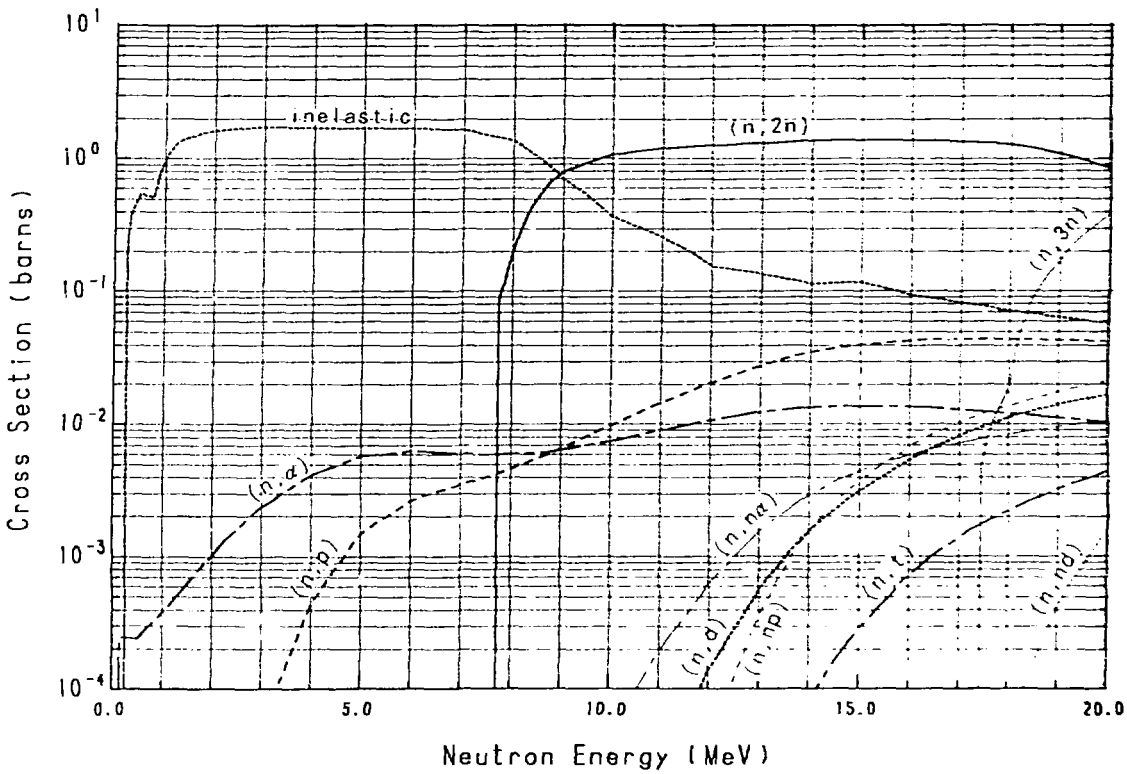

^{94}Mo (4202)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

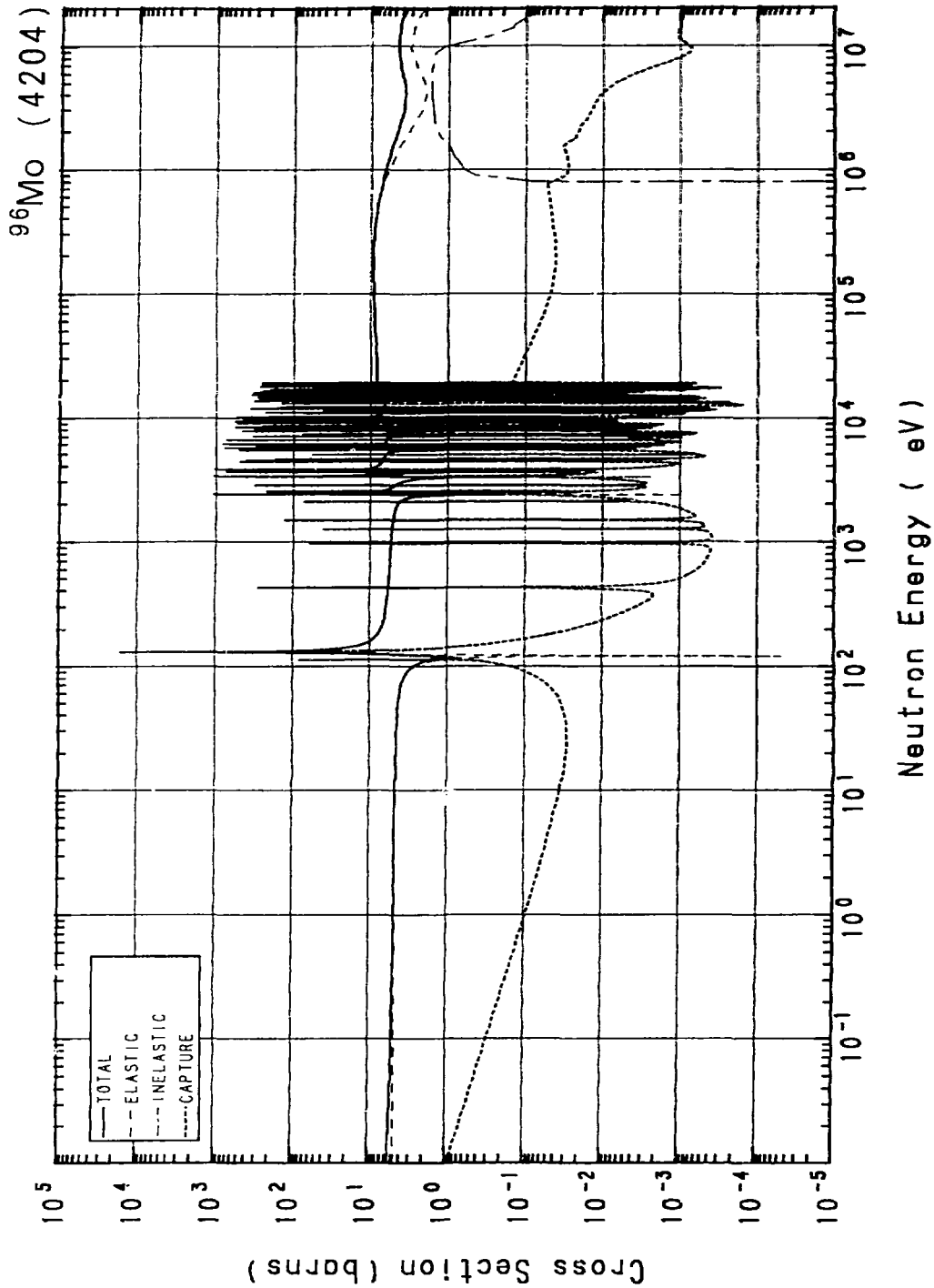

94Mo (4202)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

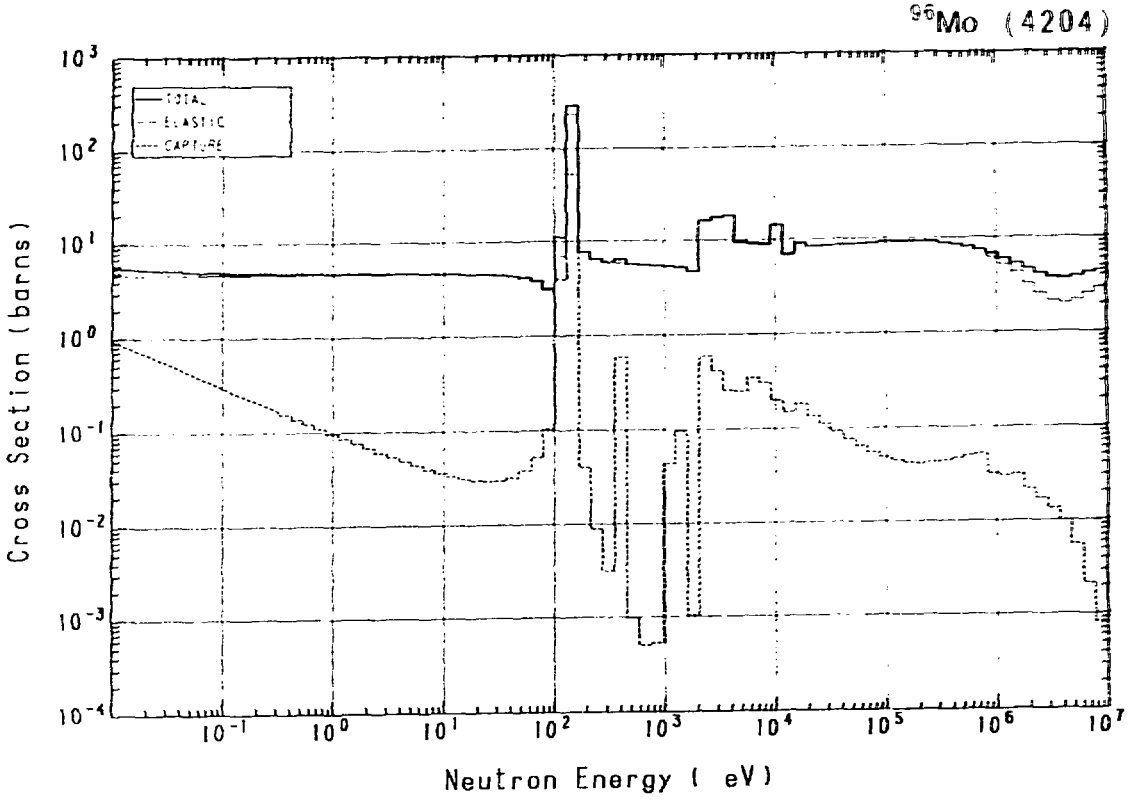

inelastic
(n,2n)
(n,d)
(n,p)
(n,nα)
(n,np)
(n,d)
(n,γ)
(n,3n)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

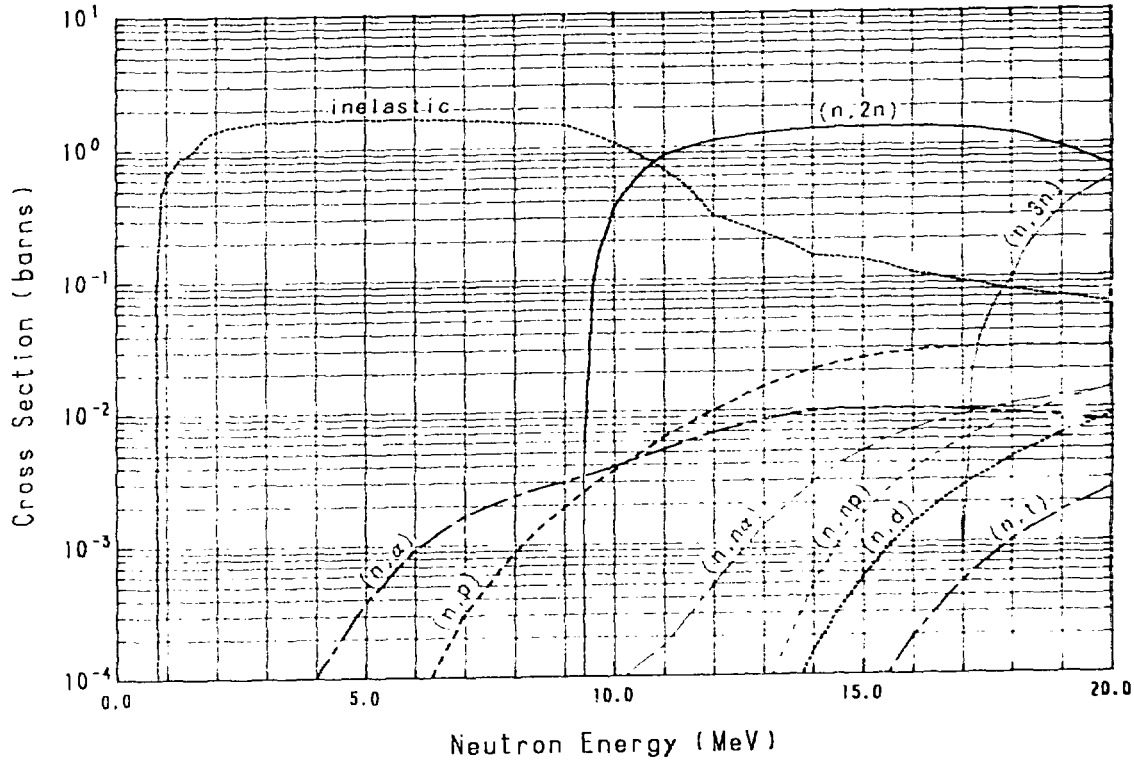

^{95}Mo (4203)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

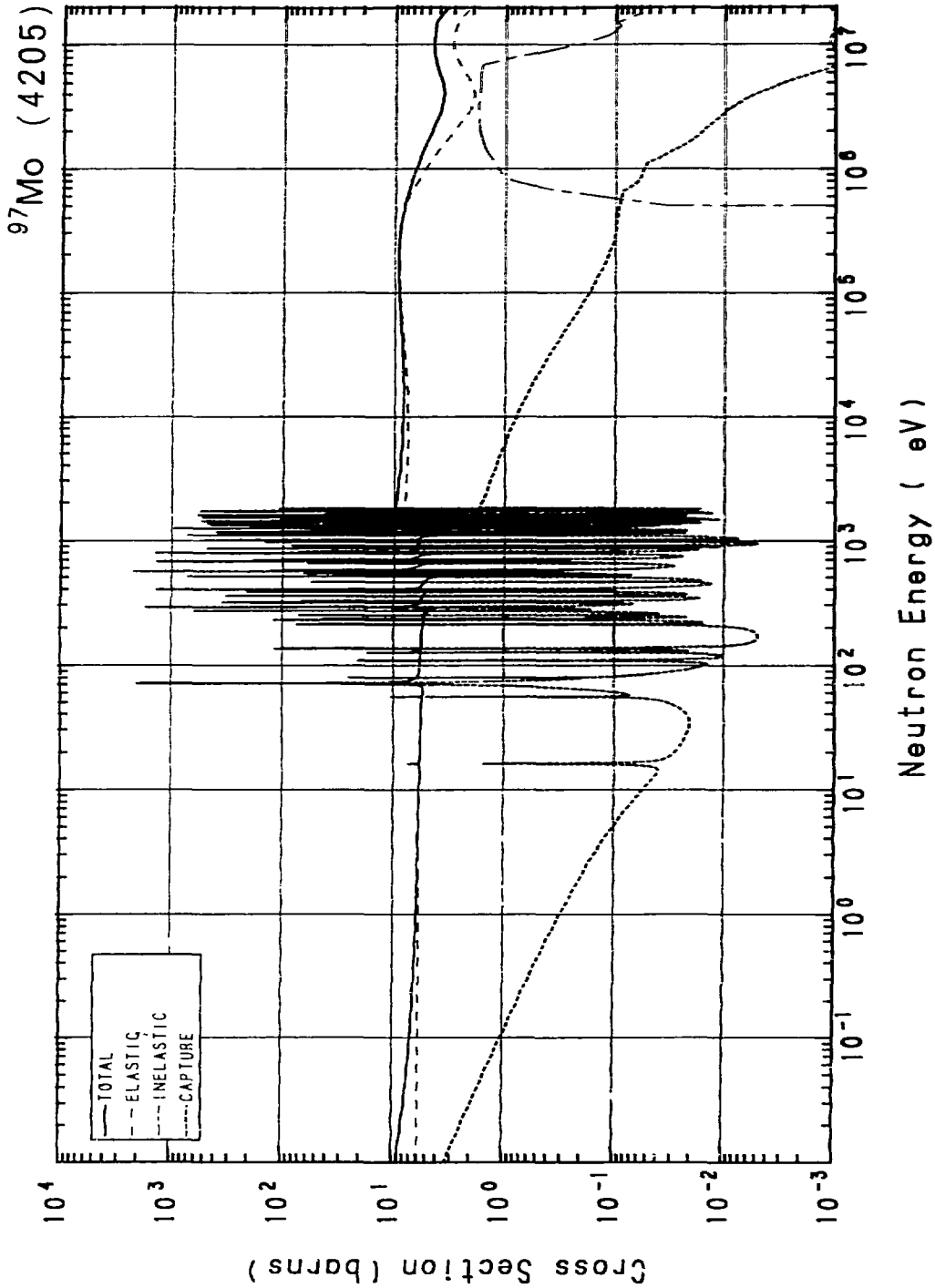

95Mo (4203)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

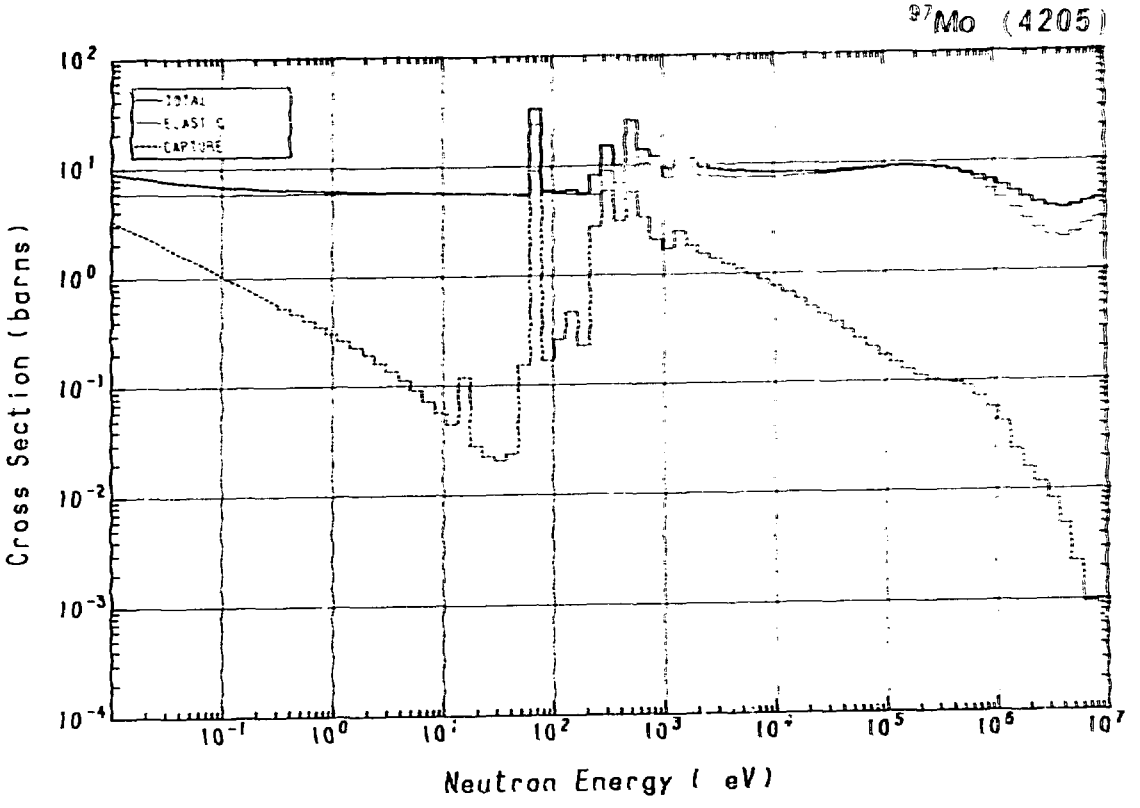

inelastic
(n,2n)
(n,3n)
(n,α)
(n,p)
(n,d)
(n,np)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

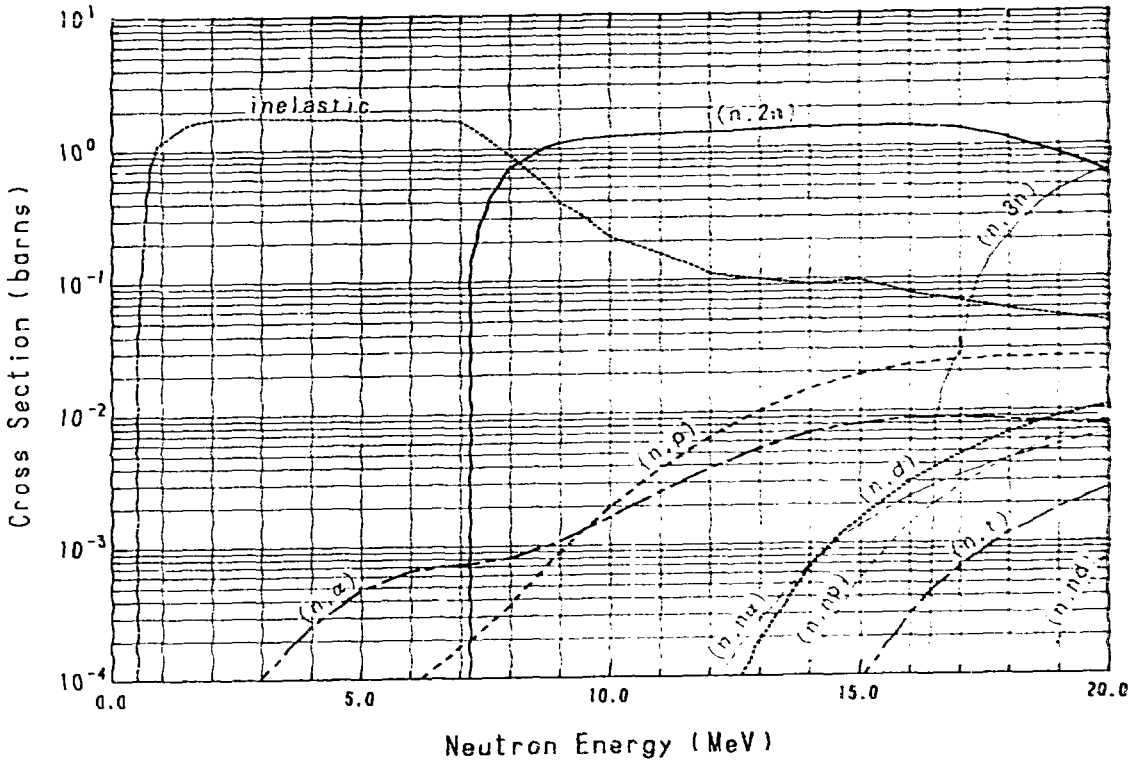

96Mo (4204)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

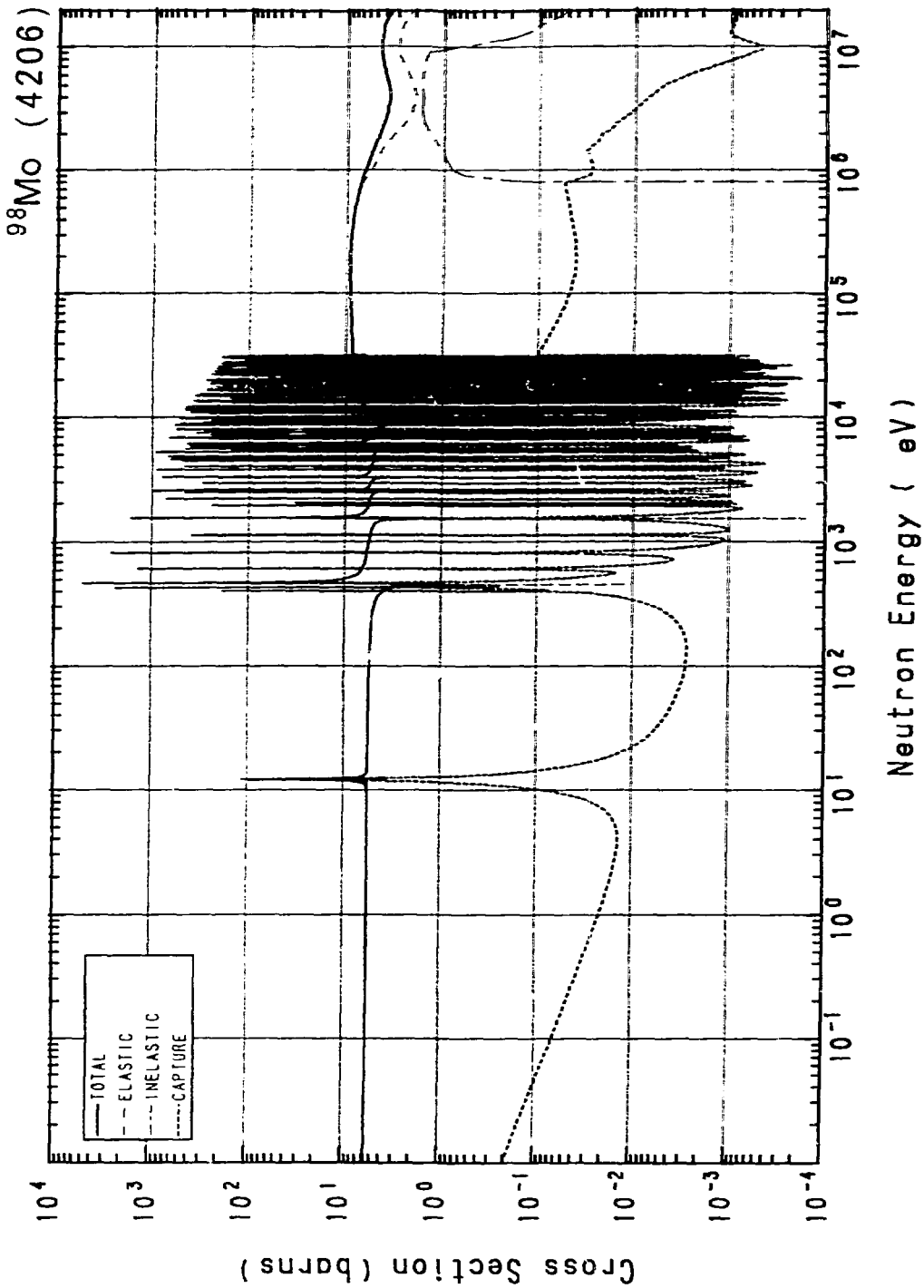

^{96}Mo (4204)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

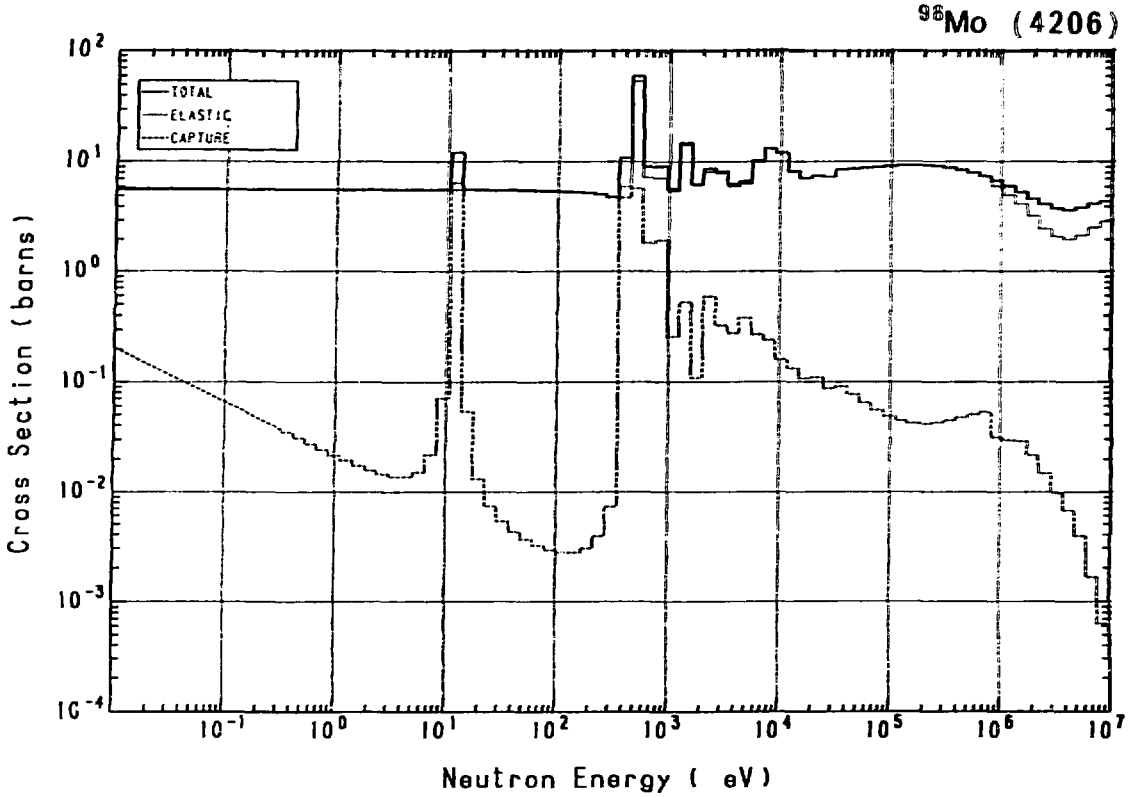

inelastic
(n,2n)
(n,3n)
(n,α)
(n,p)
(n,nα)
(n,np)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

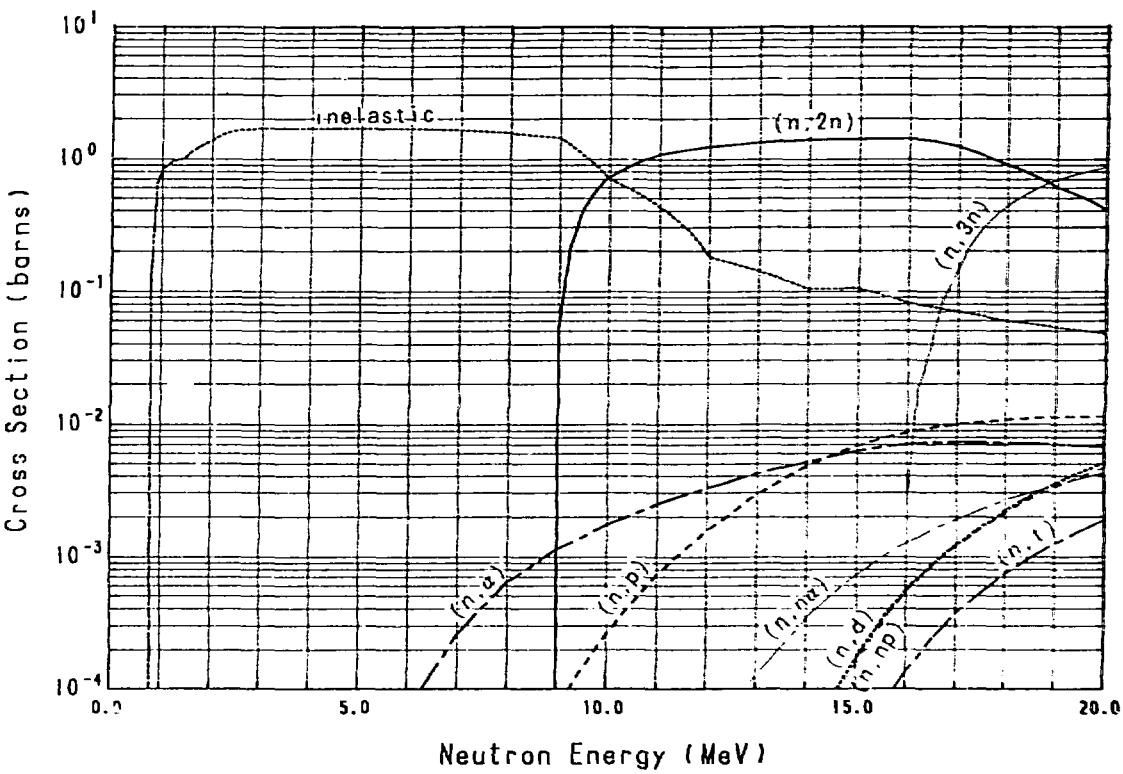

97Mo (4205)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

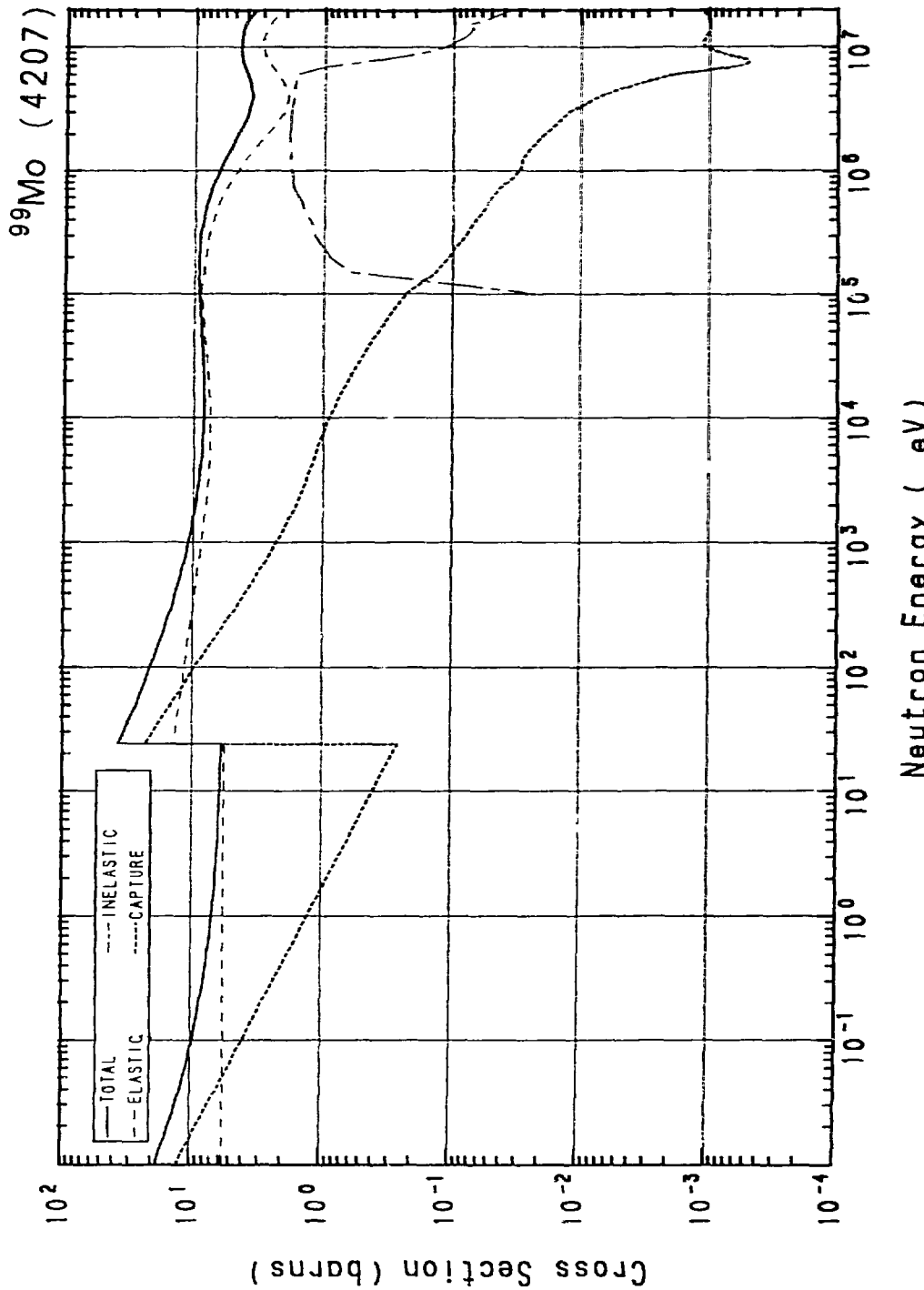

^{97}Mo (4205)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

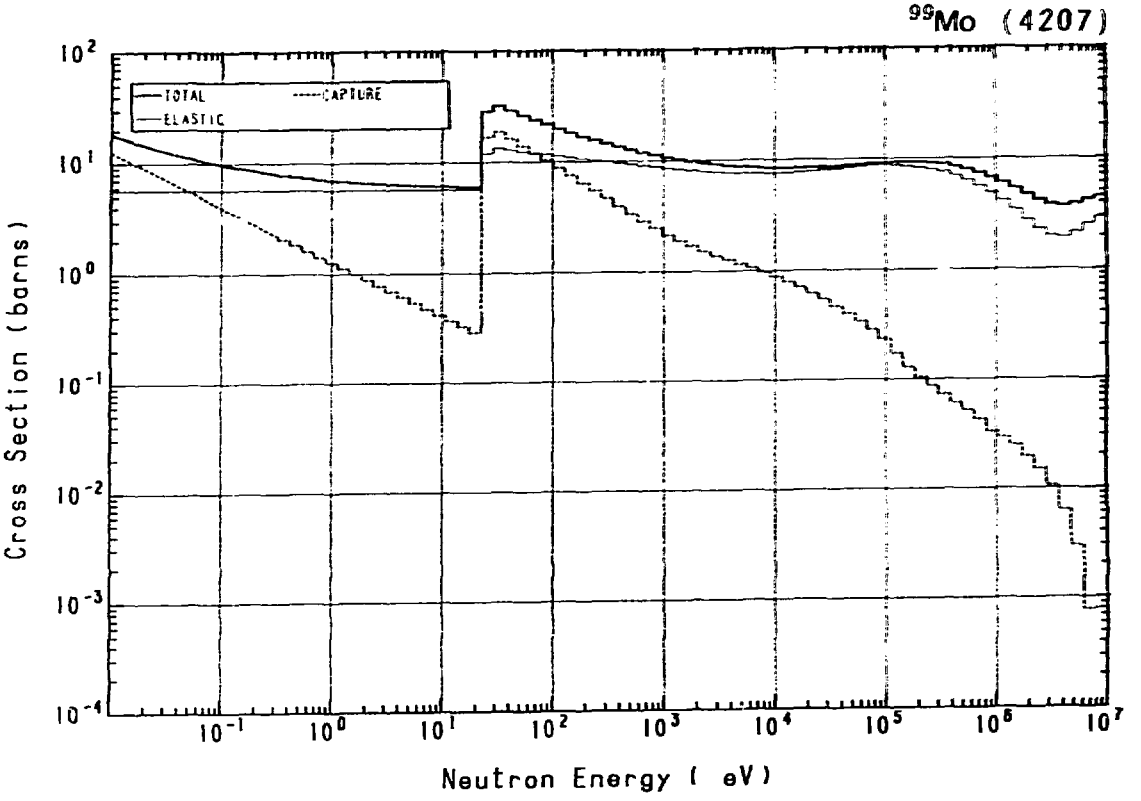

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,t)
(n,nα)
(n,np)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

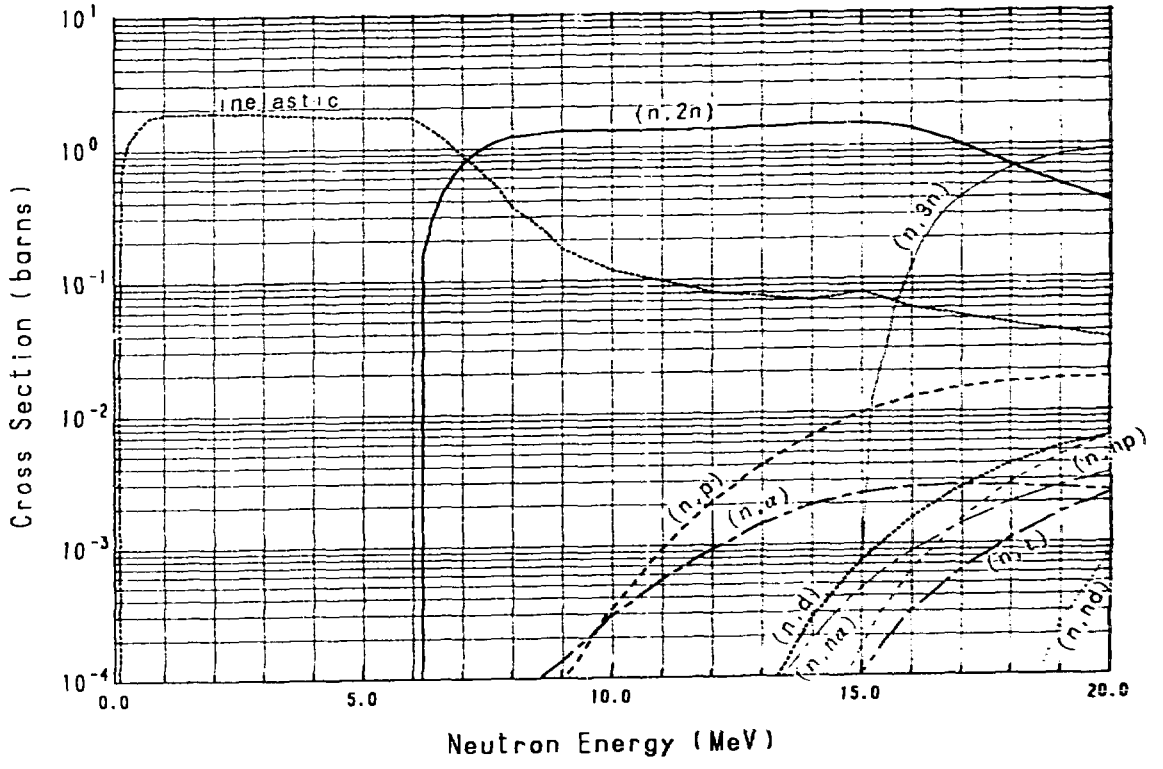

98Mo (4206)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

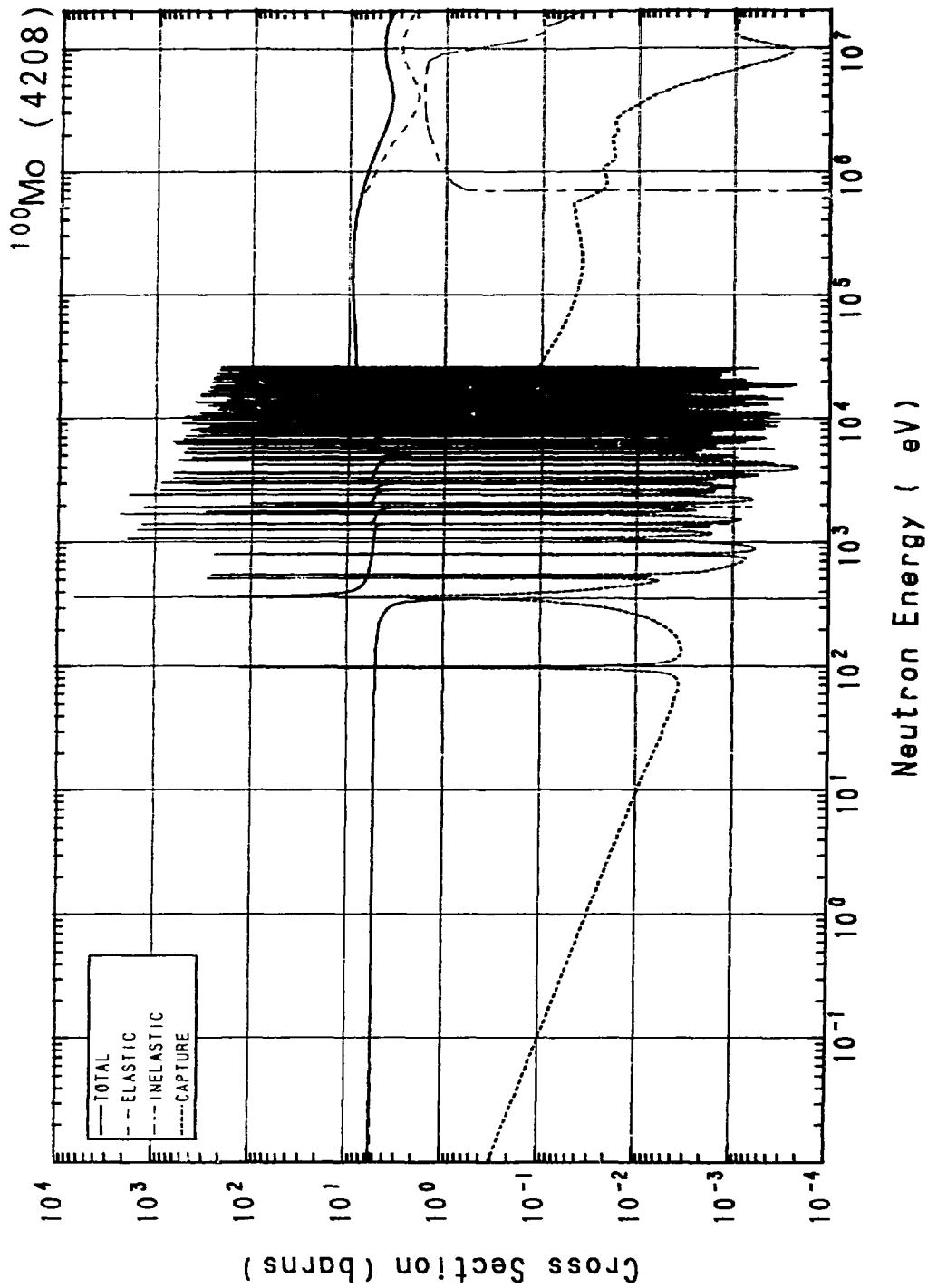

^{98}Mo (4206)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

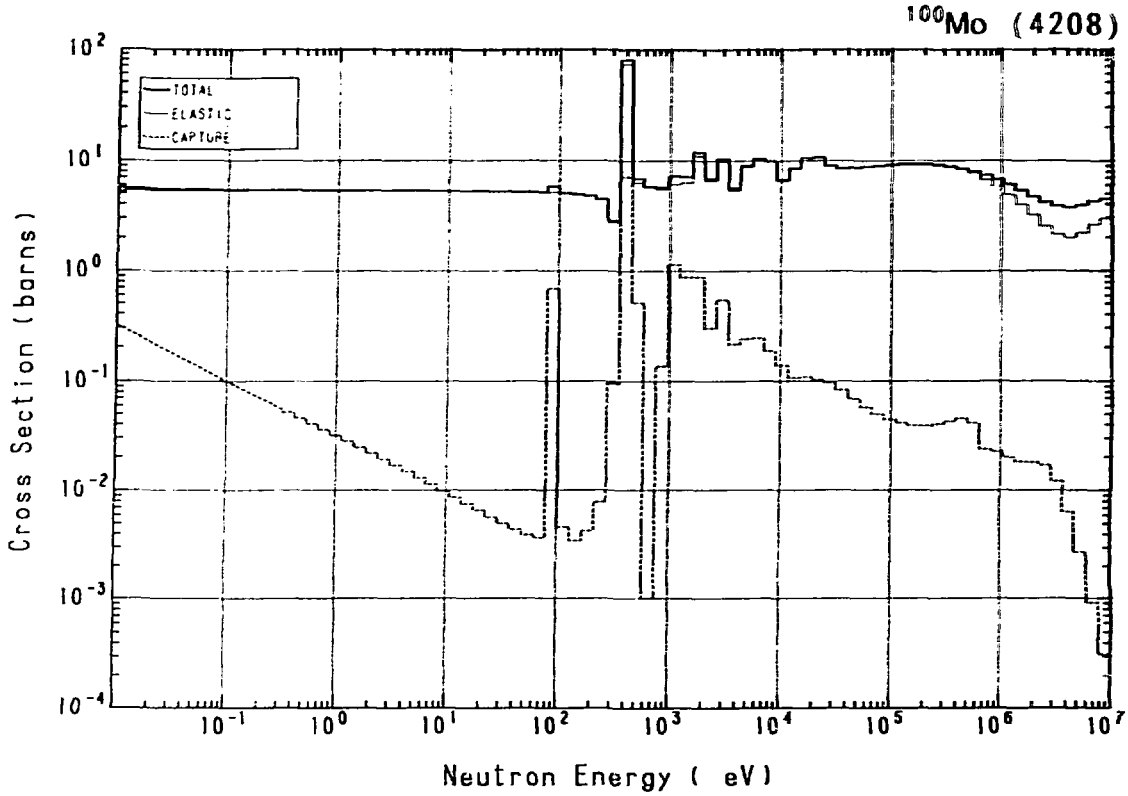

inelastic
(n,2n)
(n,3n)
(n,α)
(n,p)
(n,nα)
(n,d)
(n,np)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

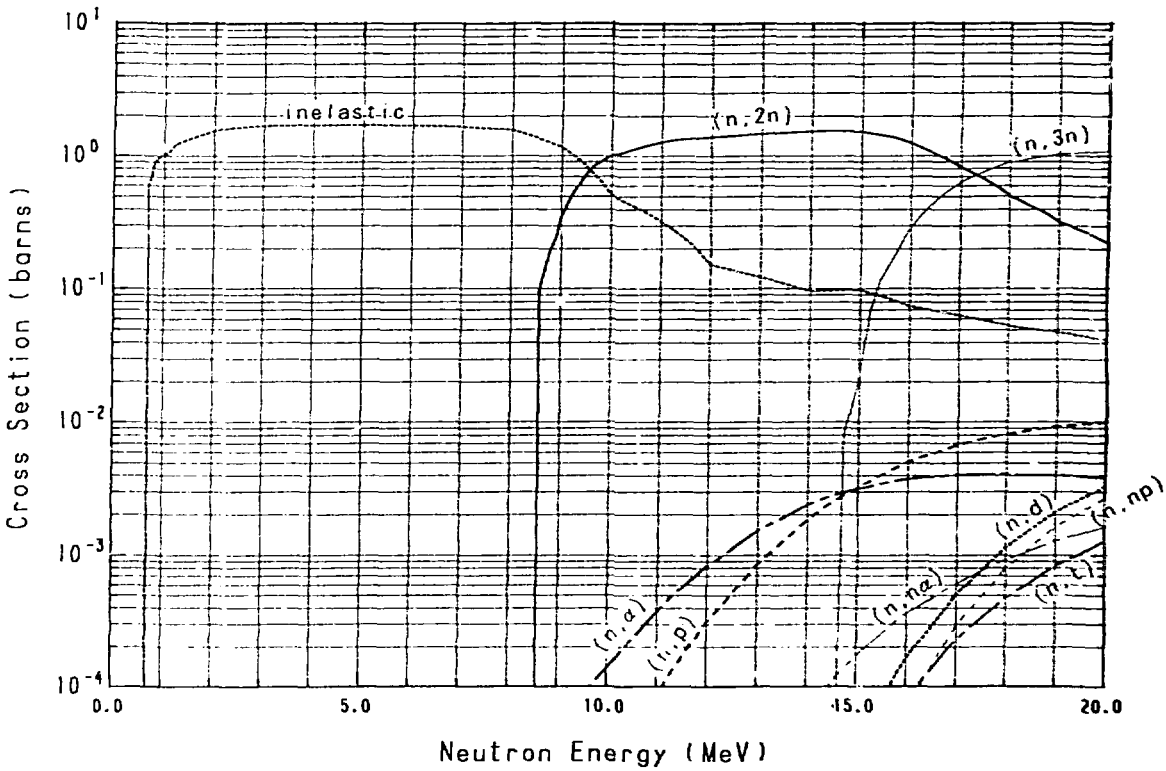

99Mo (4207)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

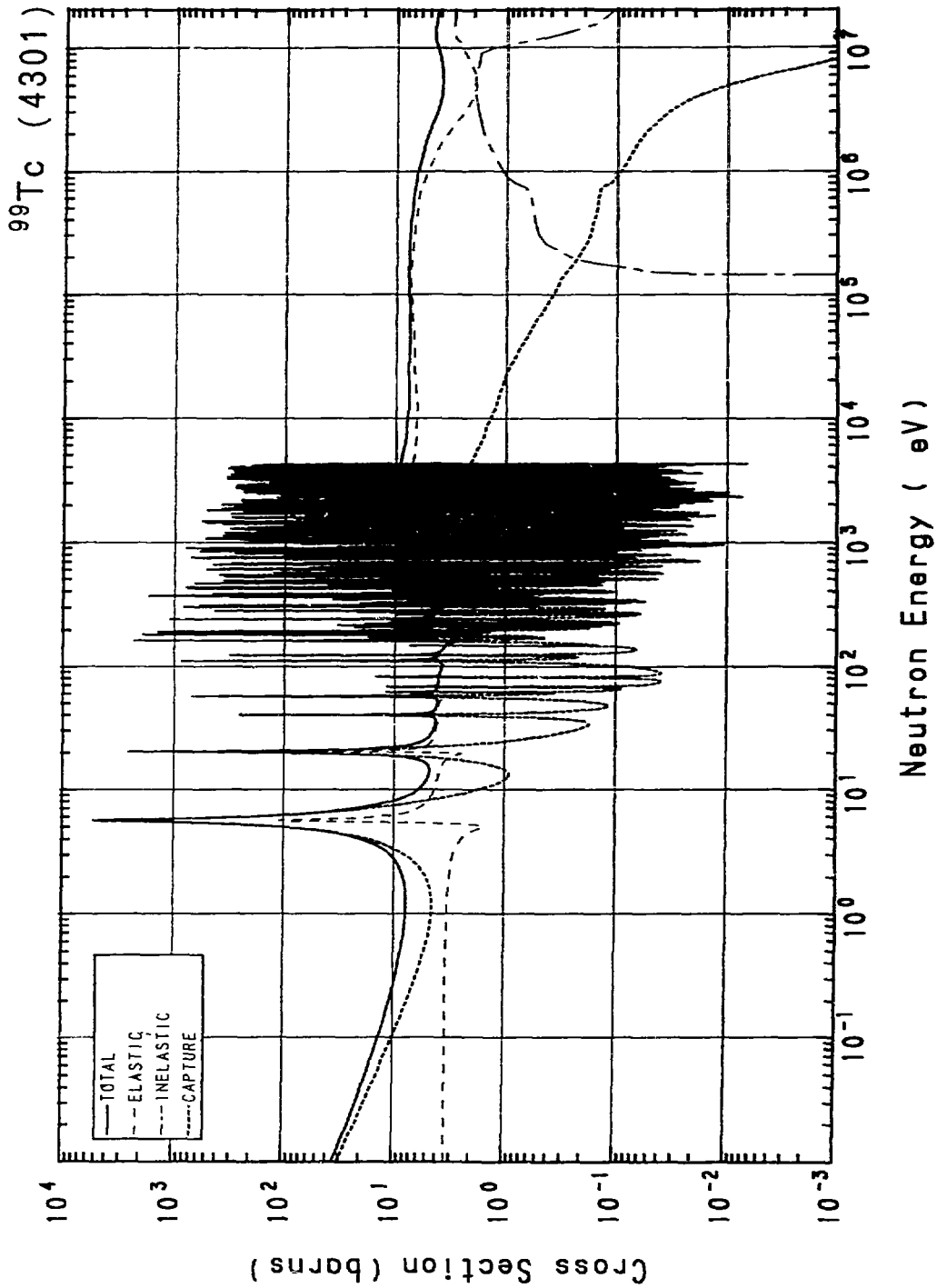

99Mo (4207)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

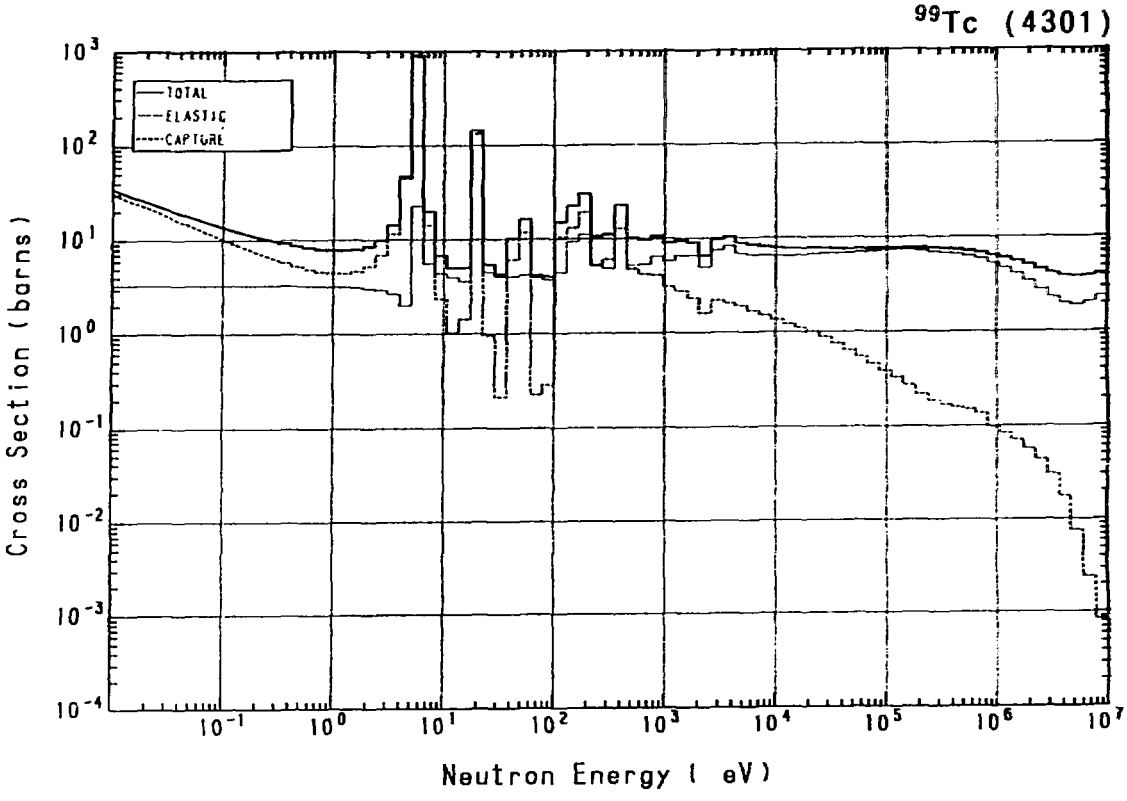

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,t)
(n,d)
(n,nα)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

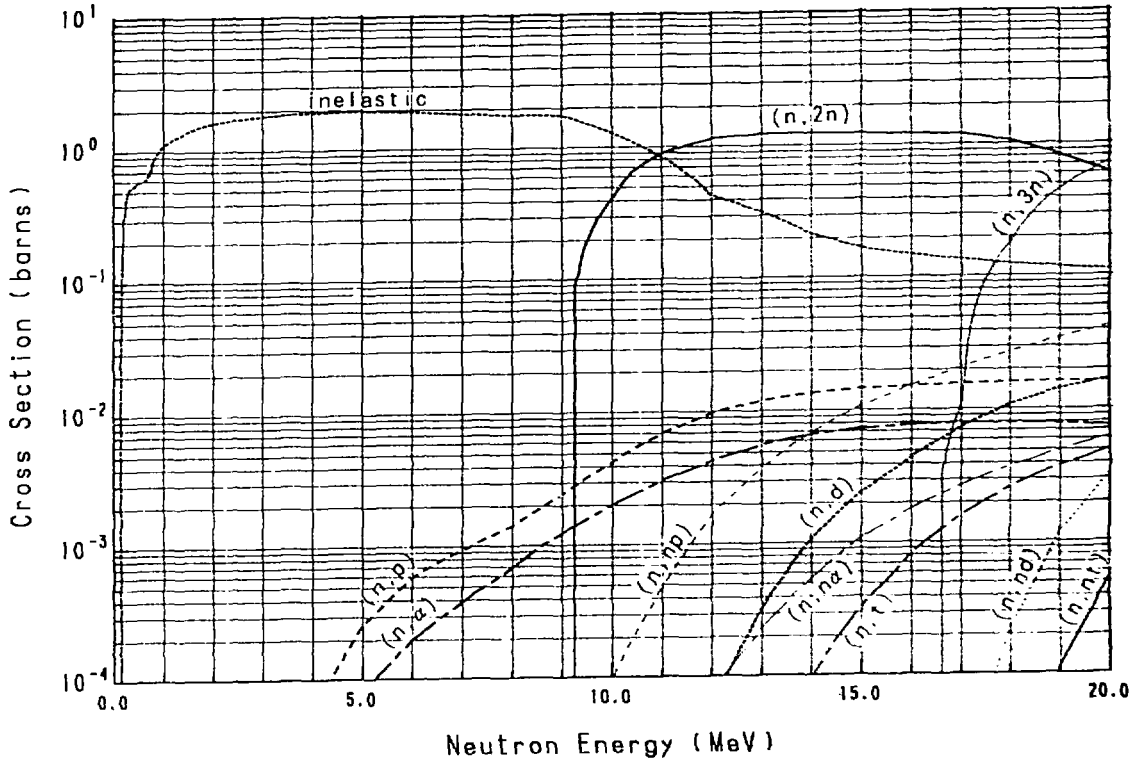

100Mo (4208)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

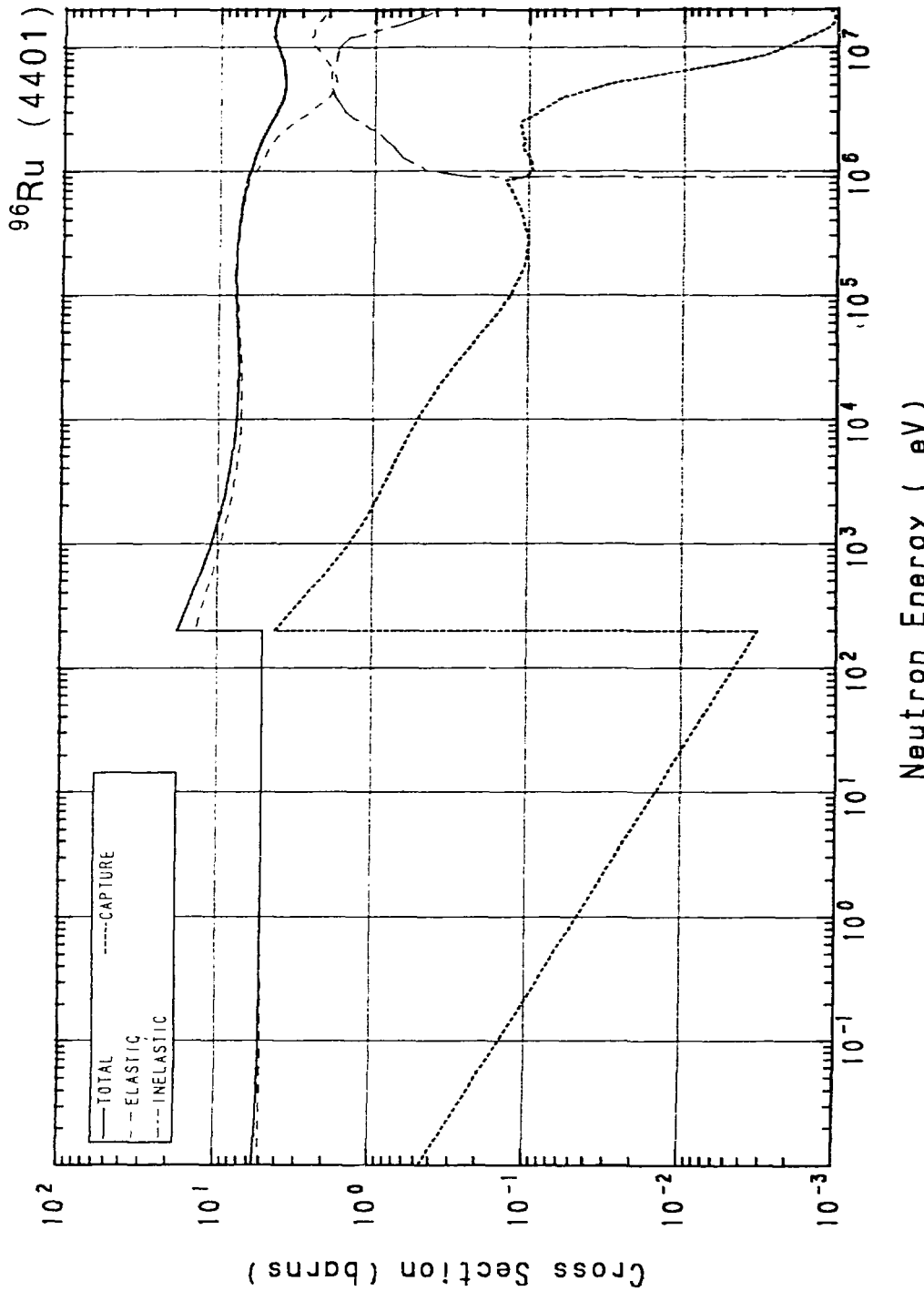

^{100}Mo (4208)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

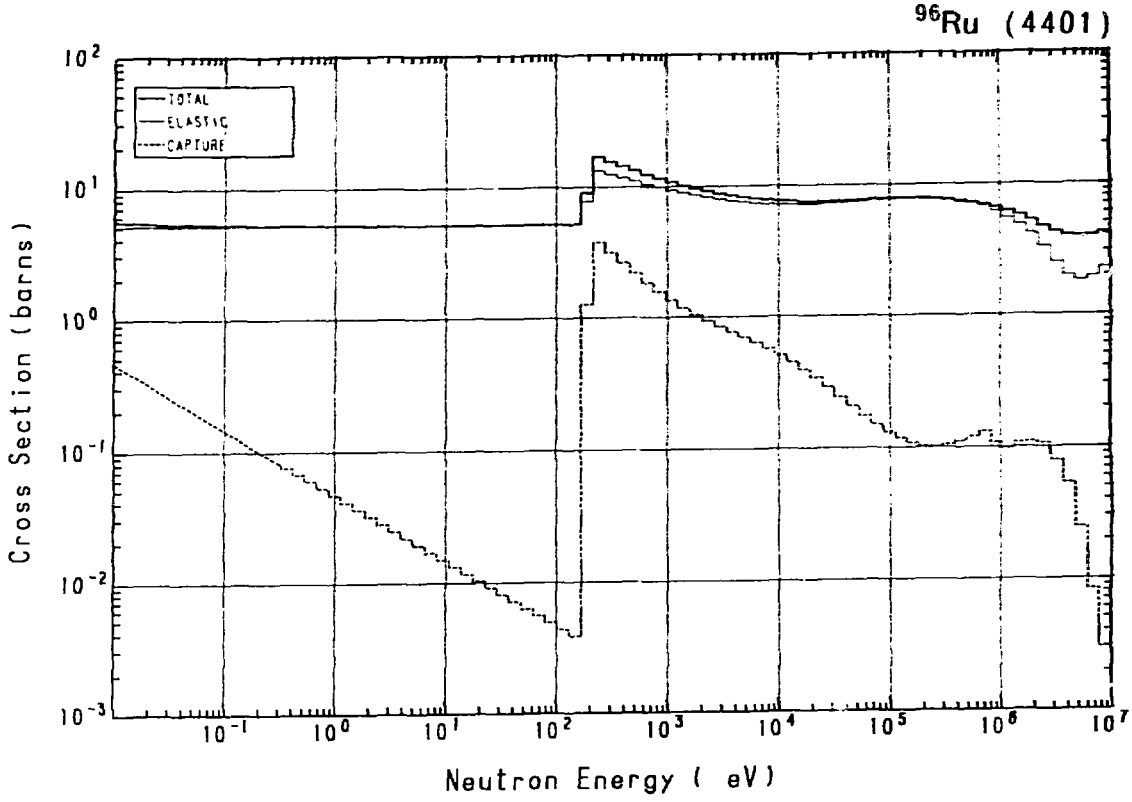

inelastic
(n,2n)
(n,3n)
(n,α)
(n,p)
(n,nα)
(n,d)
(n,np)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

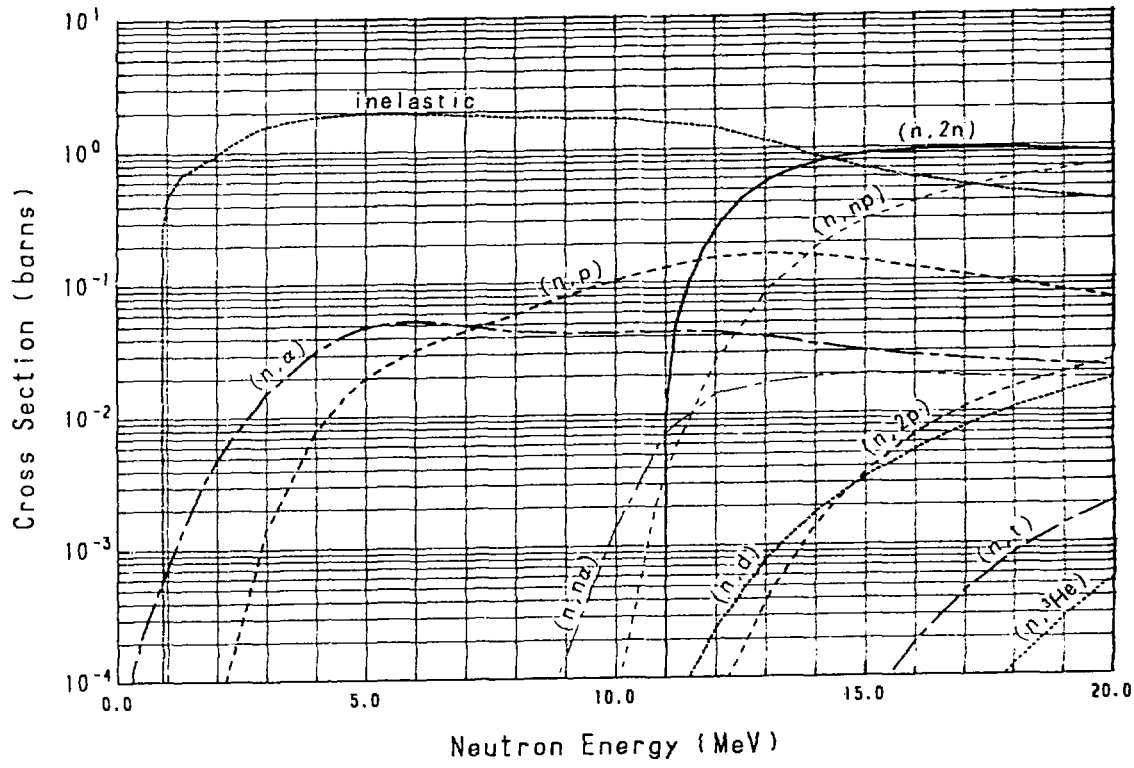

^{99}Tc (4301)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

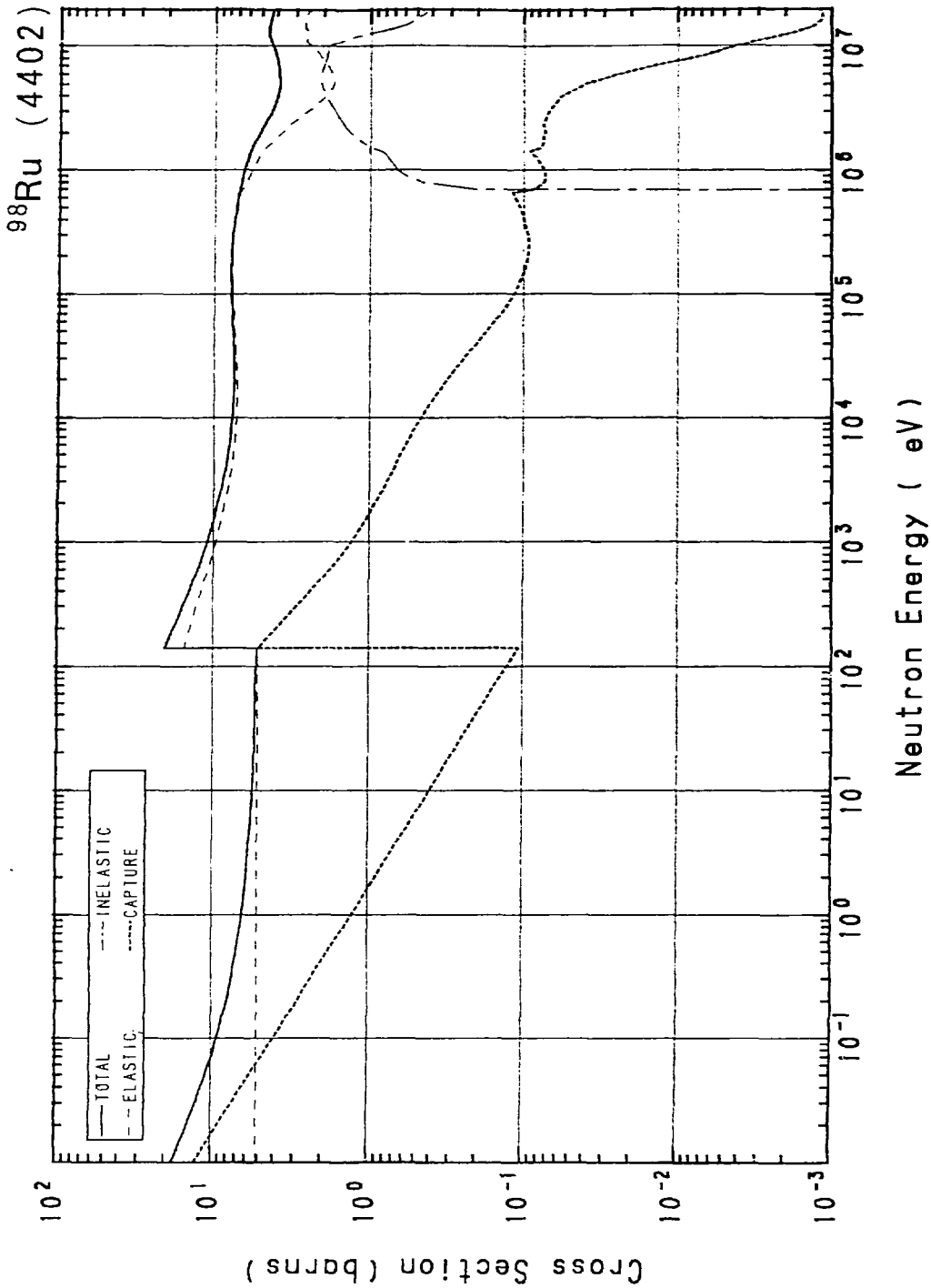

99Tc (4301)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

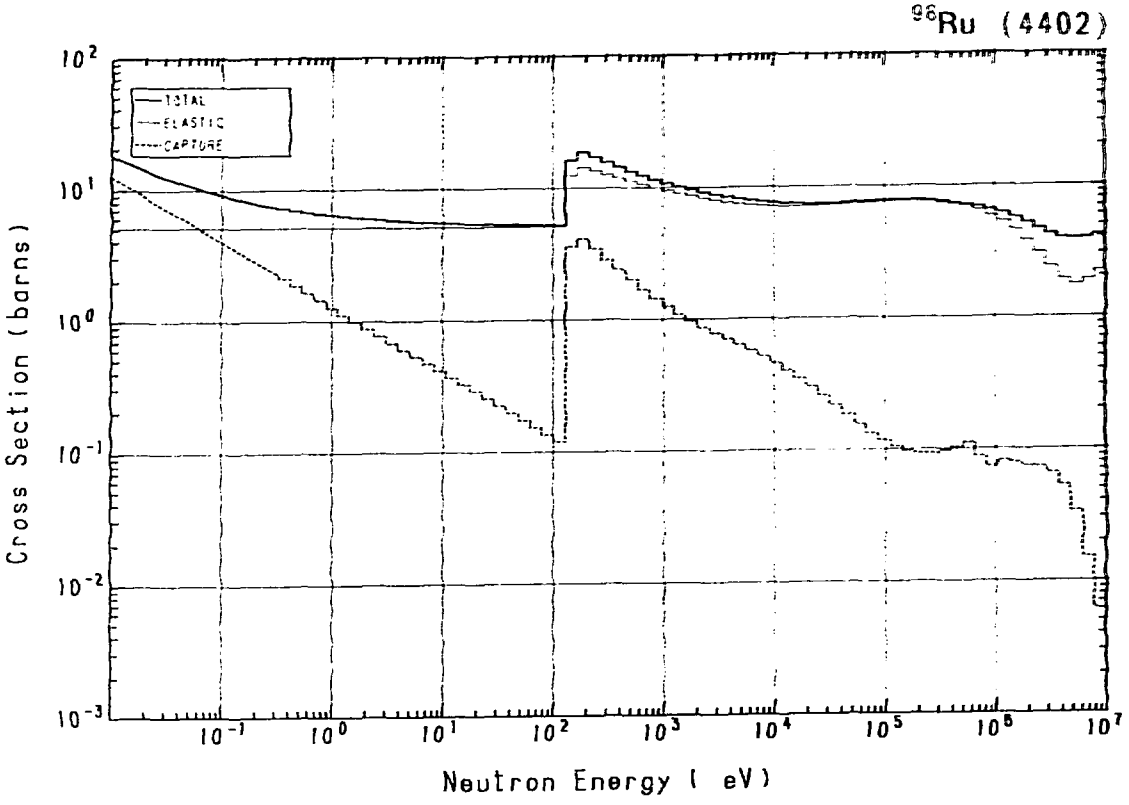

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,nα)
(n,t)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

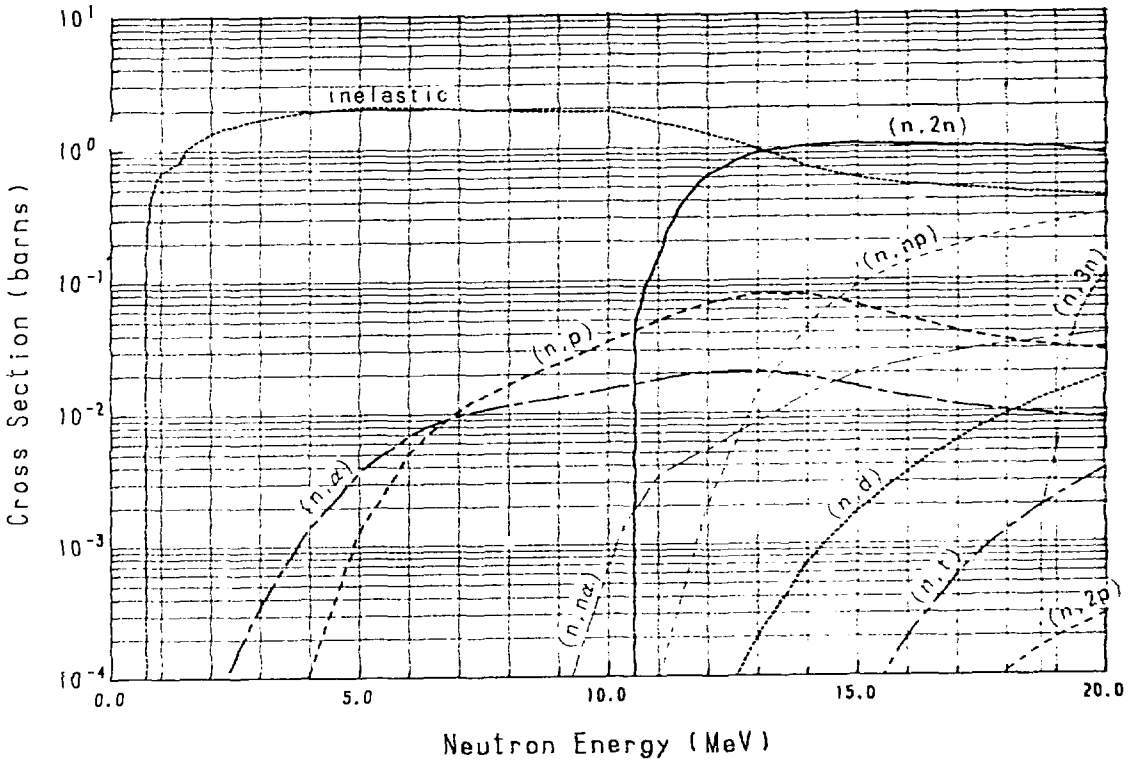

96Ru (4401)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

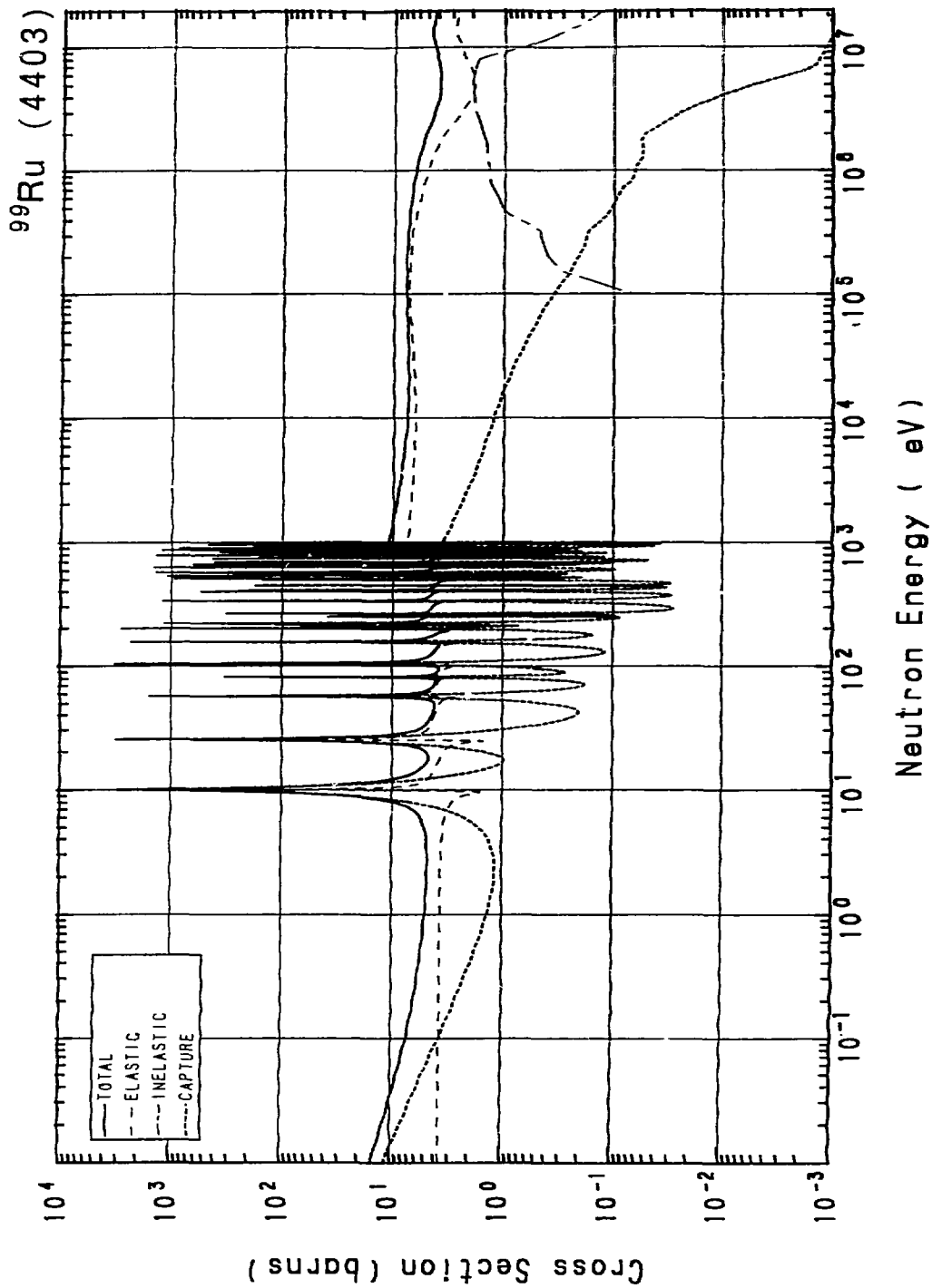

96Ru (4401)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

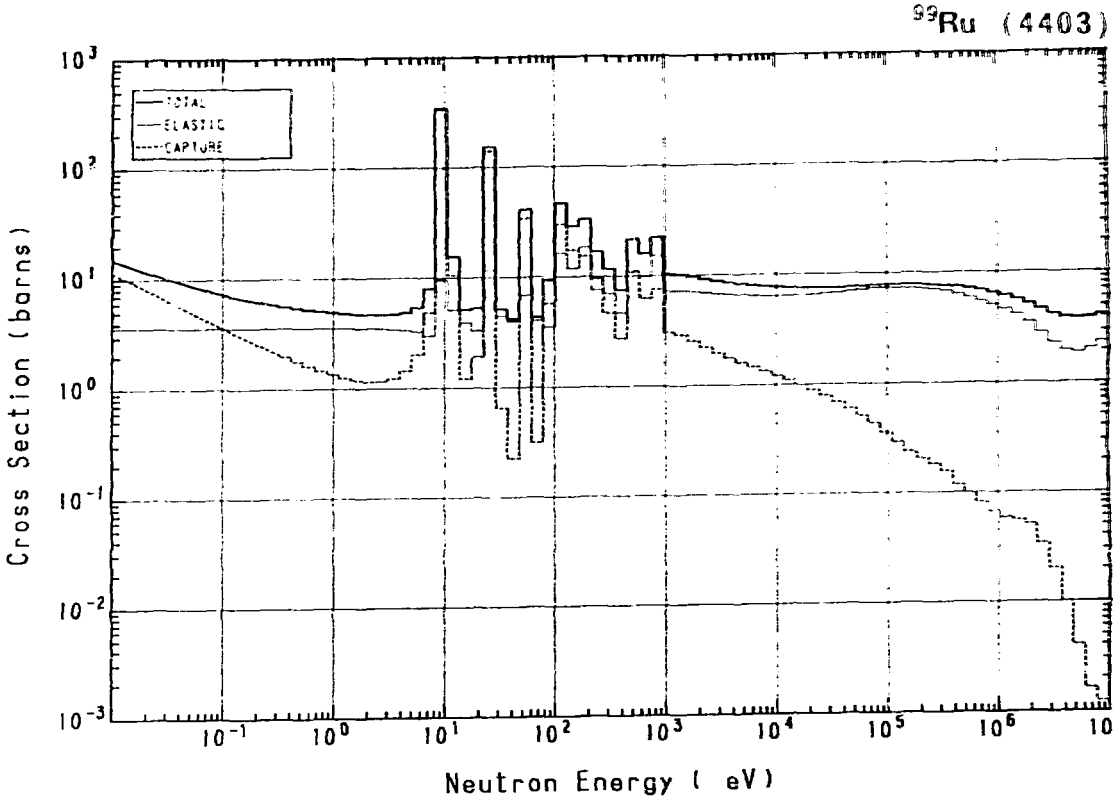

inelastic
(n,2n)
(n,np)
(n,p)
(n,α)
(n,2p)
(n,nα)
(n,d)
(n,t)
(n,3He)
Cross Section (barns)
Neutron Energy (MeV)

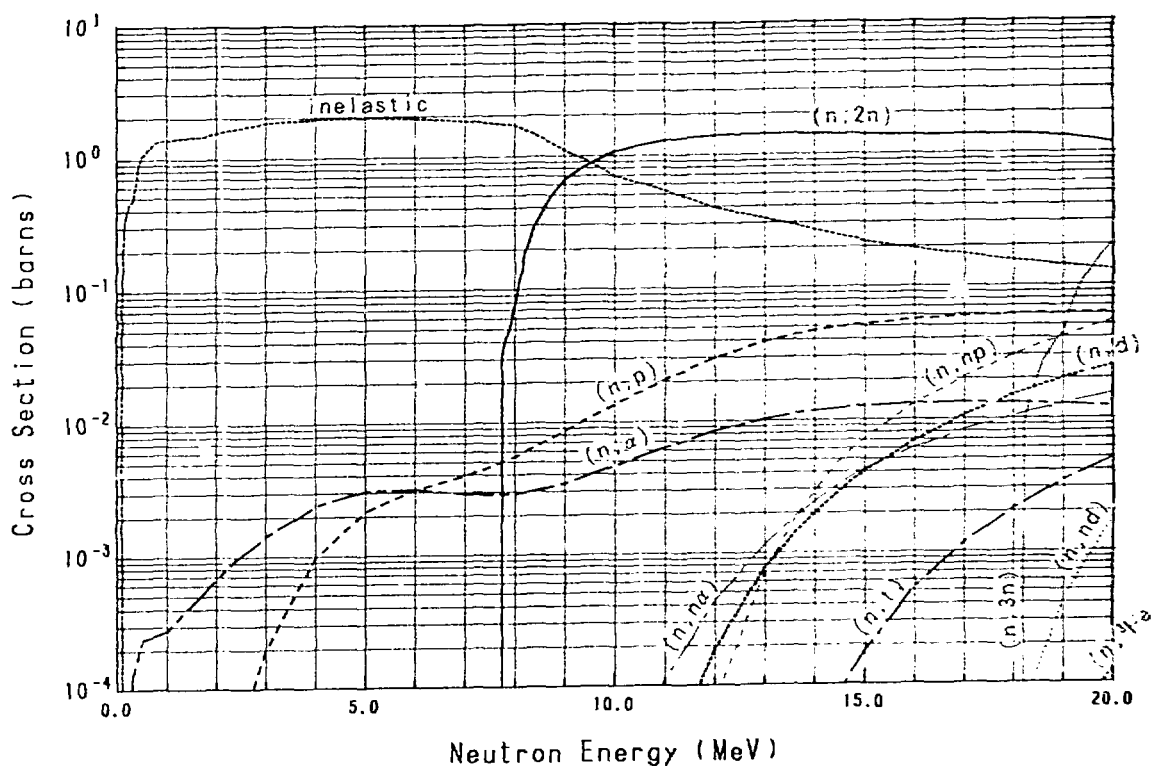

98Ru (4402)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

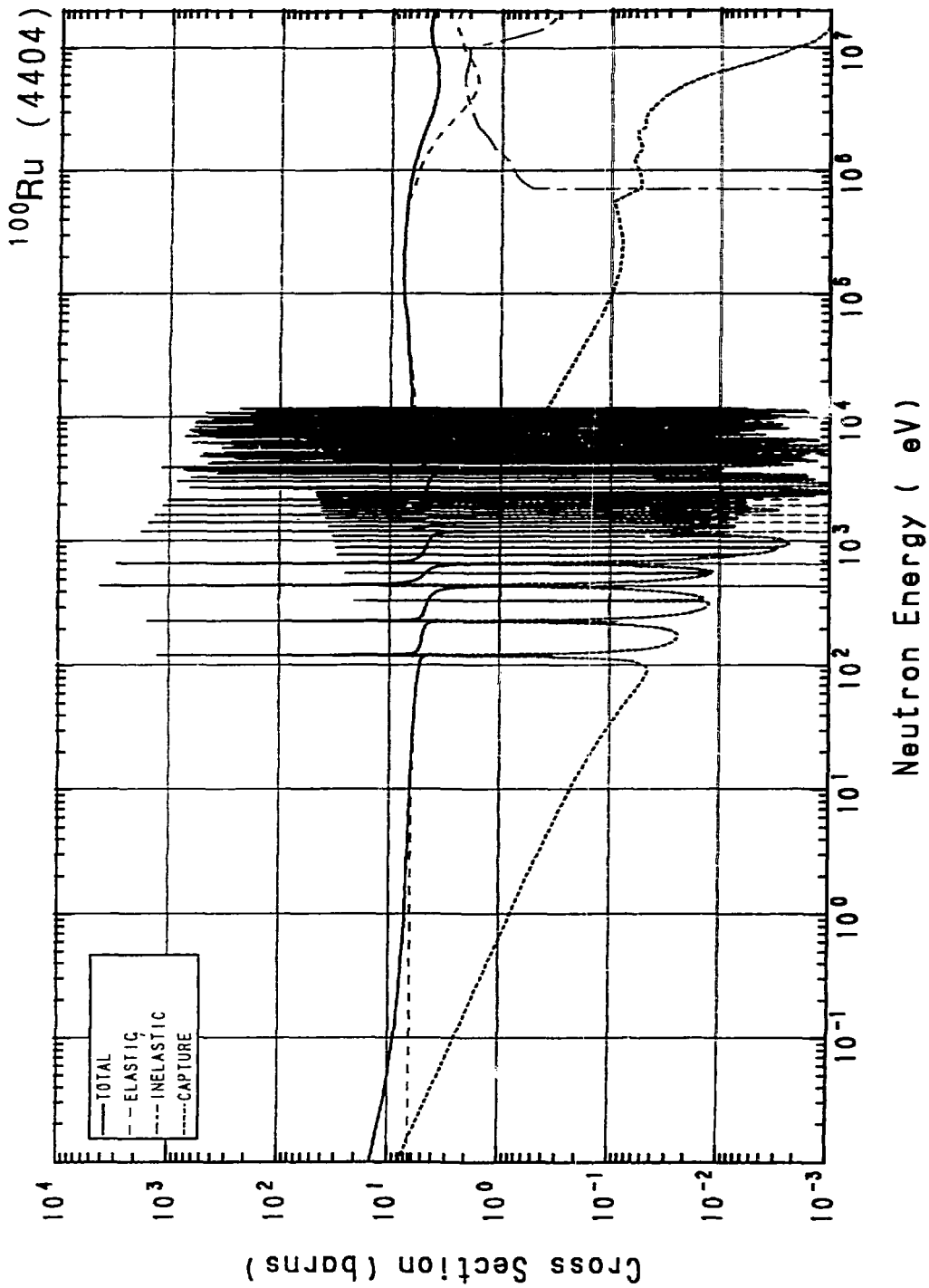

^{96}Ru (4402)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

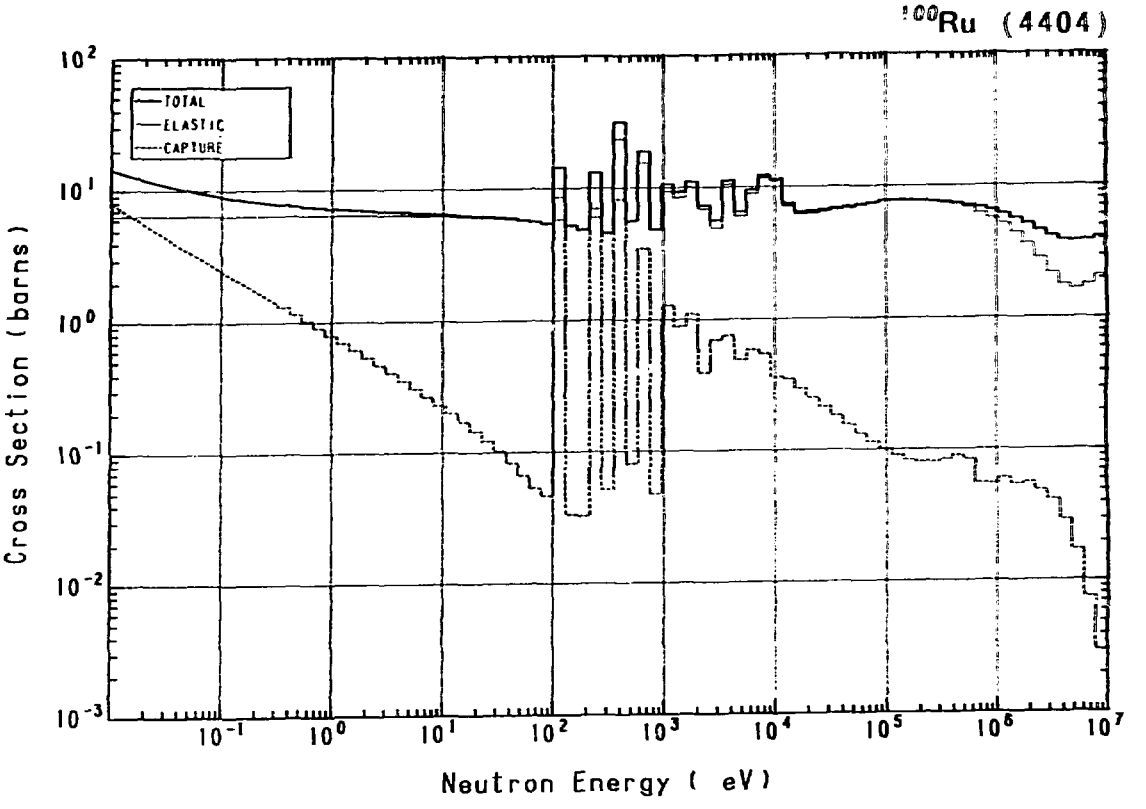

inelastic
(n,2n)
(n,np)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,2p)
Cross Section (barns)
Neutron Energy (MeV)

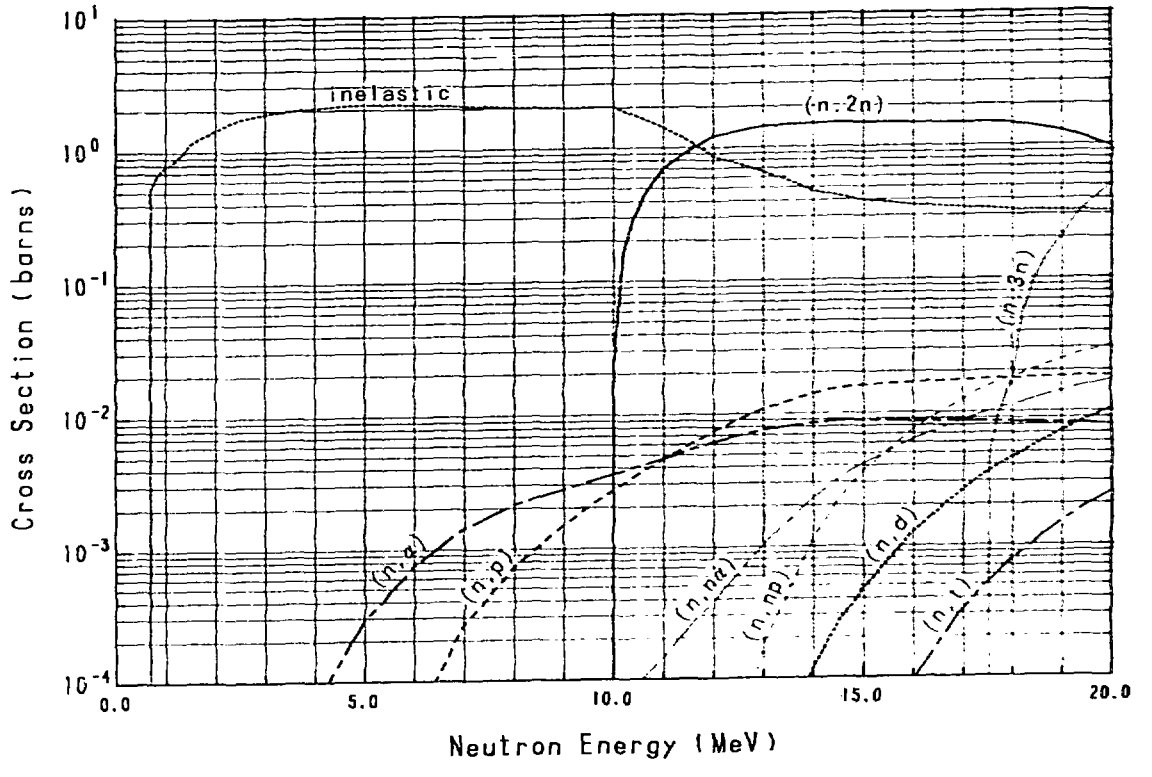

99Ru (4403)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

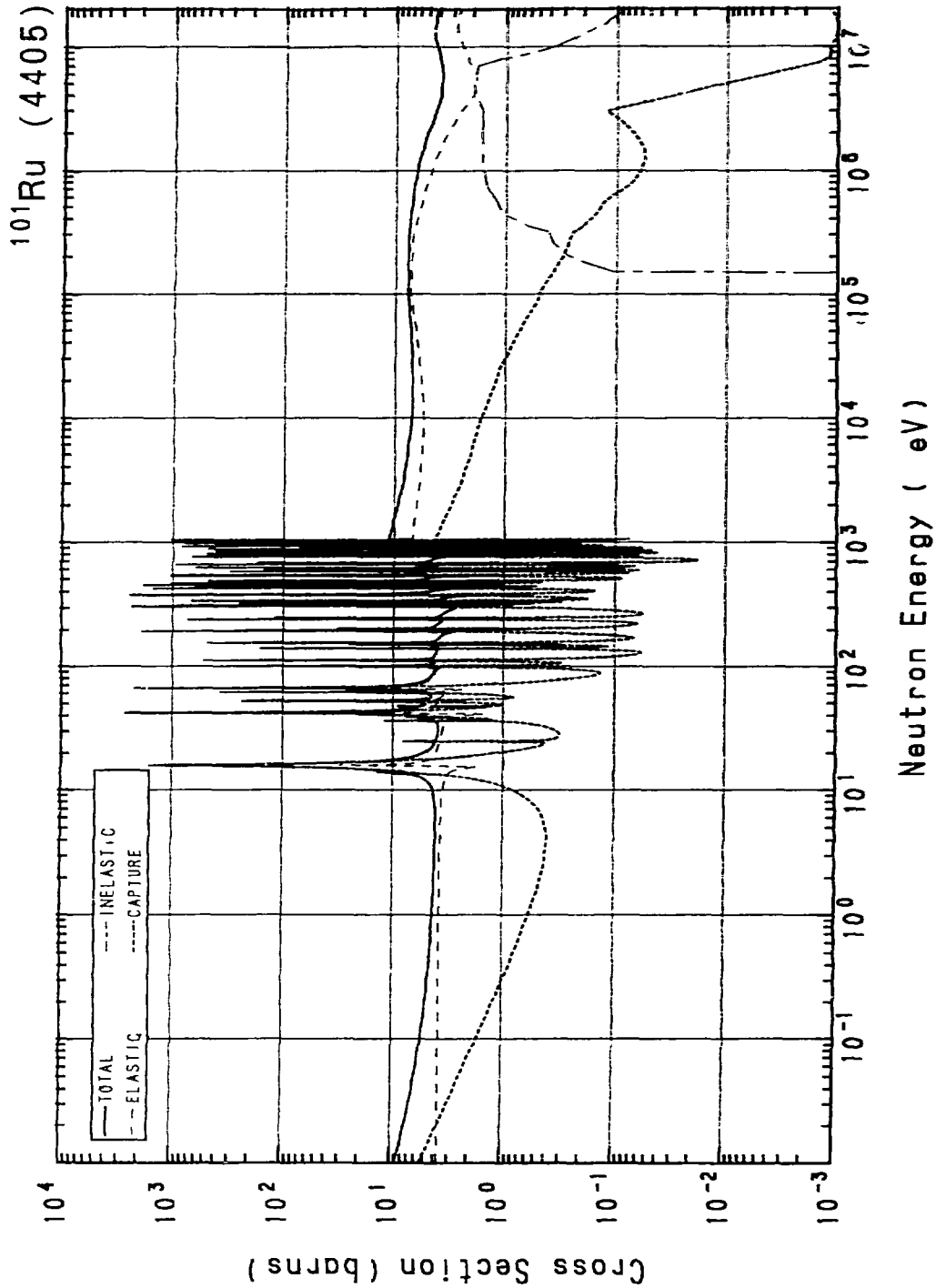

^{99}Ru (4403)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

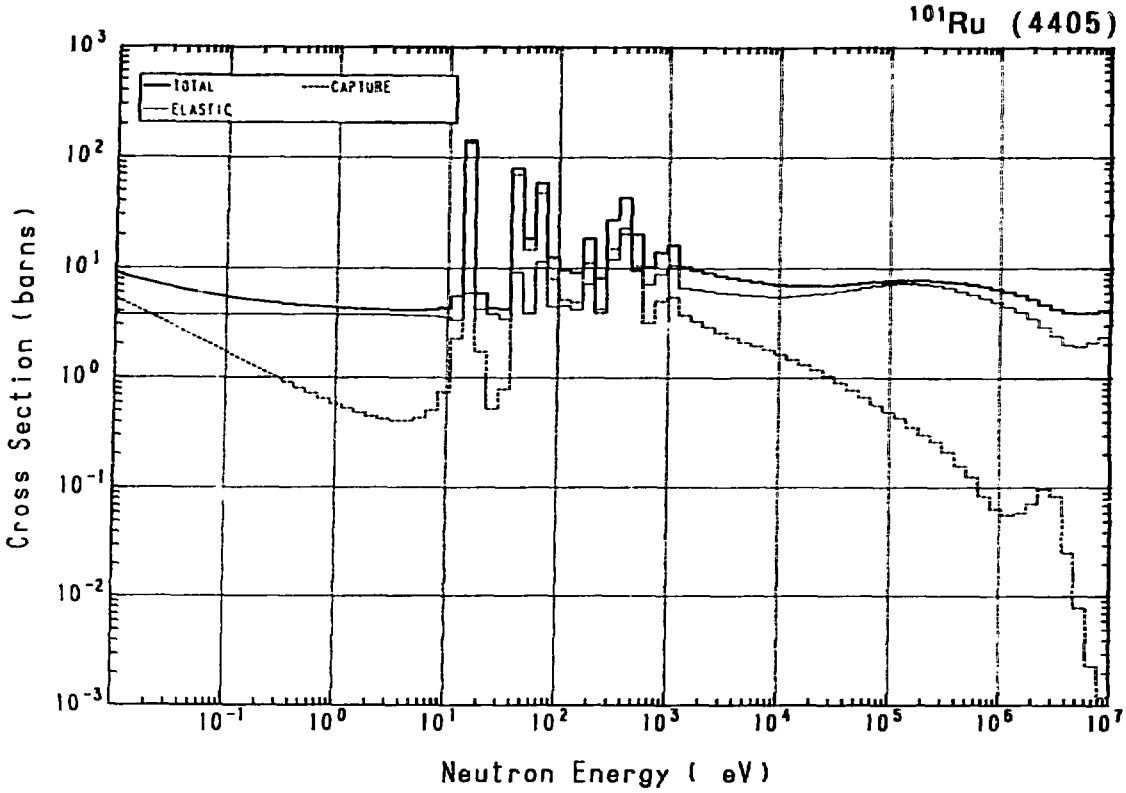

inelastic
(n,2n)
(n,p)
(n,np)
(n,d)
(n,α)
(n,nα)
(n,t)
(n,3n)
(n,nd)
(n,4n)
Cross Section (barns)
Neutron Energy (MeV)

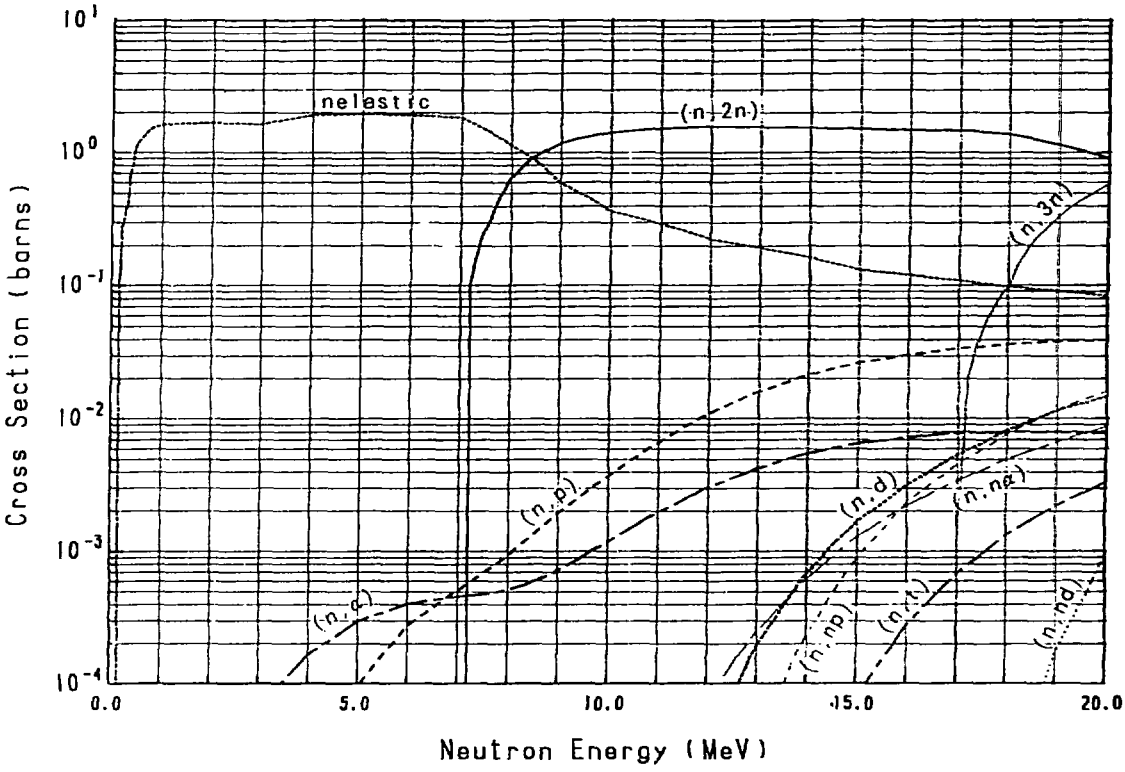

^{100}Ru (4404)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

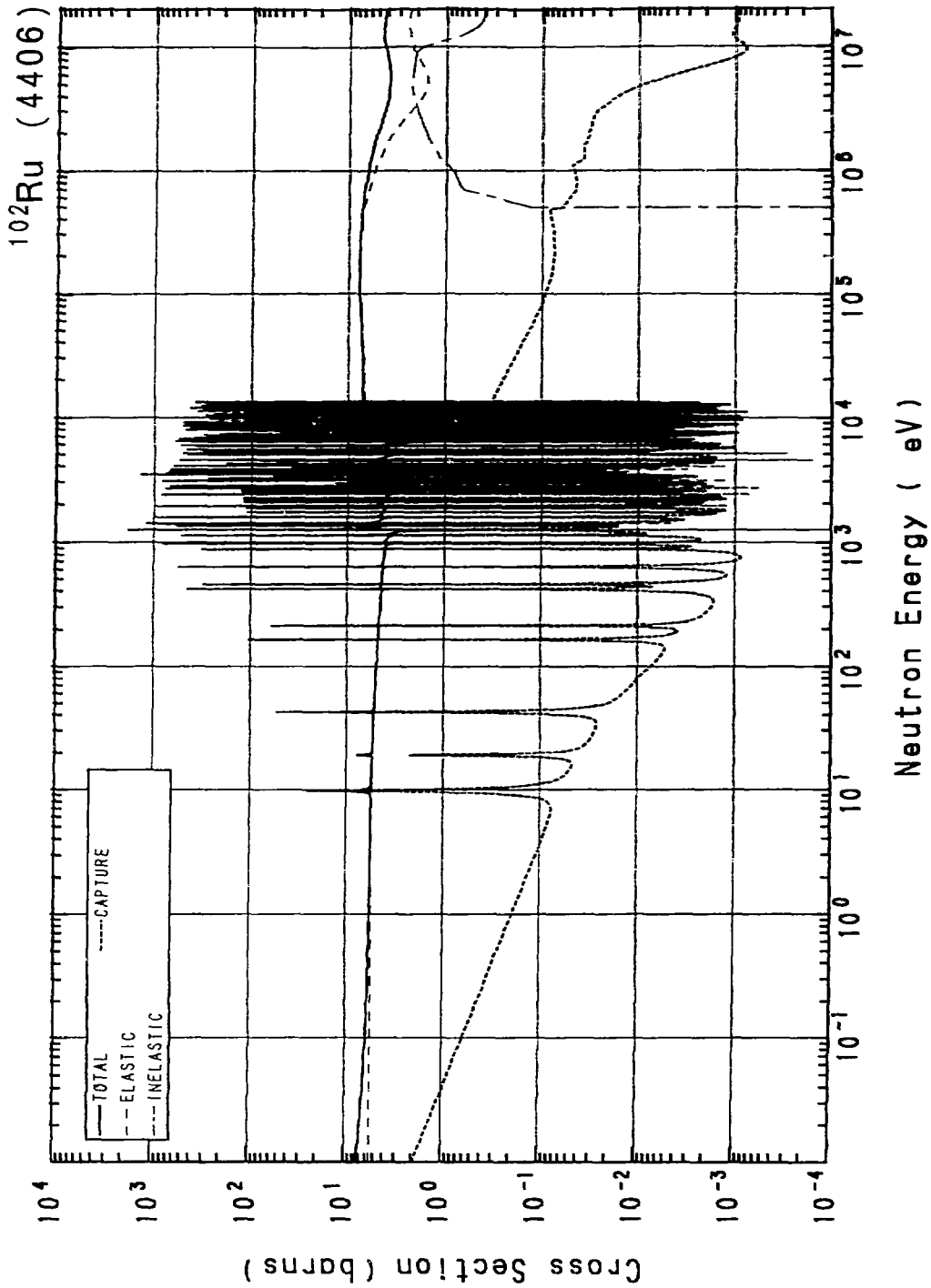

^{100}Ru (4404)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

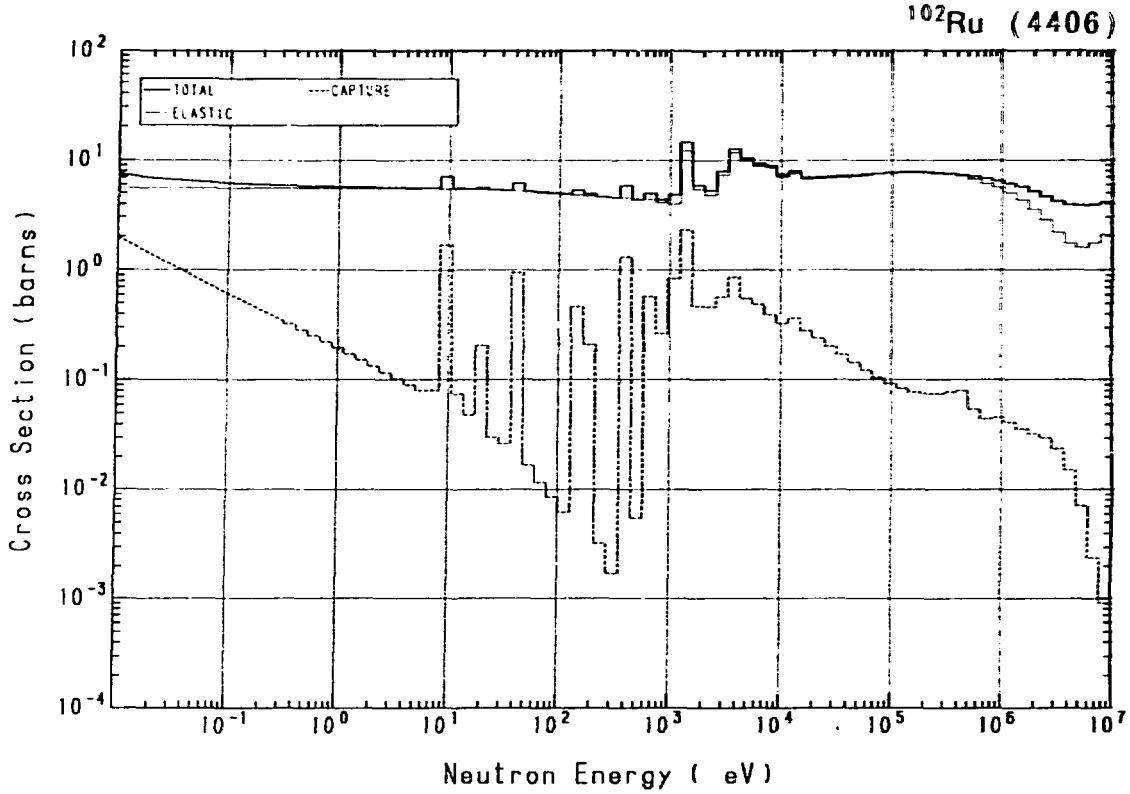

inelastic
(n,2n)
(n,3n)
(n,α)
(n,p)
(n,nα)
(n,np)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

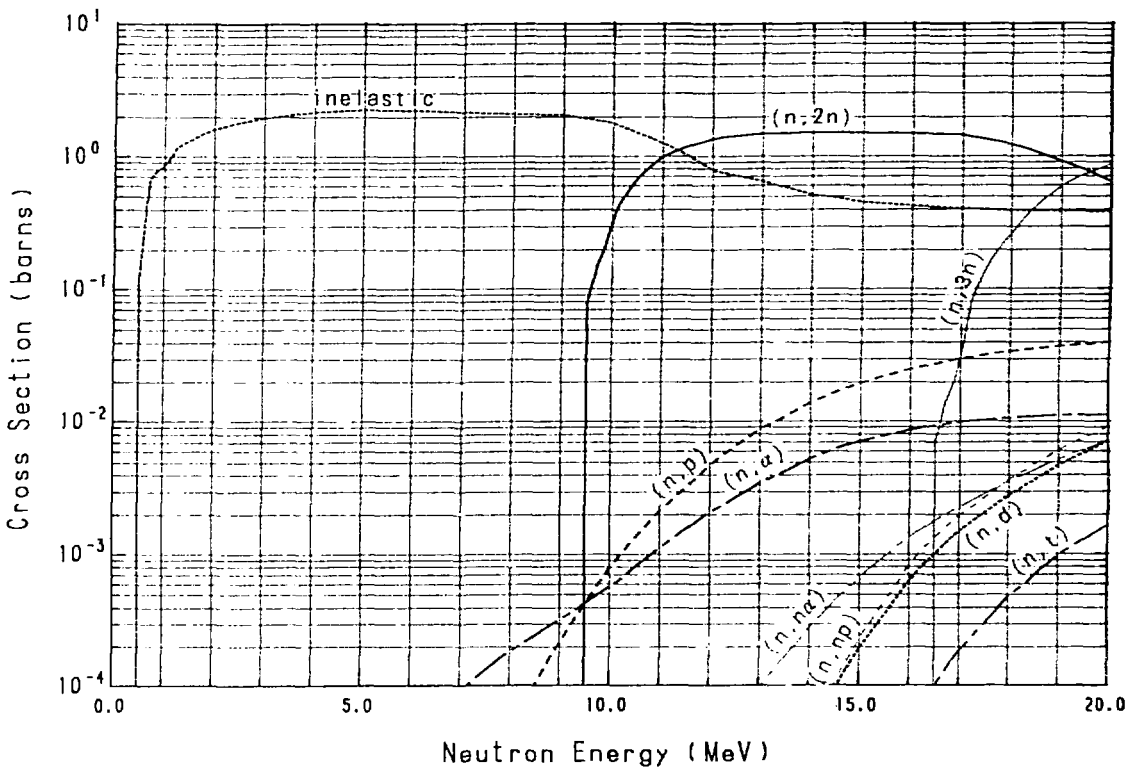

101Ru (4405)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

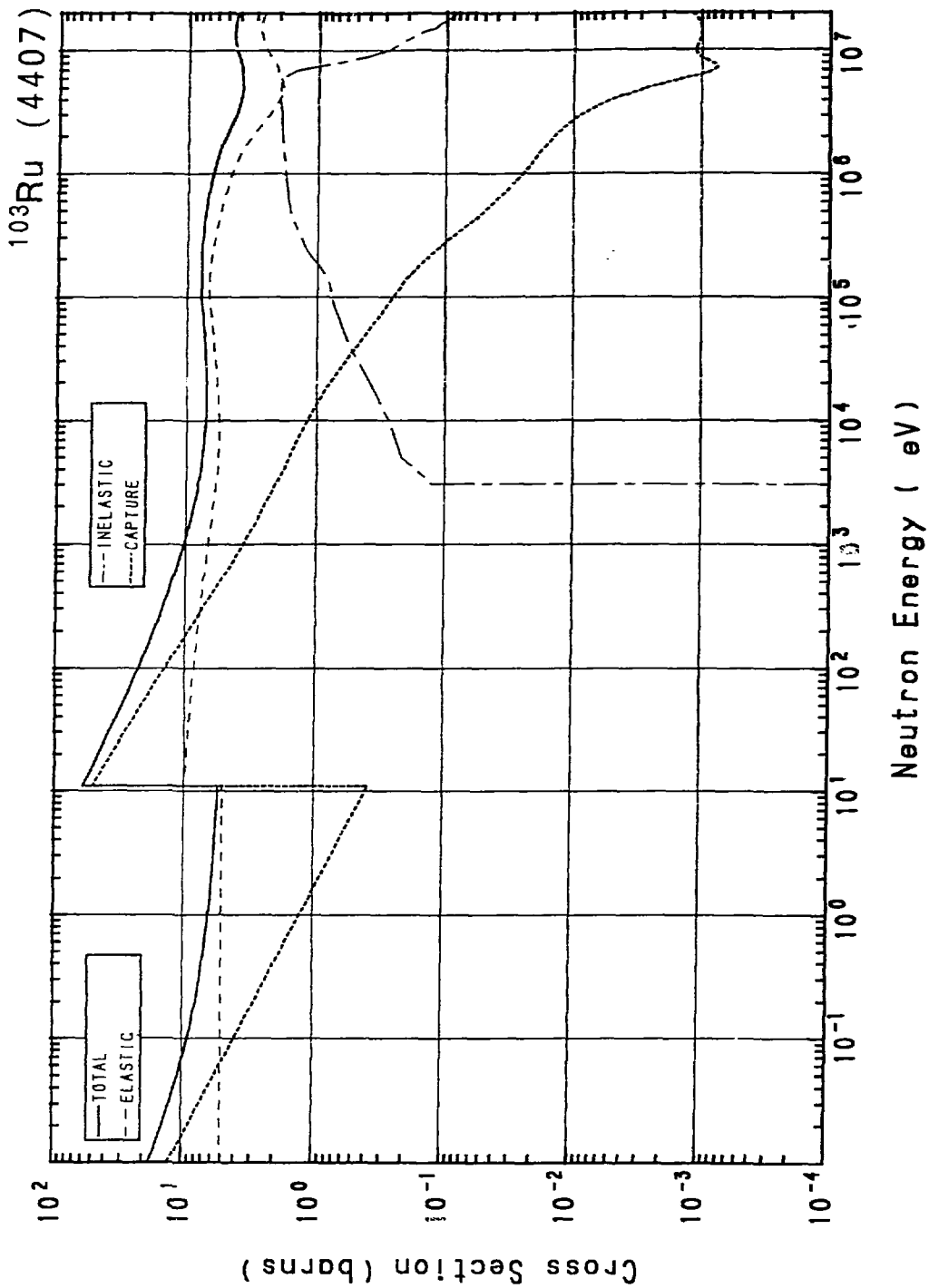

^{101}Ru (4405)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

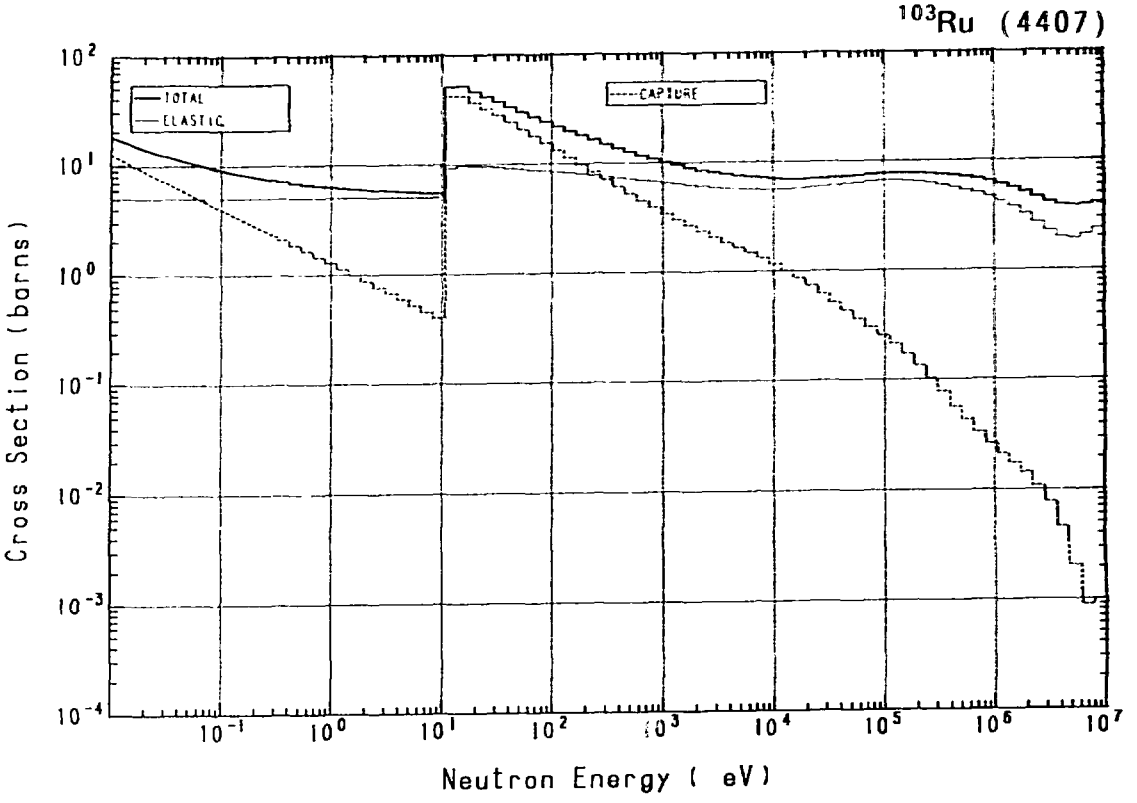

nelastic
(n,2n)
(n,3n)
(n,p)
(n,d)
(n,nα)
(n,α)
(n,np)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

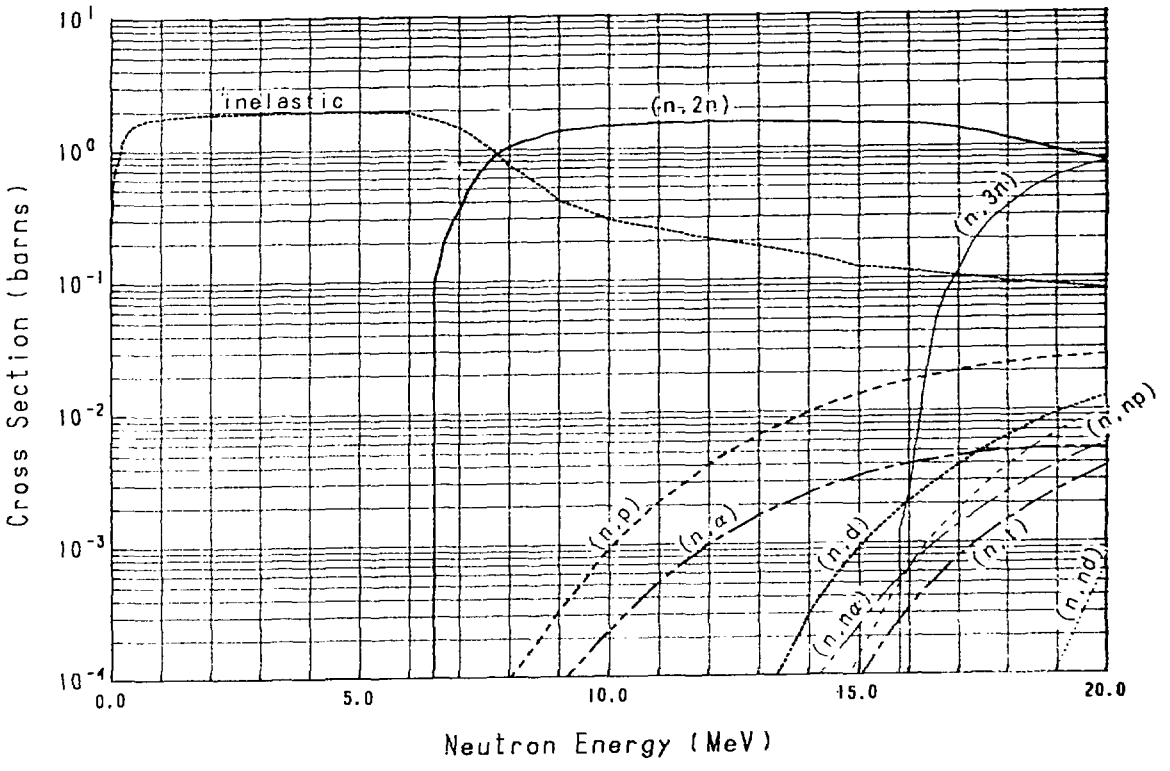

^{102}Ru (4406)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

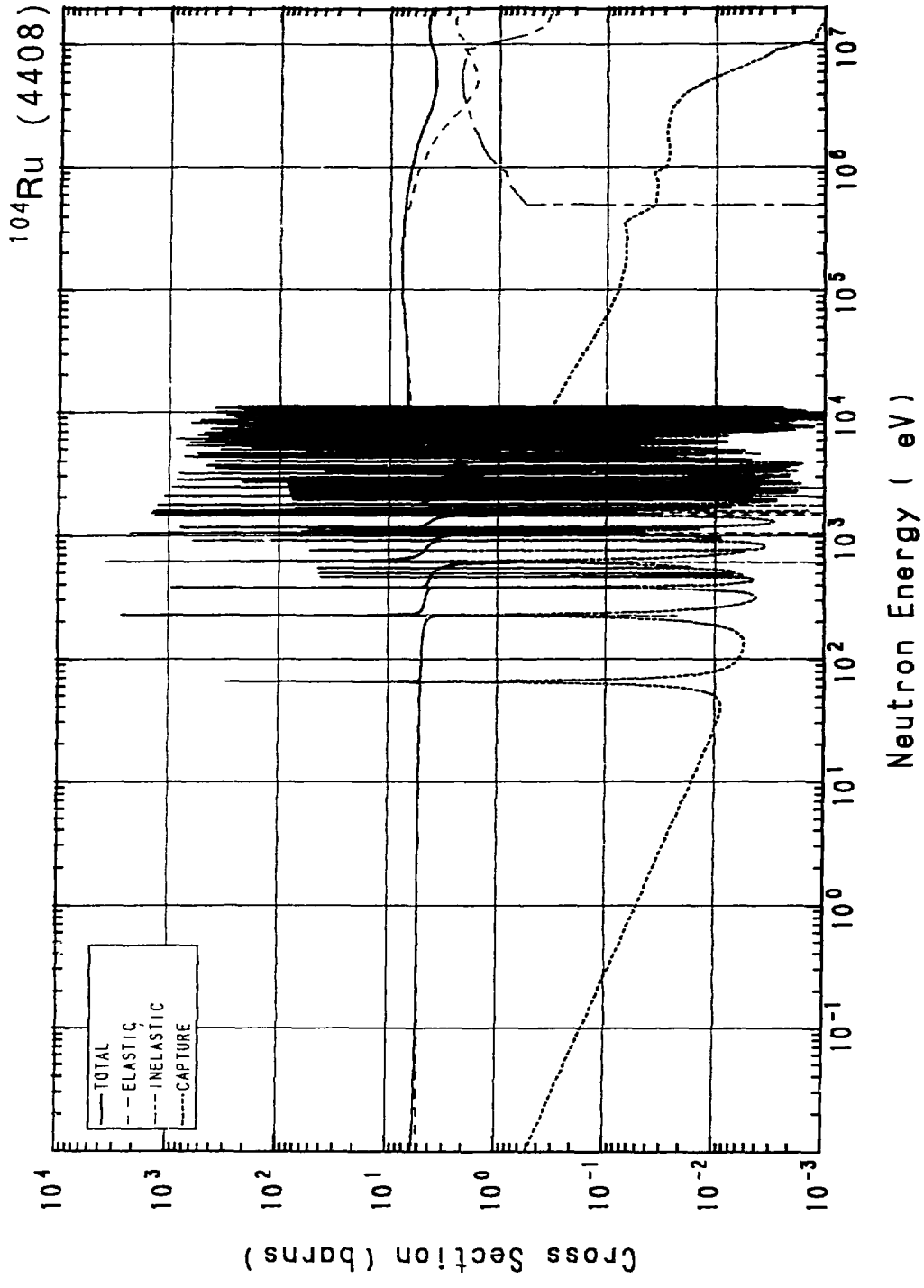

^{102}Ru (4406)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

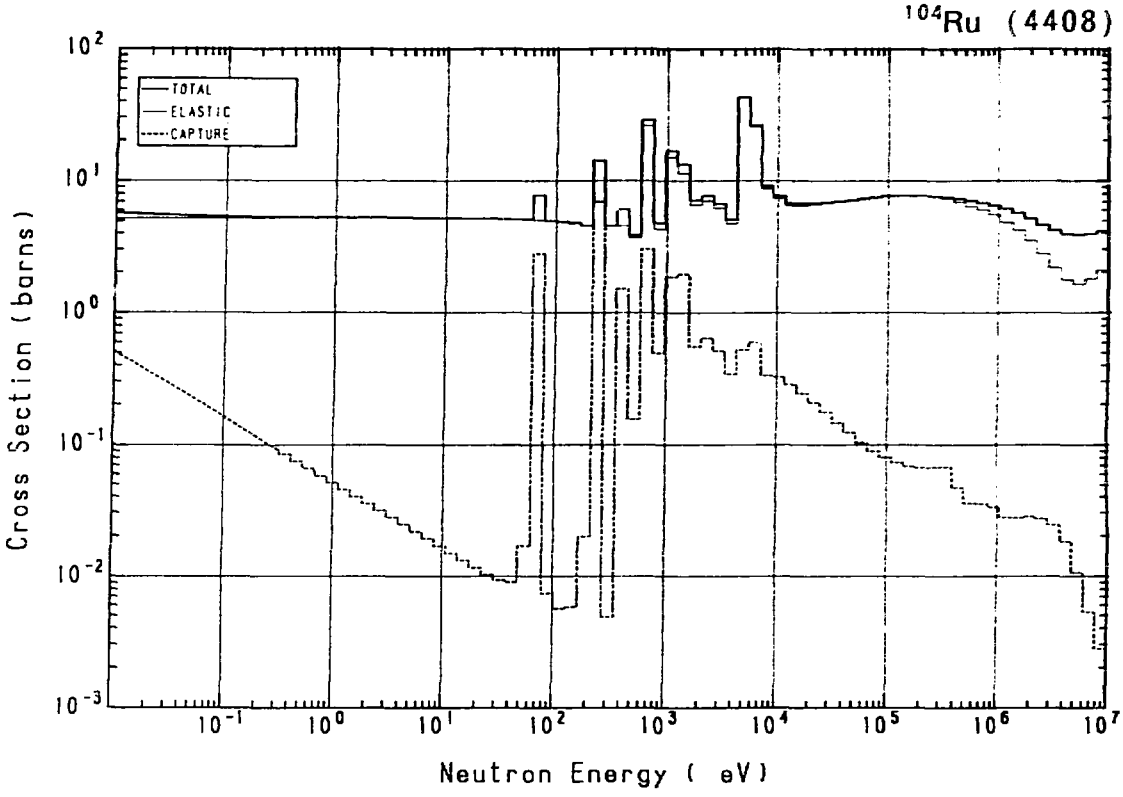

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,t)
(n,nα)
(n,np)
Cross Section (barns)
Neutron Energy (MeV)

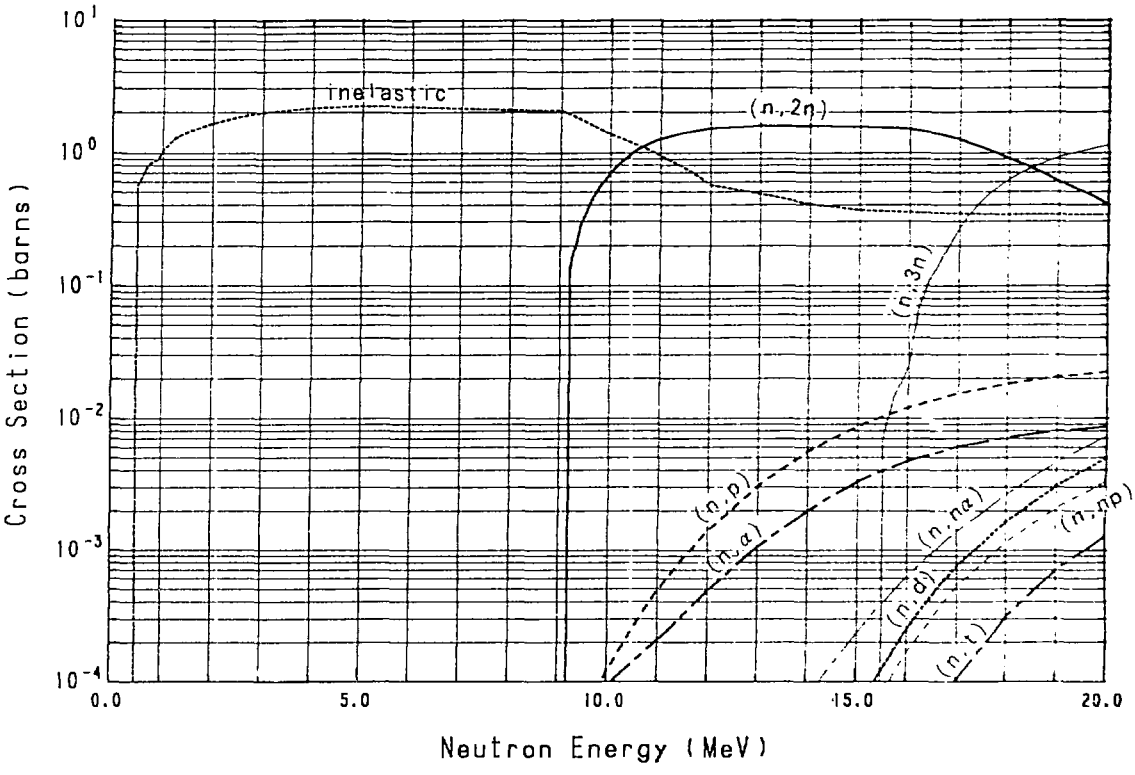

103Ru (4407)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

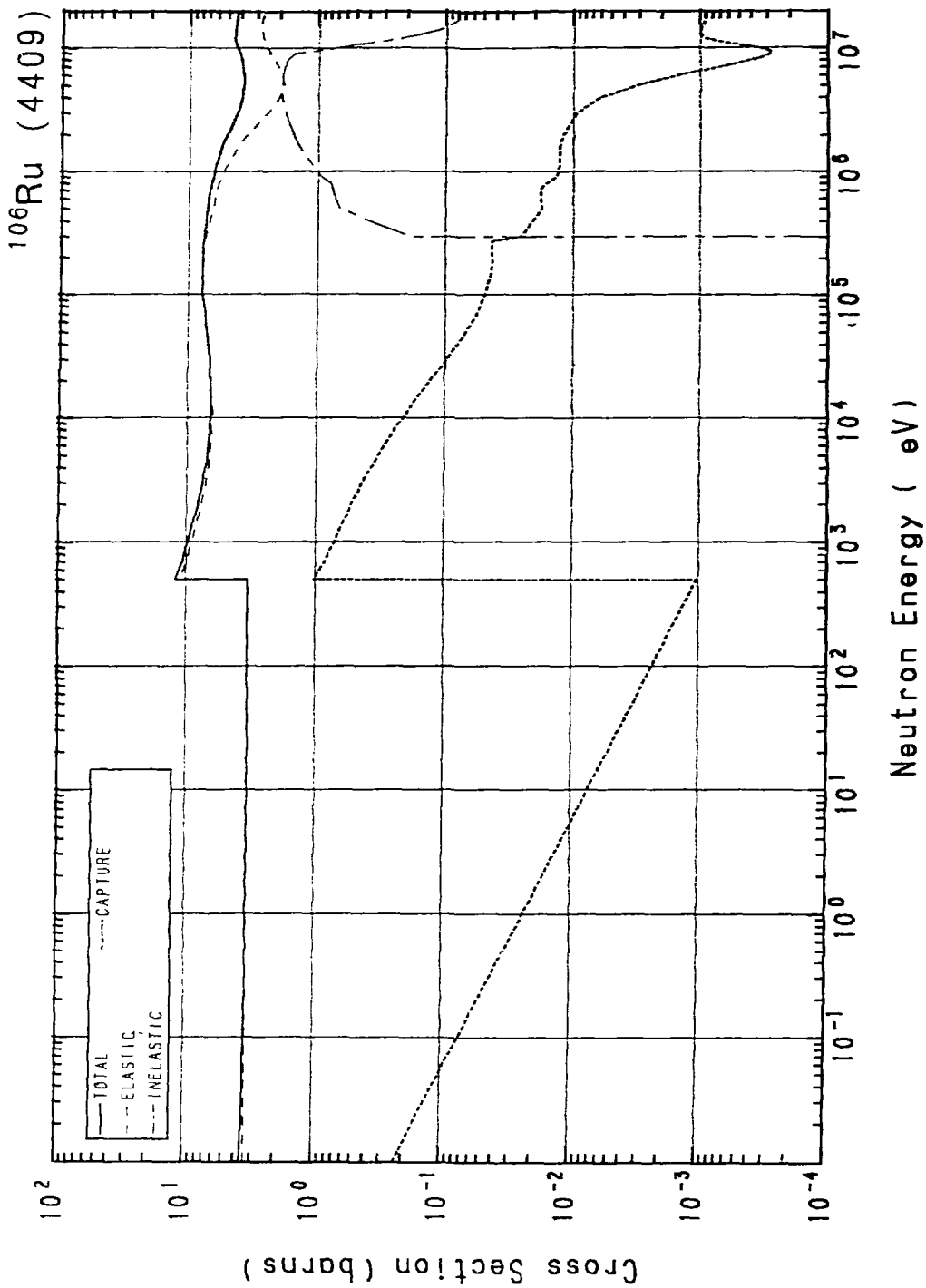

^{103}Ru (4407)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

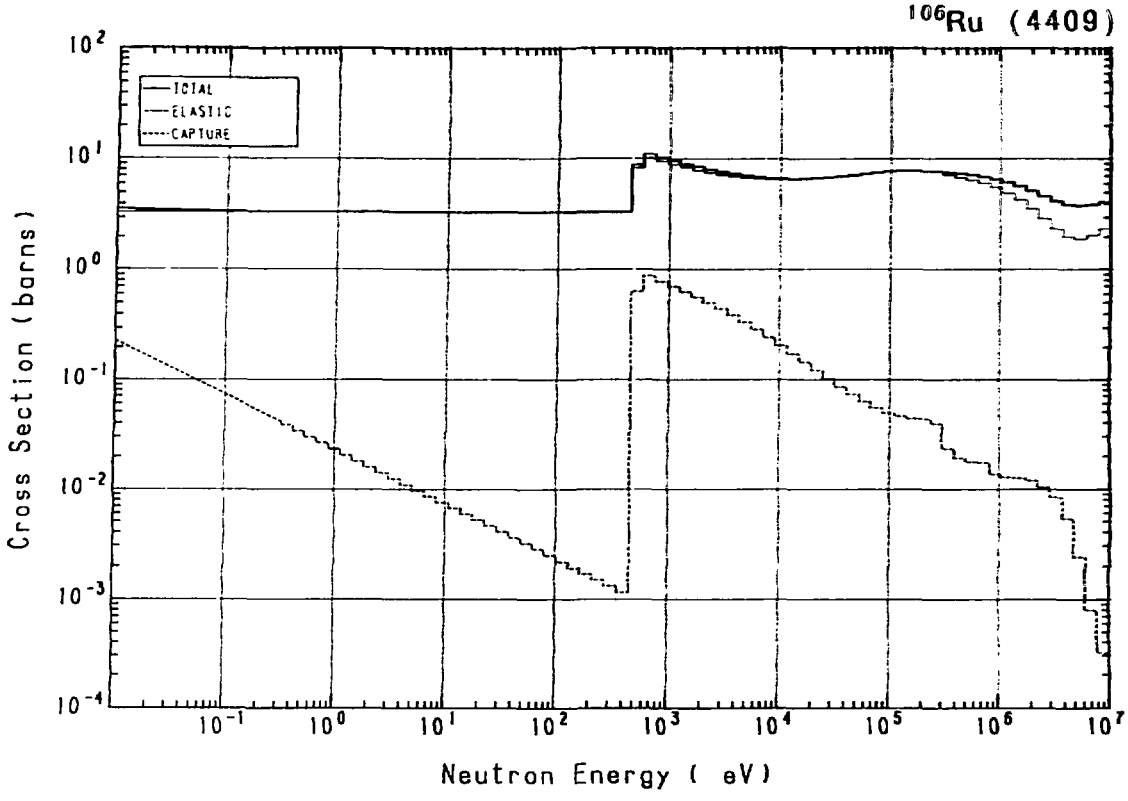

inelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

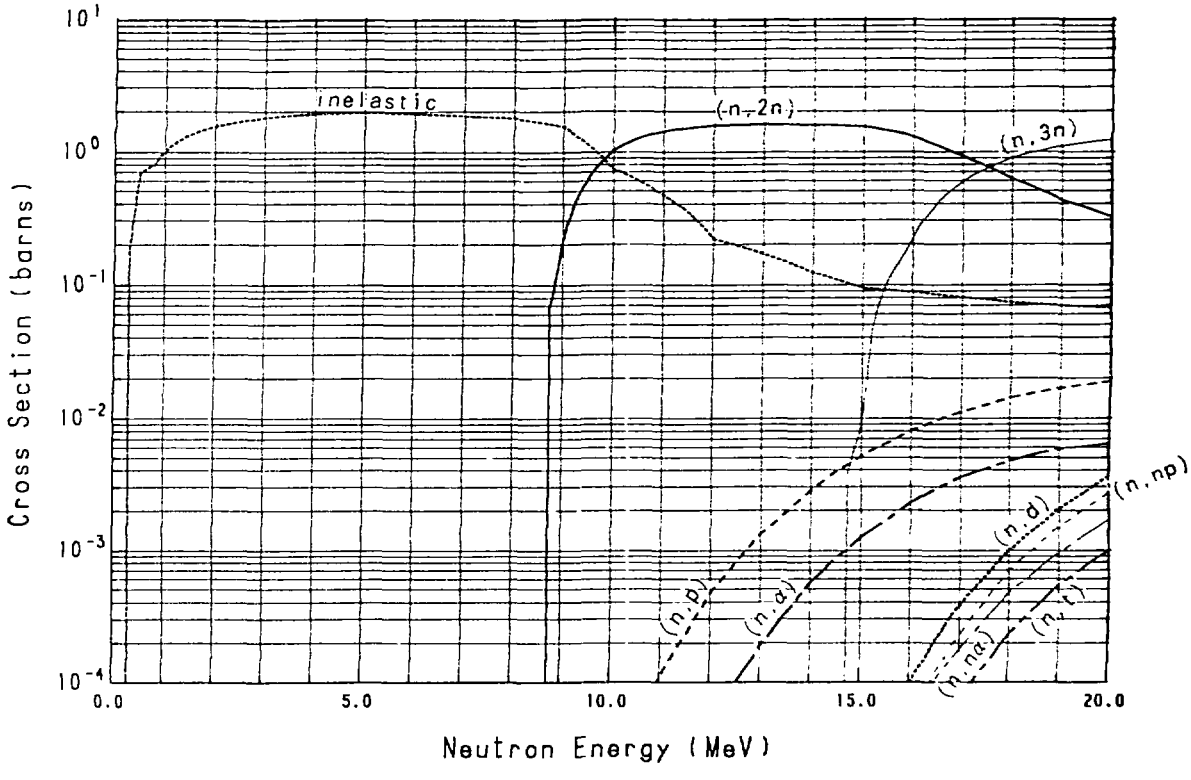

^{104}Ru (4408)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

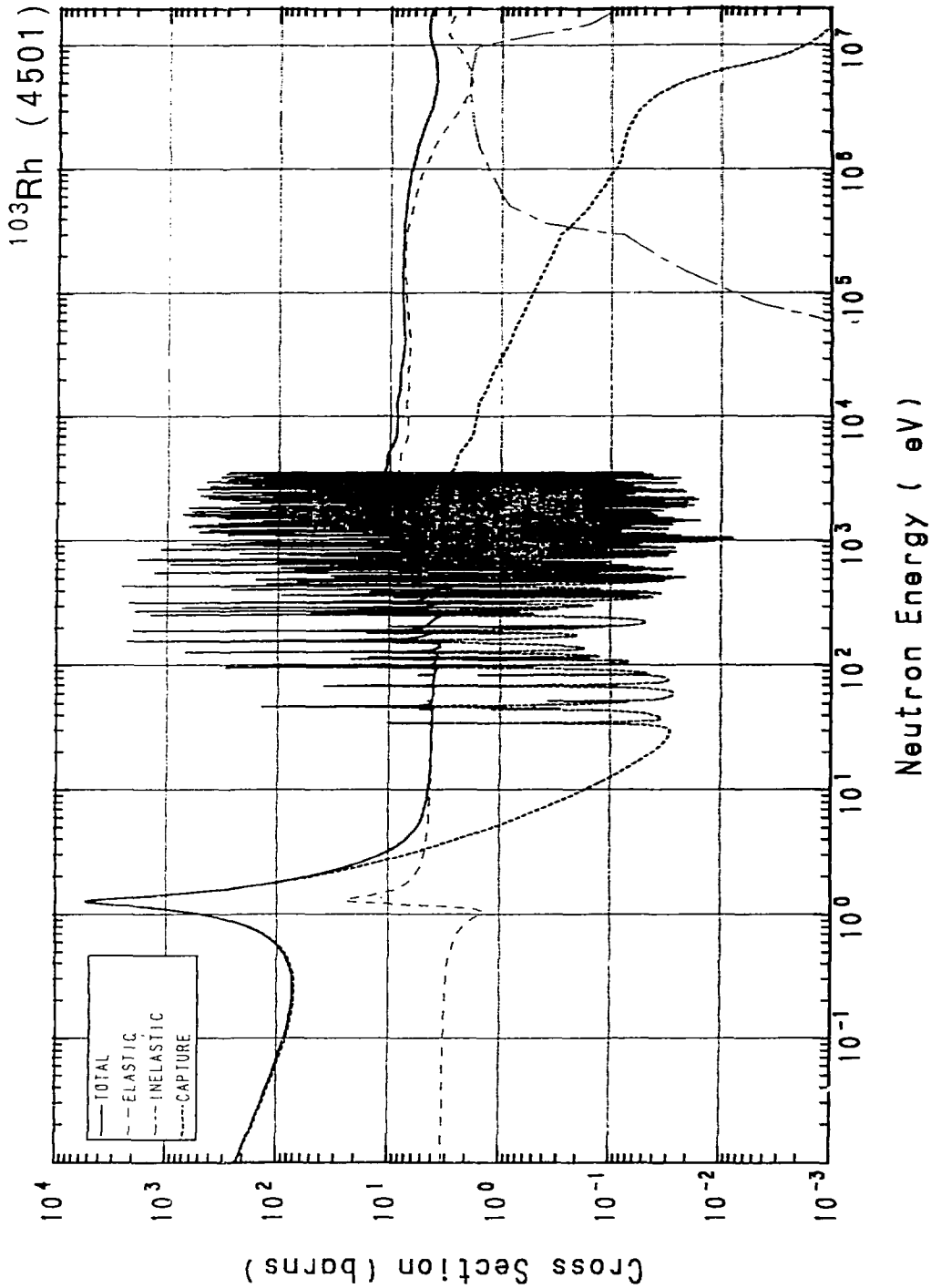

^{104}Ru (4408)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

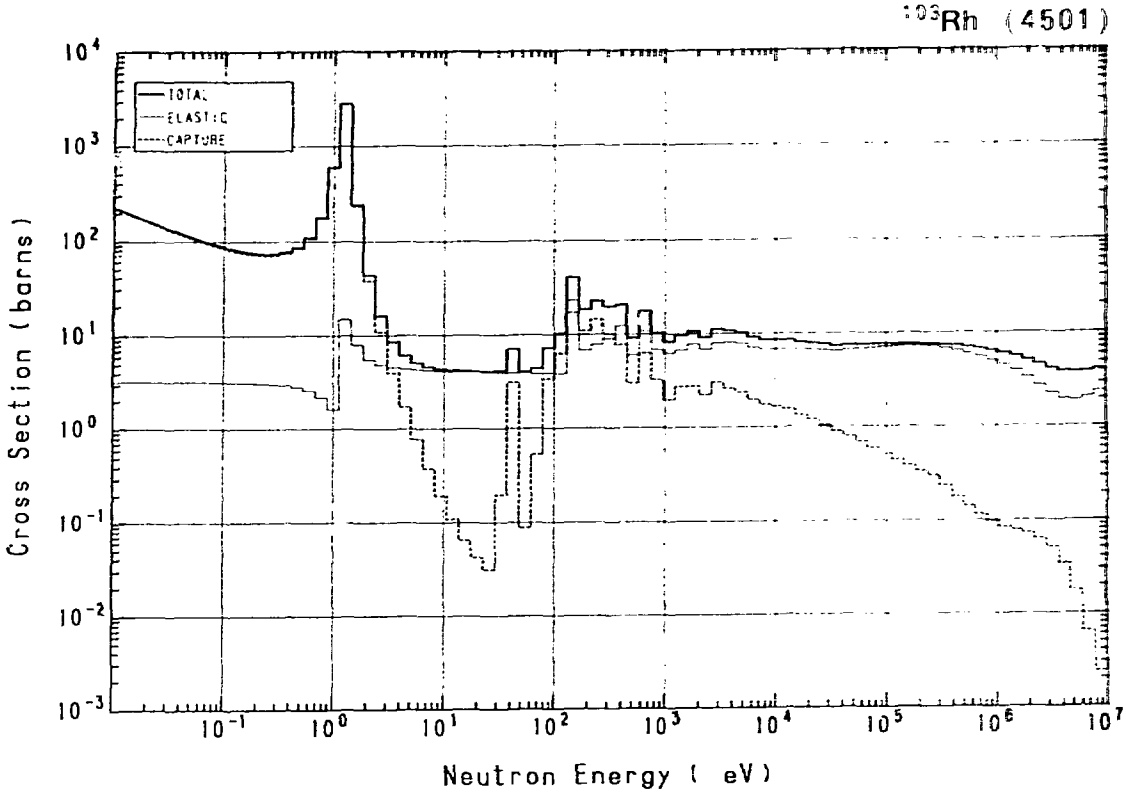

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,nα)
(n,d)
(n,t)
(n,np)
Cross Section (barns)
Neutron Energy (MeV)

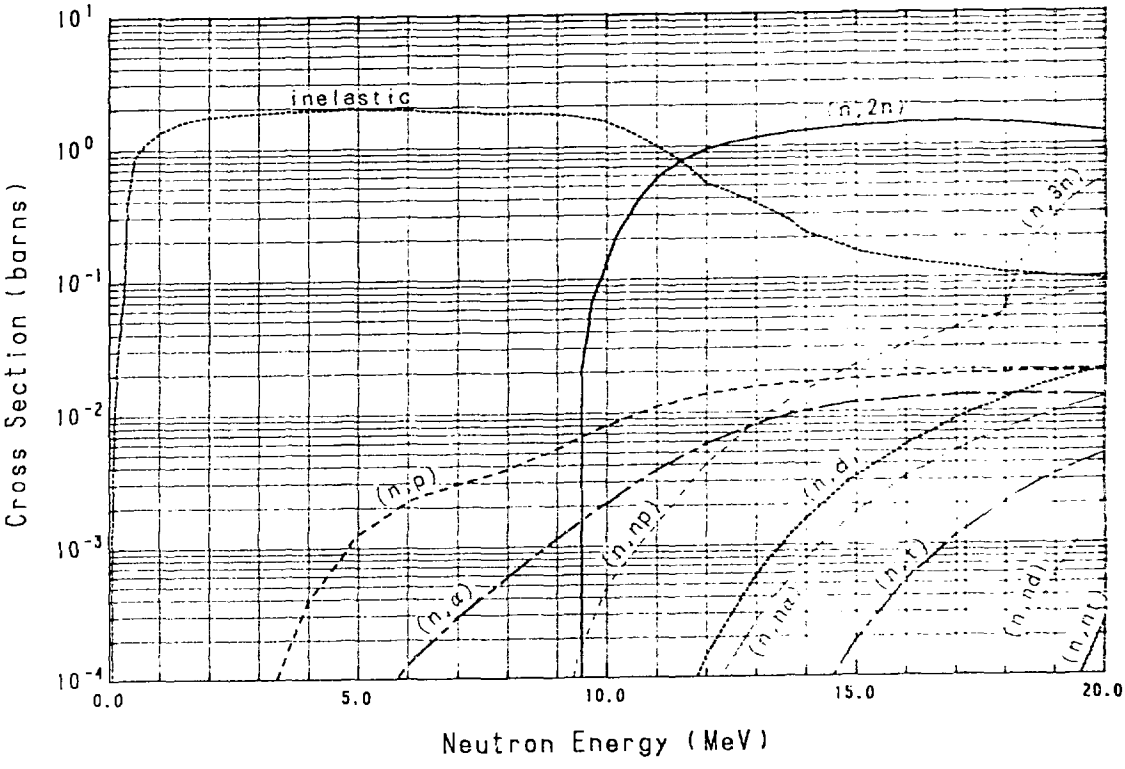

^{106}Ru (4409)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

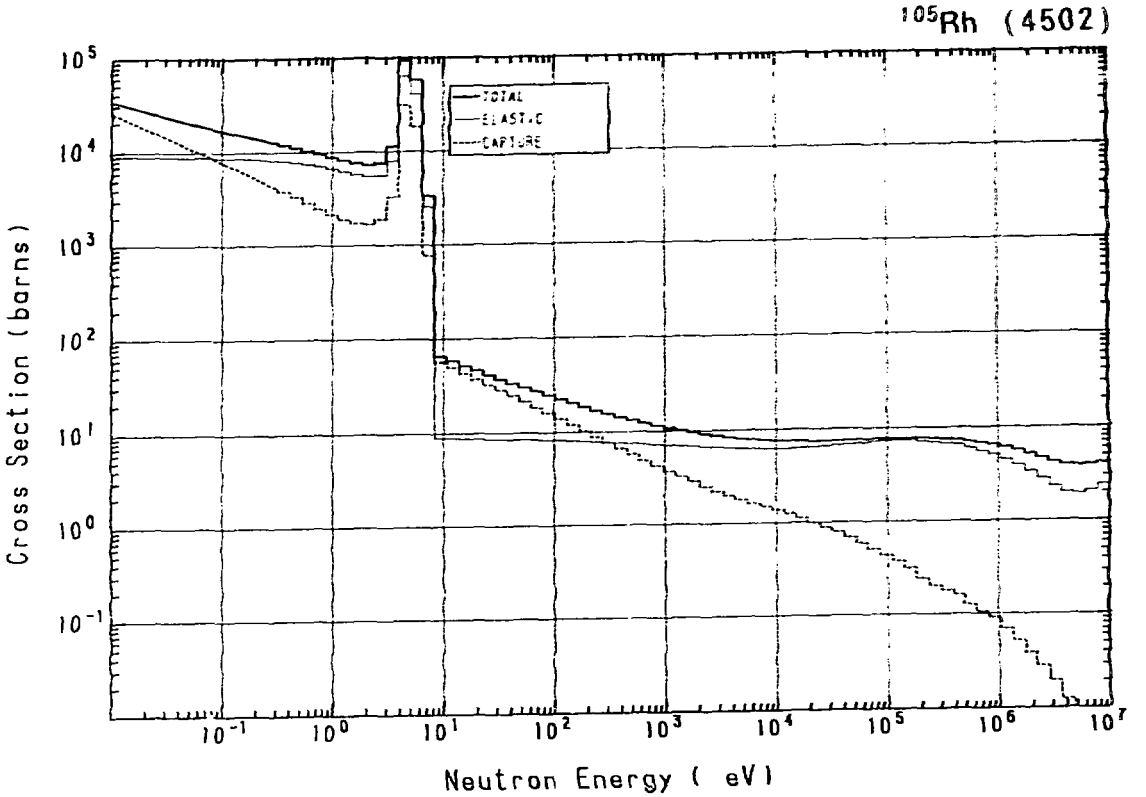

^{106}Ru (4409)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

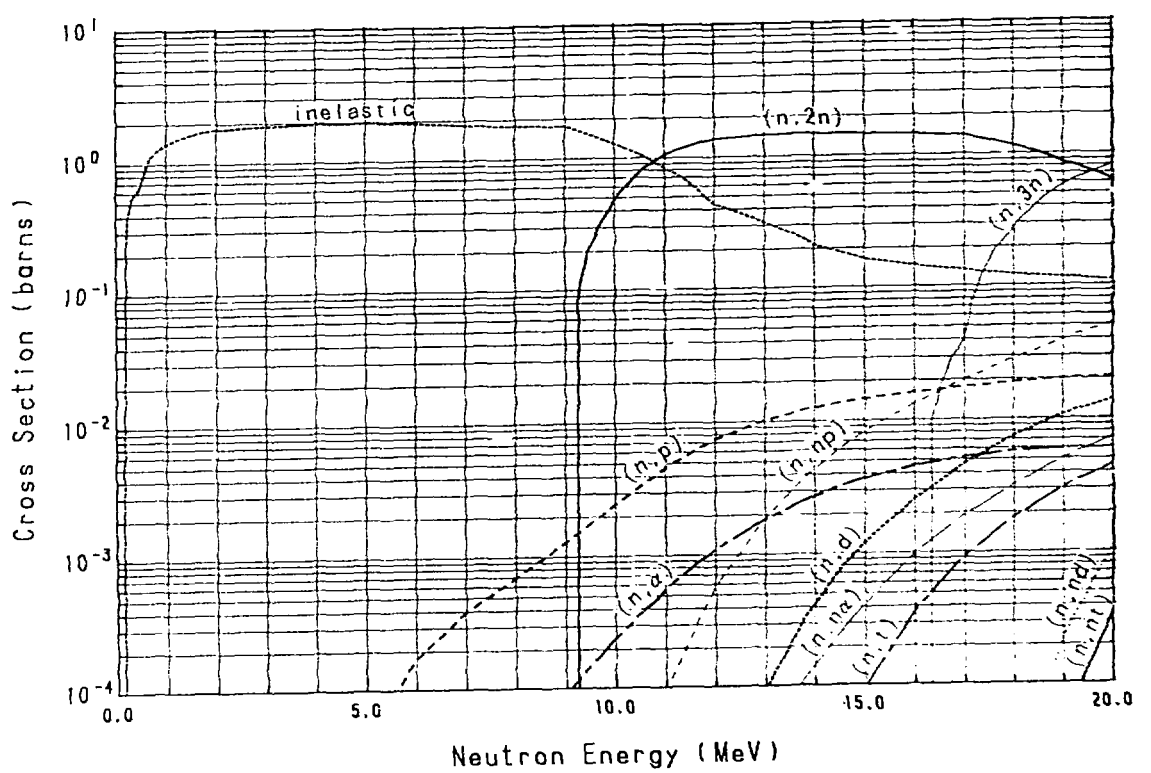

inelastic
(n,2n)
(n,3n)
(n,np)
(n,d)
(n,p)
(n,α)
(n,t)
(n,nα)
Cross Section (barns)
Neutron Energy (MeV)

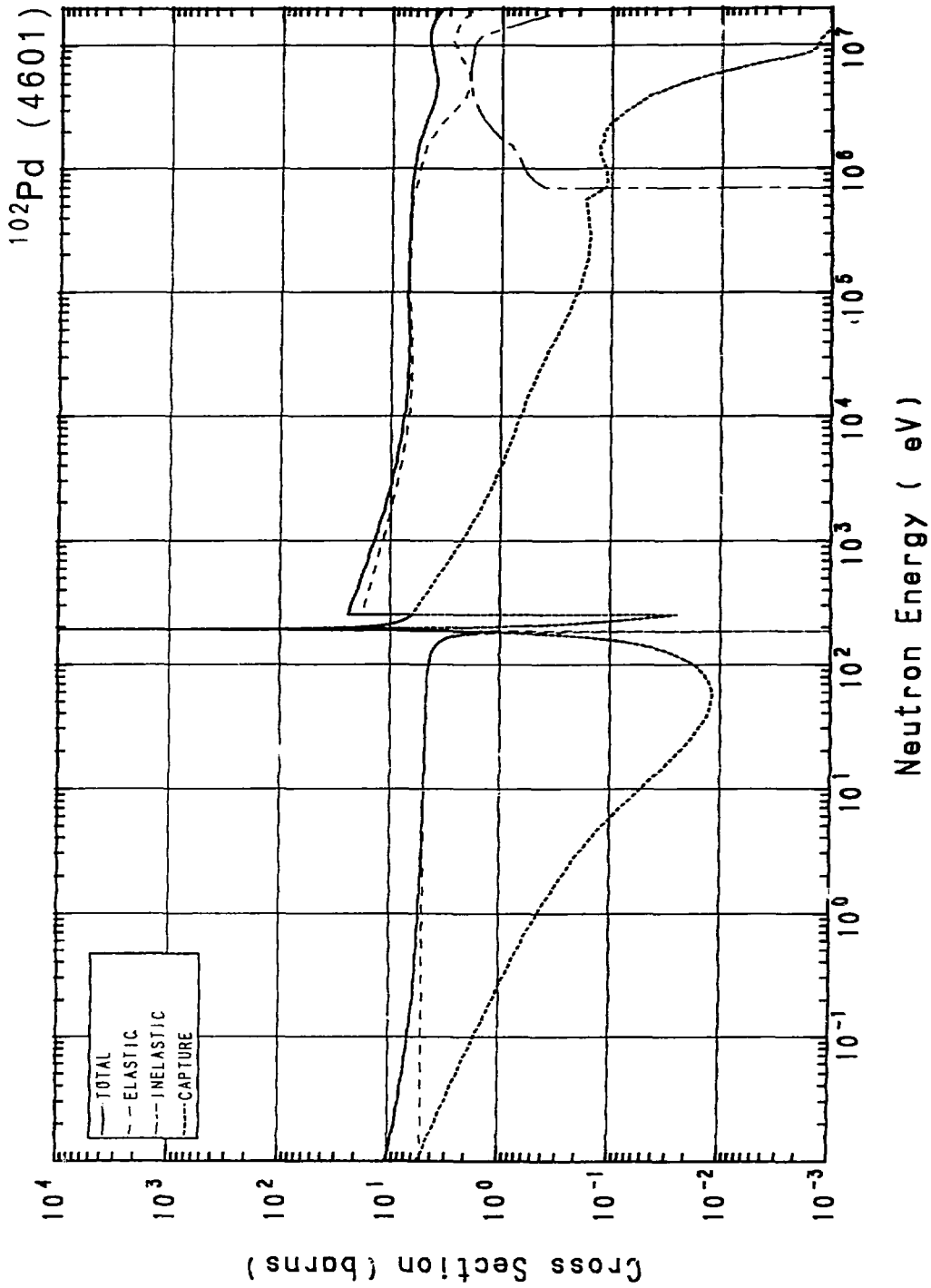

^{103}Rh (4501)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

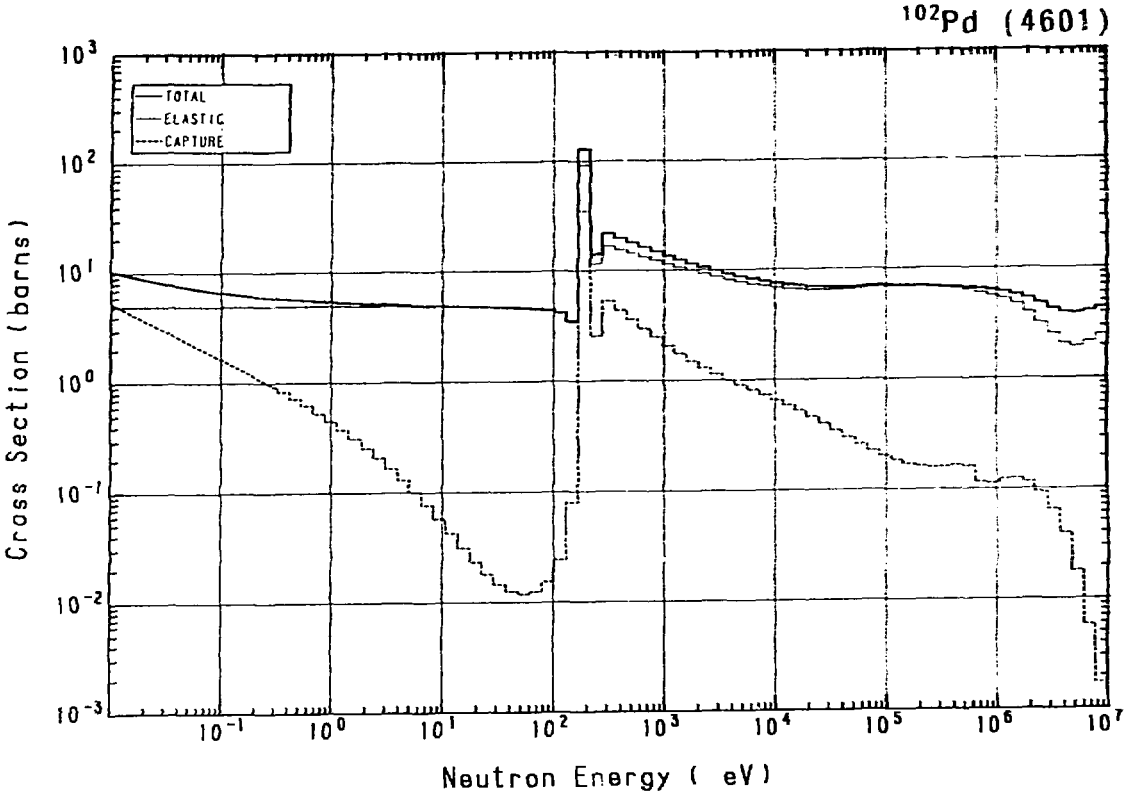

^{103}Rh (4501)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

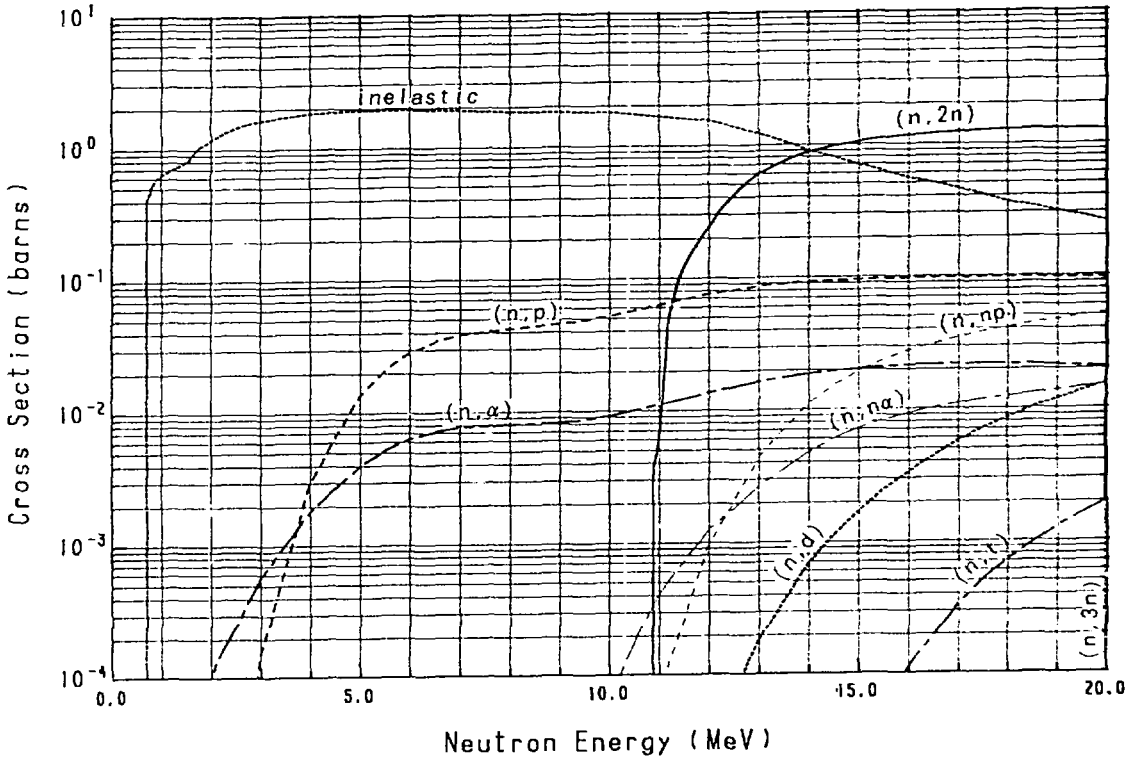

inelastic
(n,2n)
(n,3n)
(n,p)
(n,np)
(n,d)
(n,α)
(n,nα)
(n,t)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

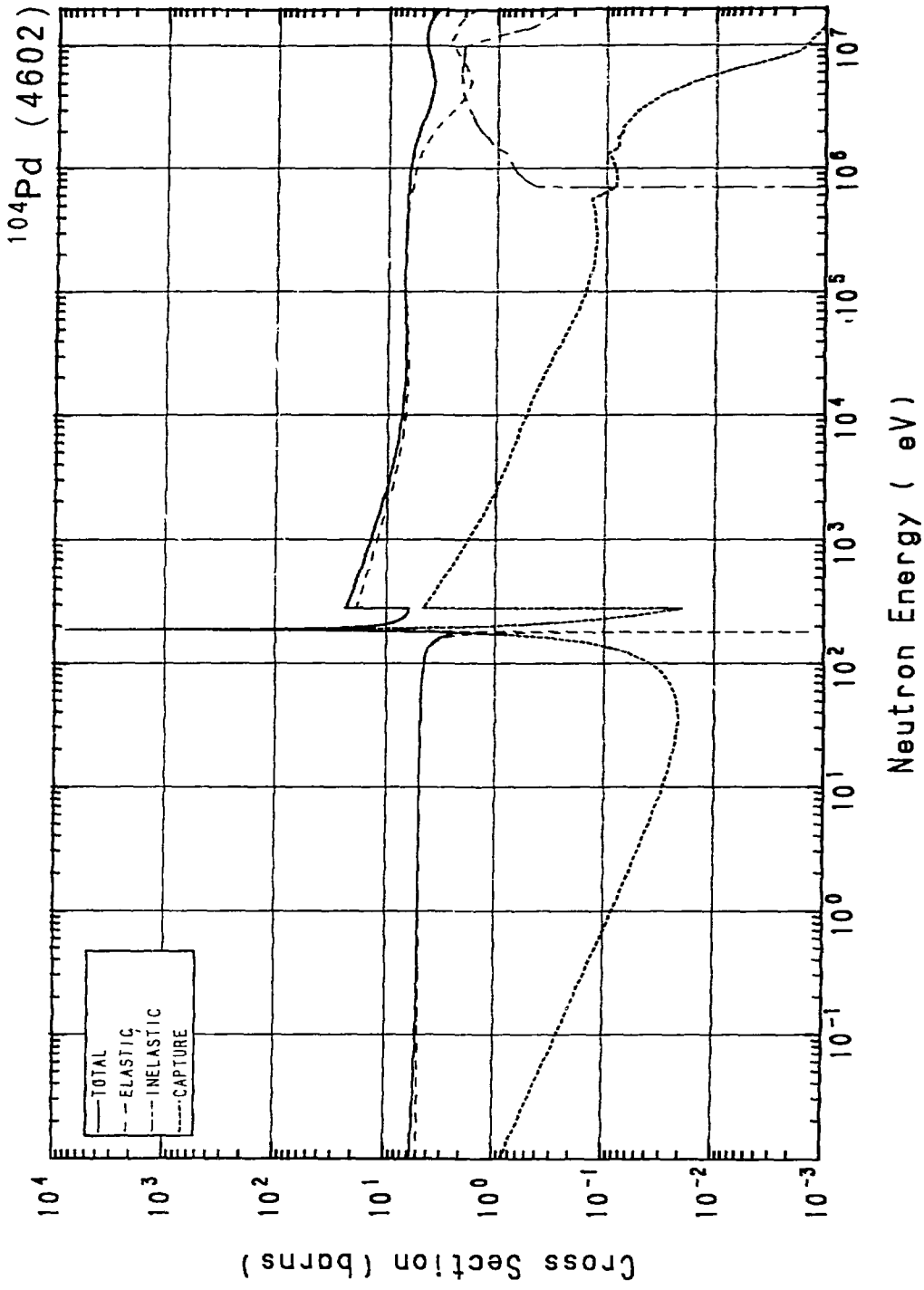

105Rh (4502)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

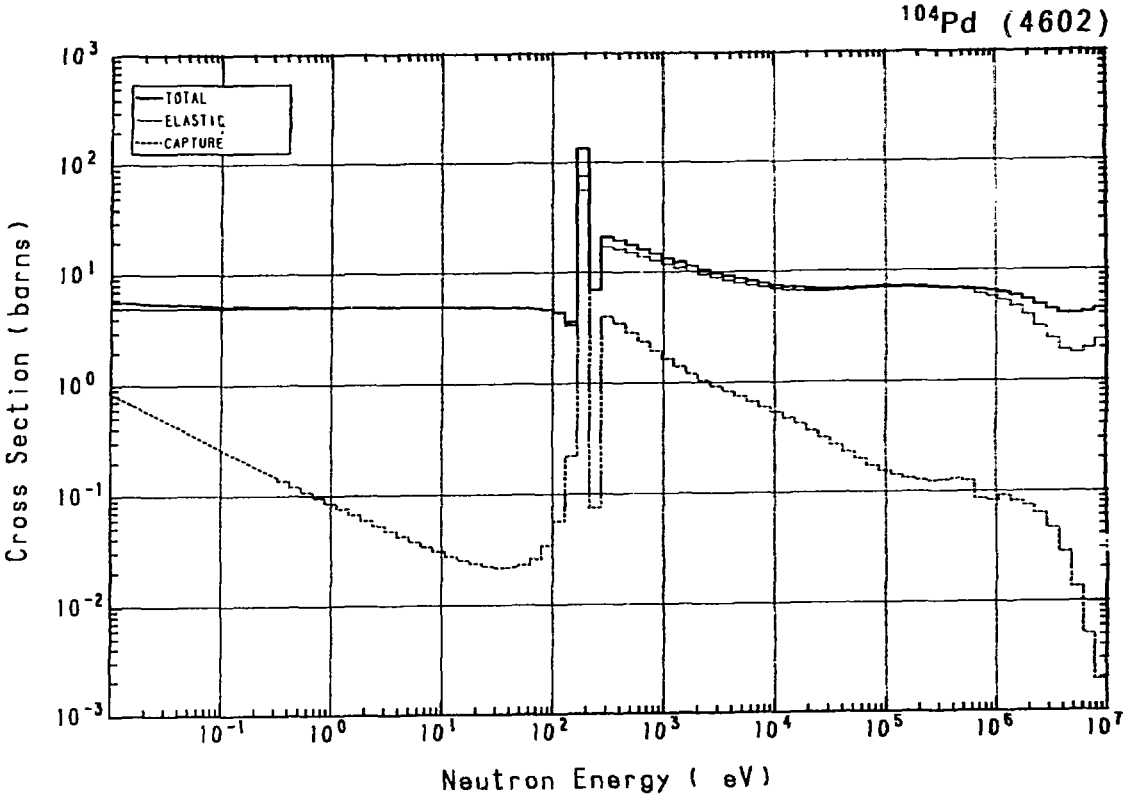

inelastic
(n,2n)
(n,3n)
(n,p)
(n,np)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

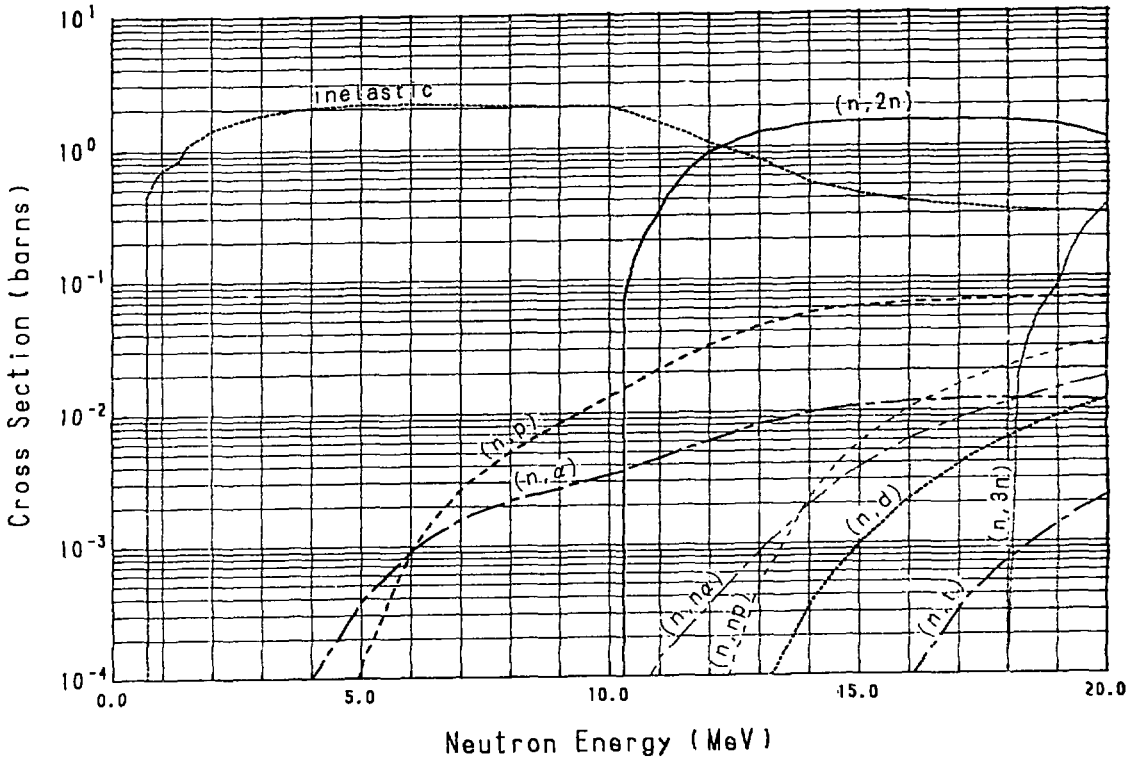

^{102}Pd (4601)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

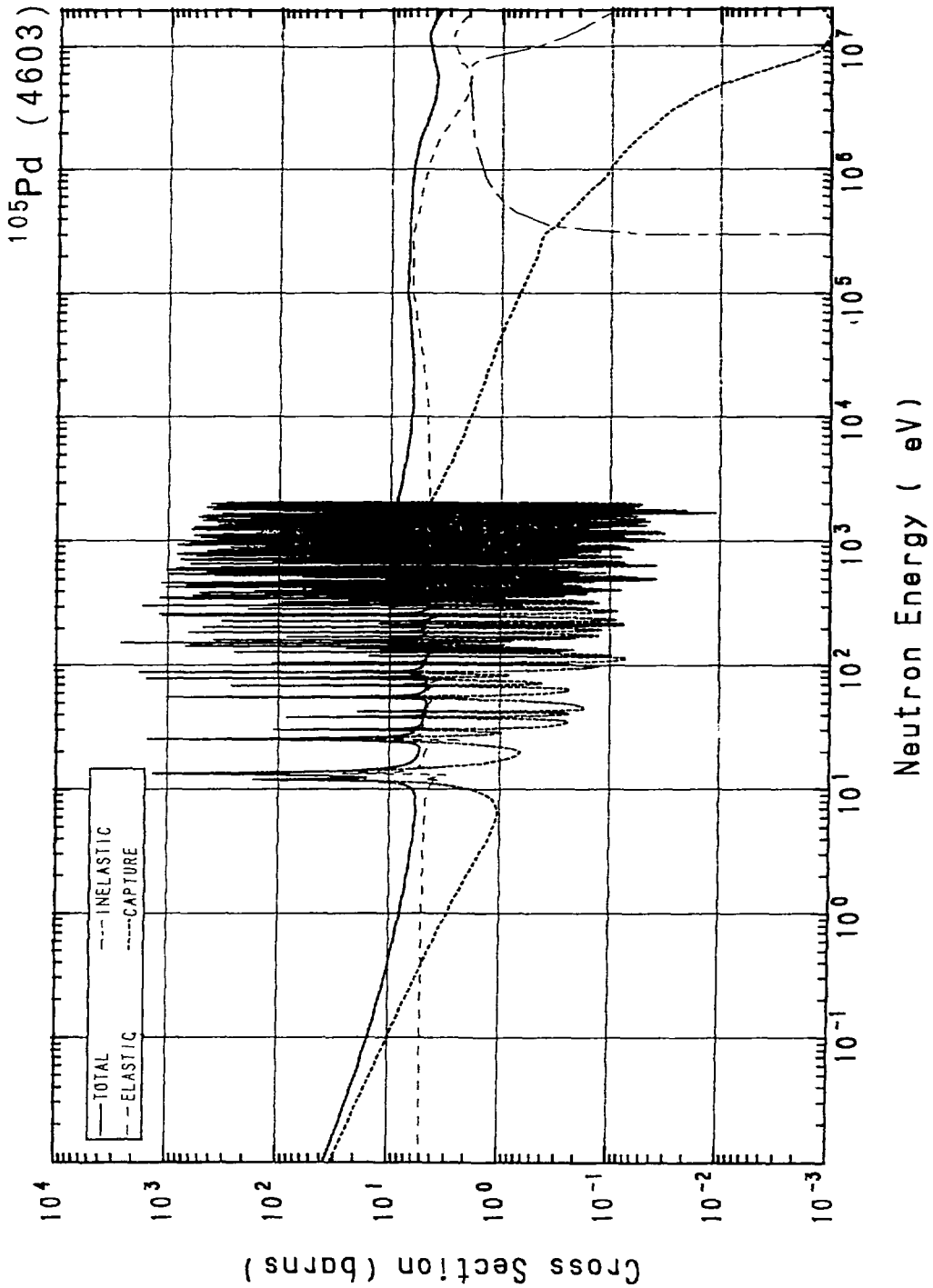

^{102}Pd (4601)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

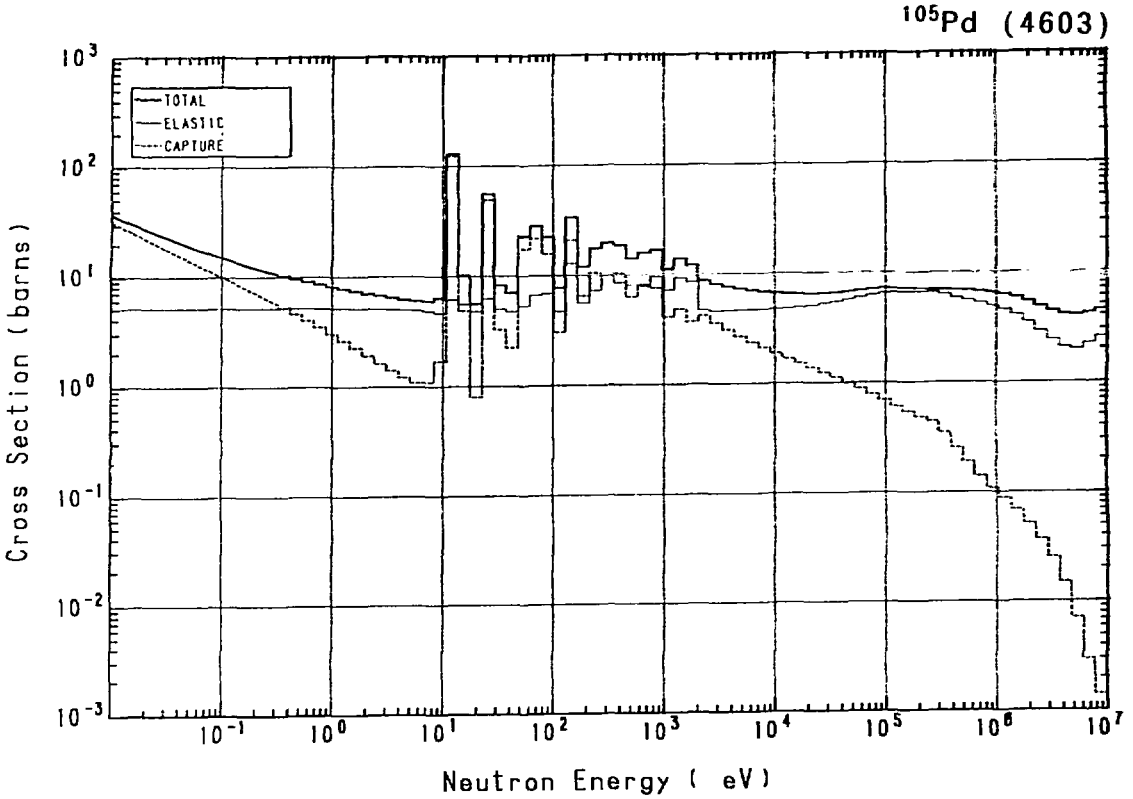

inelastic
(n,2n)
(n,p)
(n,np)
(n,α)
(n,nα)
(n,d)
(n,t)
(n,3n)
Cross Section (barns)
Neutron Energy (MeV)

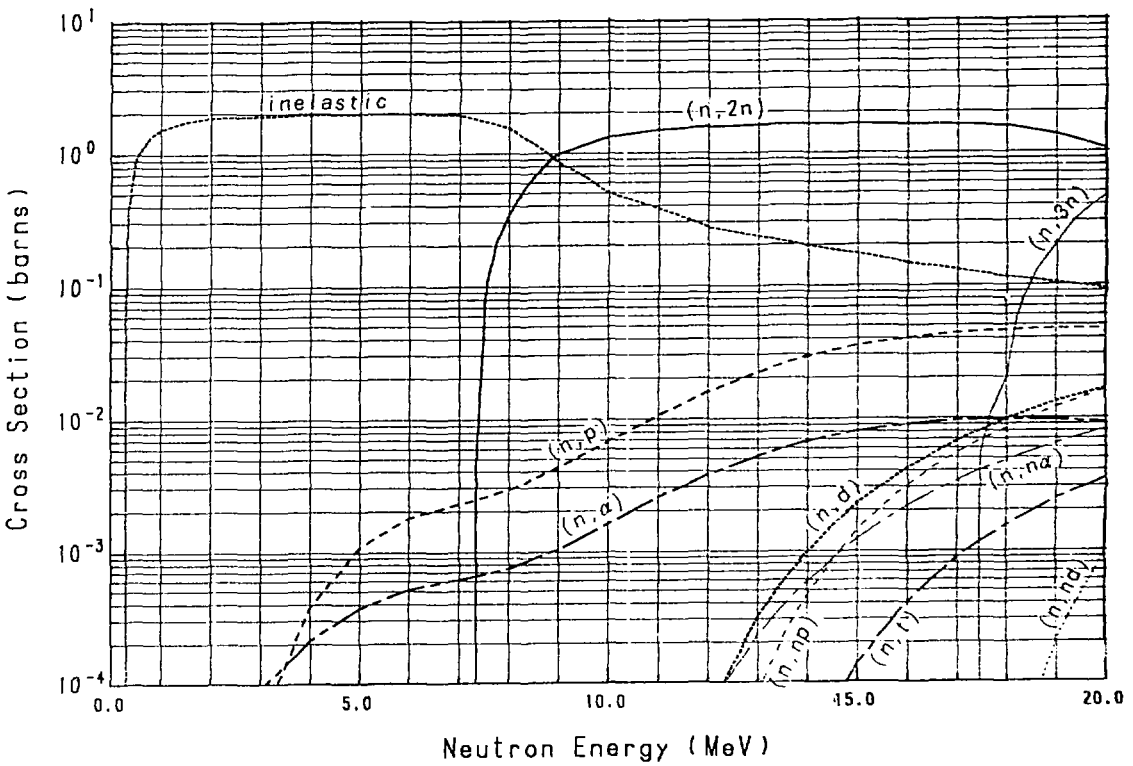

104Pd (4602)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

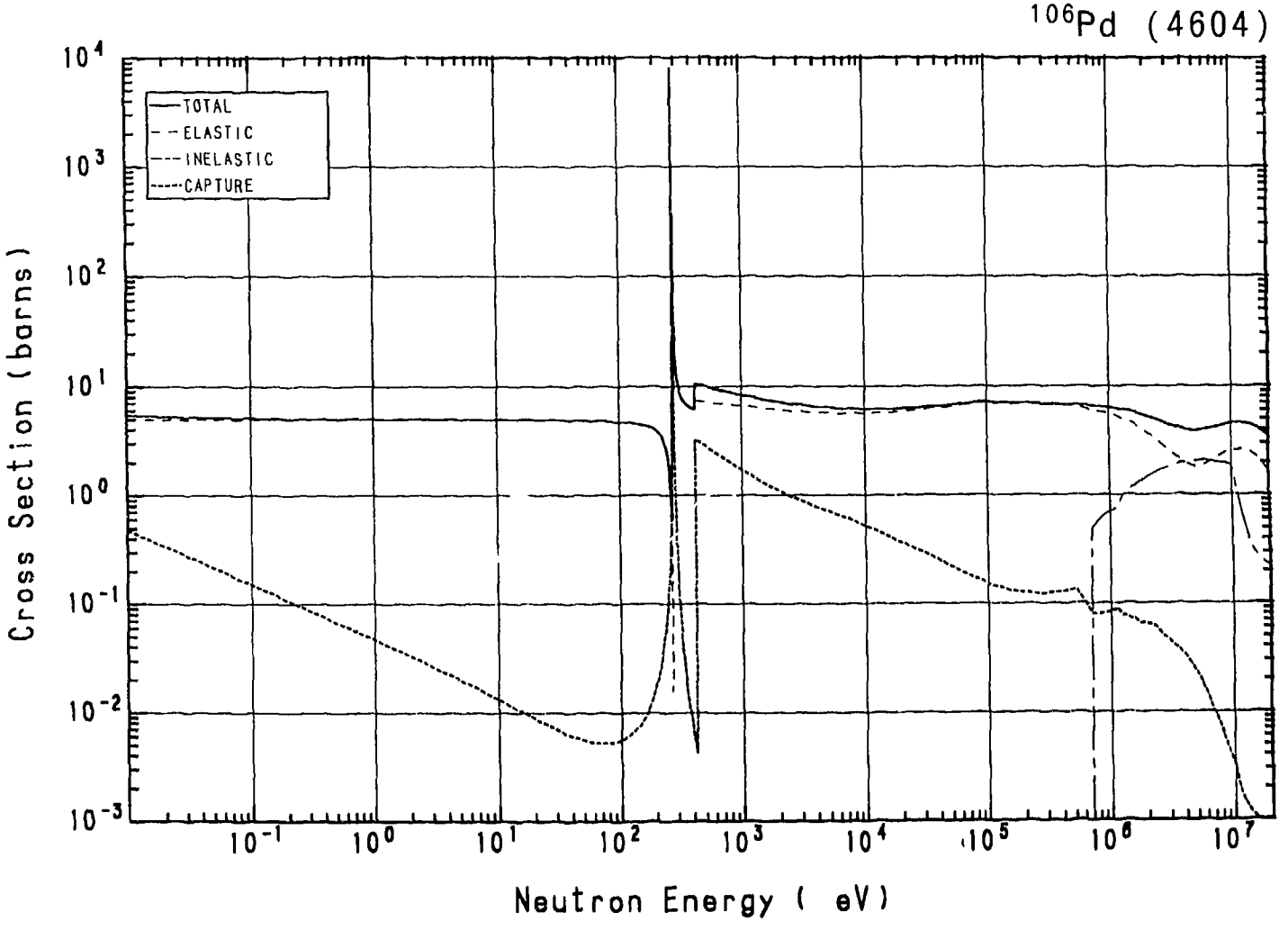

^{104}Pd (4602)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

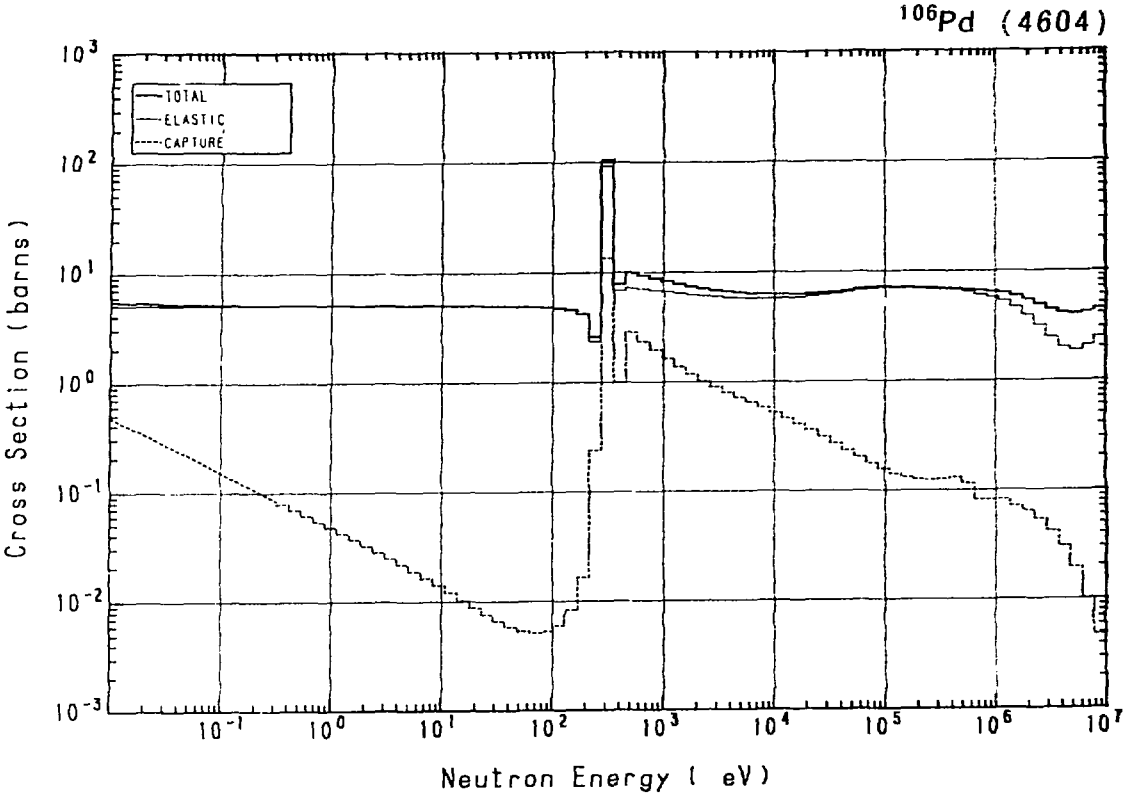

inelastic
(n,2n)
(n,p)
(n,α)
(n,d)
(n,3n)
(n,nα)
(n,np)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

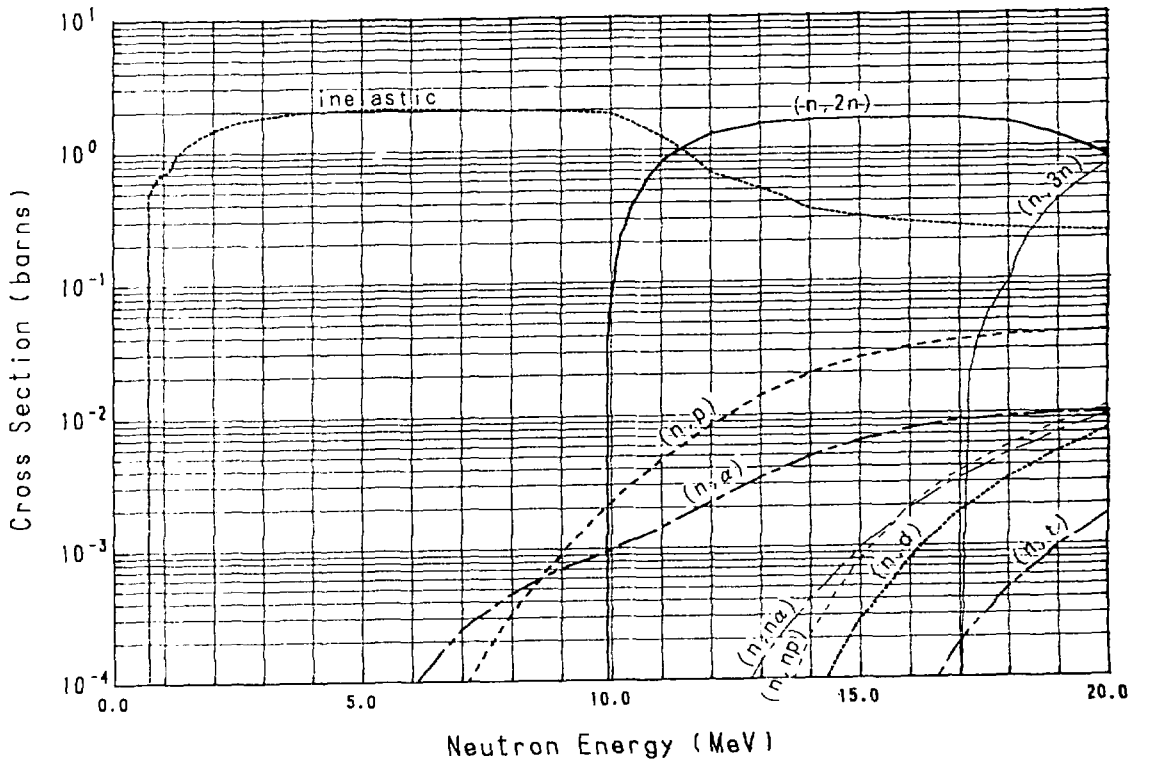

105Pd (4603)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

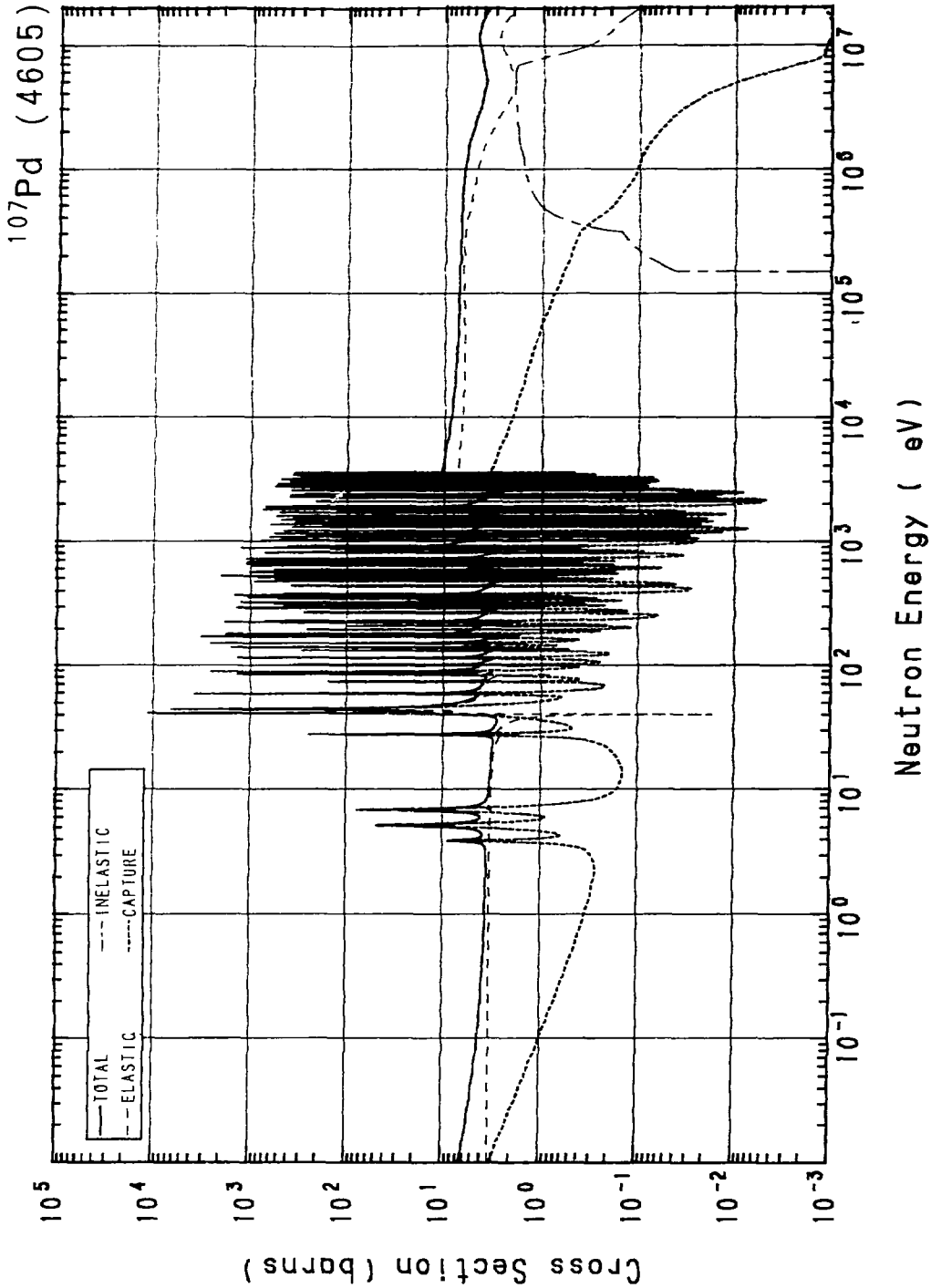

105Pd (4603)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

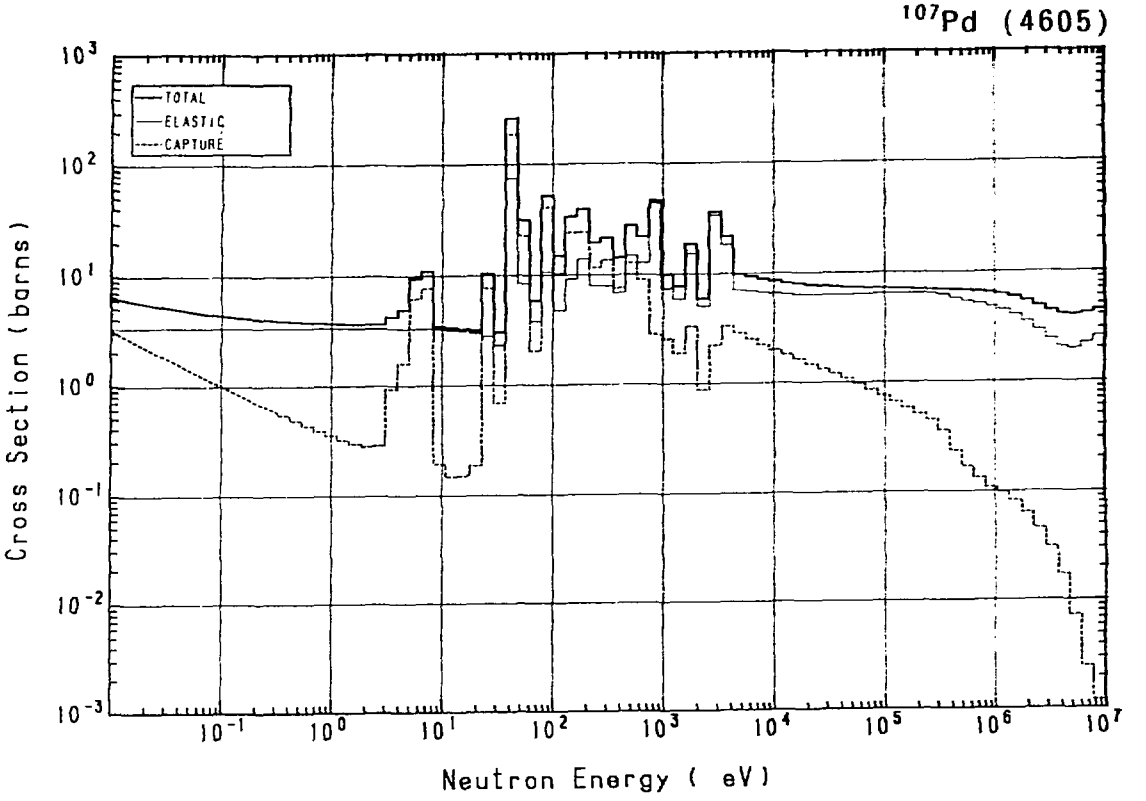

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,np)
(n,γ)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

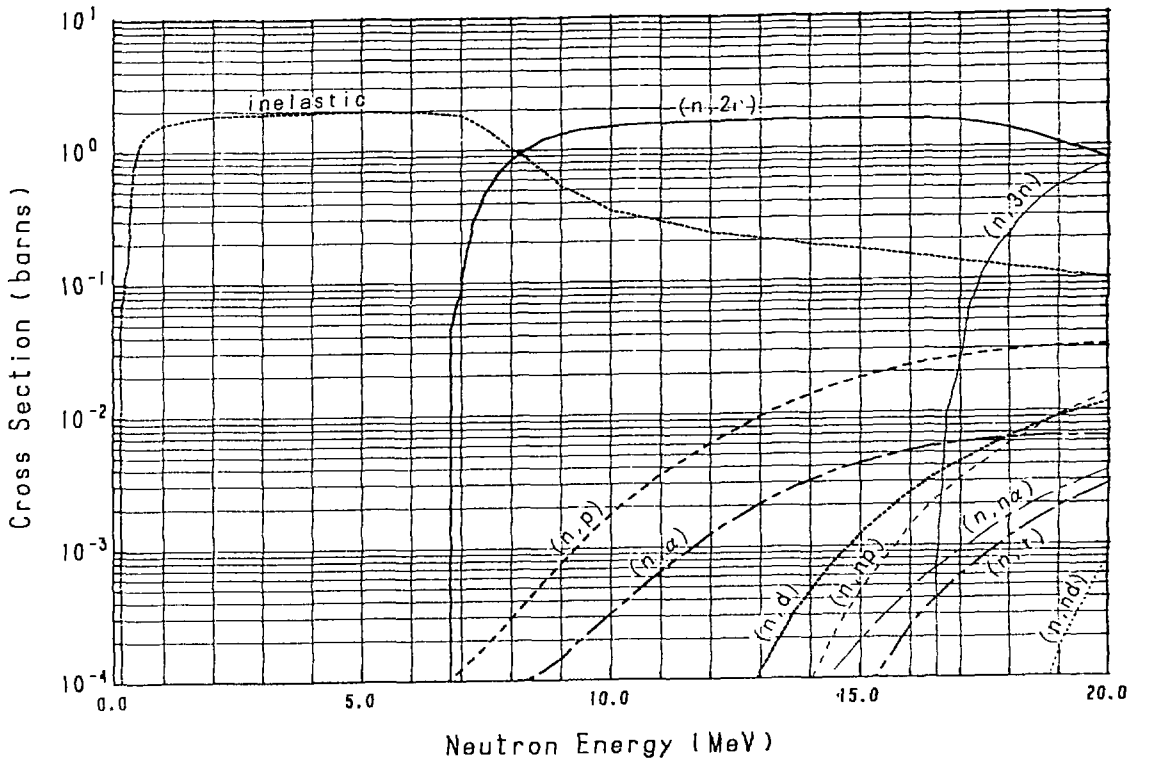

^{106}Pd (4604)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

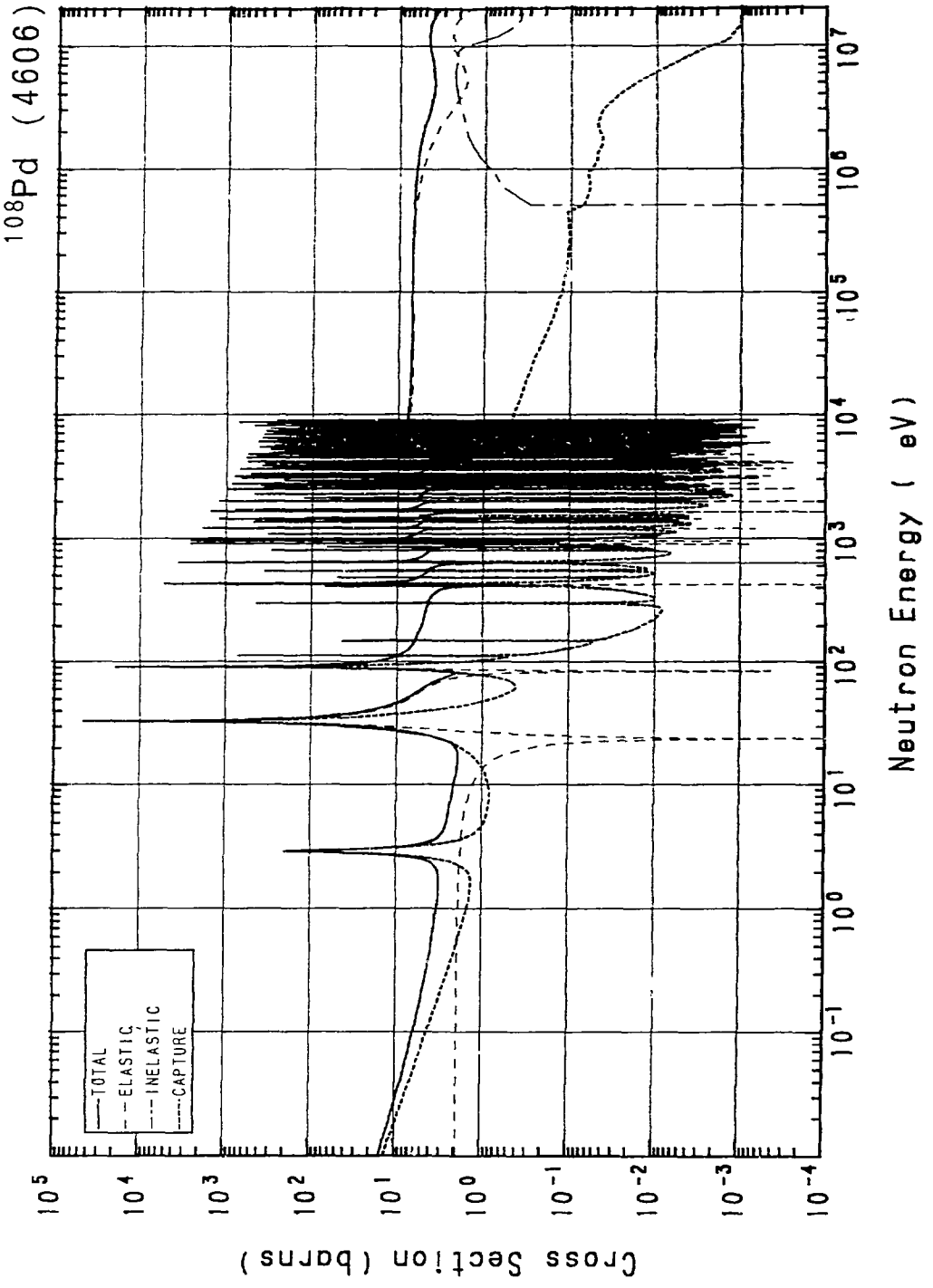

106Pd (4604)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

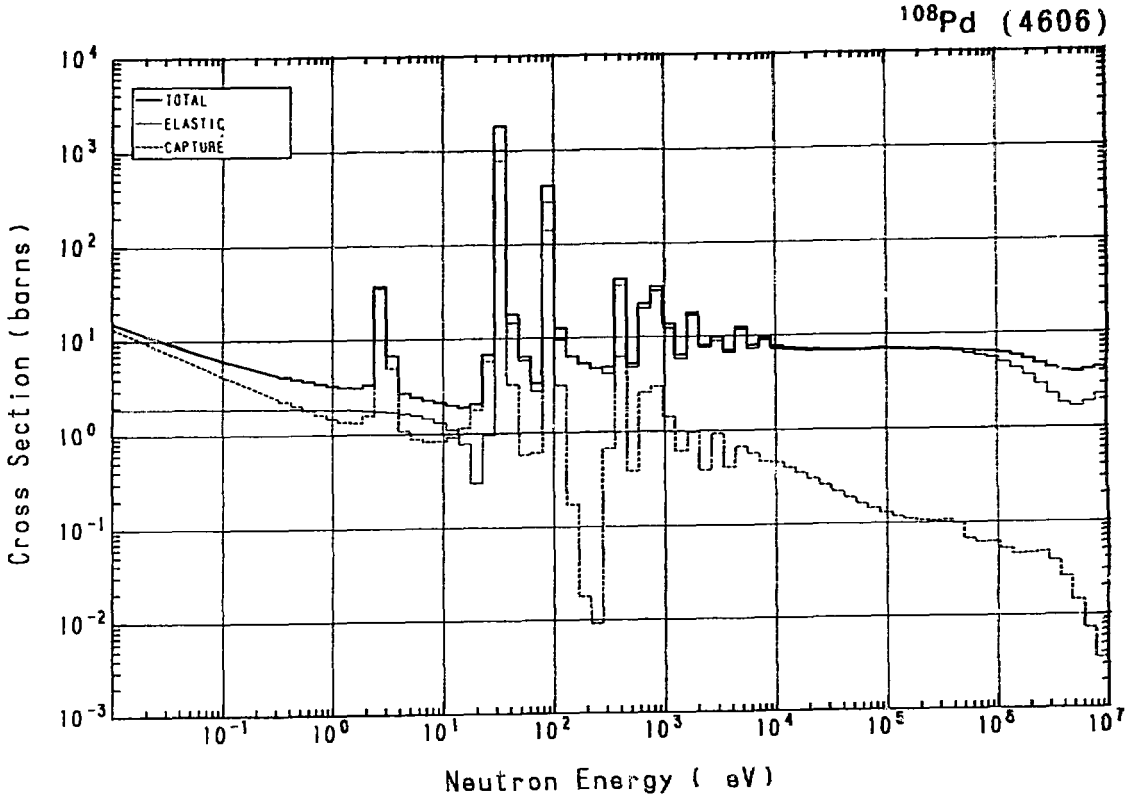

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,t)
(n,nα)
(n,np)
Cross Section (barns)
Neutron Energy (MeV)

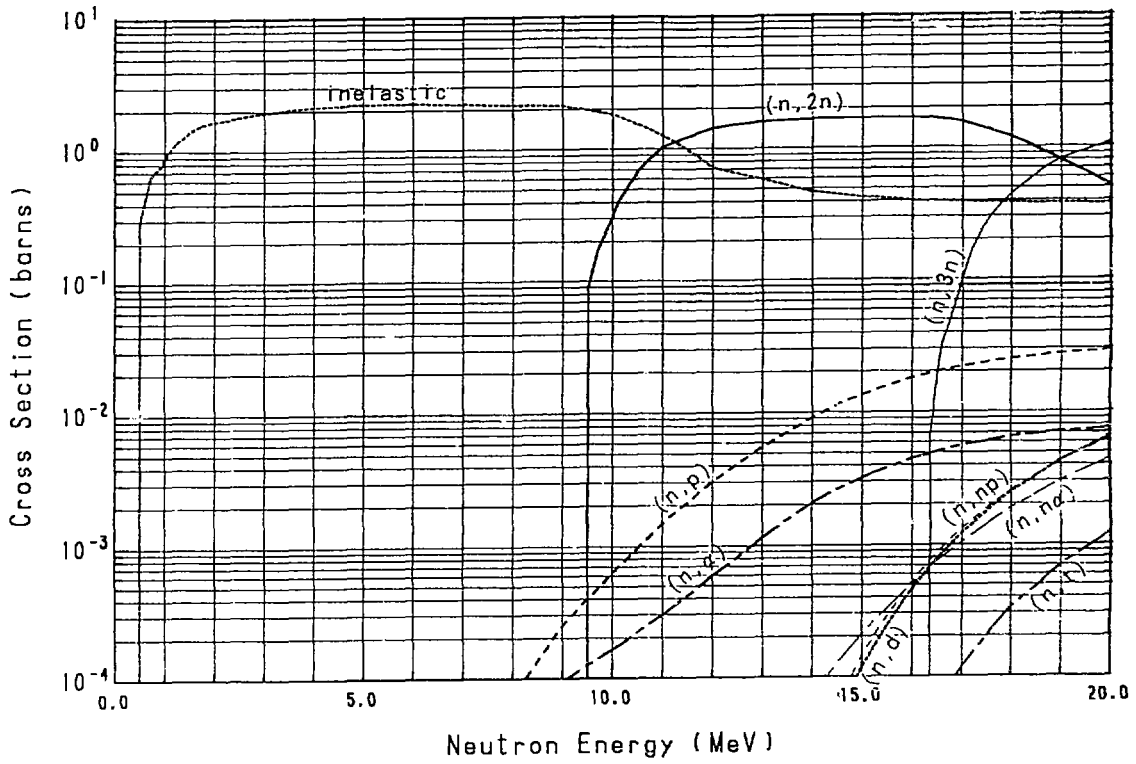

^{107}Pd (4605)
TOTAL
INELASTIC
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

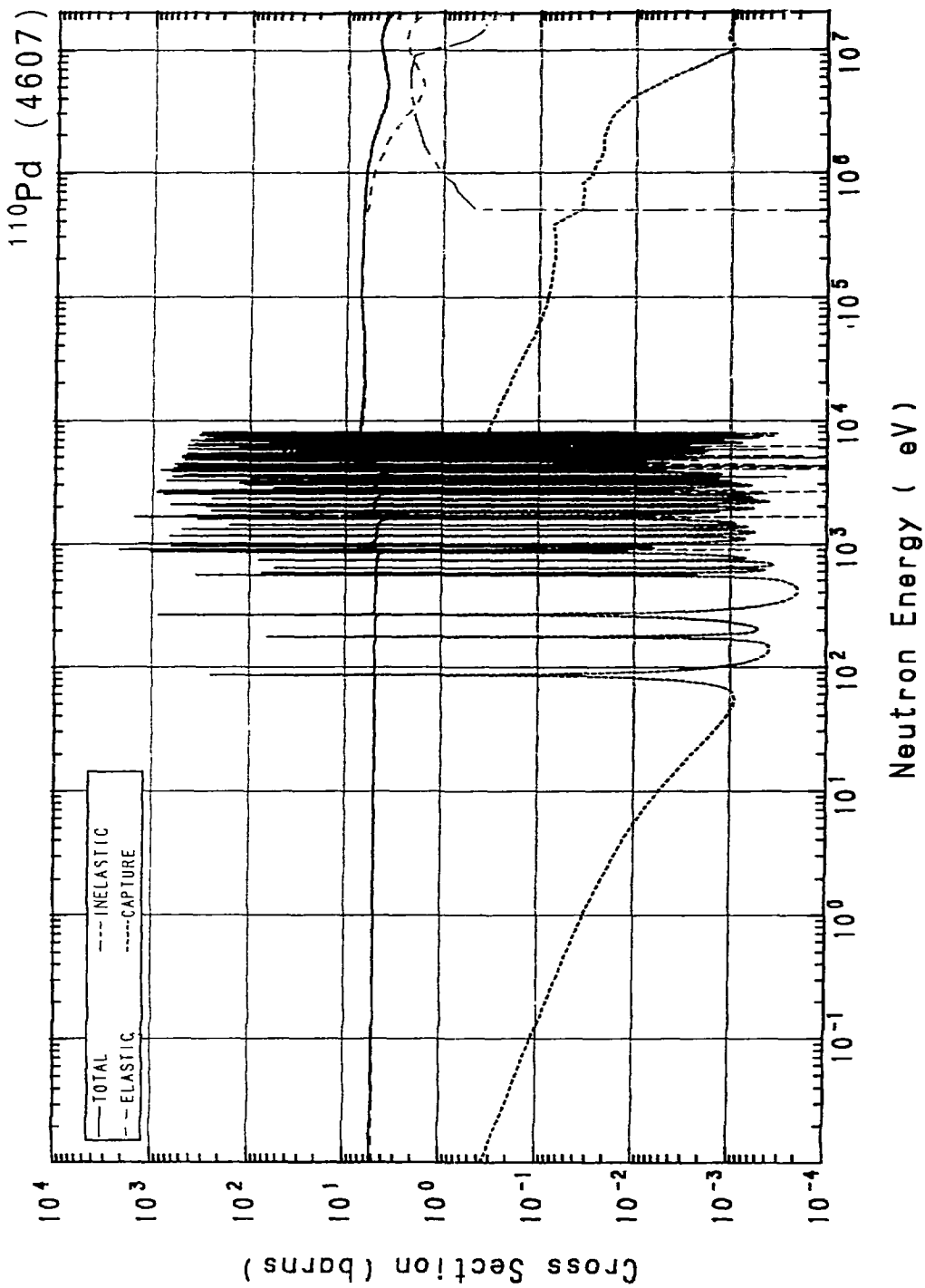

^{107}Pd (4605)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

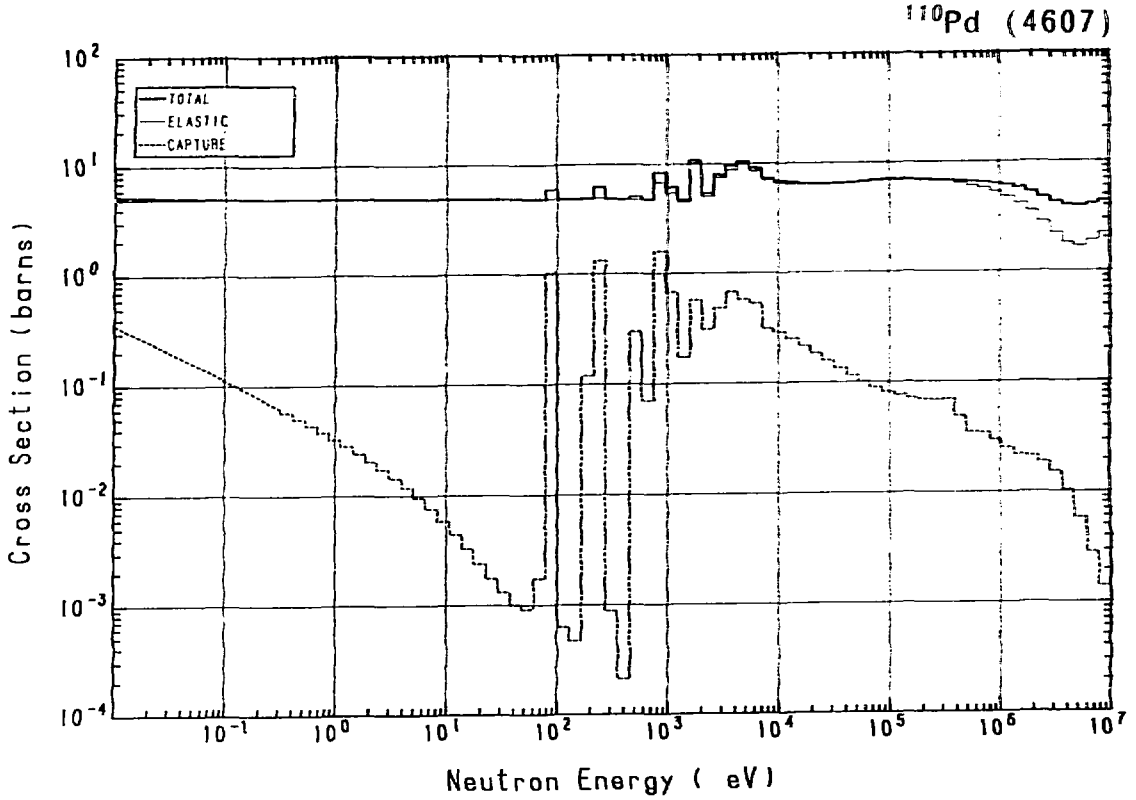

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,γ)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

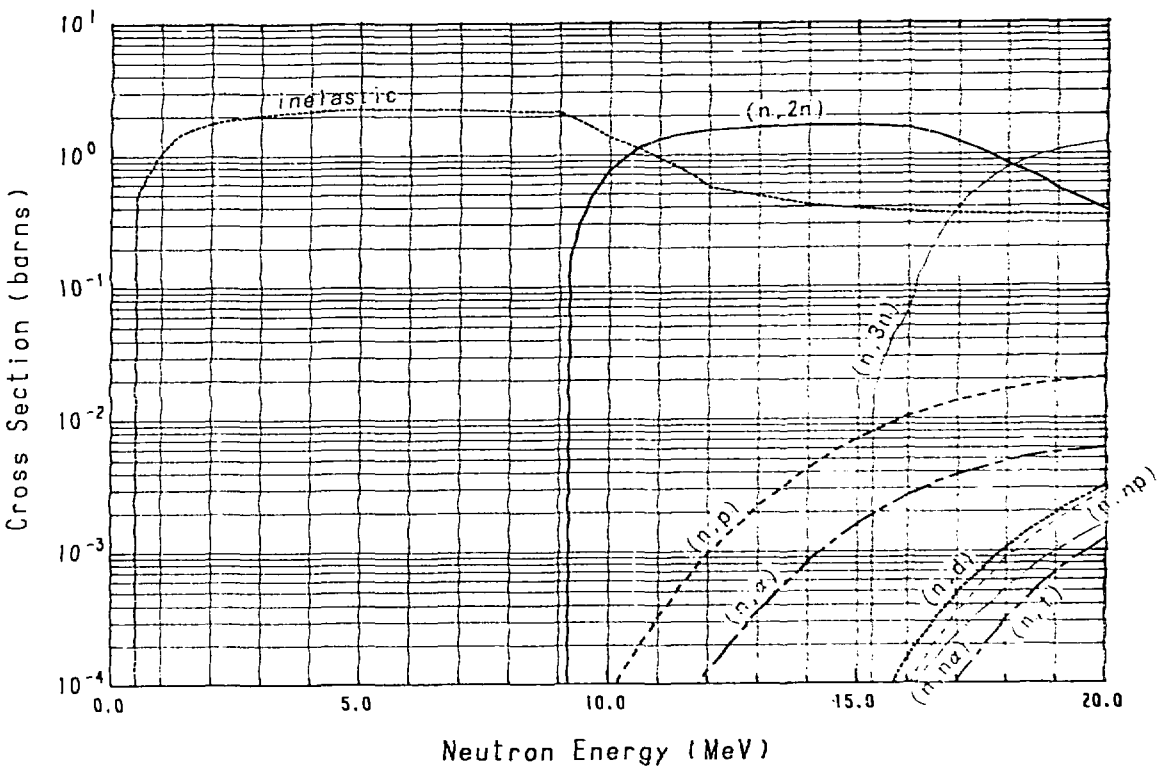

108Pd (4606)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

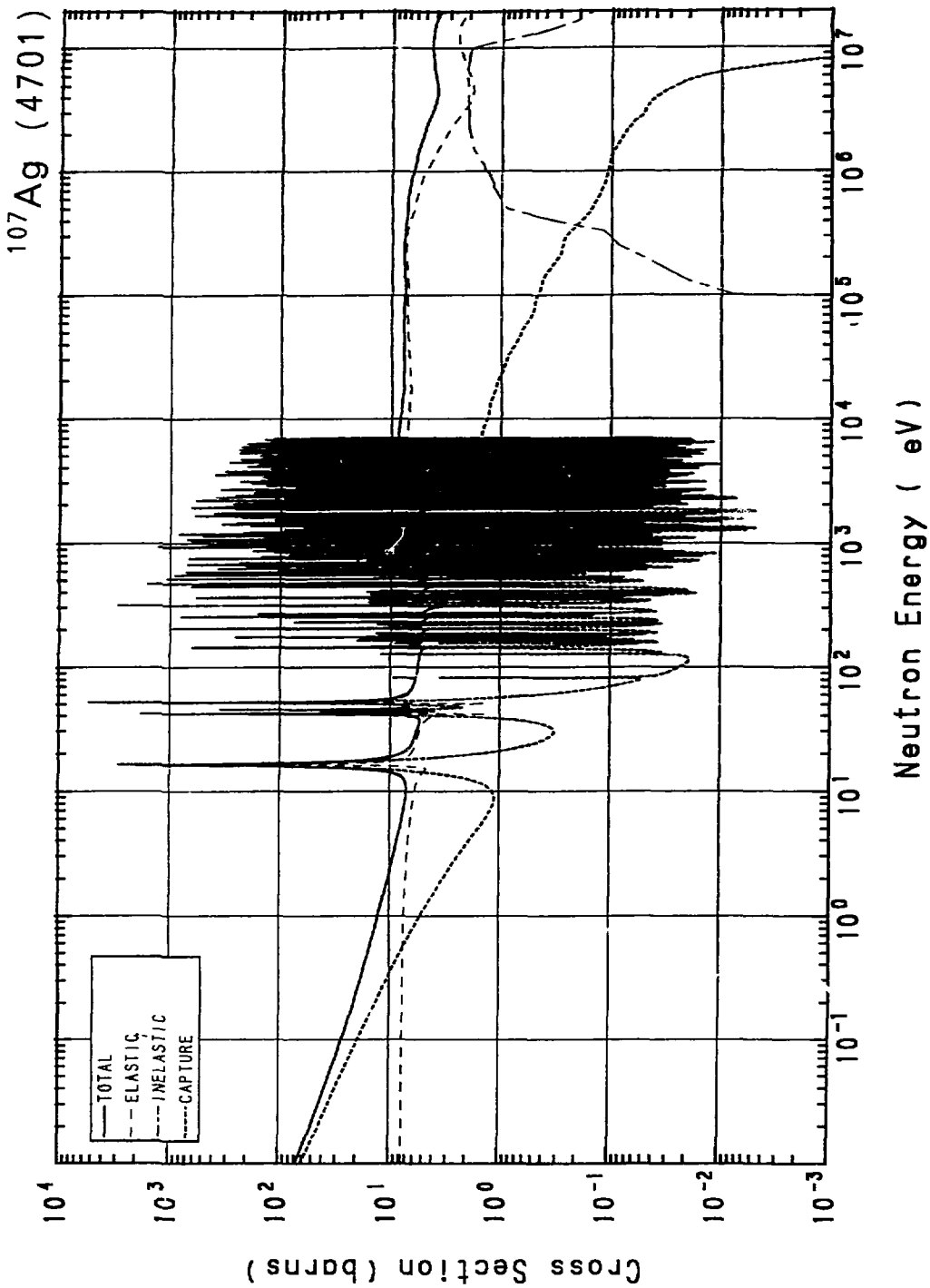

108Pd (4606)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

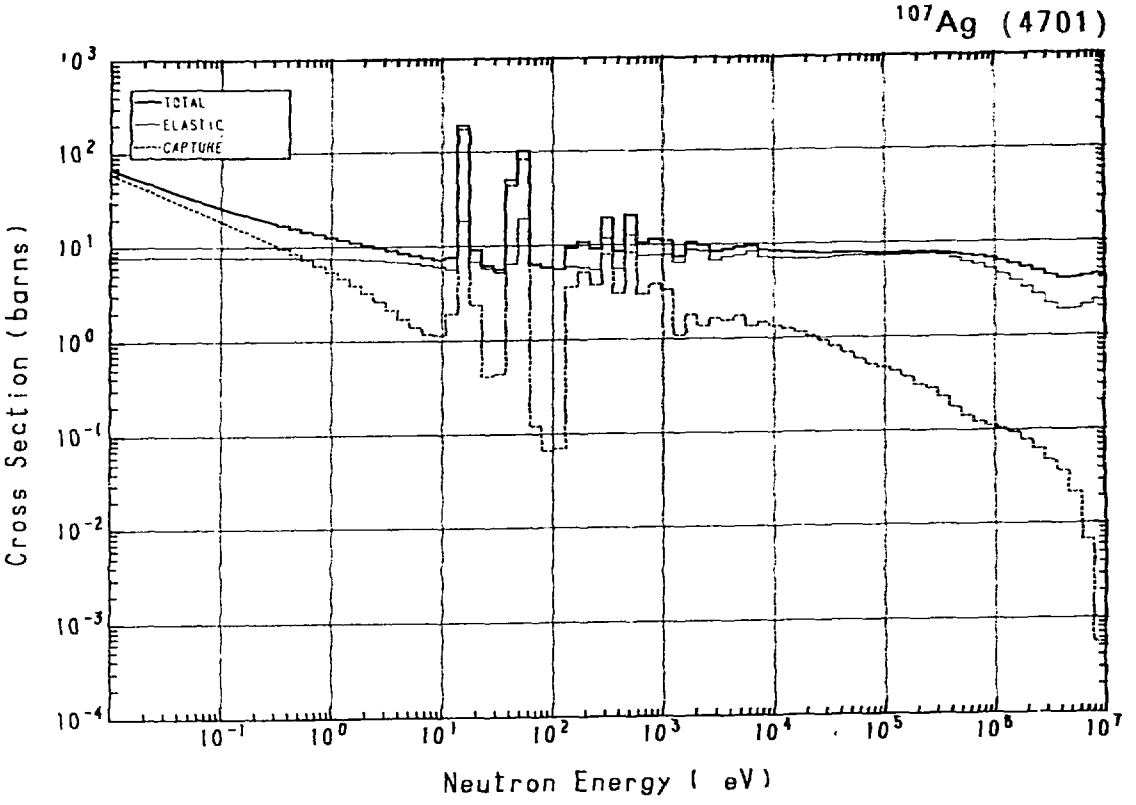

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,nα)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

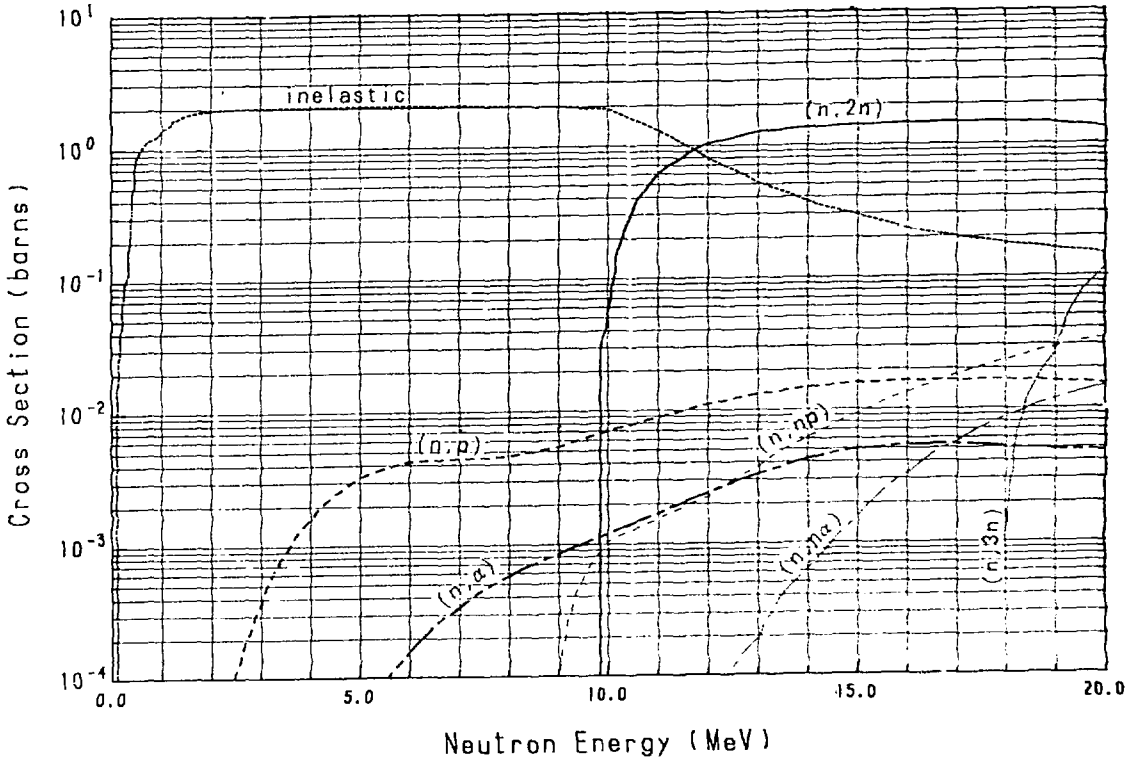

110Pd (4607)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

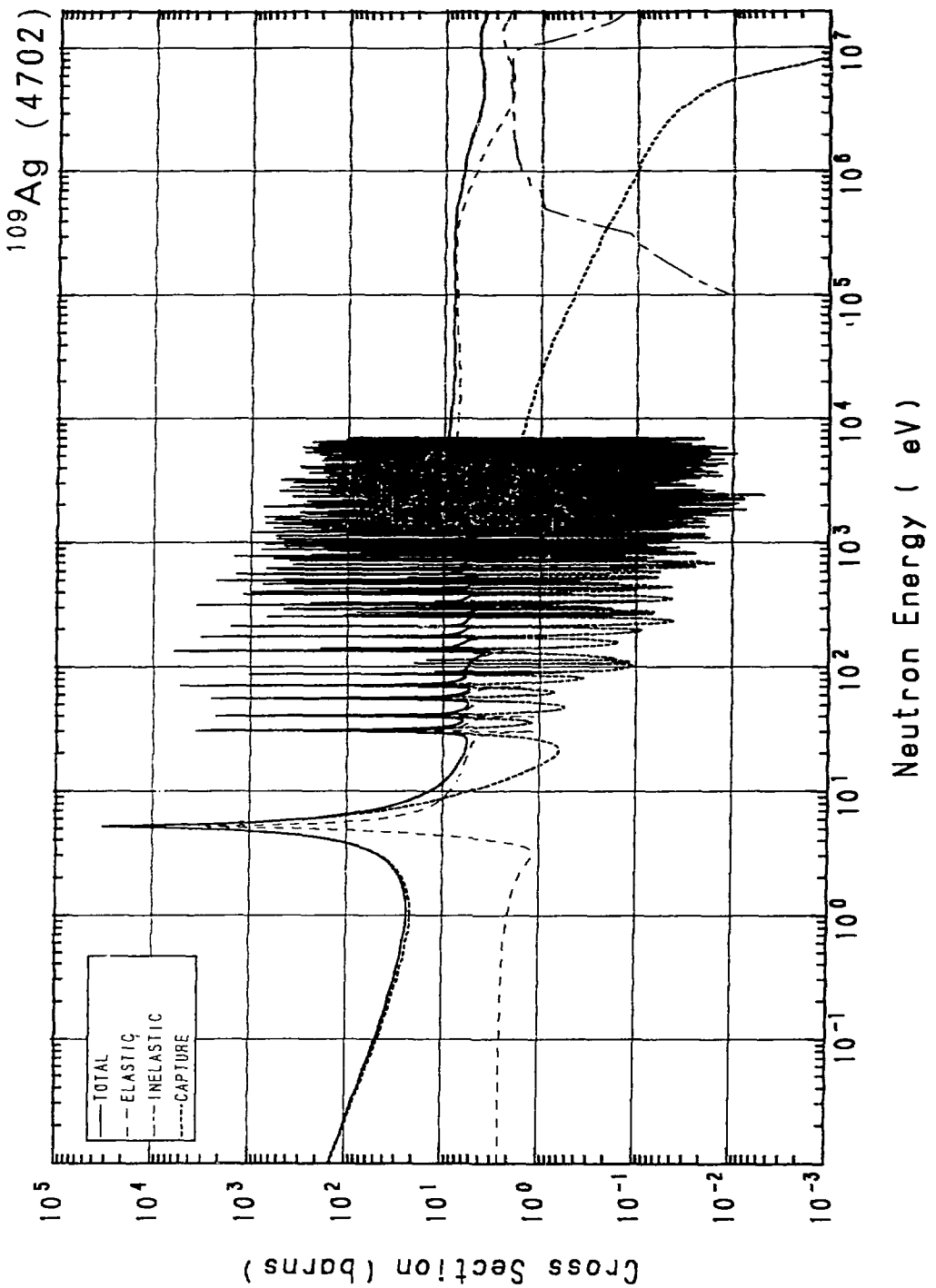

110Pd (4607)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

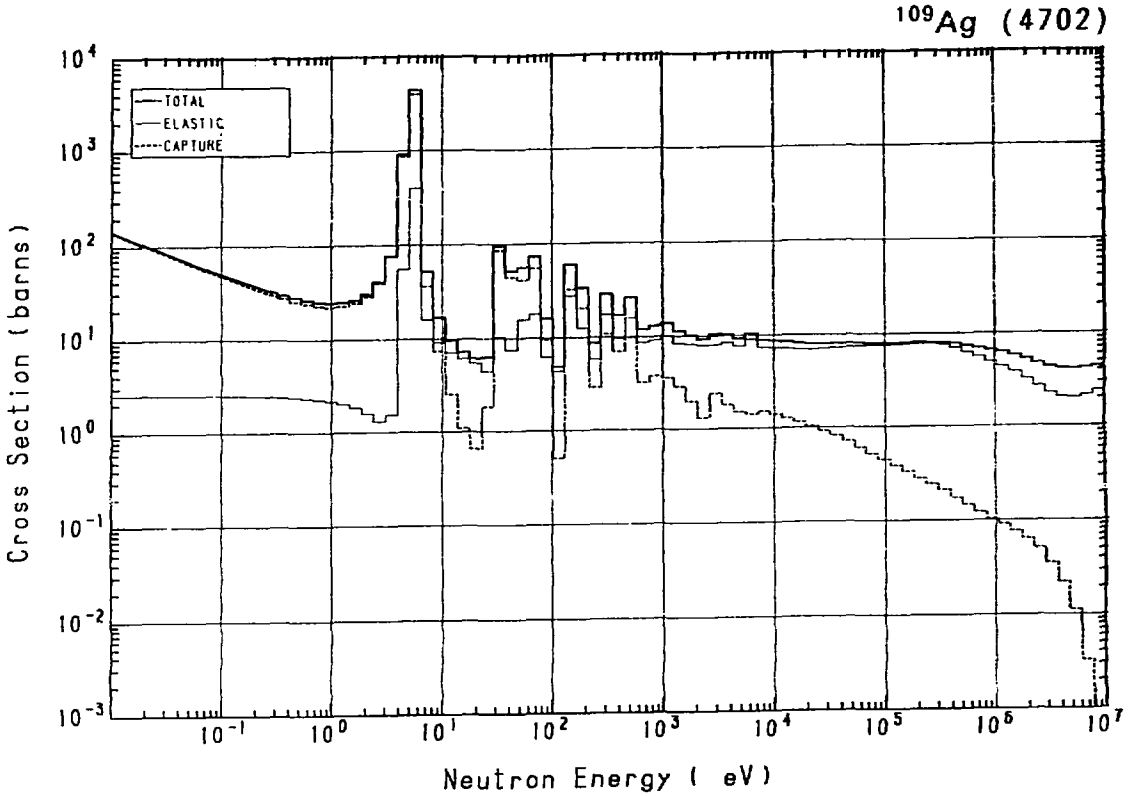

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,t)
(n,np)
(n,nα)
Cross Section (barns)
Neutron Energy (MeV)

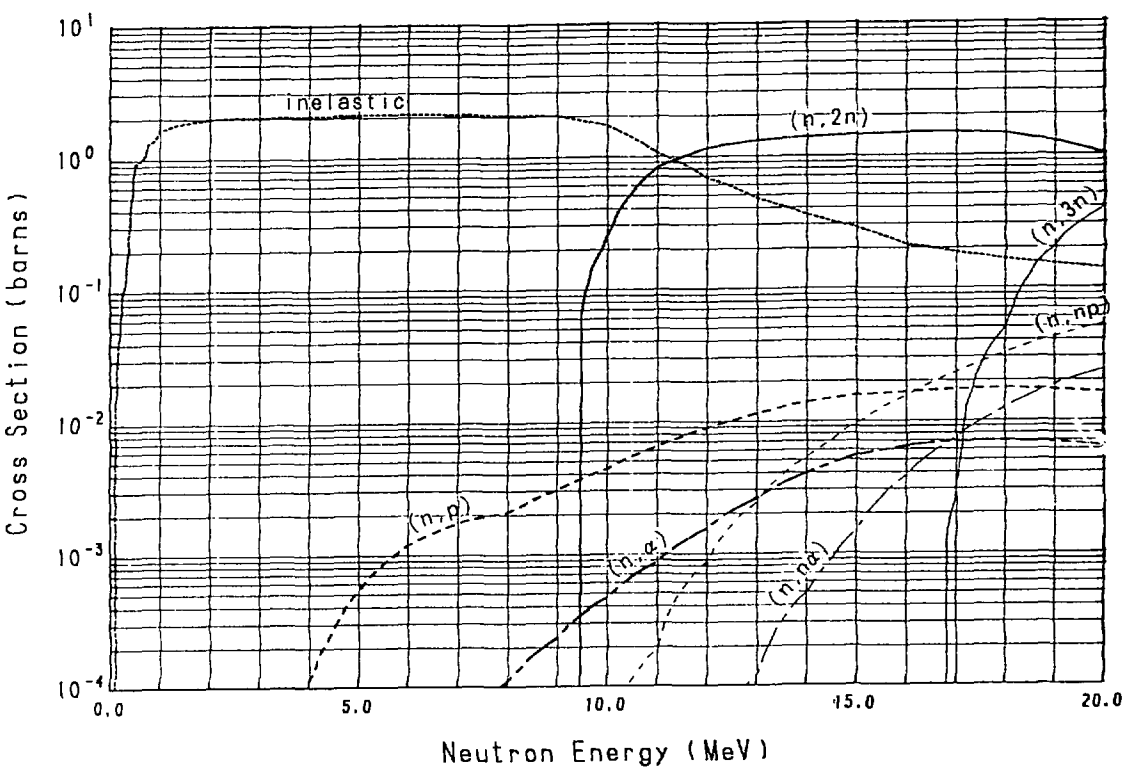

^{107}Ag (4701)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

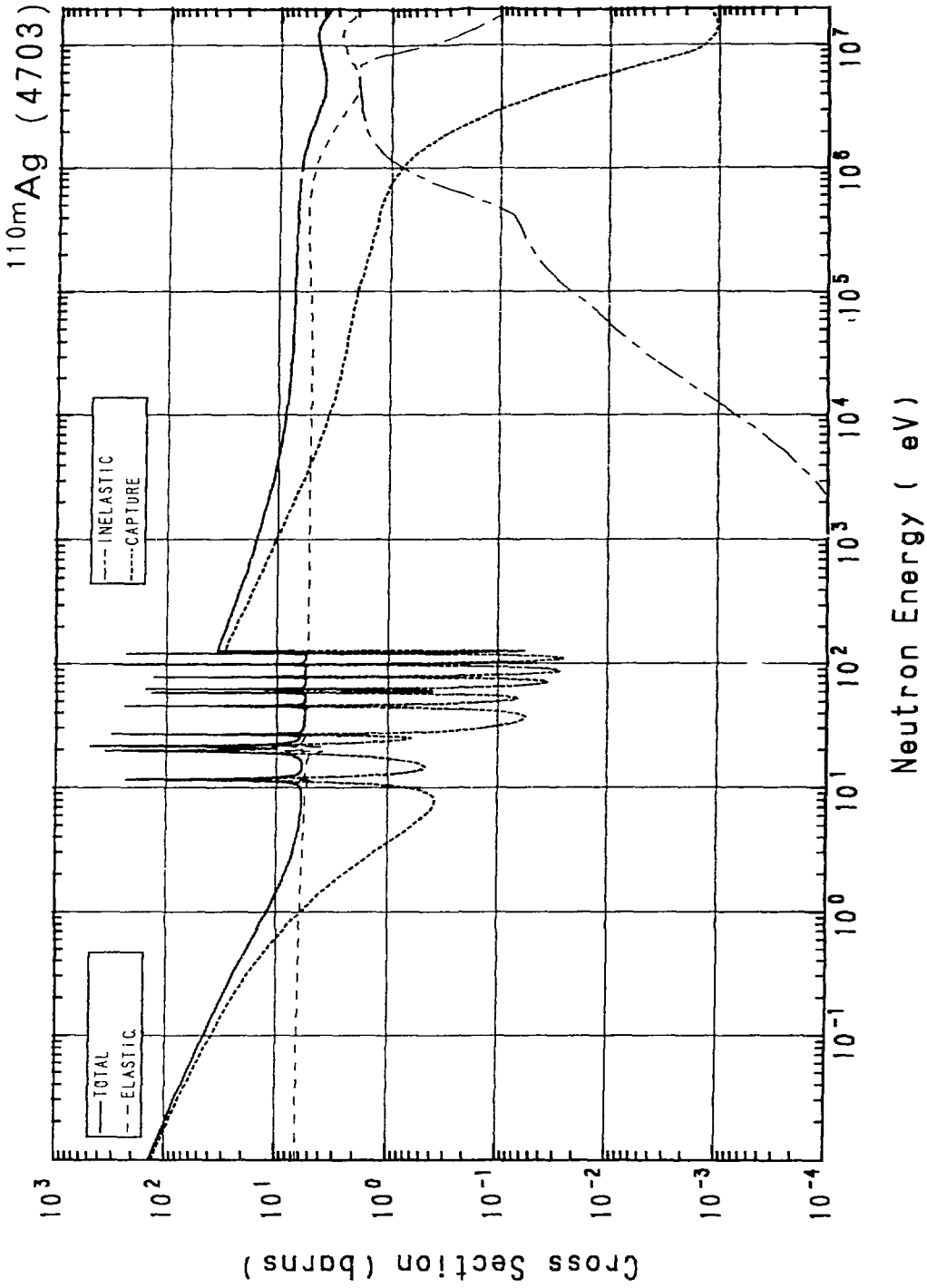

^{107}Ag (4701)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

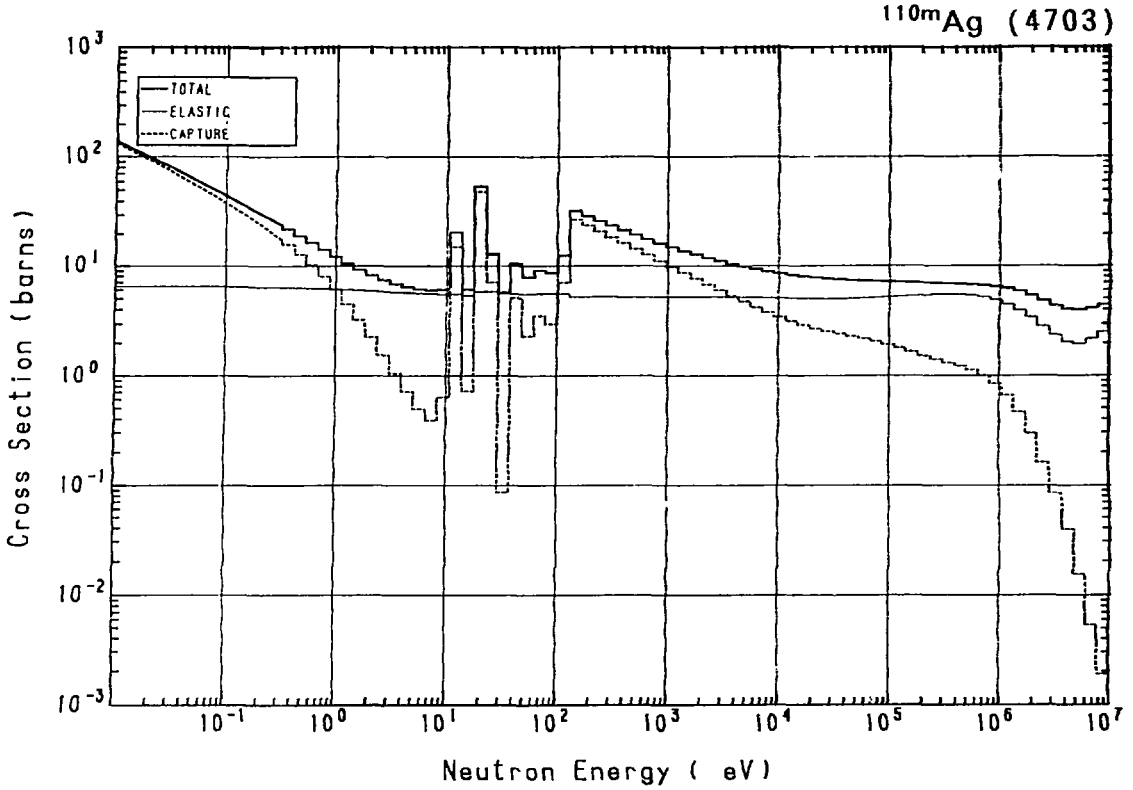

inelastic
(n,2n)
(n,p)
(n,np)
(n,α)
(n,nα)
(n,3n)
Cross Section (barns)
Neutron Energy (MeV)

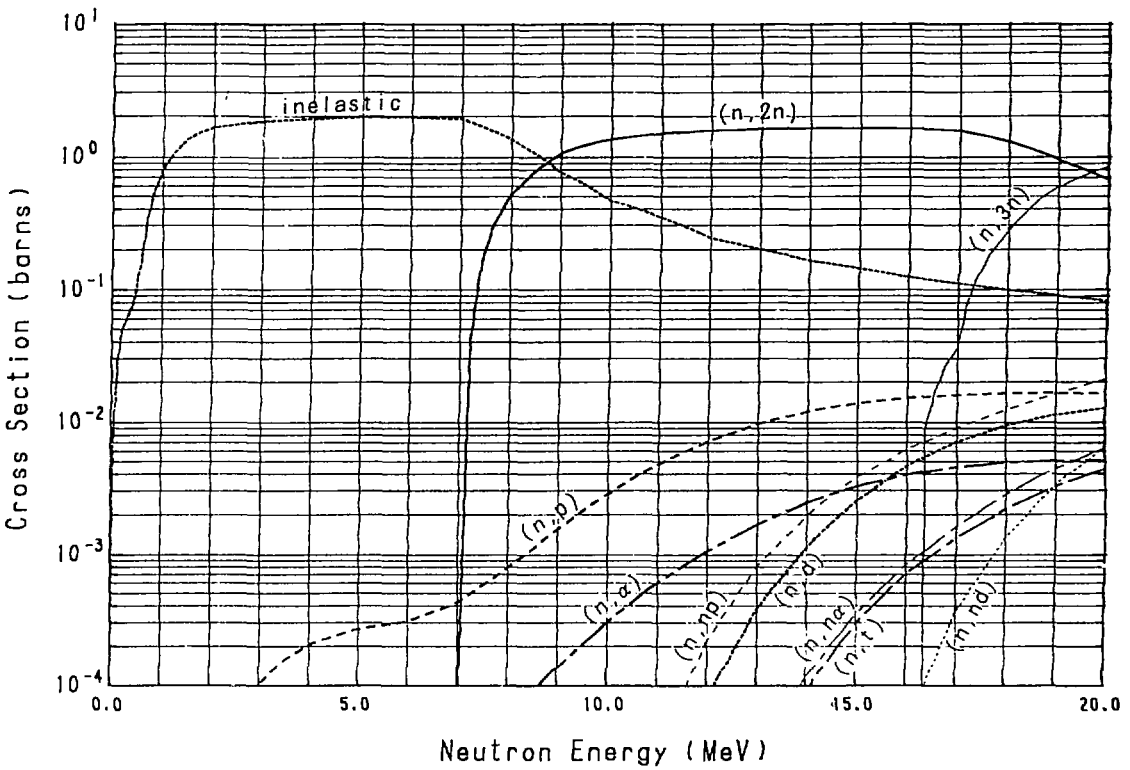

^{109}Ag (4702)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

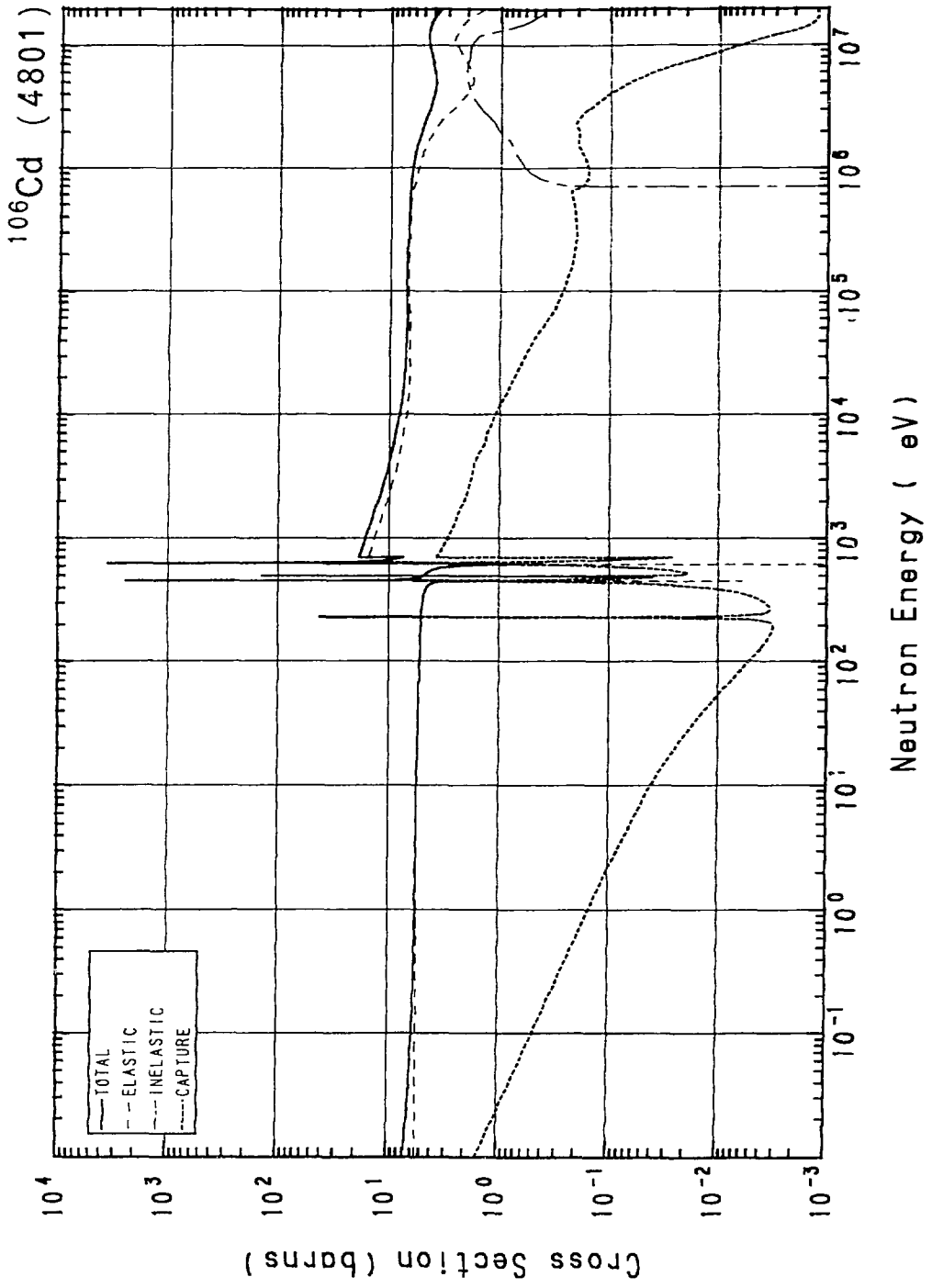

^{109}Ag (4702)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

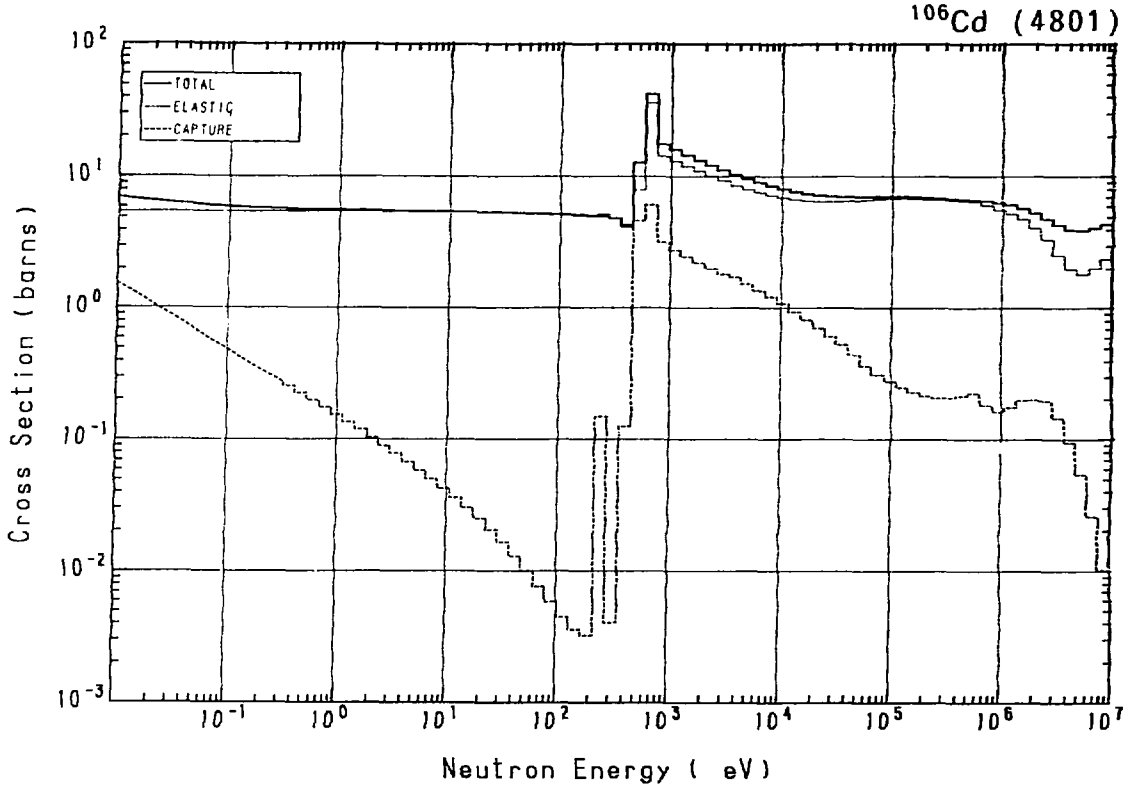

inelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,α)
(n,nα)
Cross Section (barns)
Neutron Energy (MeV)

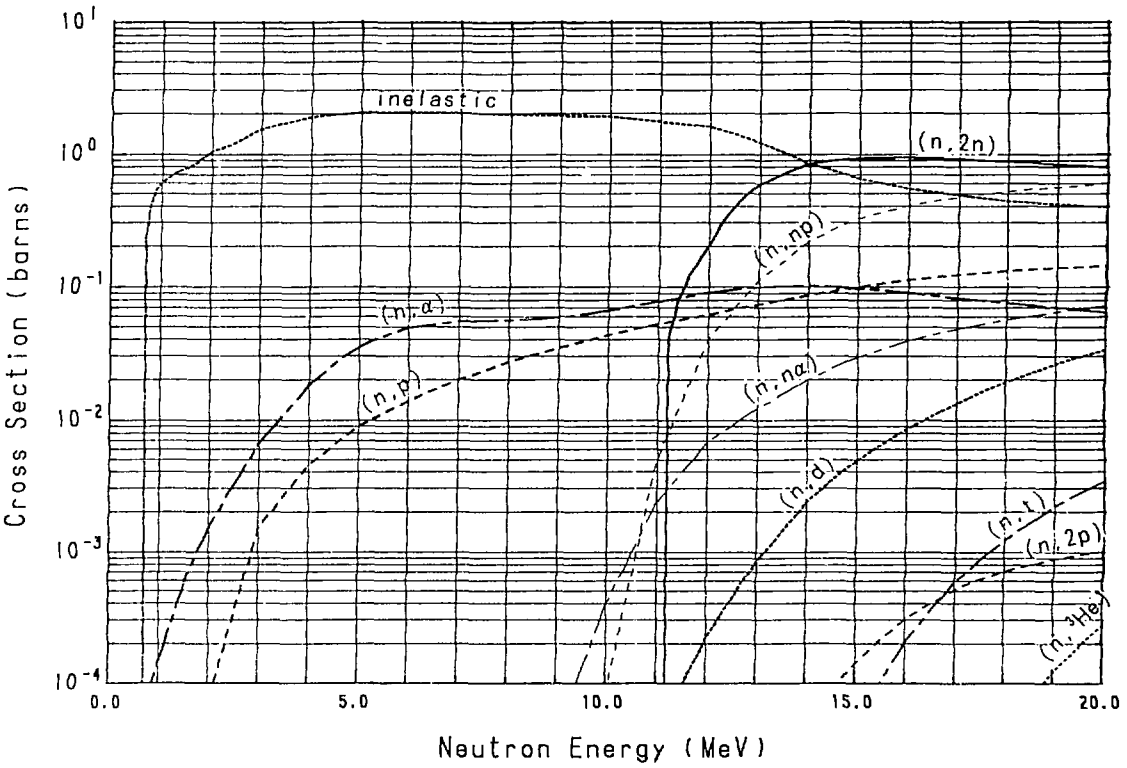

110mAg (4703)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

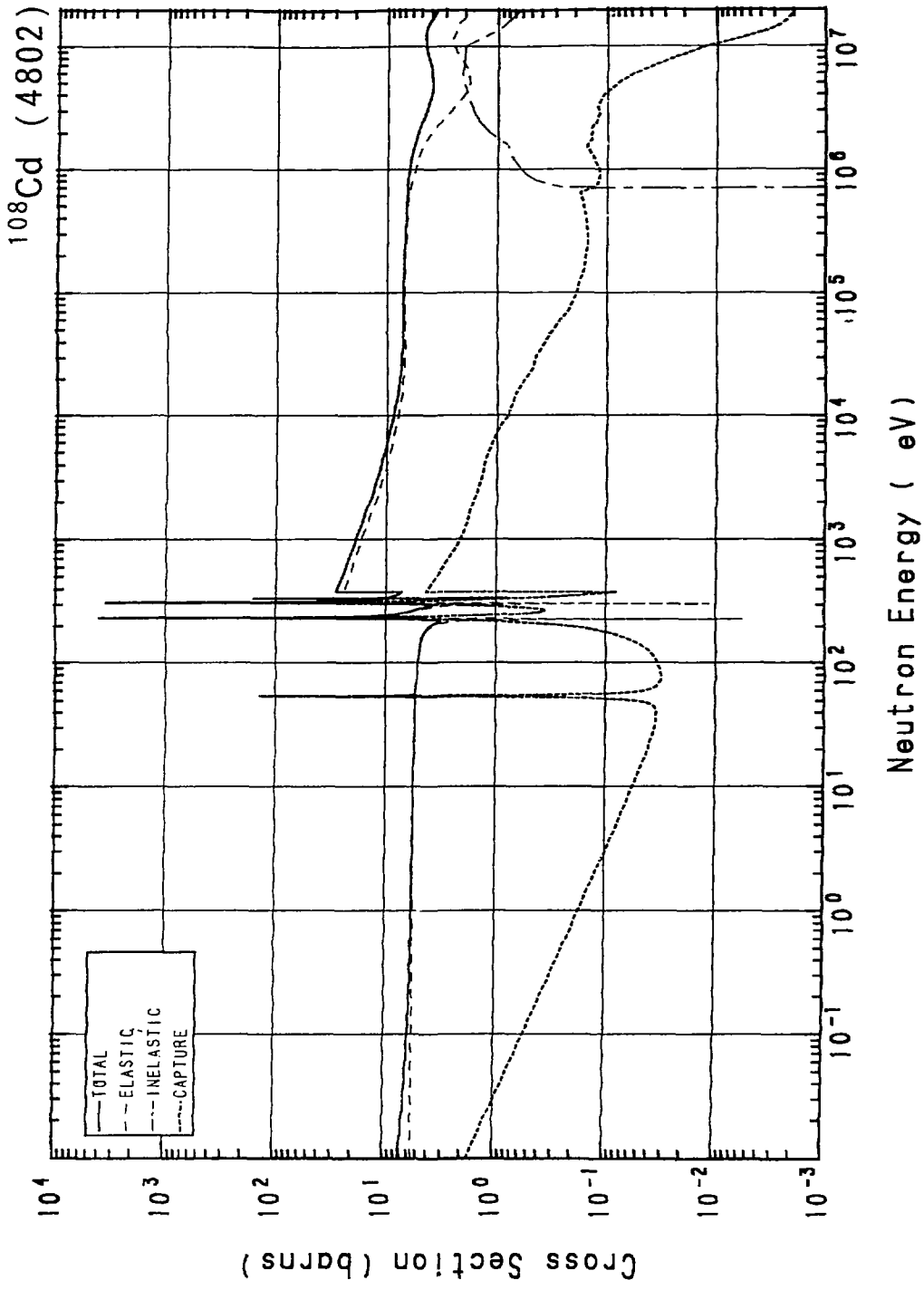

110mAg (4703)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

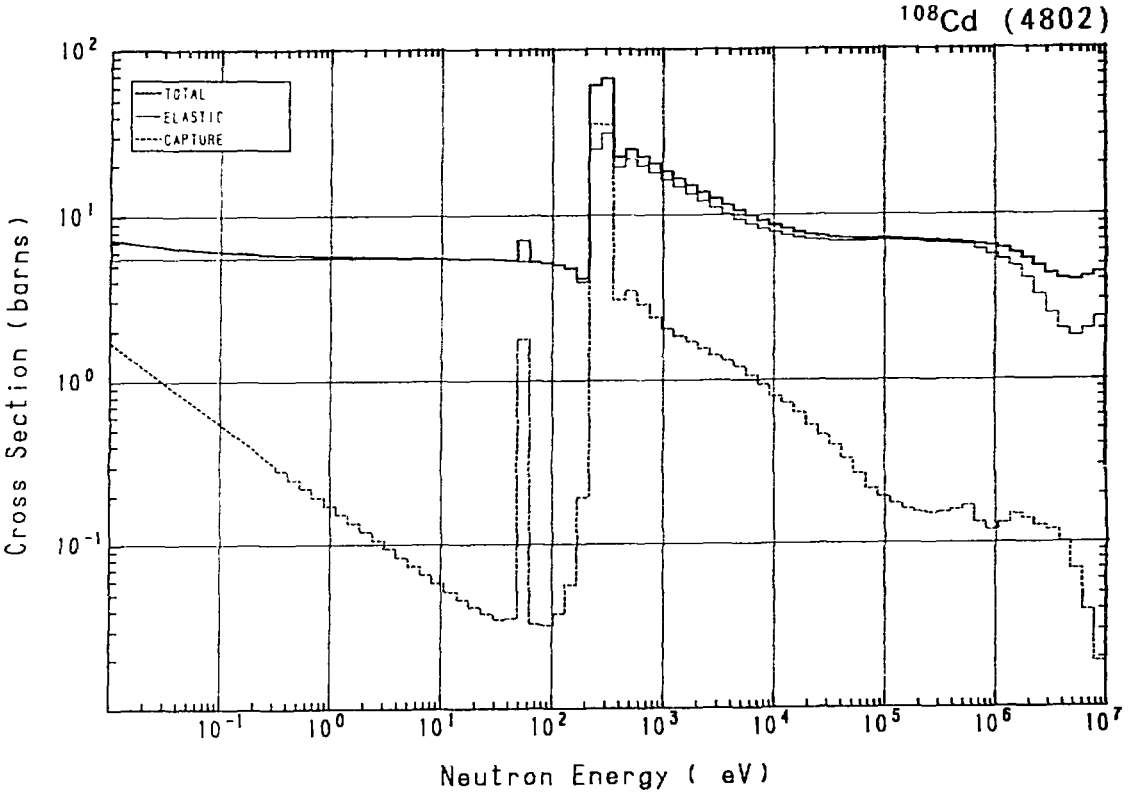

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,nα)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

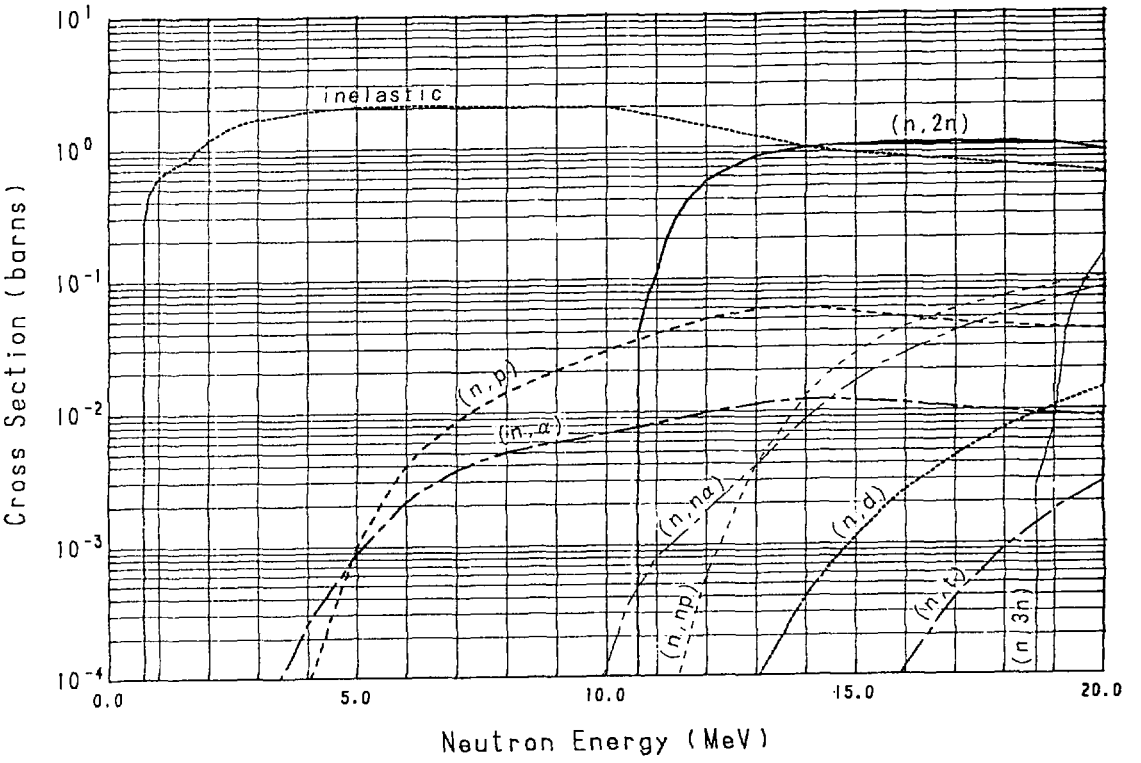

^{106}Cd (4801)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

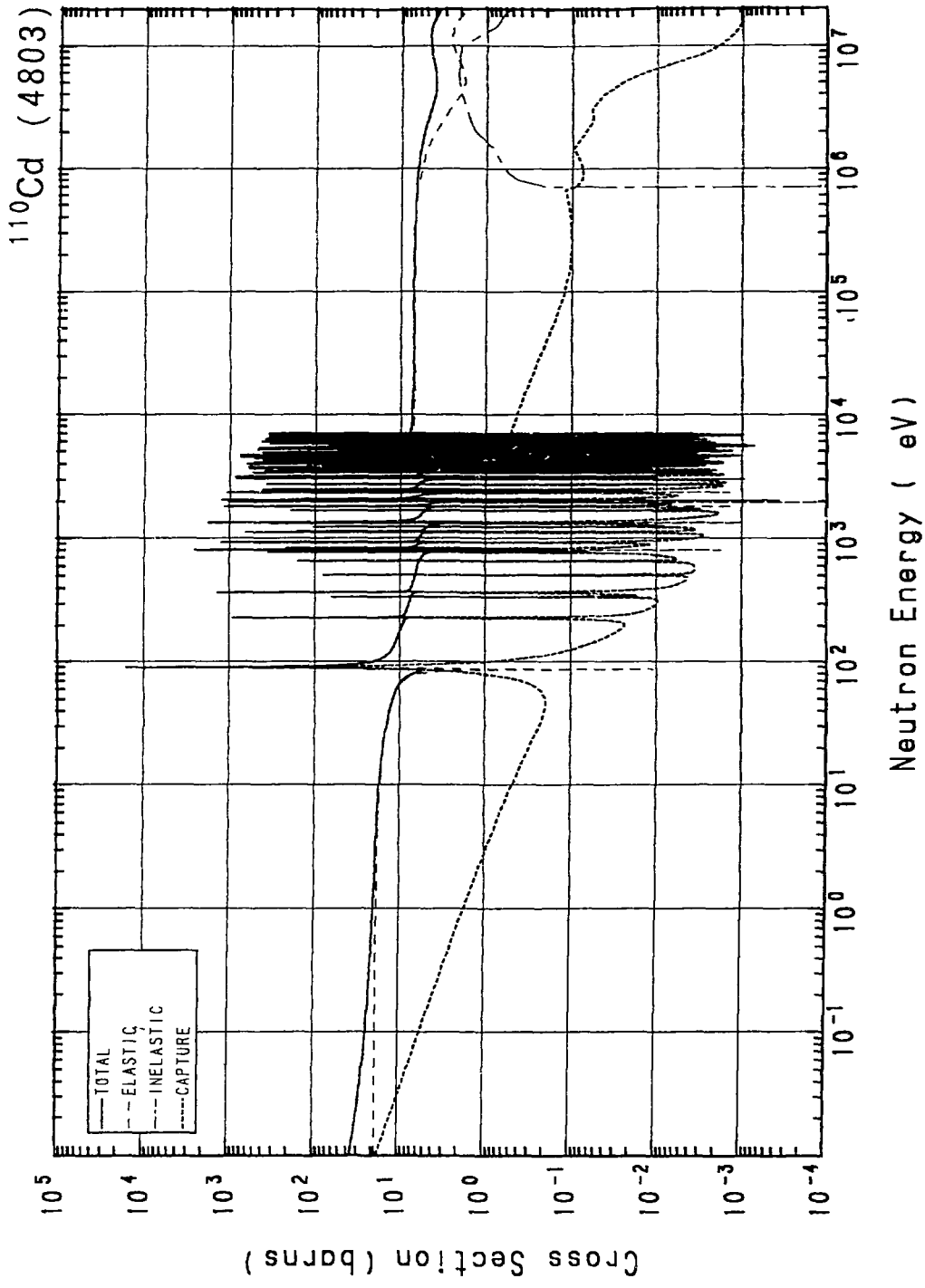

^{106}Cd (4801)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

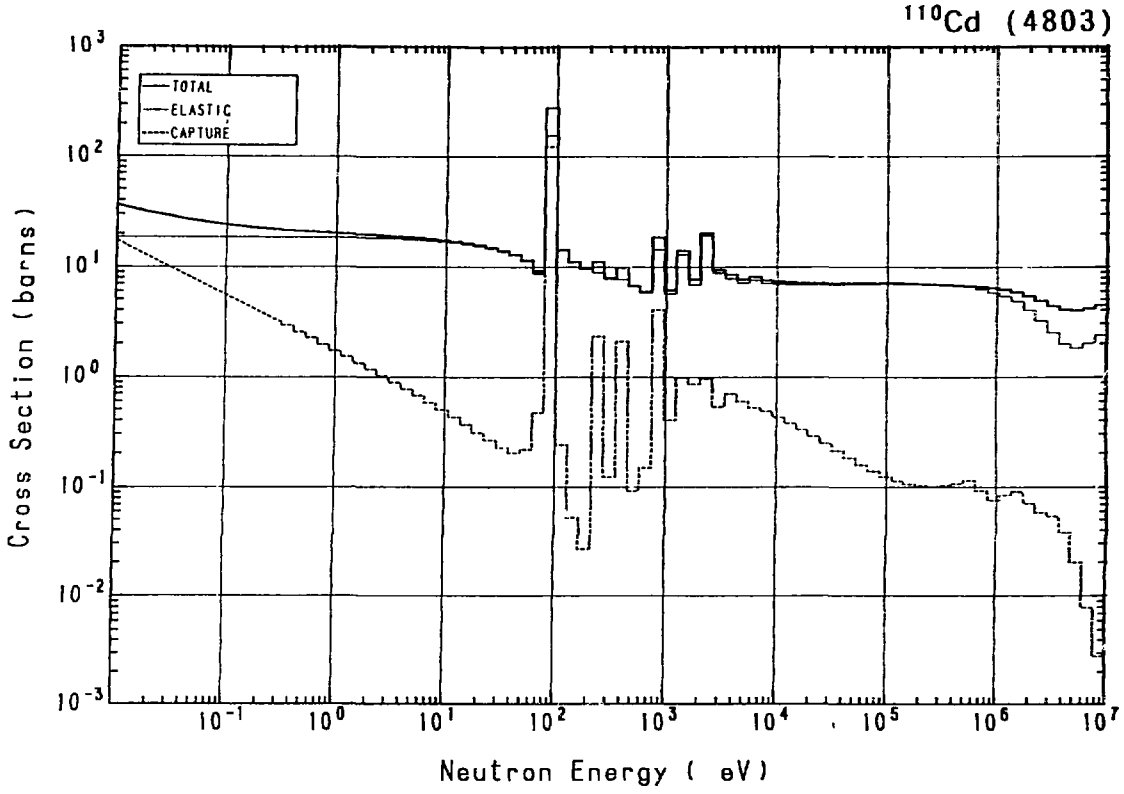

inelastic
(n,2n)
(n,np)
(n,α)
(n,p)
(n,nα)
(n,d)
(n,t)
(n,2p)
(n,³He)
Cross Section (barns)
Neutron Energy (MeV)

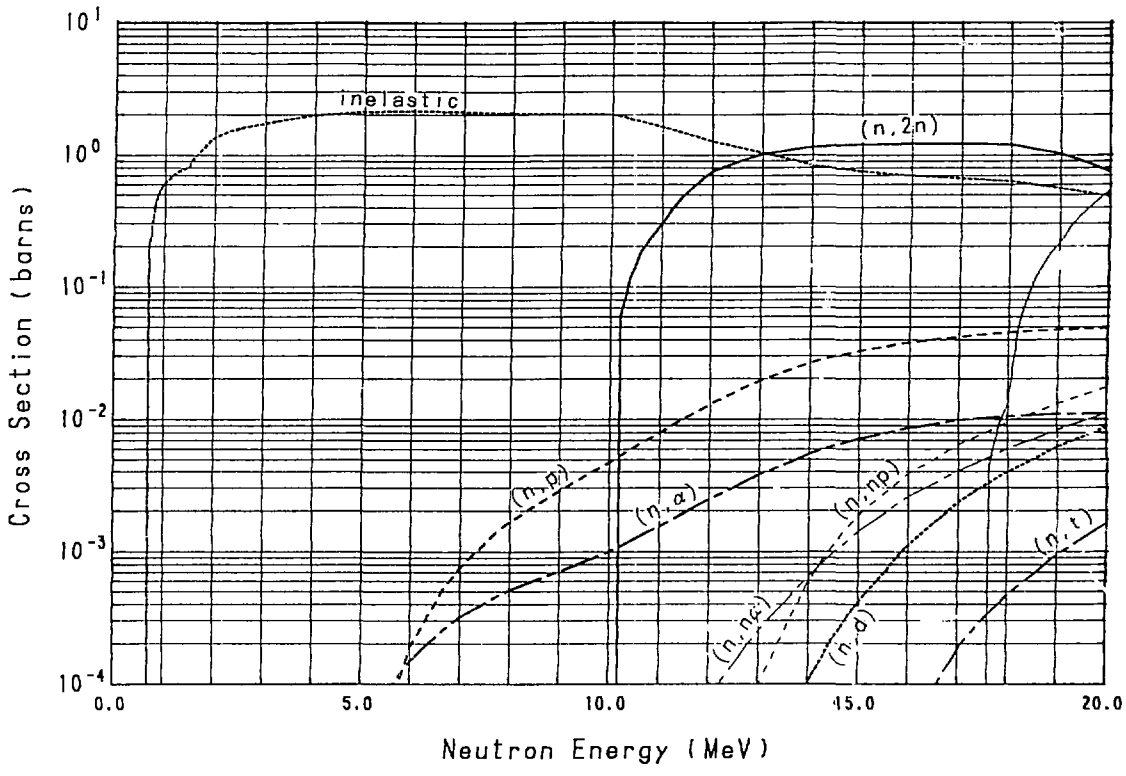

108Cd (4802)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

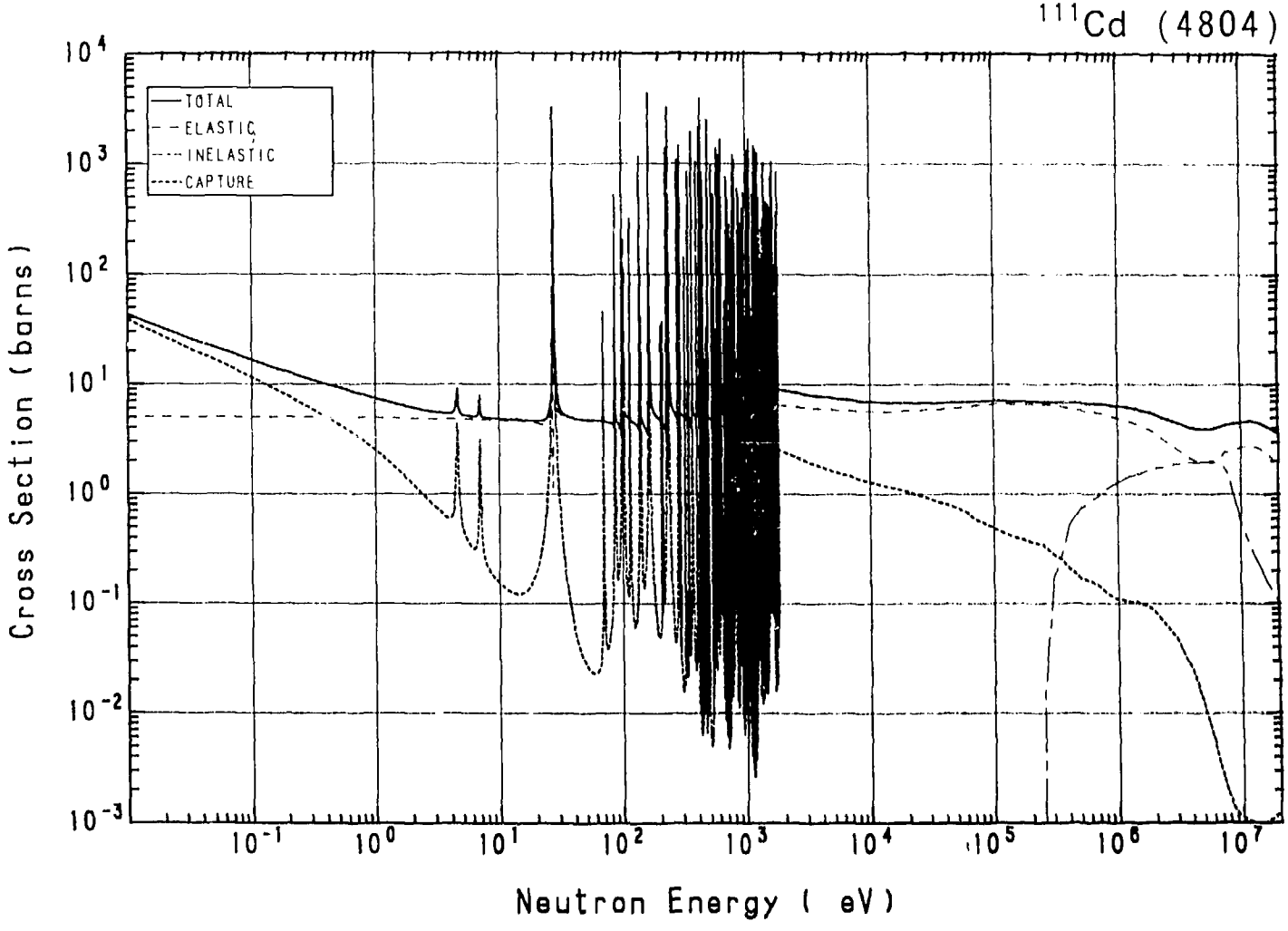

108Cd (4802)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

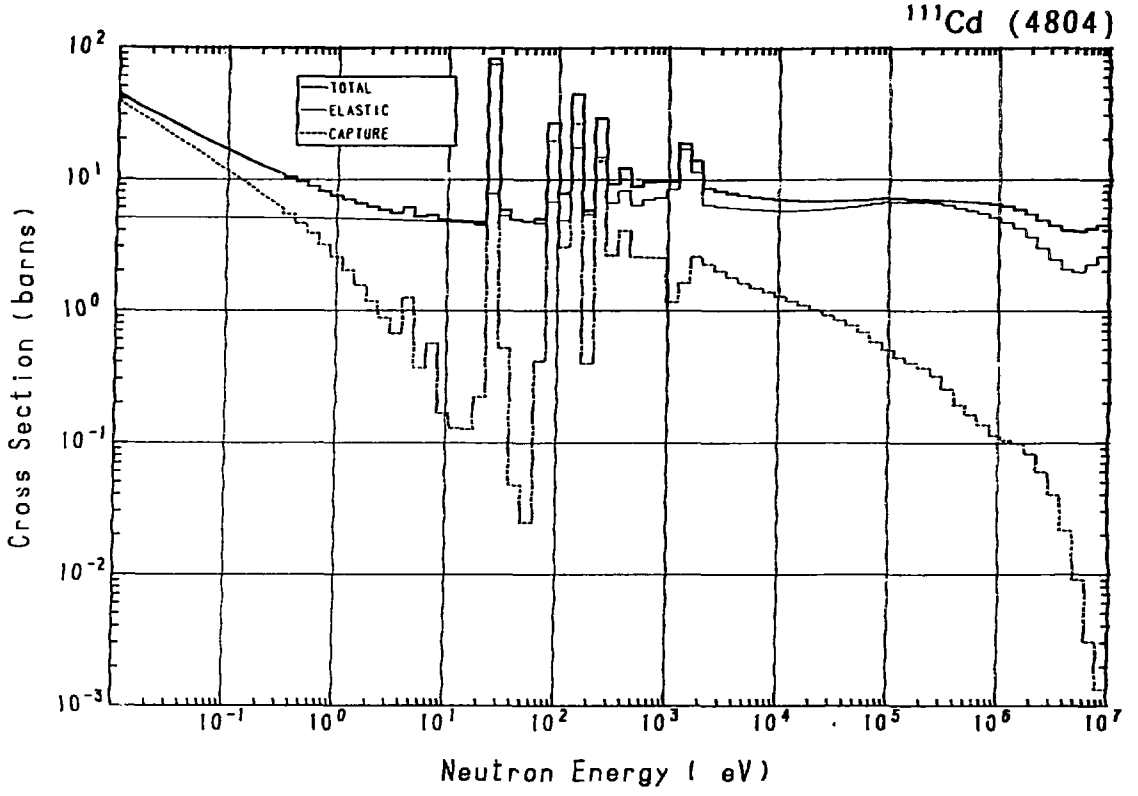

inelastic
(n,2n)
(n,p)
(n,α)
(n,nα)
(n,np)
(n,d)
(n,t)
(n,3n)
Cross Section (barns)
Neutron Energy (MeV)

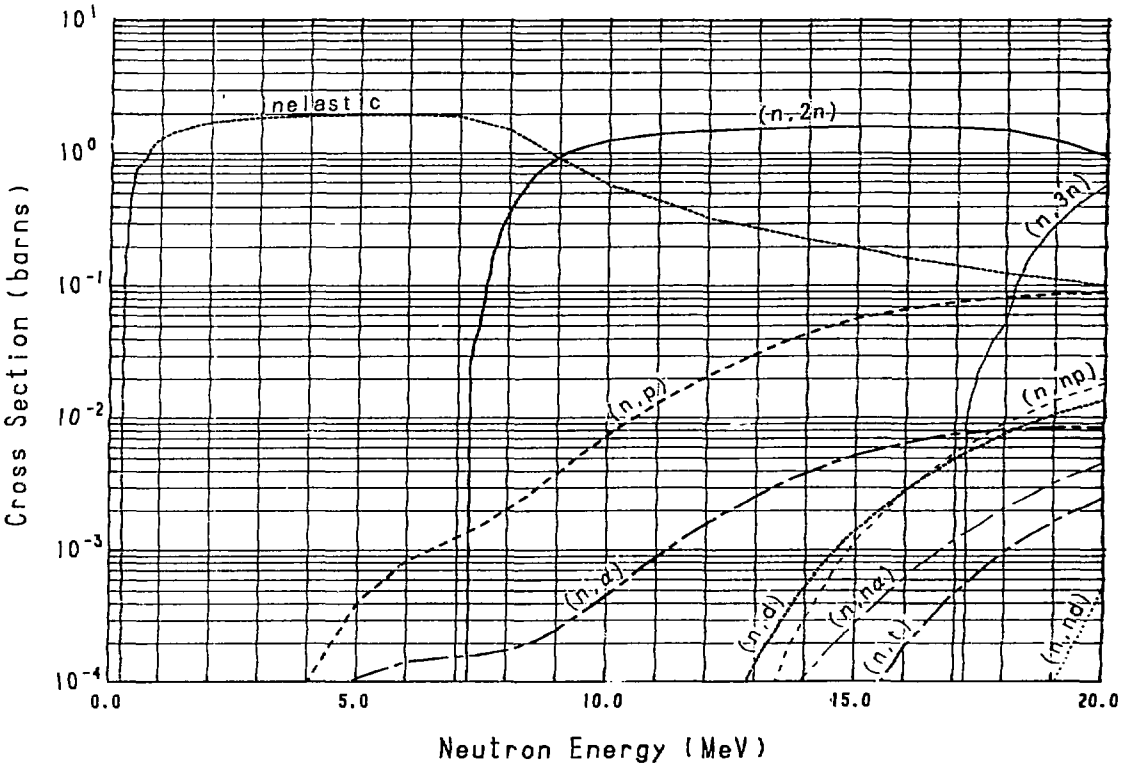

110Cd (4803)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

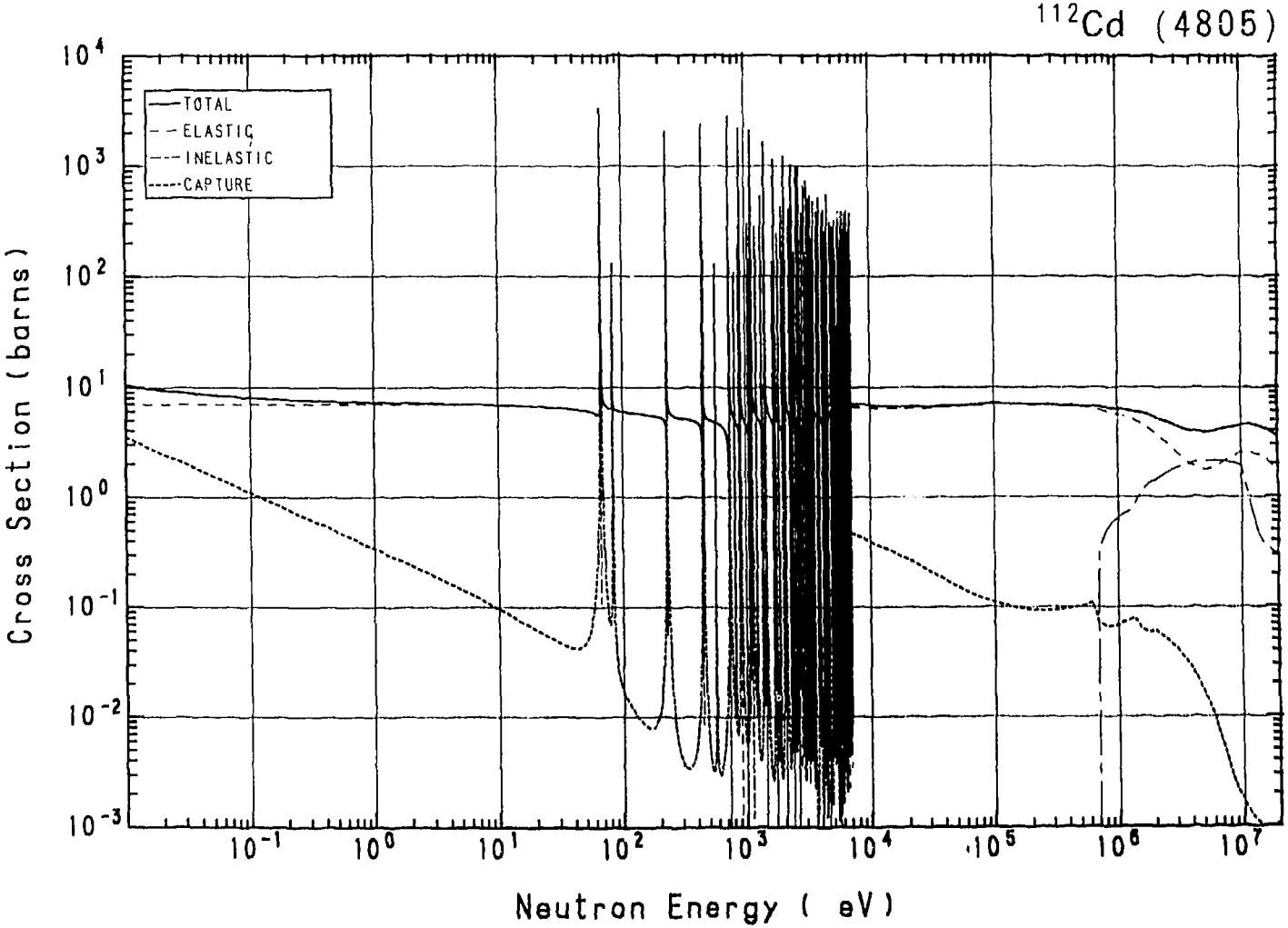

^{110}Cd (4803)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

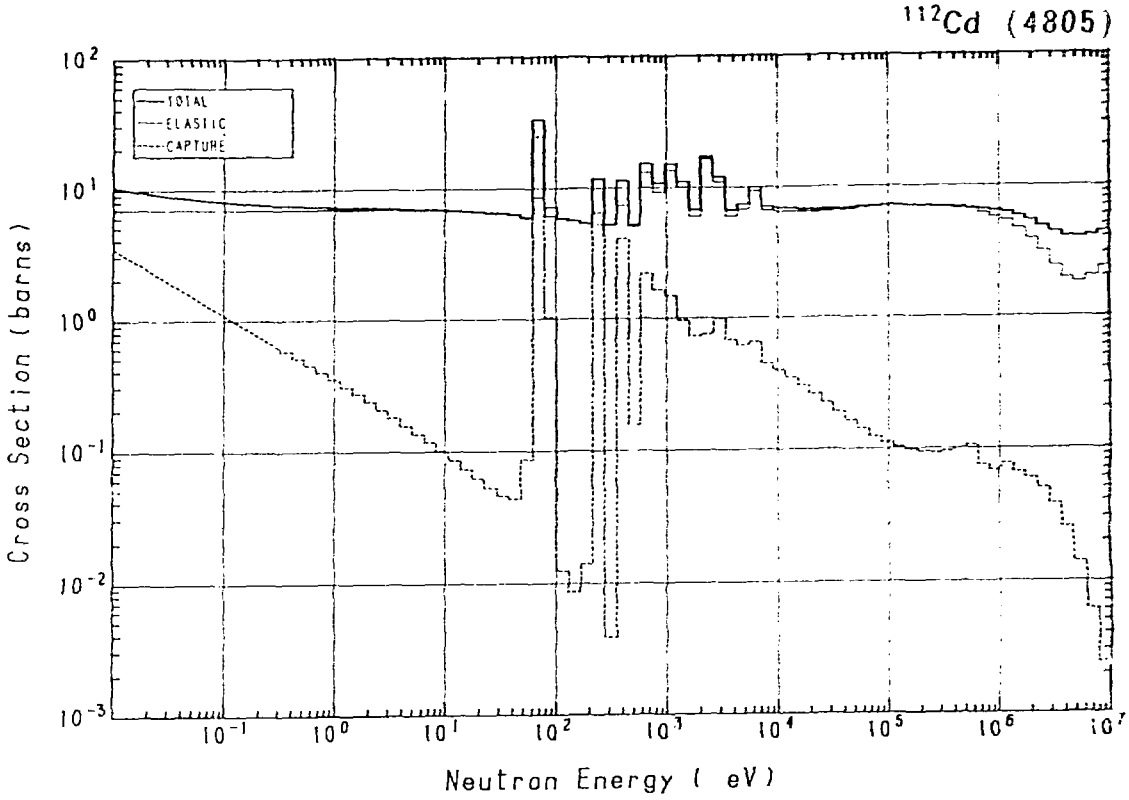

inelastic
(n,2n)
(n,p)
(n,α)
(n,np)
(n,nα)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

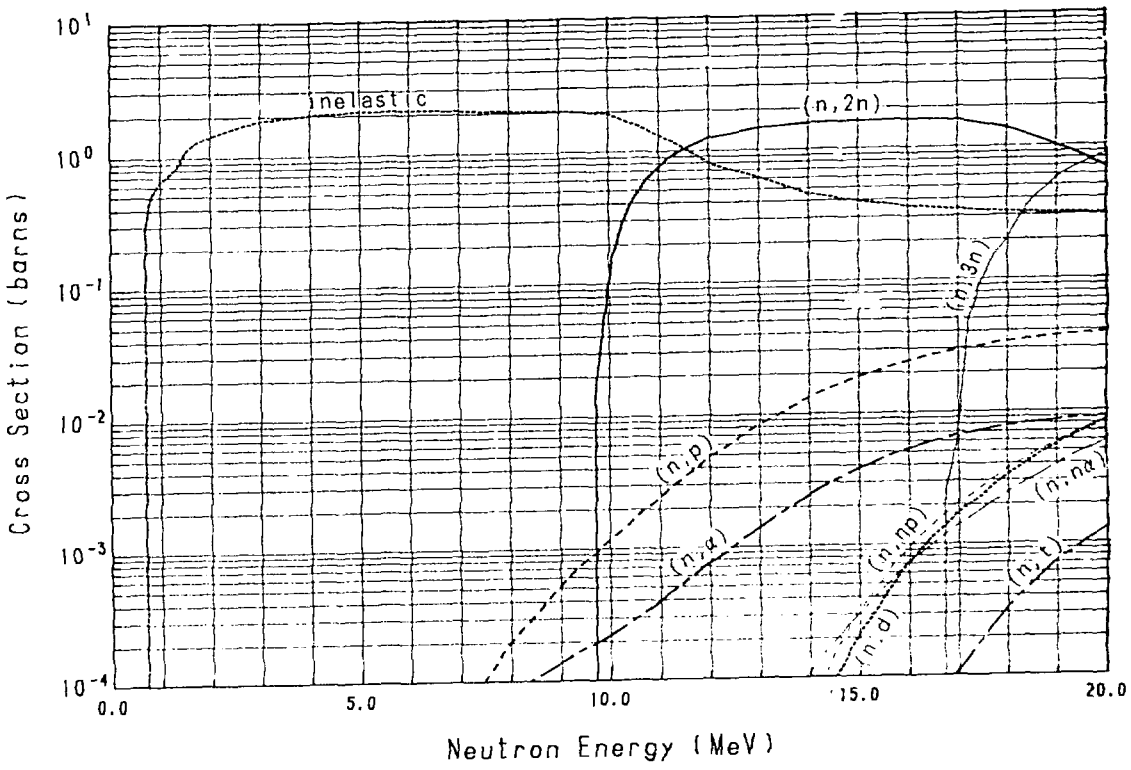

^{111}Cd (4804)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

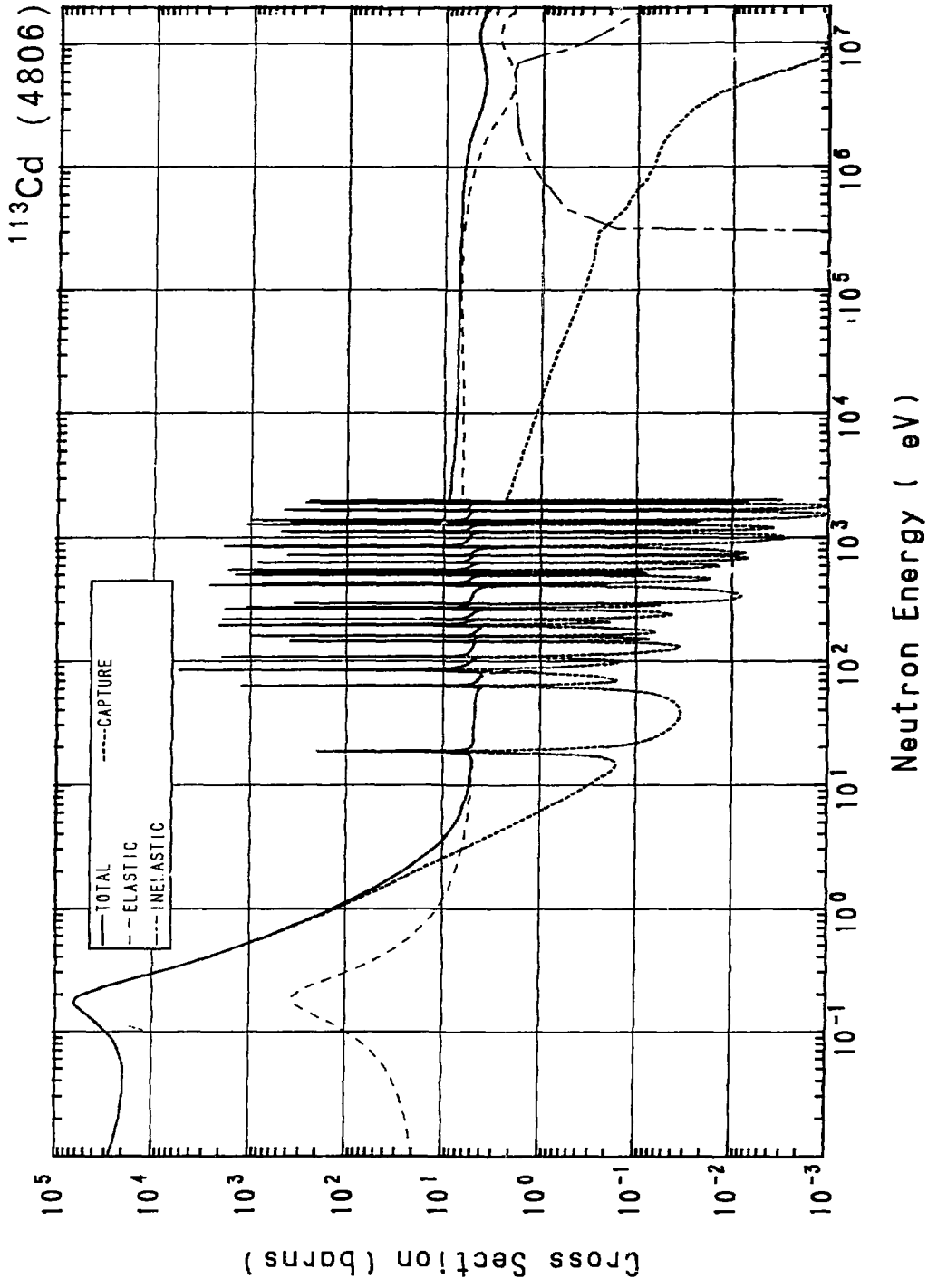

^{111}Cd (4804)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

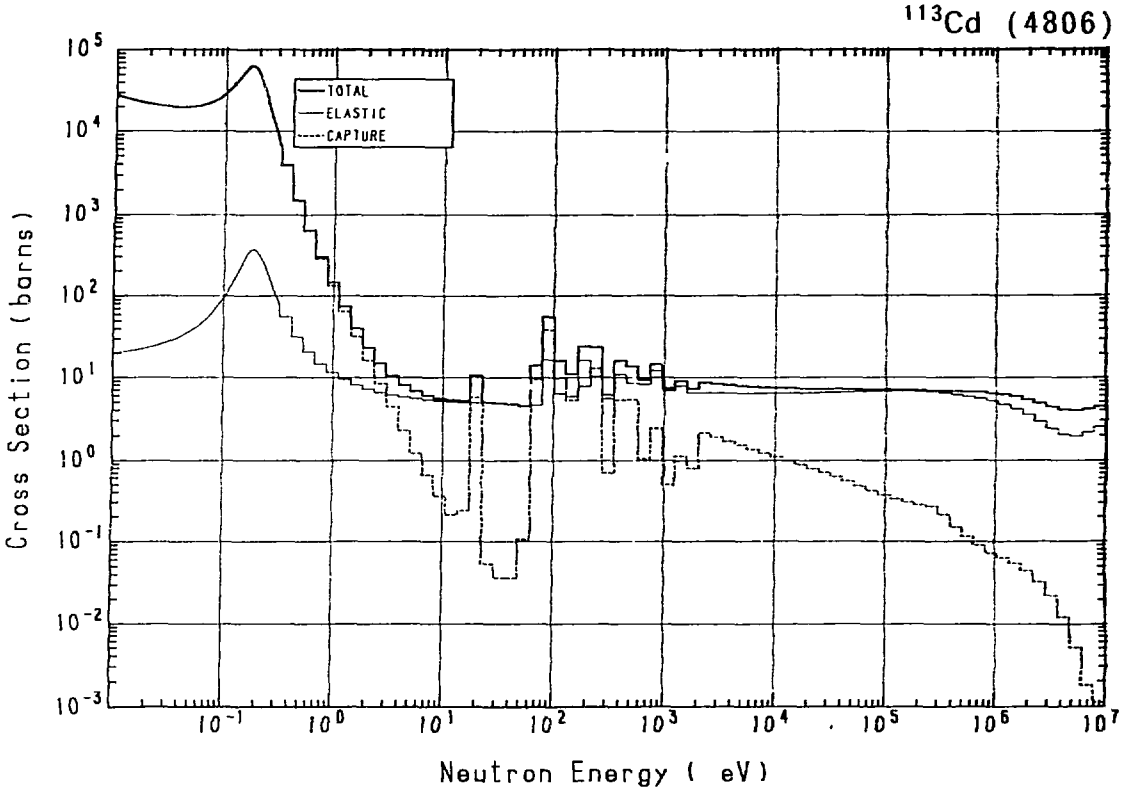

nelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,d)
(n,nd)
(n,nα)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

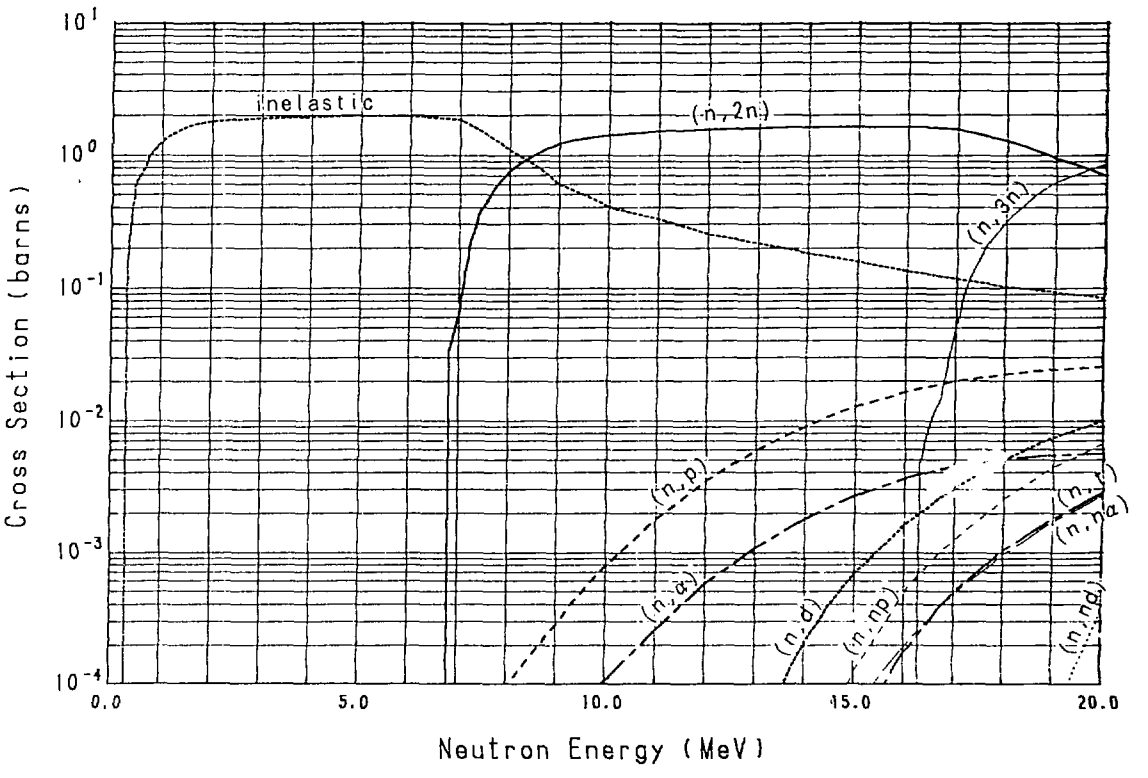

^{112}Cd (4805)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

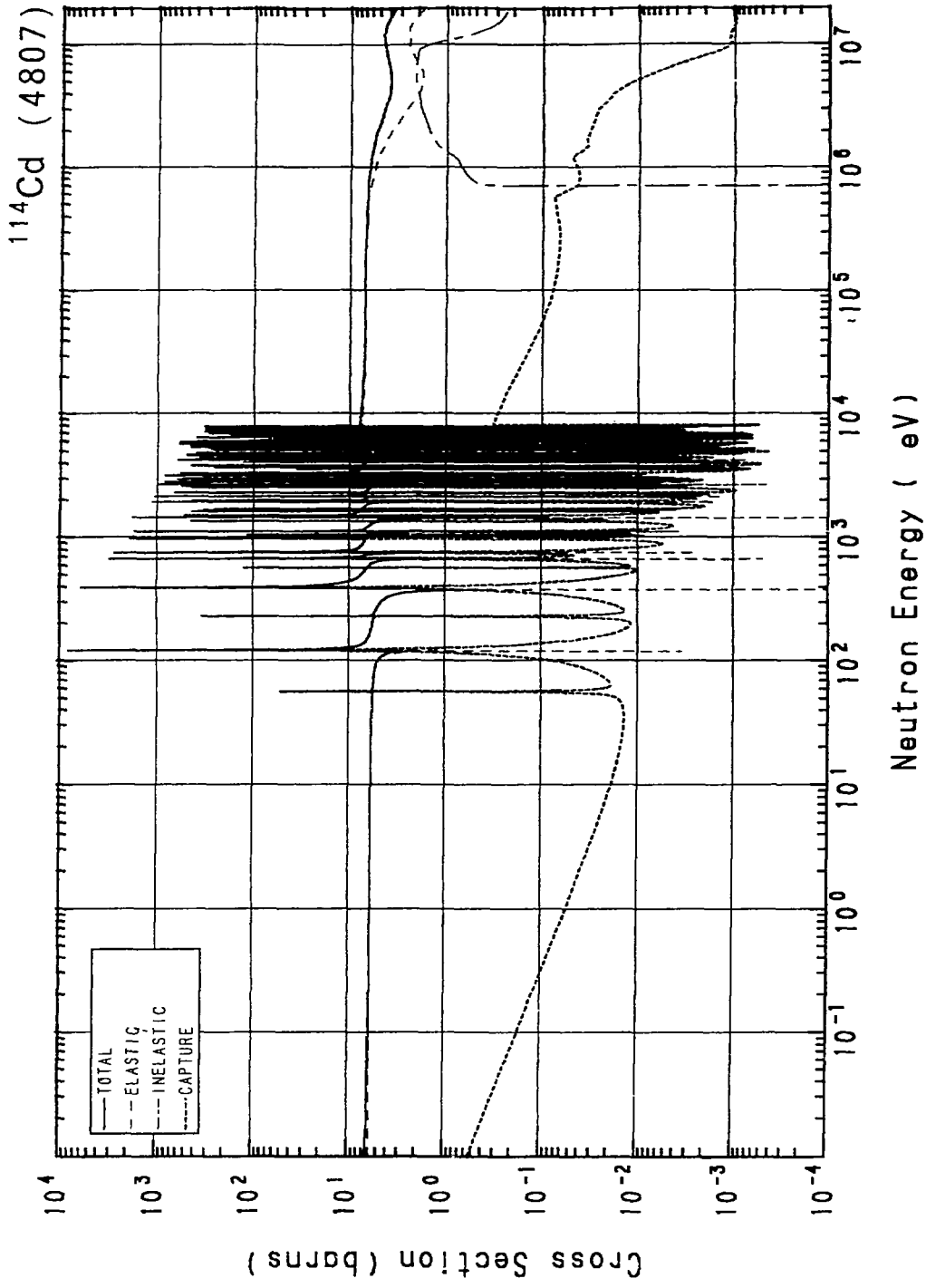

^{112}Cd (4805)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

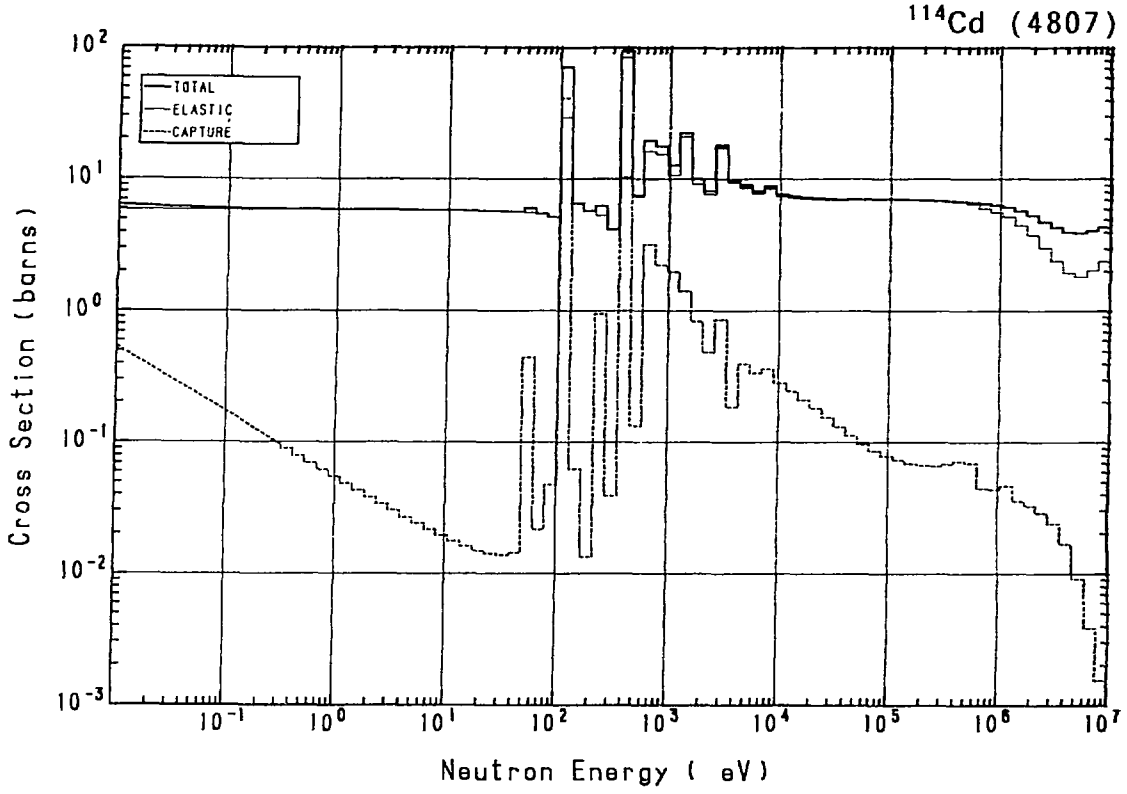

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,nα)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

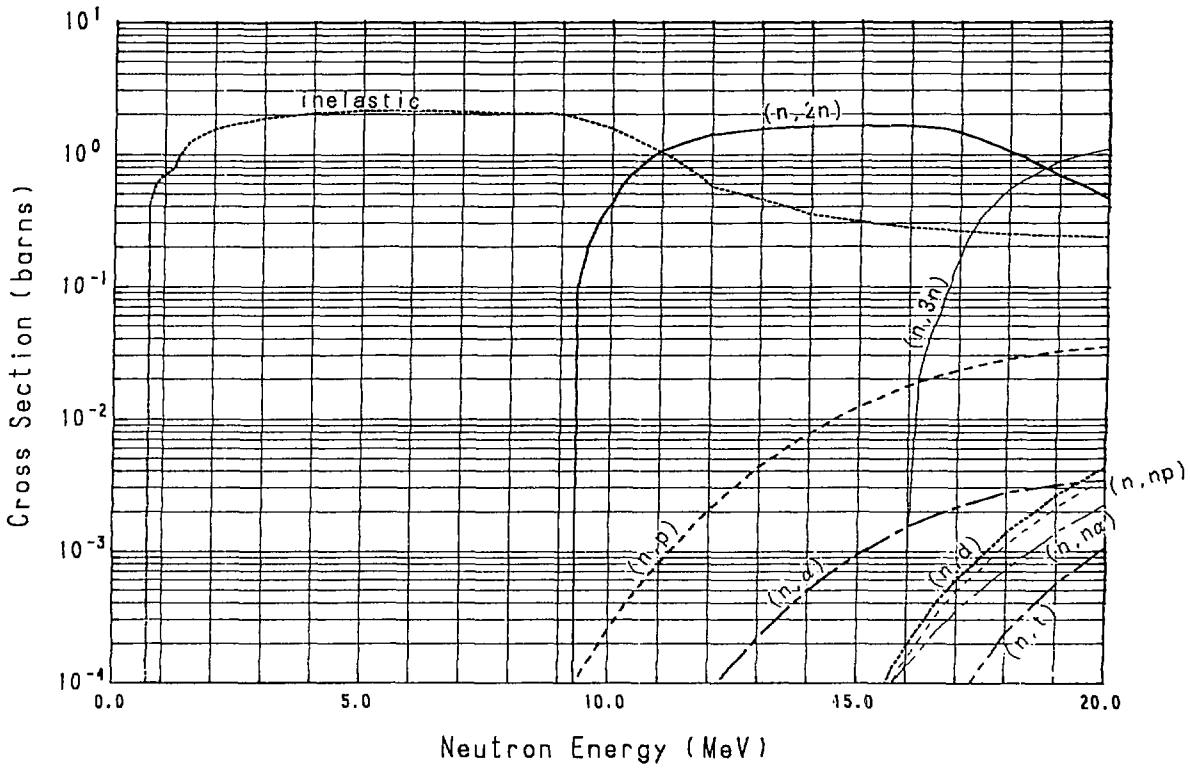

113Cd (4806)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

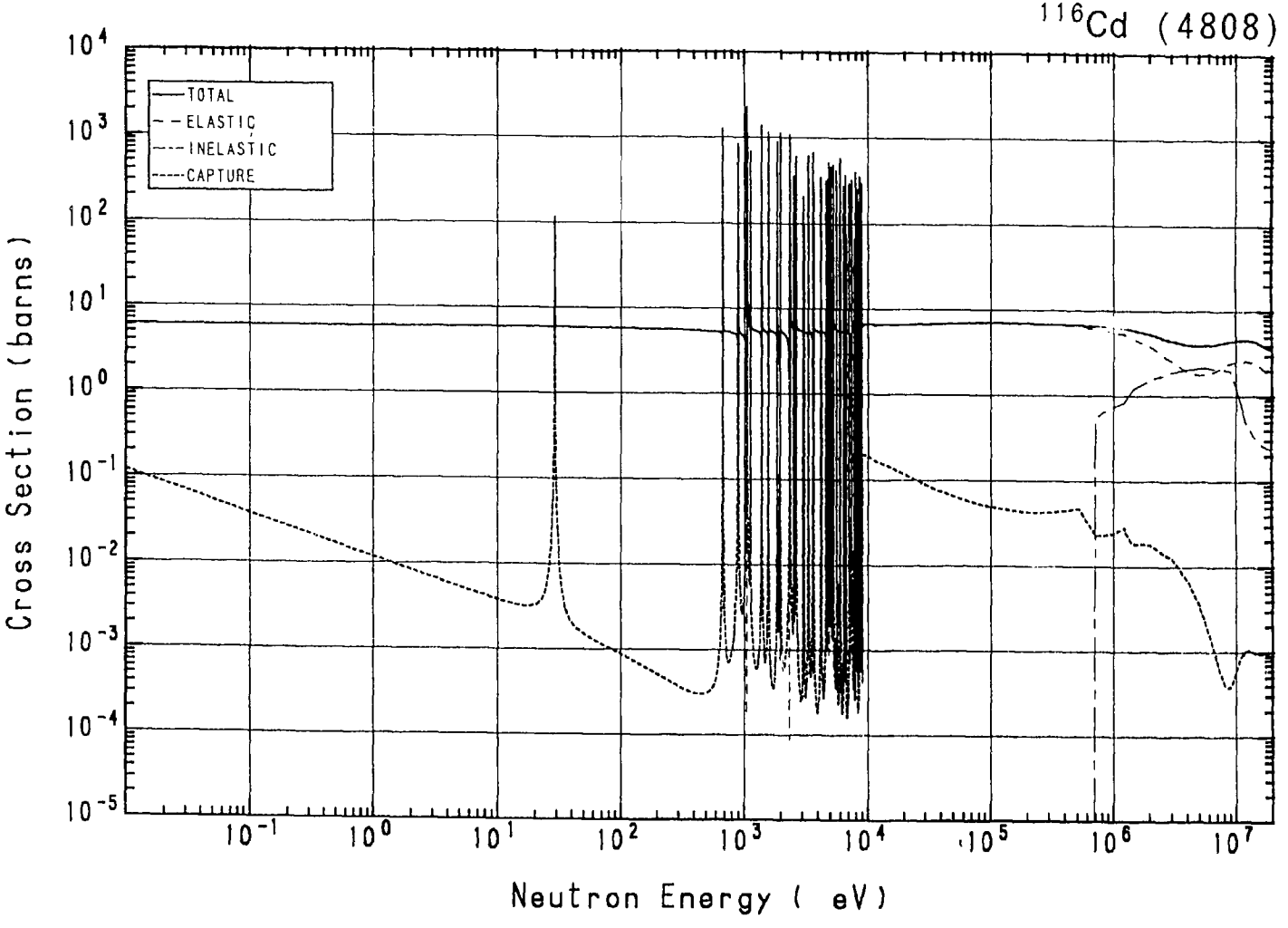

113Cd (4806)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

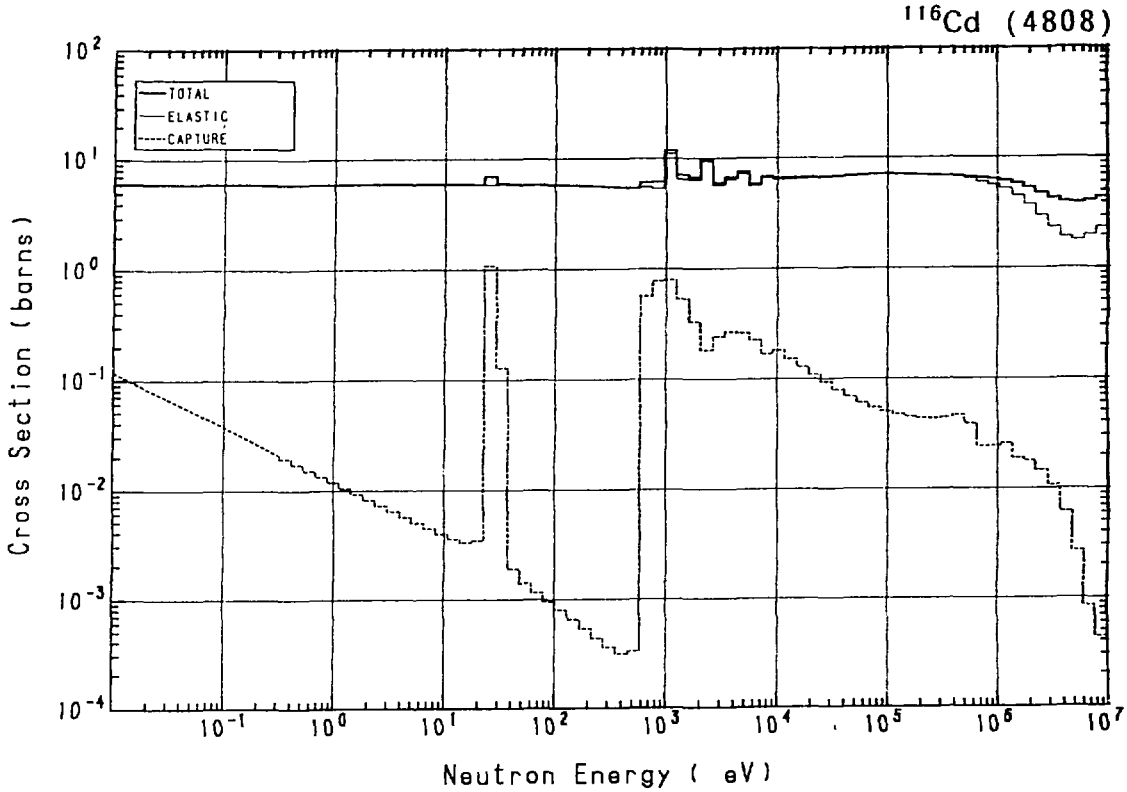

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,t)
(n,nα)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

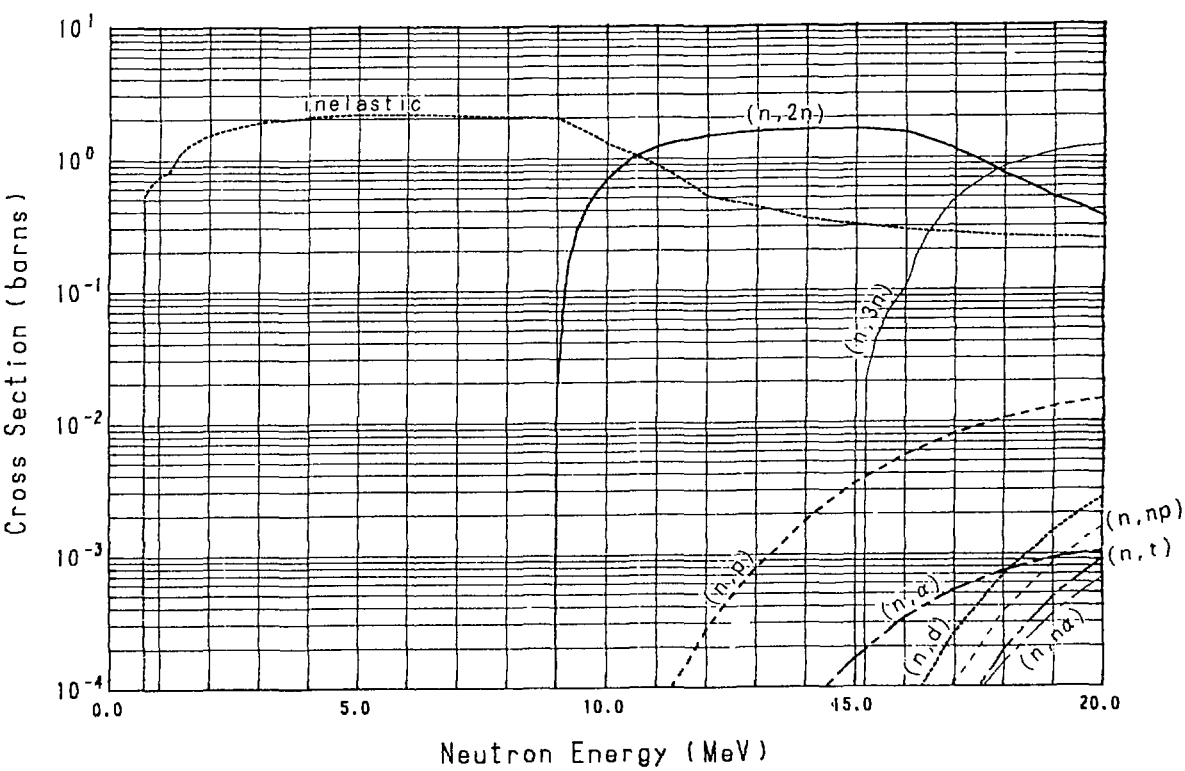

114Cd (4807)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

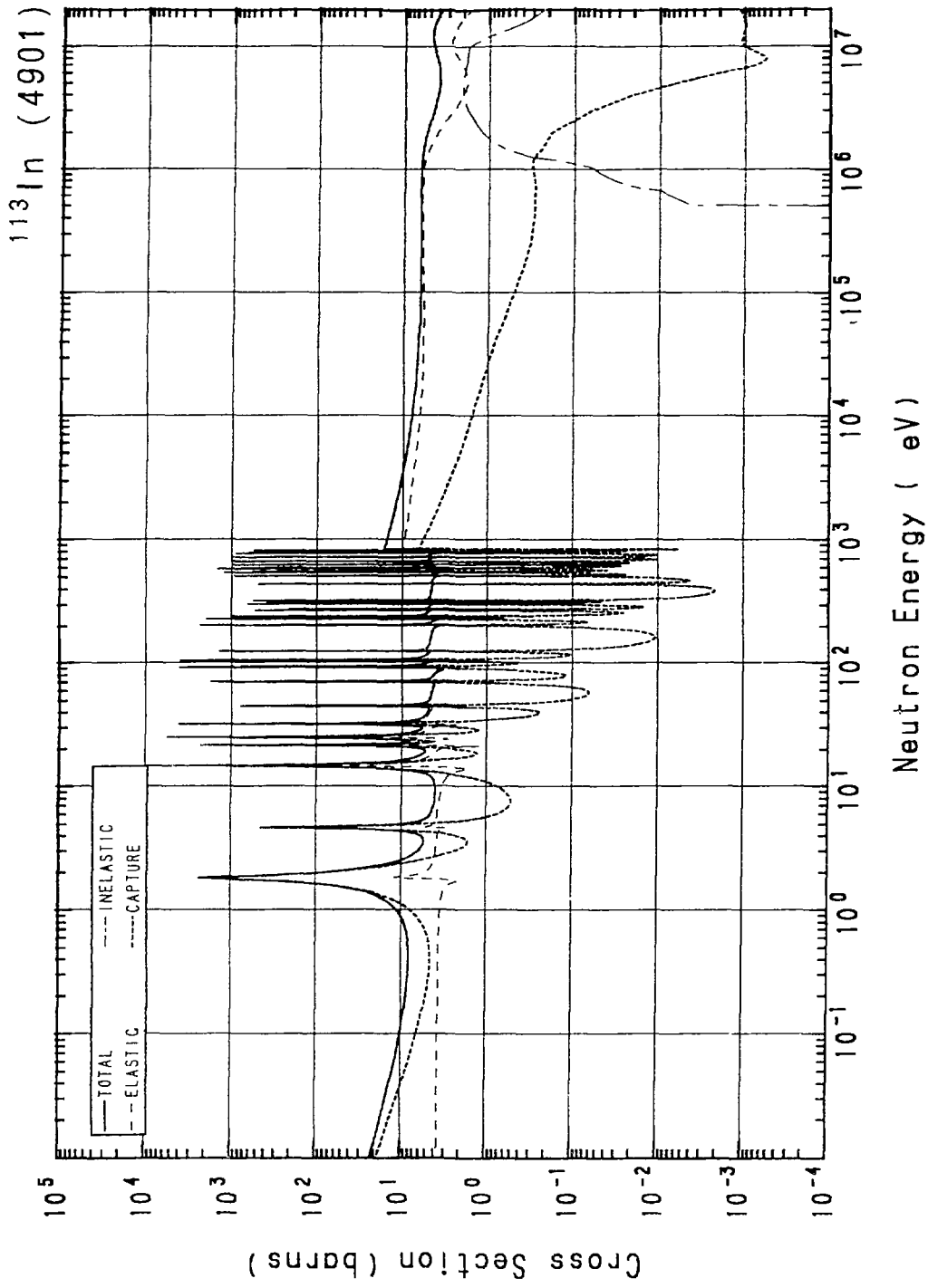

114Cd (4807)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

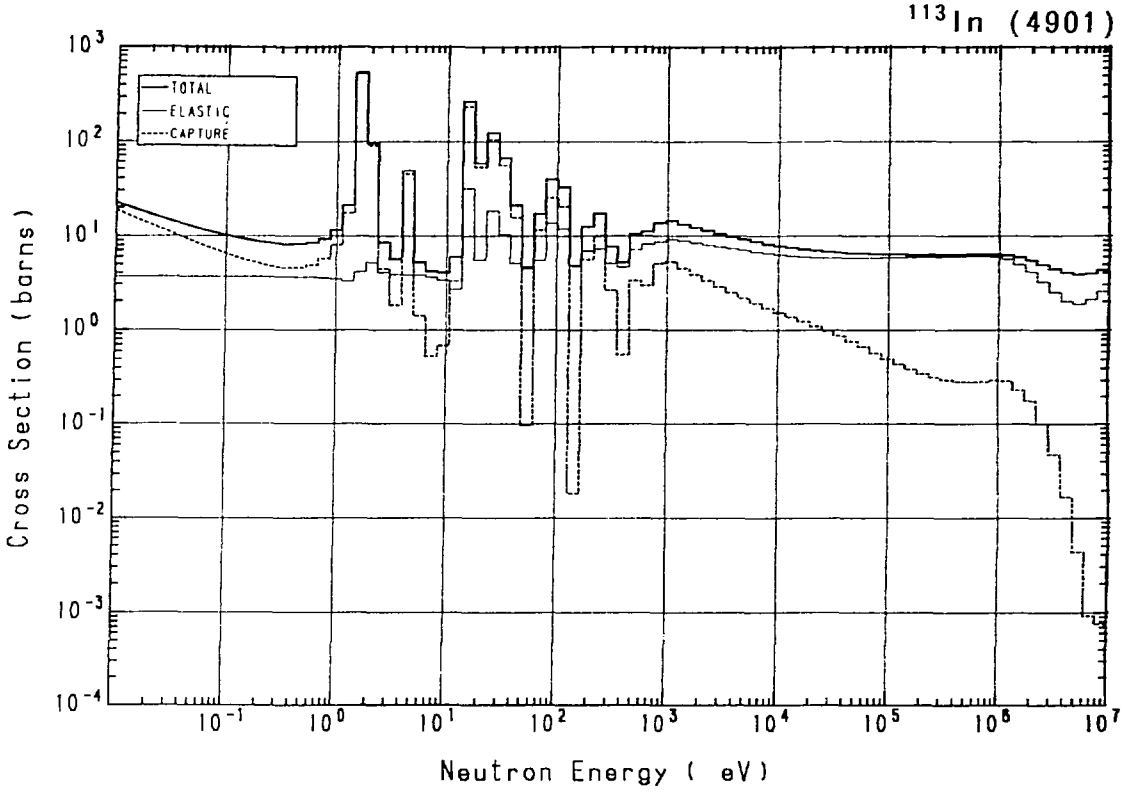

inelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,α)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

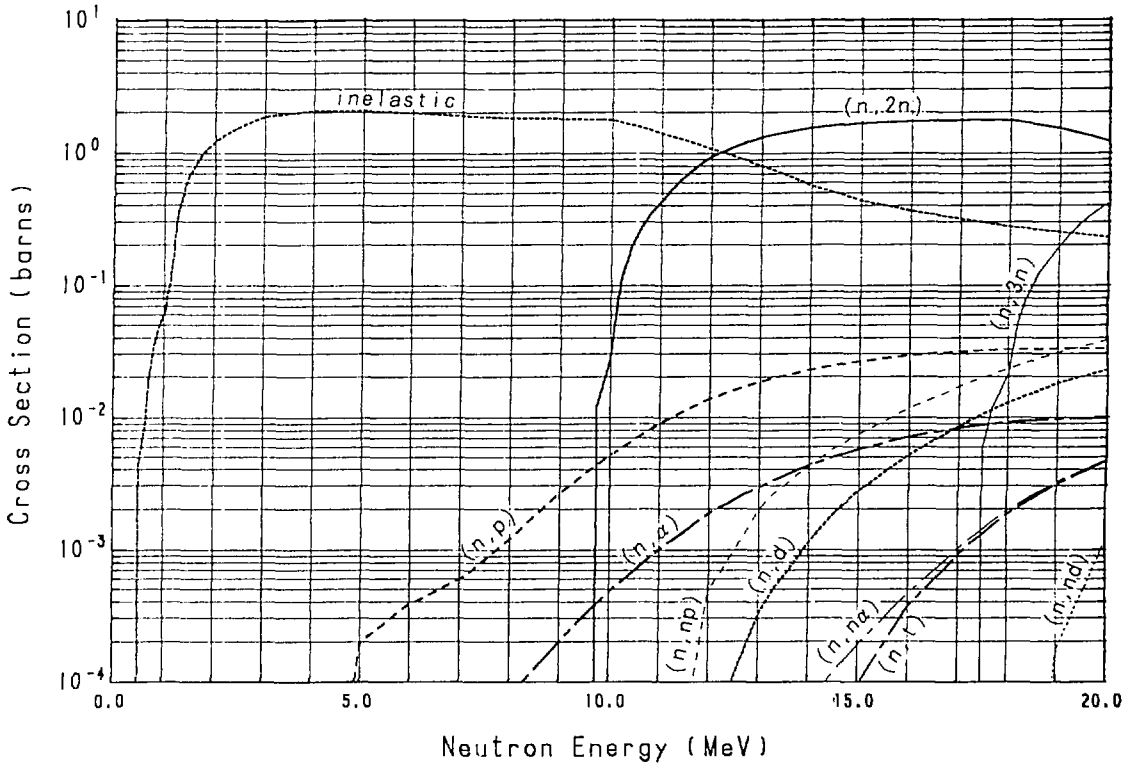

^{116}Cd (4808)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

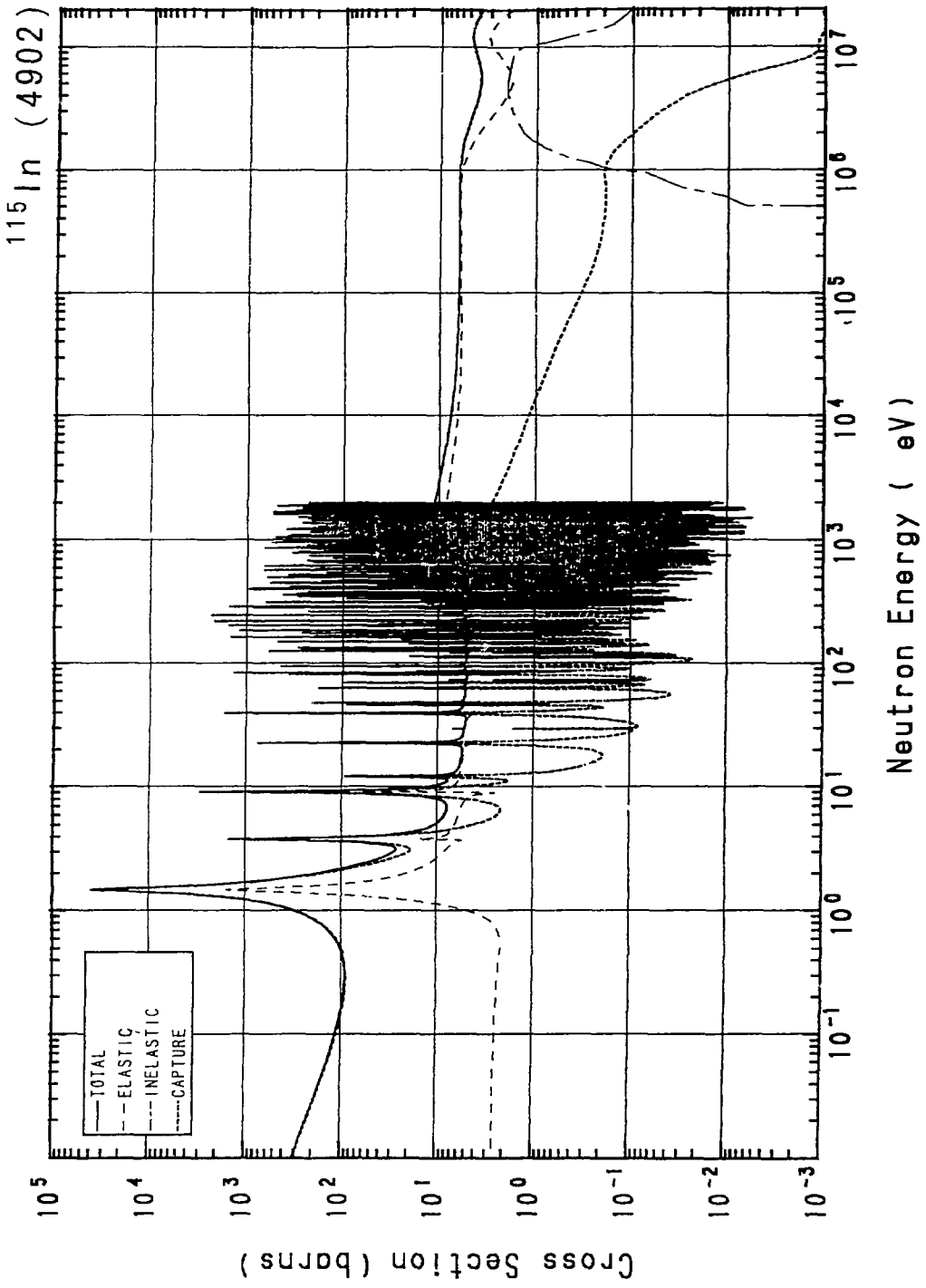

116Cd (4808)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

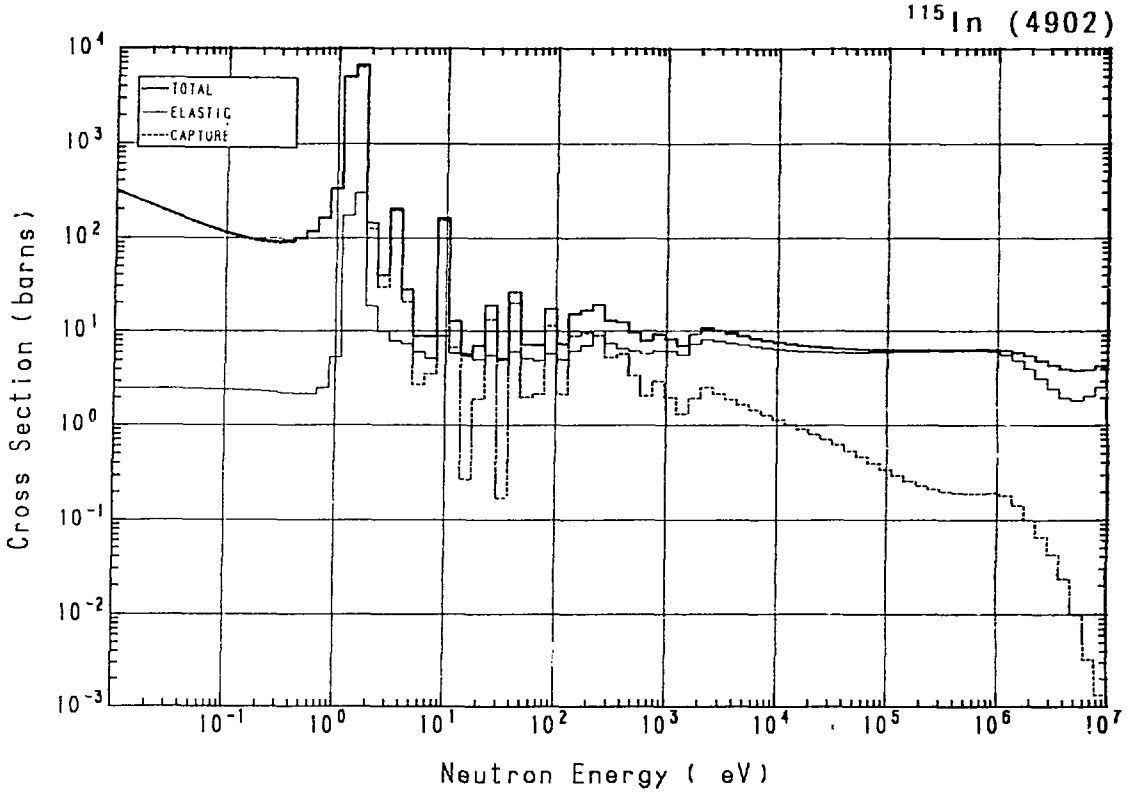

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,np)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

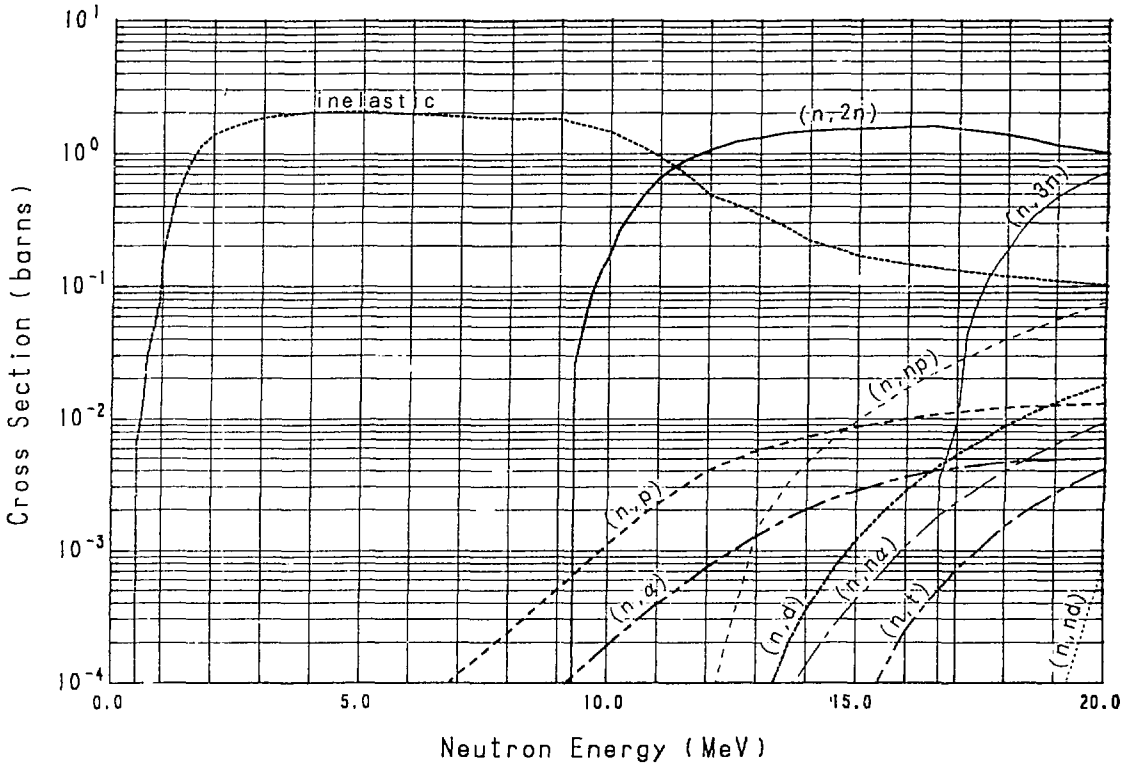

^{113}In (4901)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

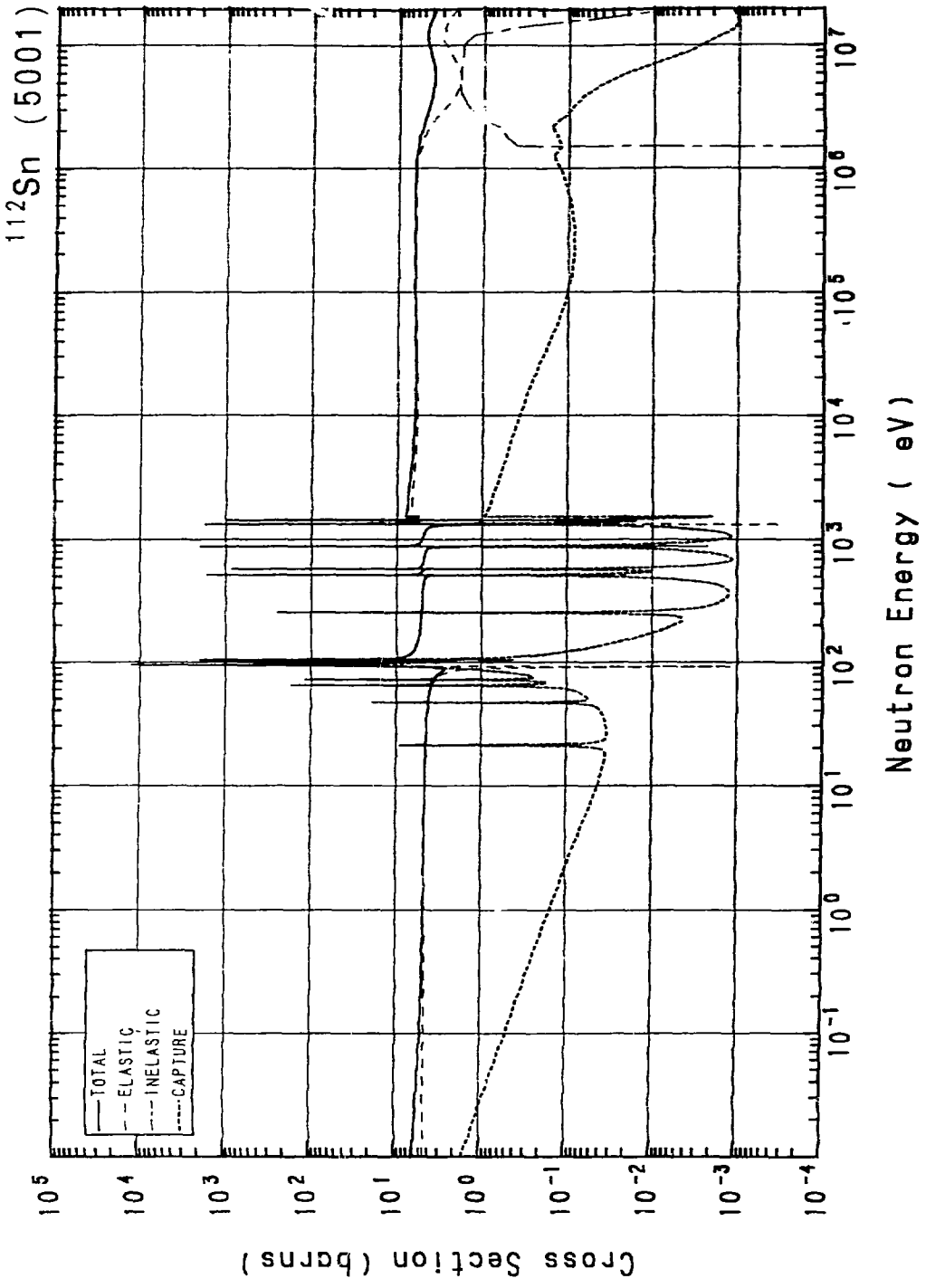

^{113}In (4901)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

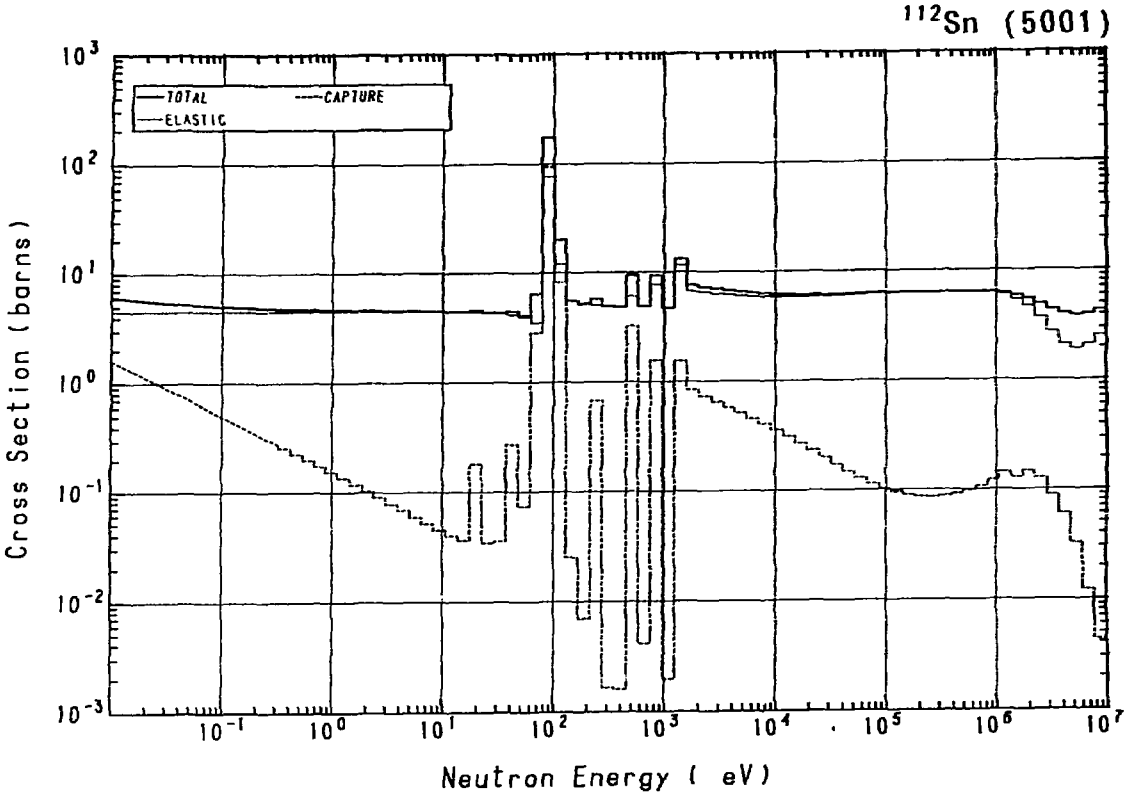

inelastic
(n,,2n,)
(n,,3n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,nα)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

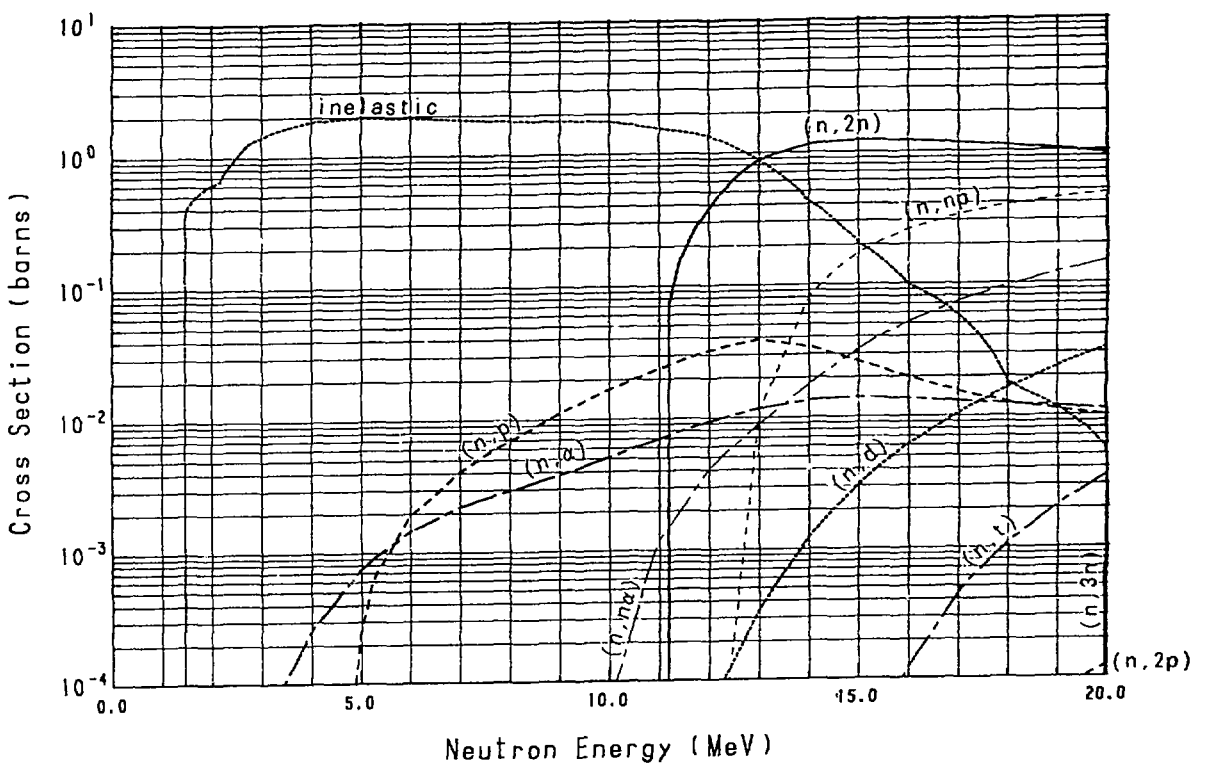

115In (4902)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

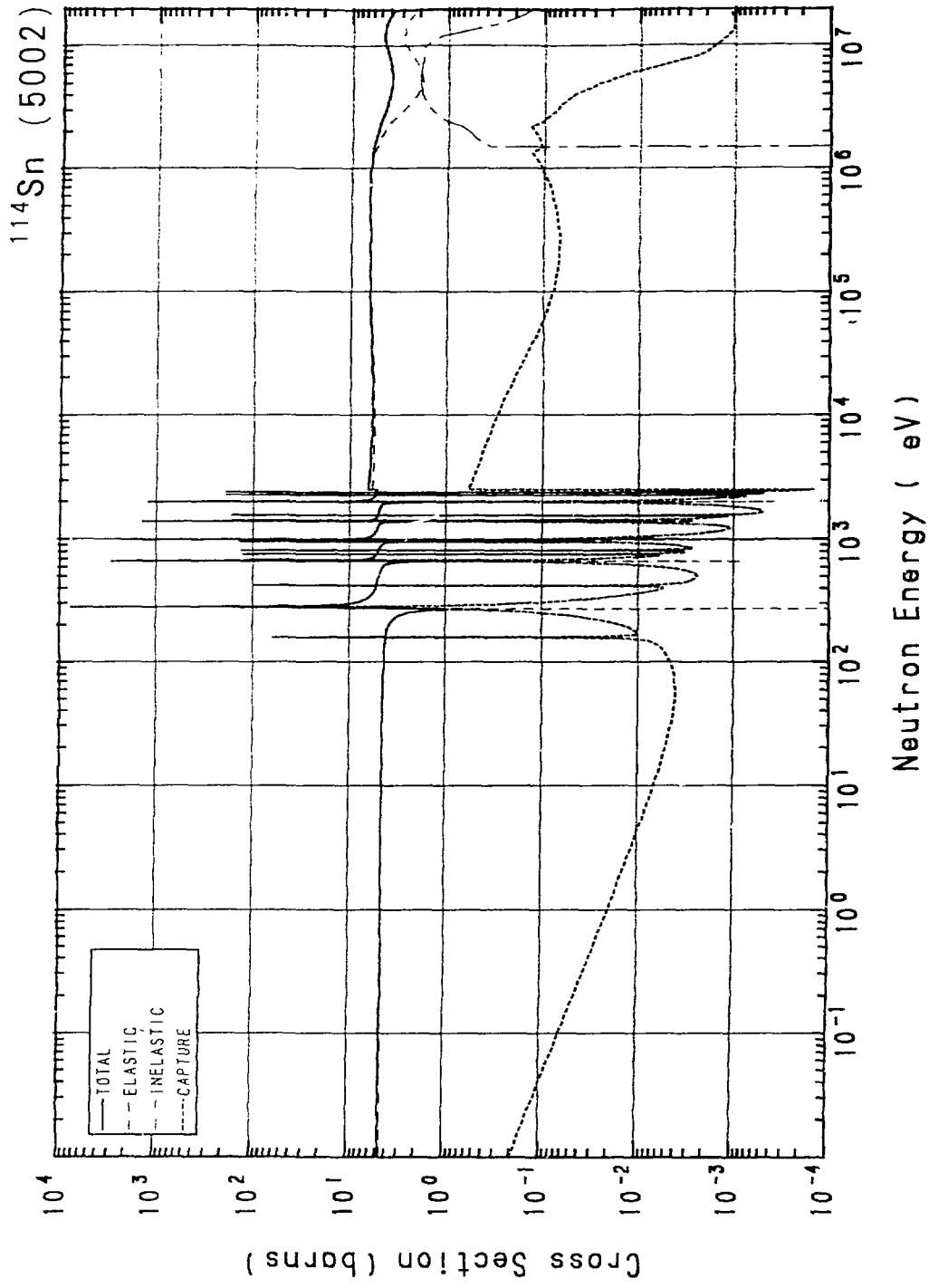

115In (4902)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

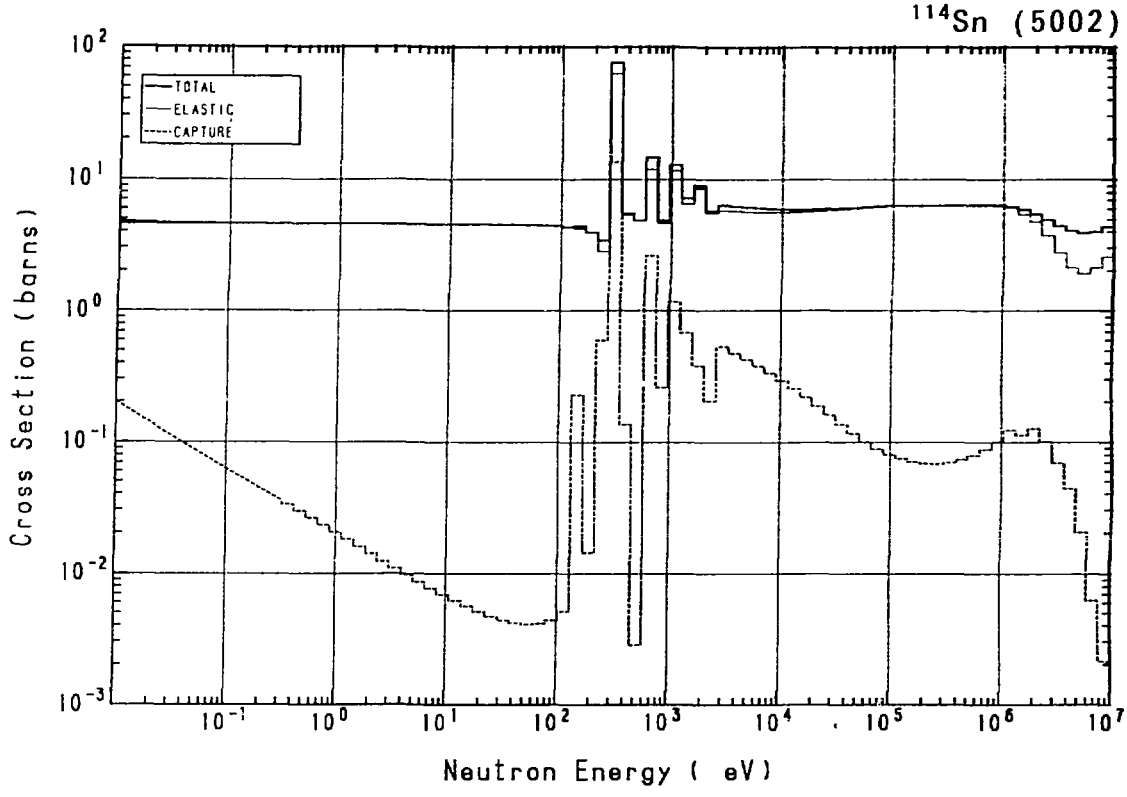

inelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

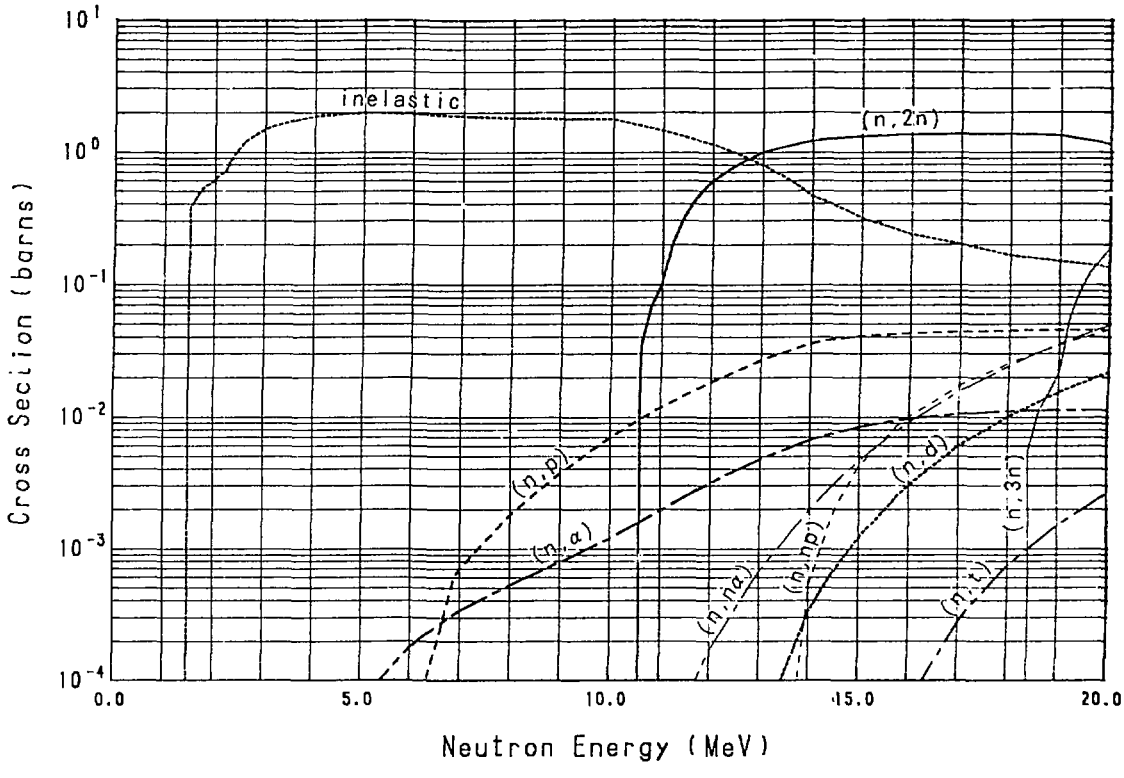

112Sn (5001)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

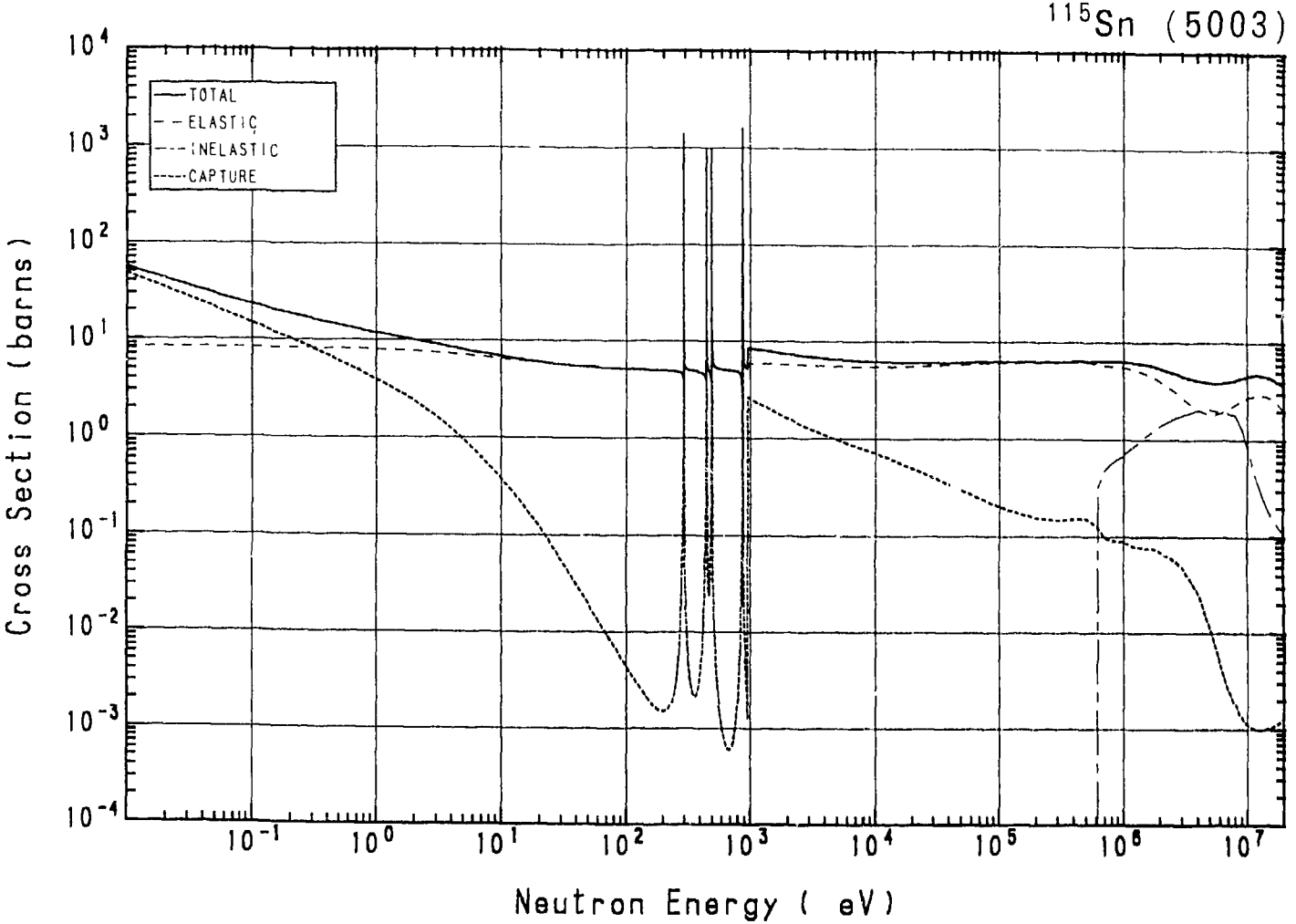

^{112}Sn (5001)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

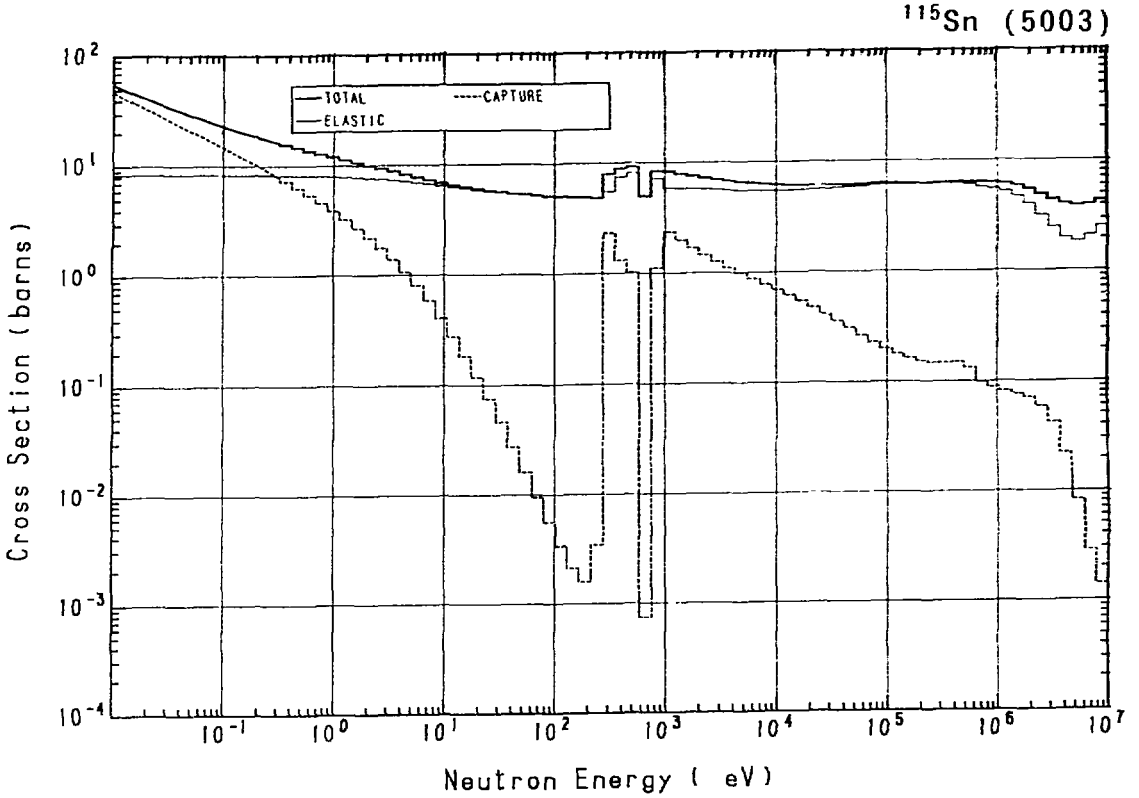

inelastic
(n,2n)
(n,np)
(n,p)
(n,α)
(n,nα)
(n,d)
(n,t)
(n,3n)
(n,2p)
Cross Section (barns)
Neutron Energy (MeV)

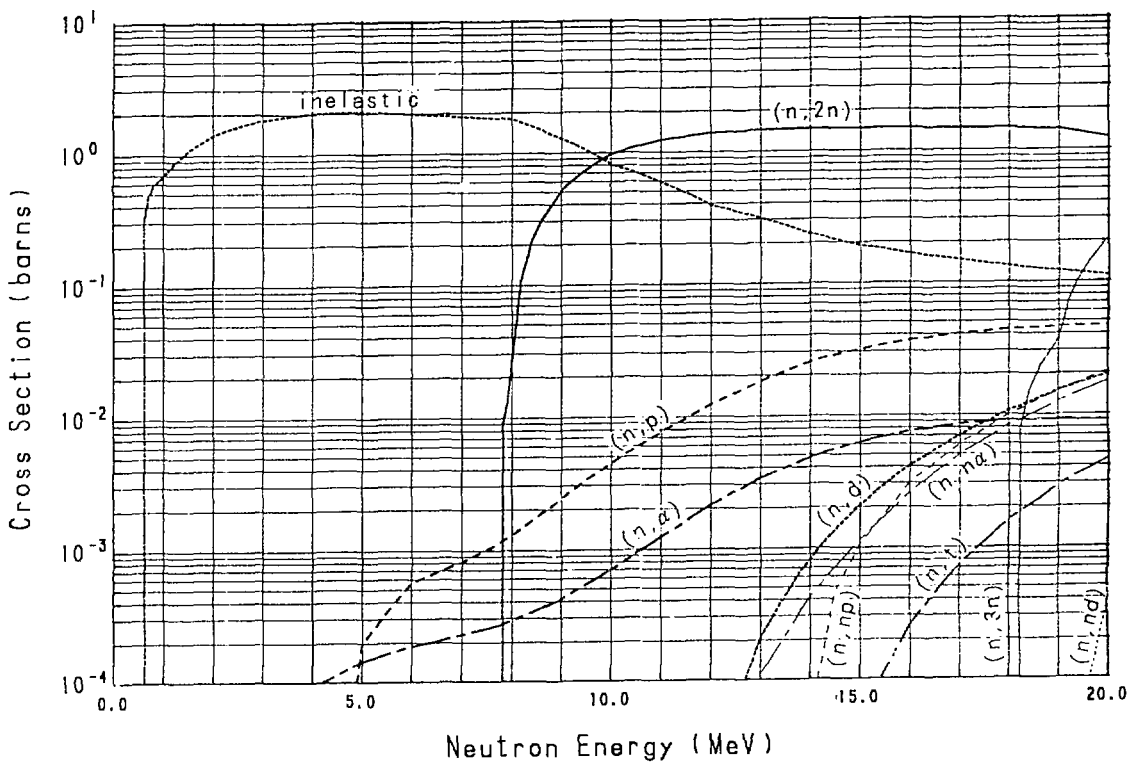

114Sn (5002)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

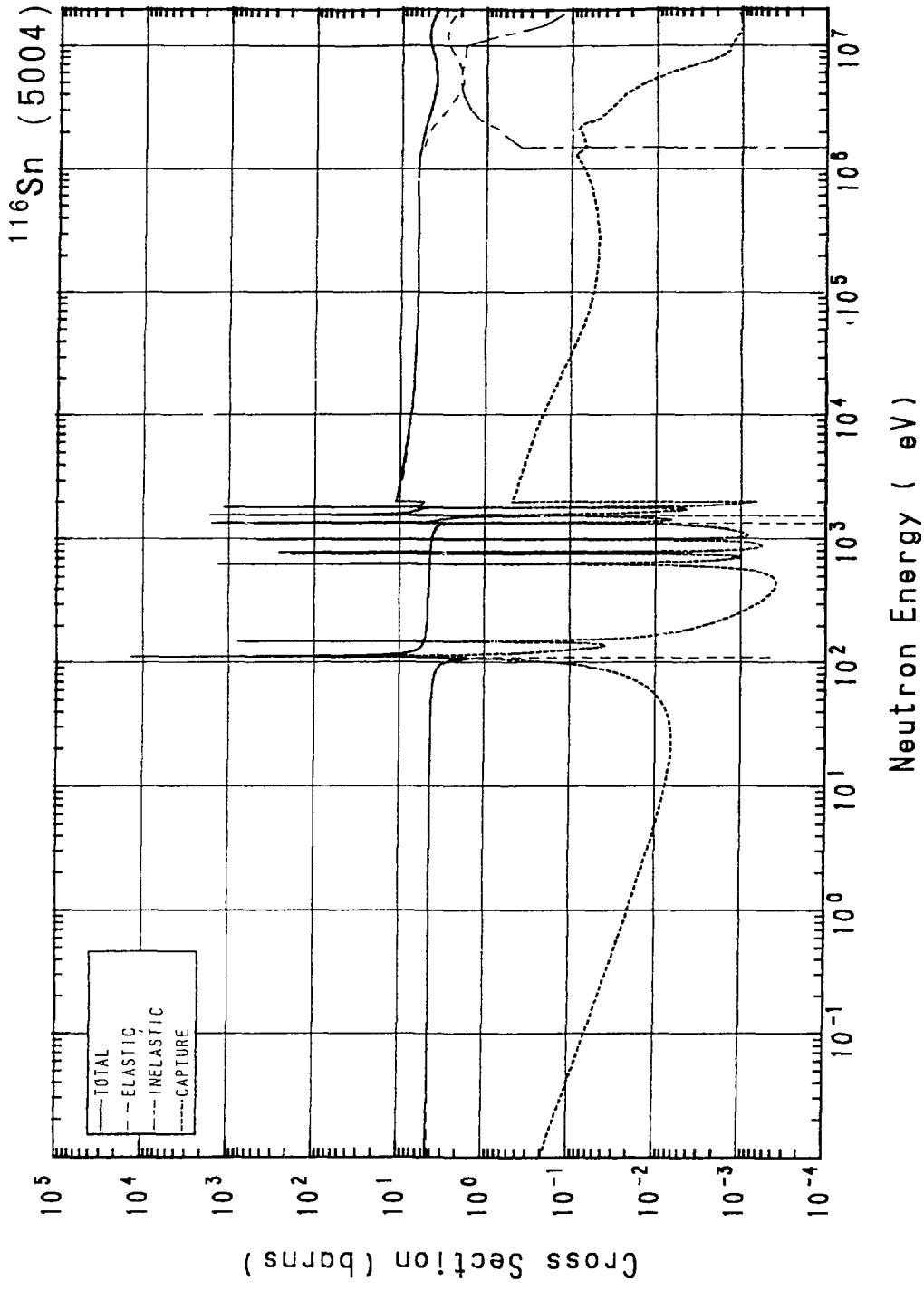

114Sn (5002)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

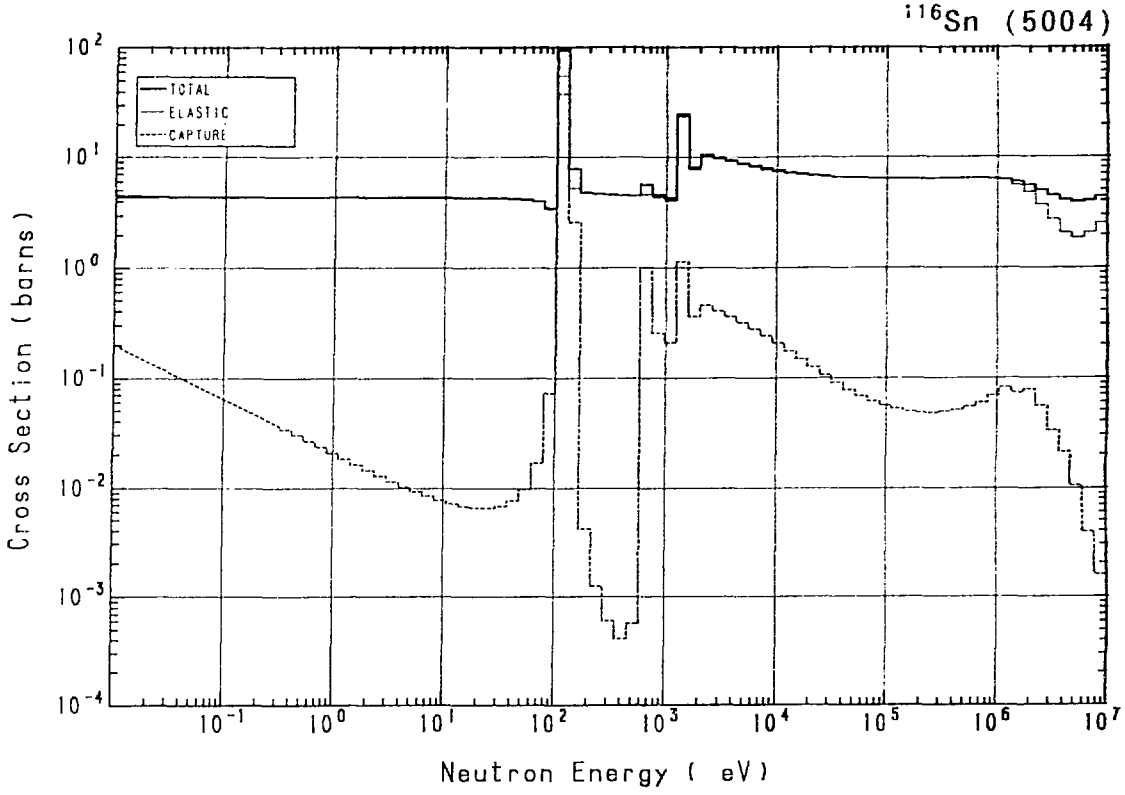

inelastic
(n,2n)
(n,p)
(n,α)
(n,nα)
(n,np)
(n,d)
(n,3n)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

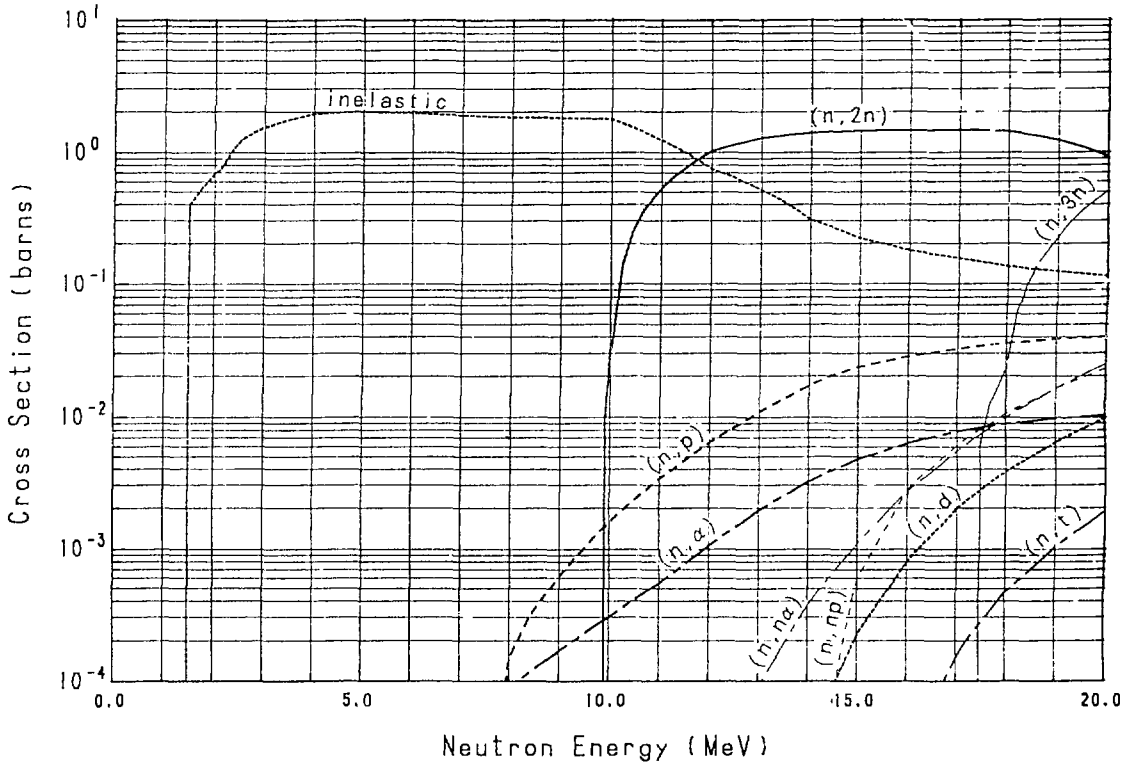

^{115}Sn (5003)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

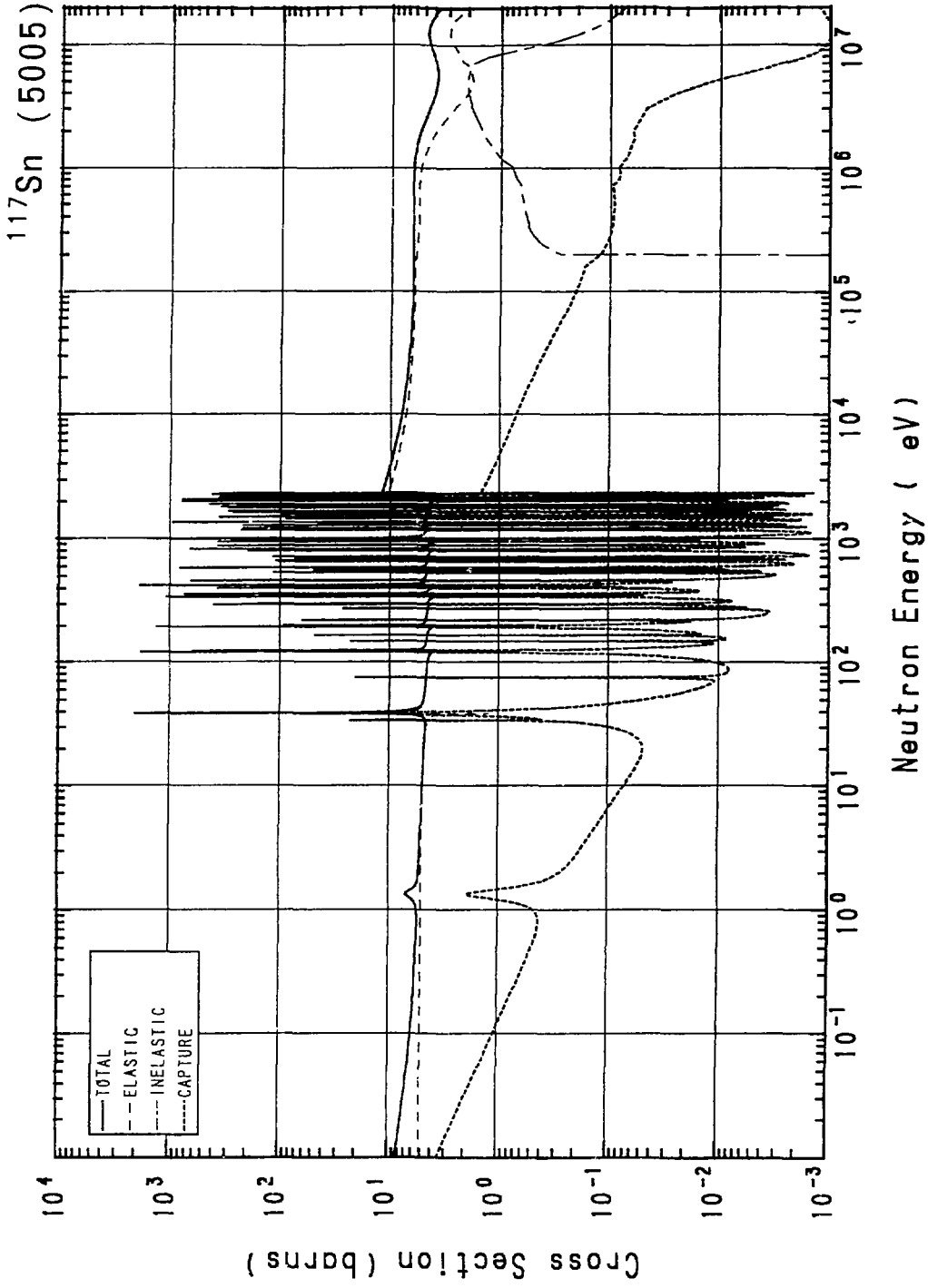

^{115}Sn (5003)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

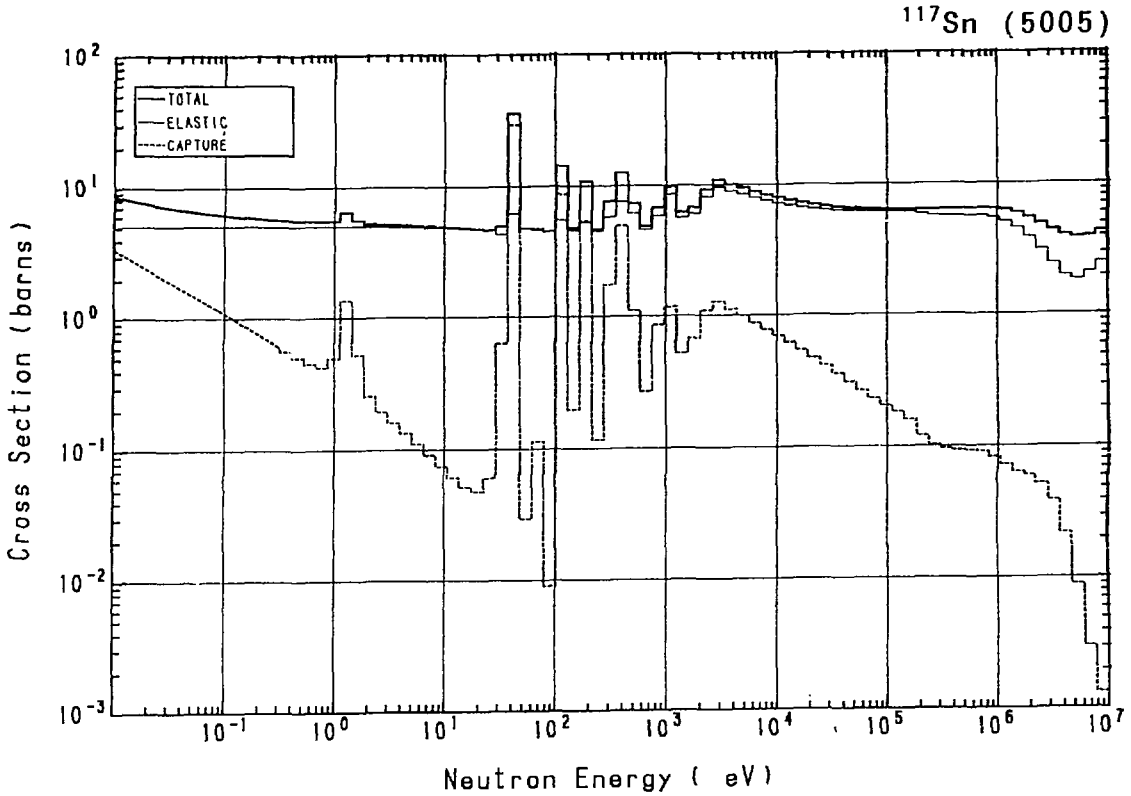

inelastic
(n,2n)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,3n)
(n,np)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

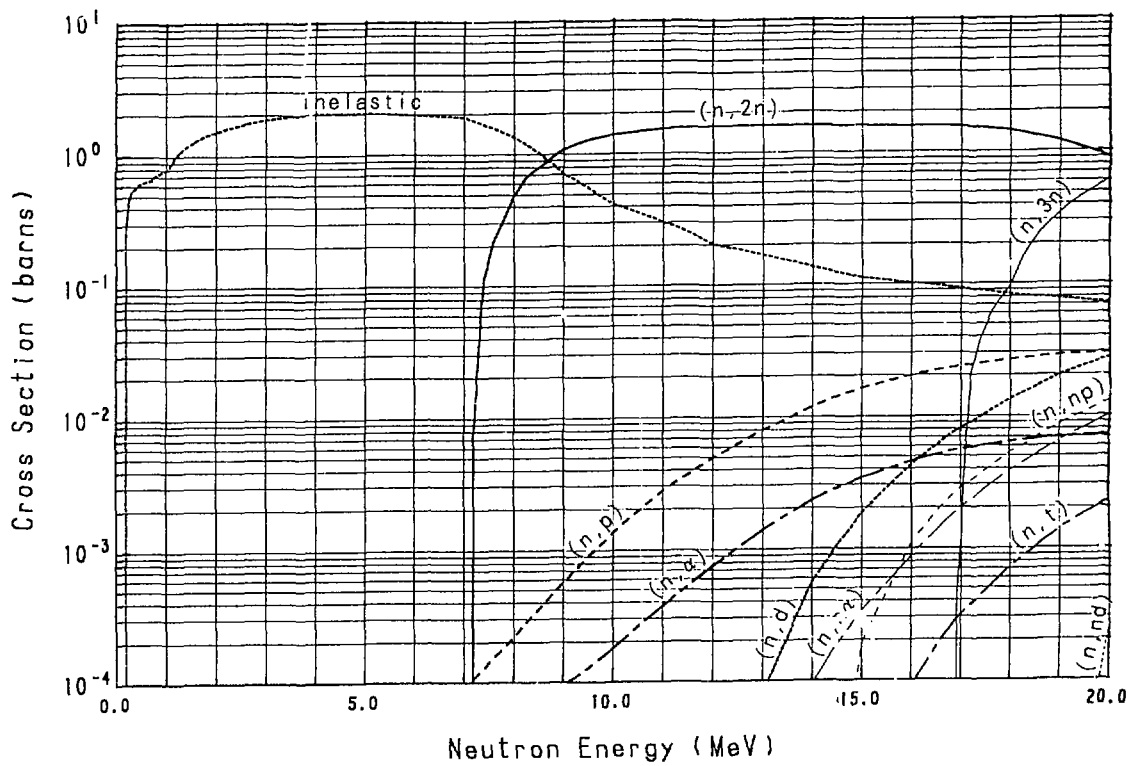

116Sn (5004)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

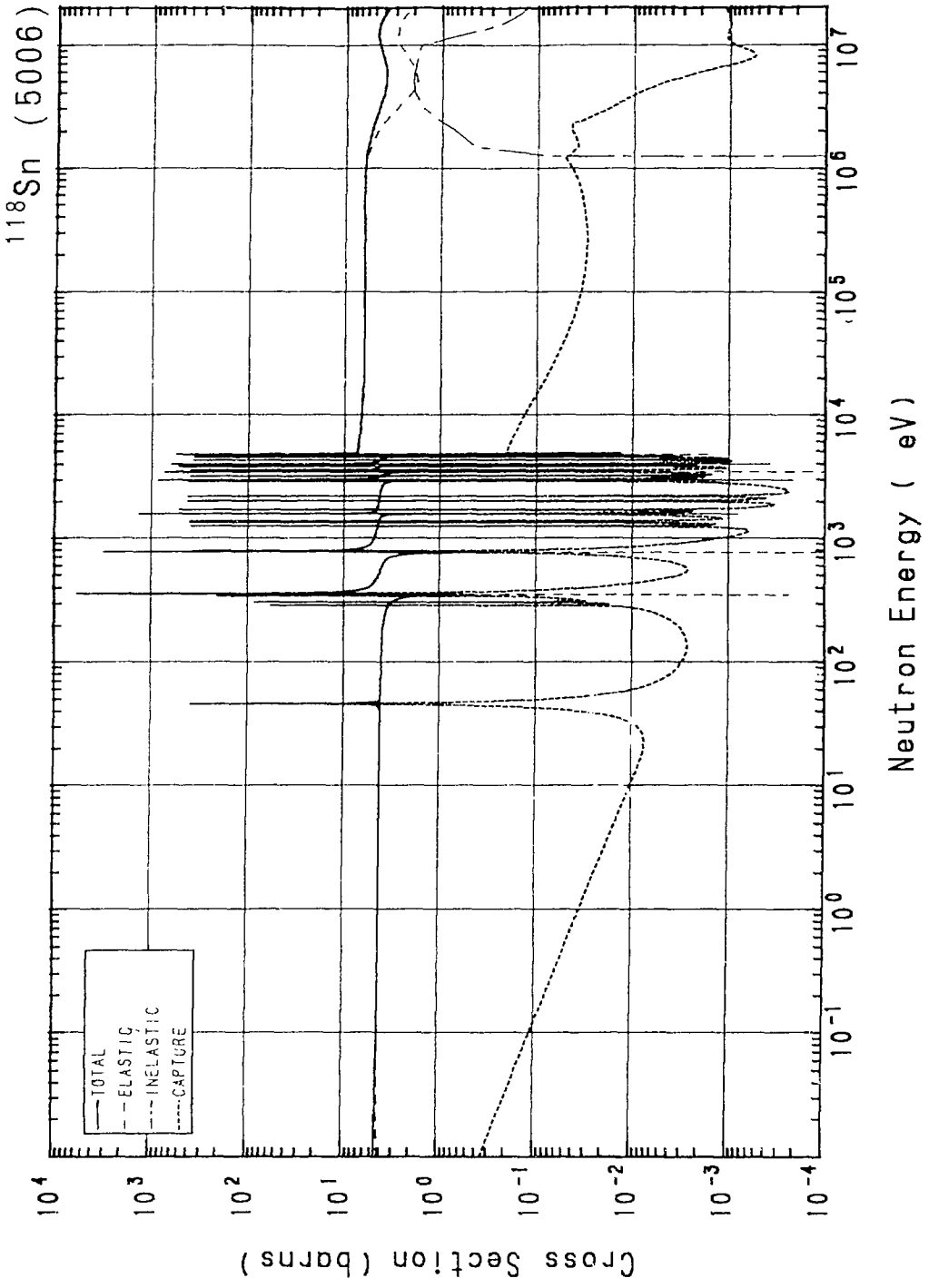

^{116}Sn (5004)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

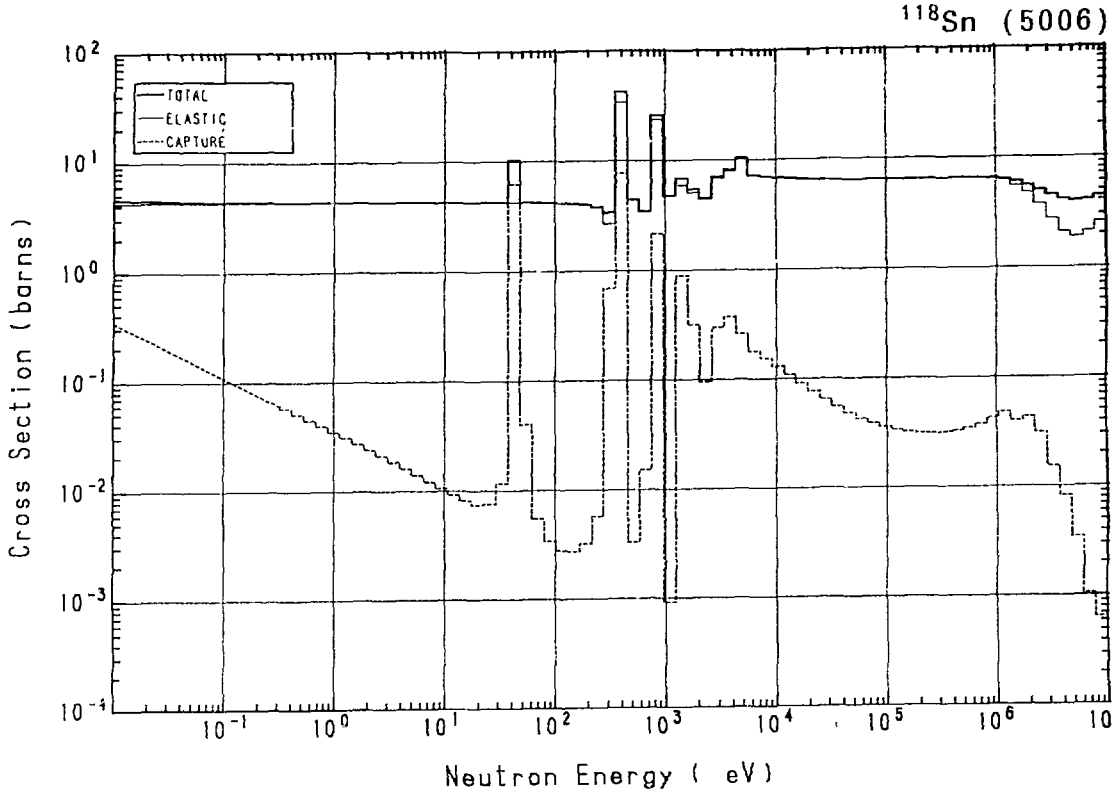

Inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,nα)
(n,np)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

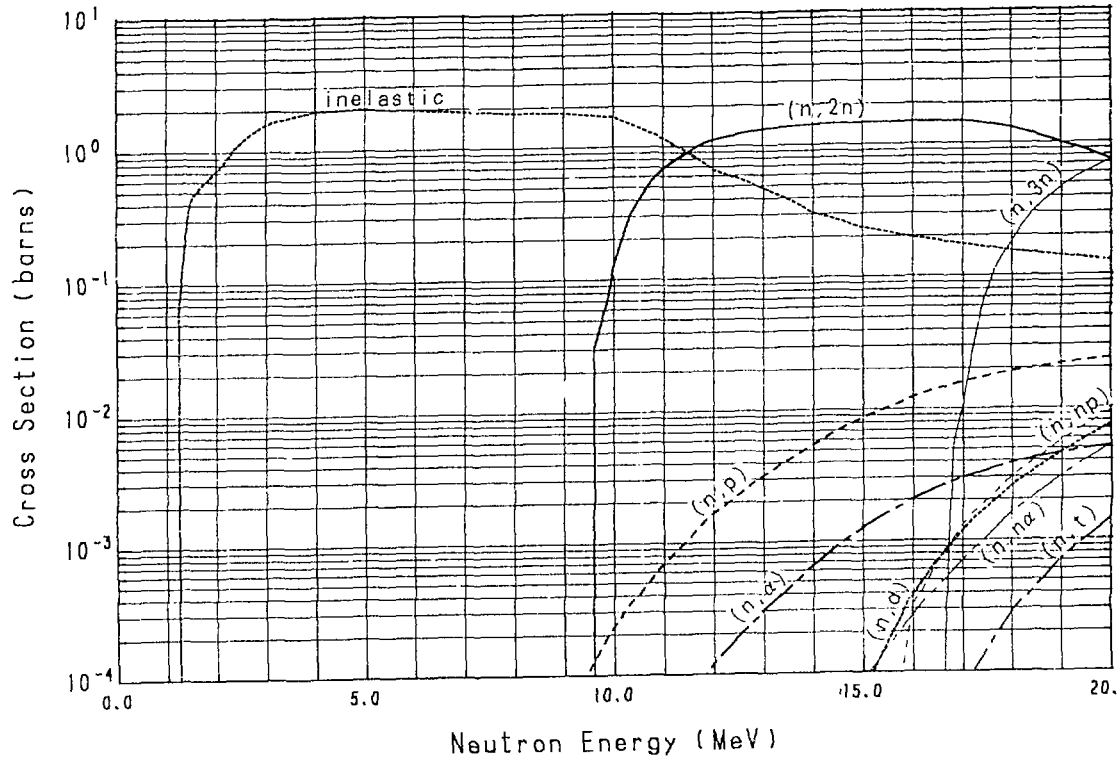

117Sn (5005)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

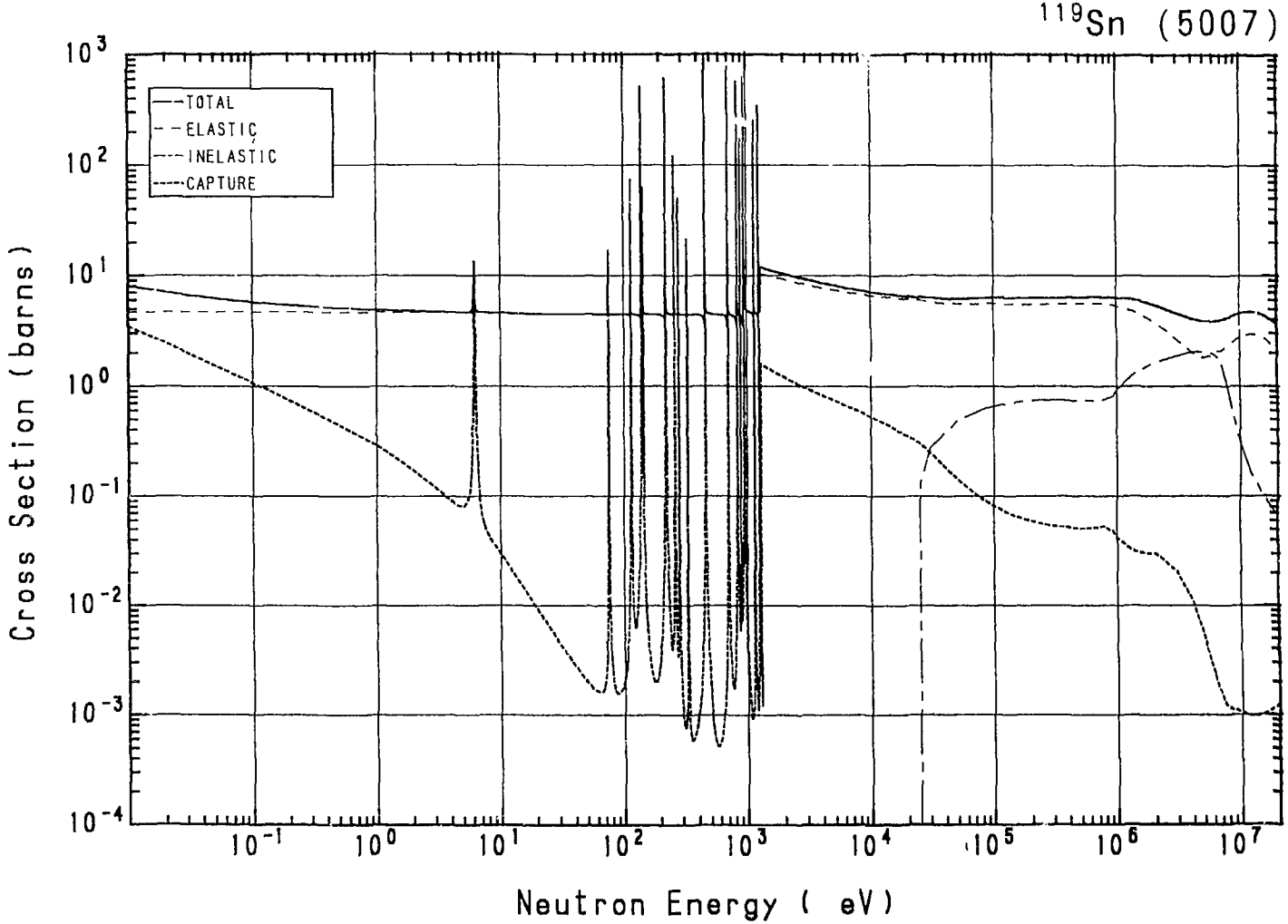

117Sn (5005)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

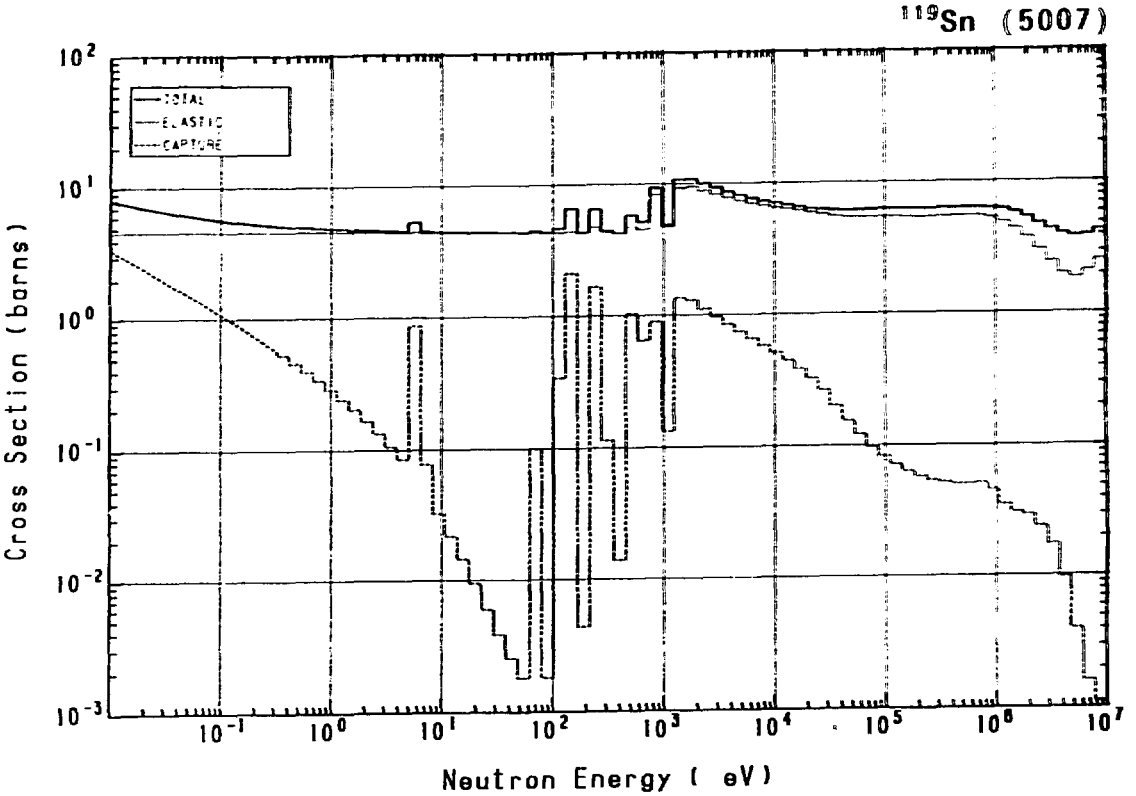

inelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,α)
(n,d)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

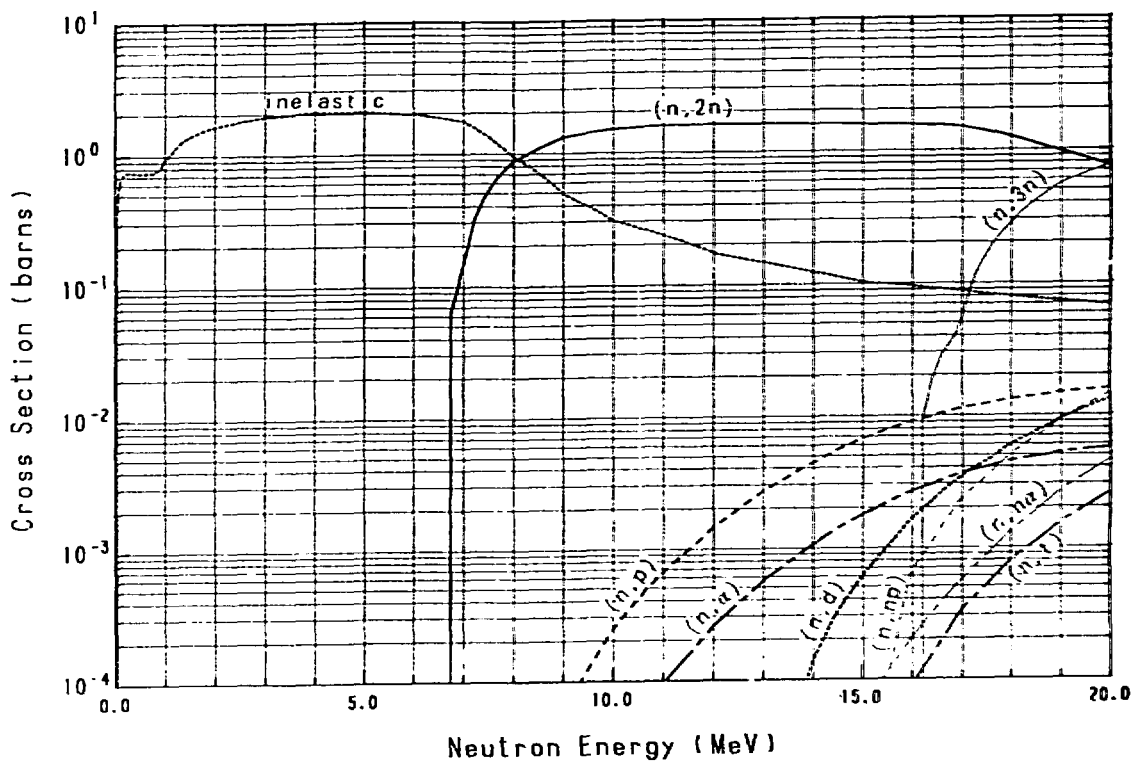

118Sn (5006)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

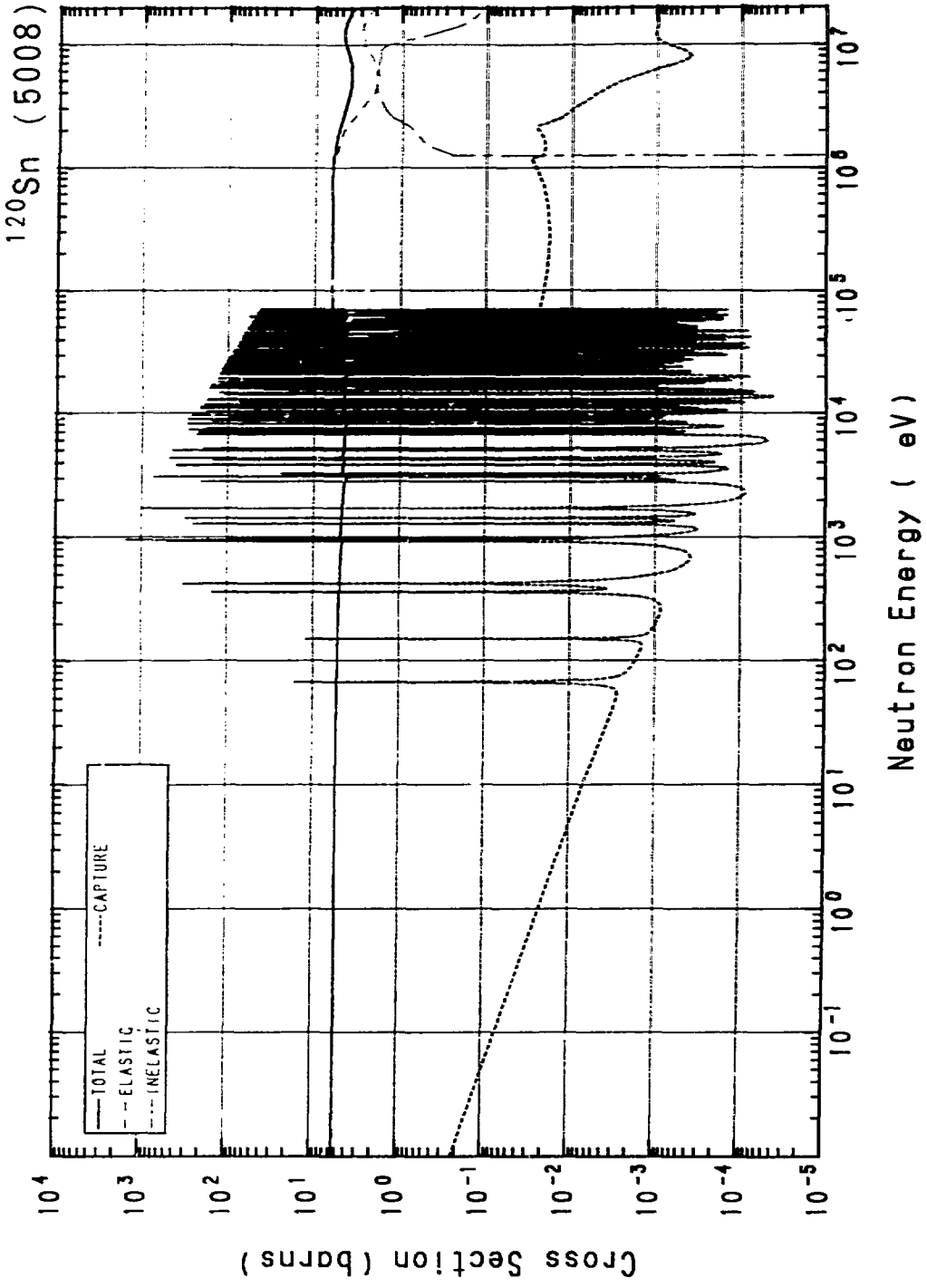

118Sn (5006)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

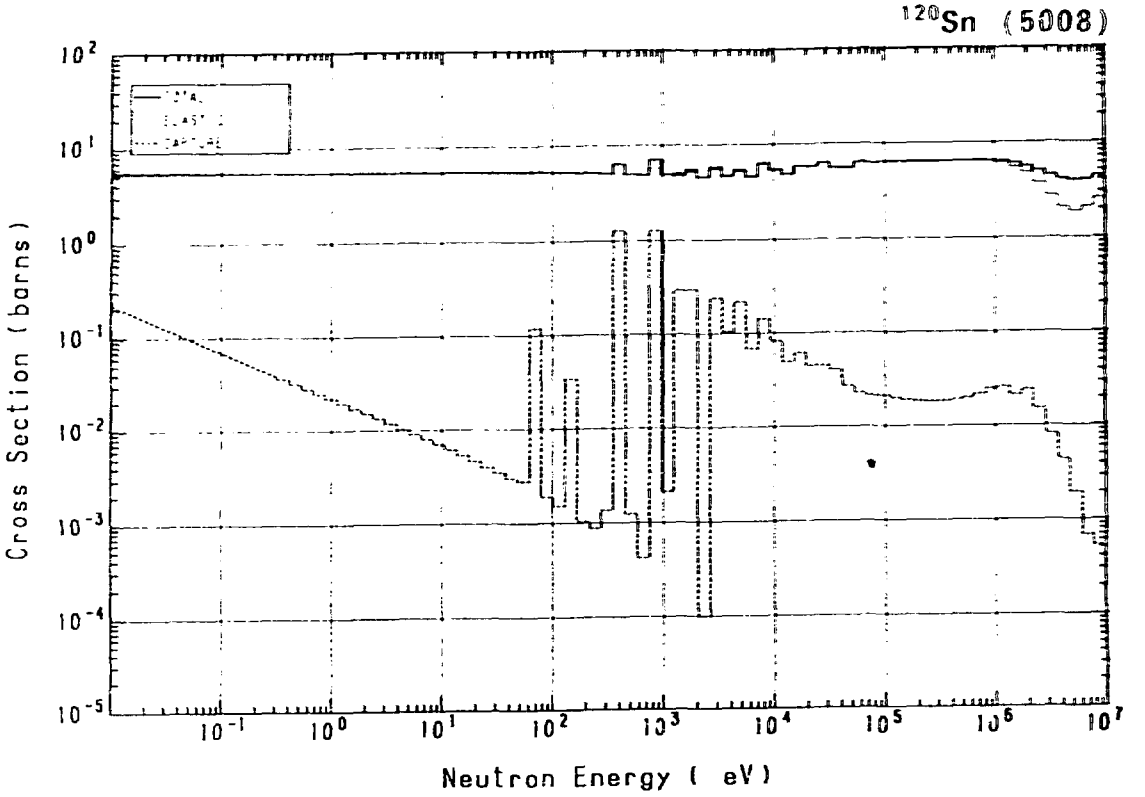

inelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

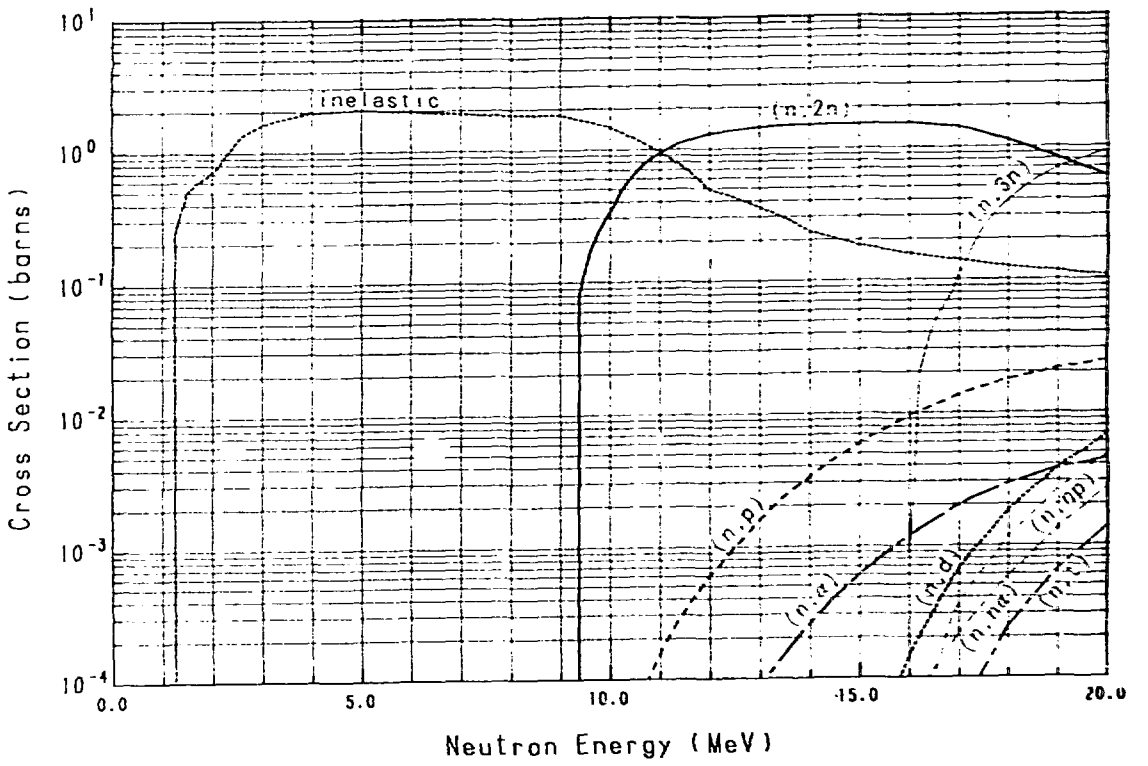

^{119}Sn (5007)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

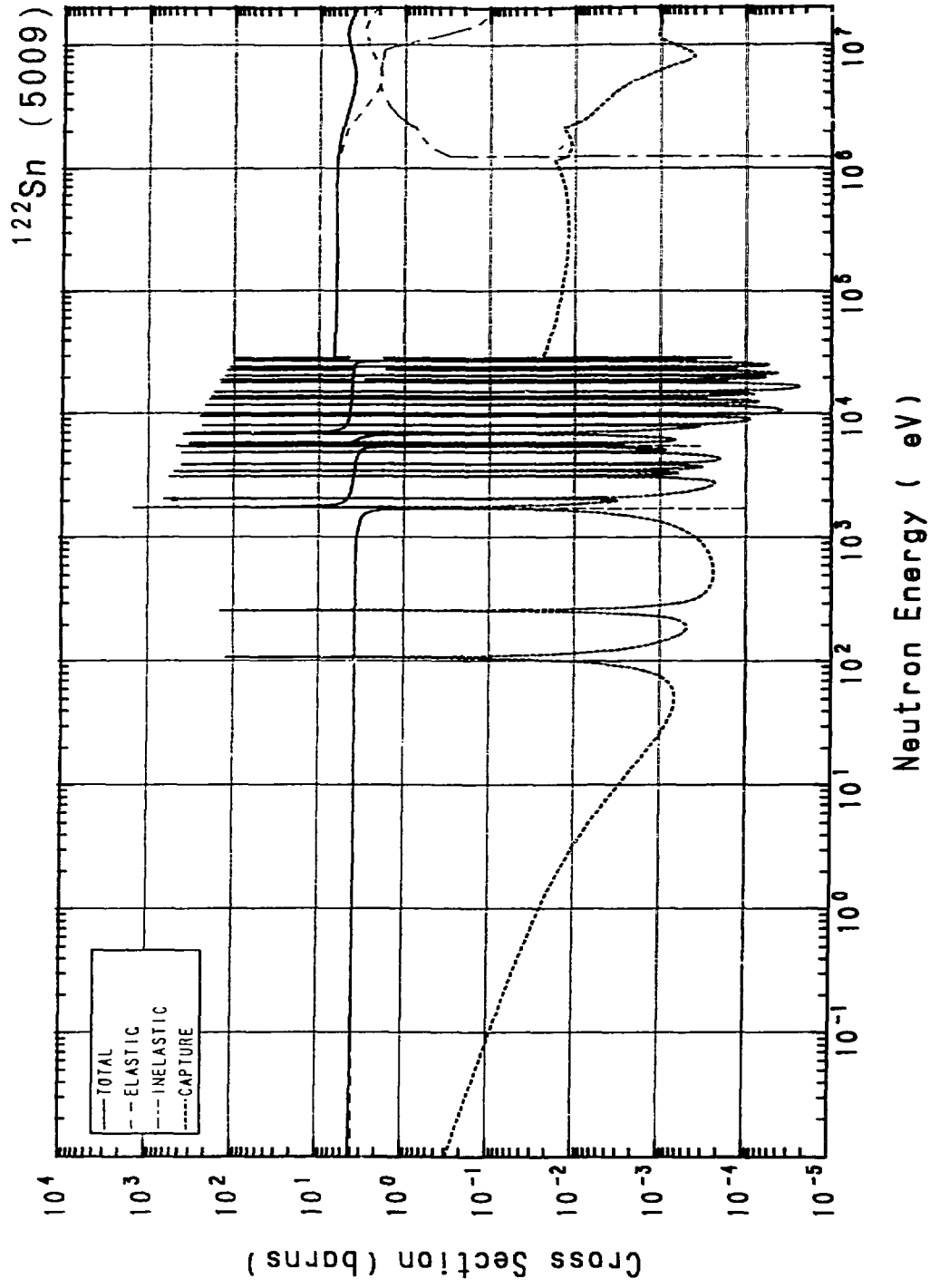

^{119}Sn (5007)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

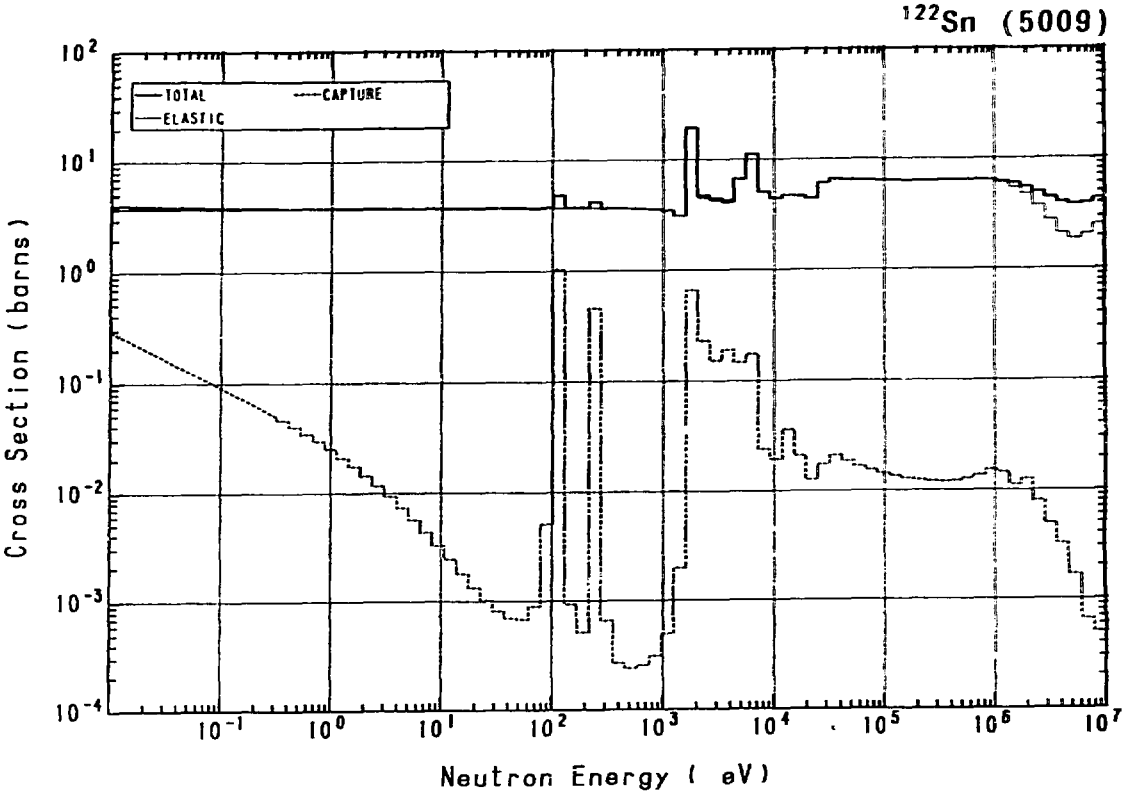

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

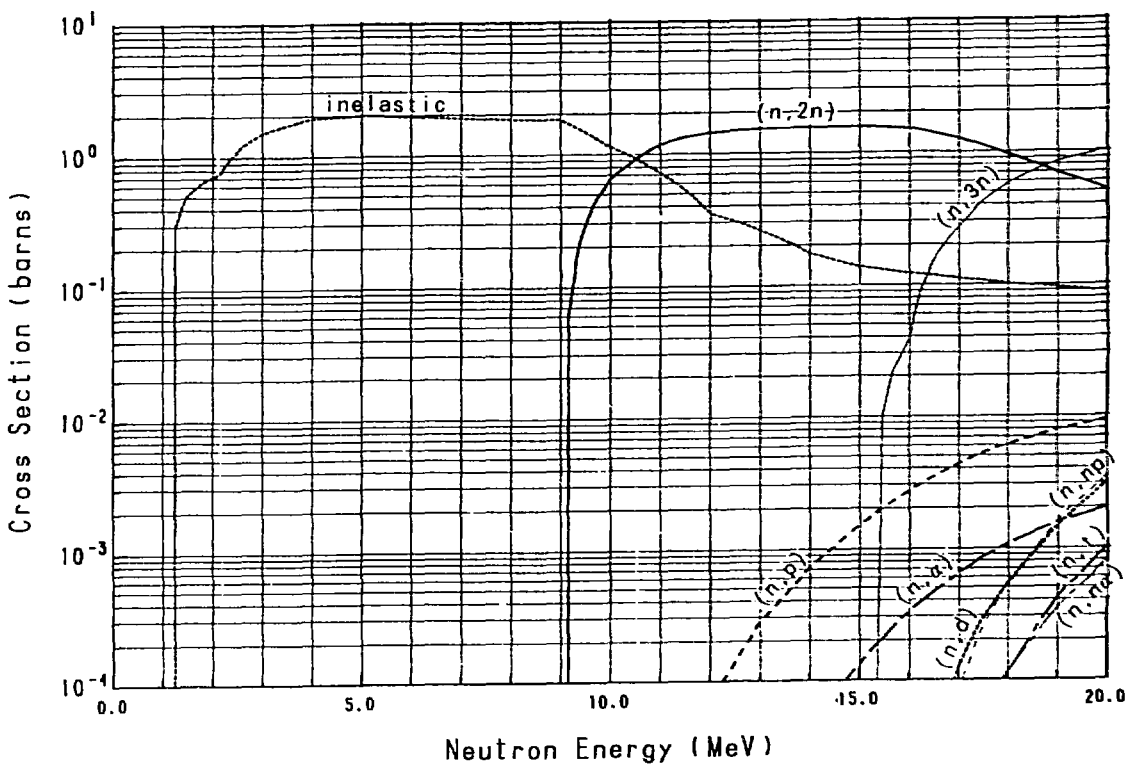

120Sn (5008)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

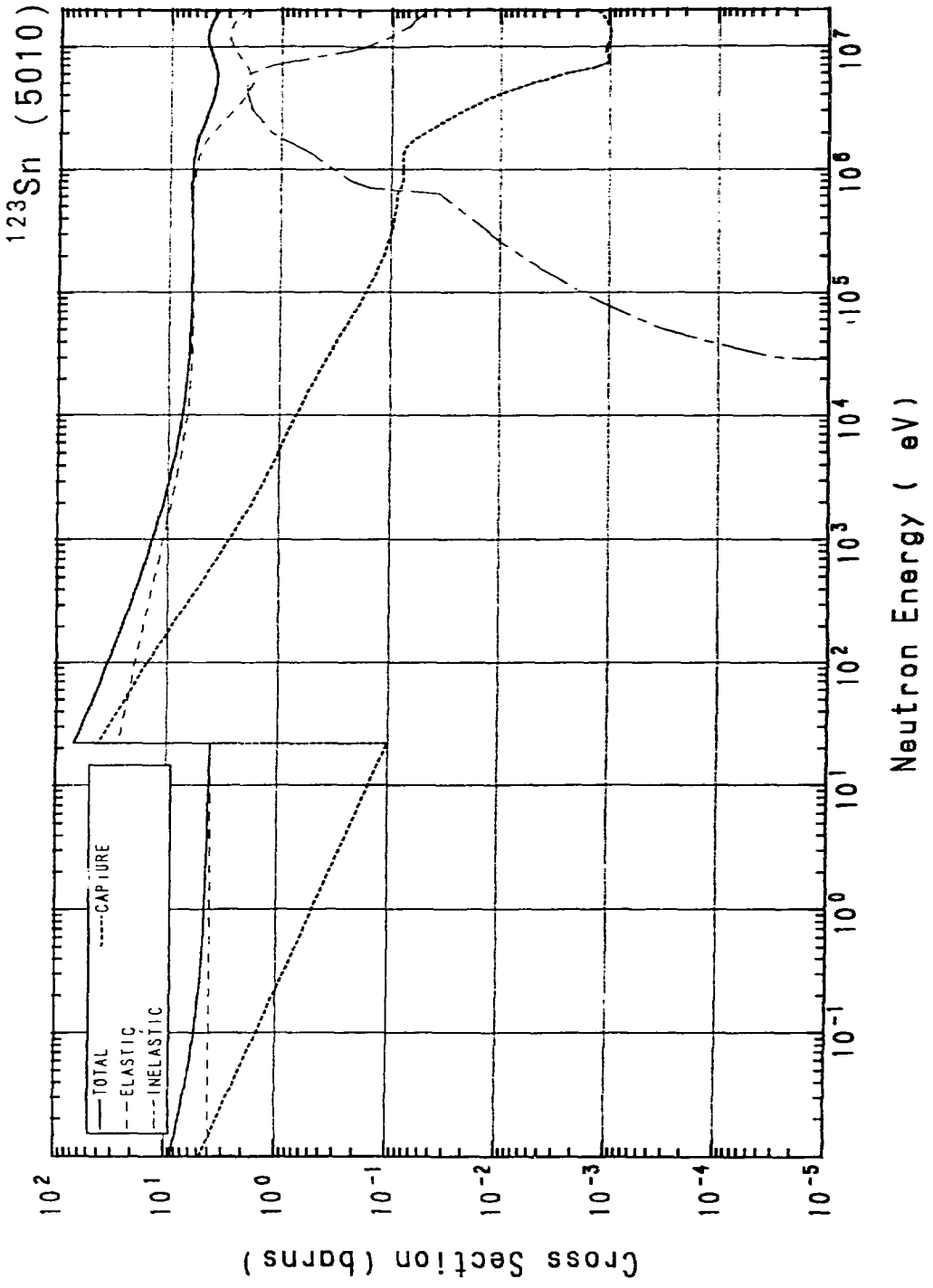

^{120}Sn (5008)
Cross Section (barns)
Neutron Energy (eV)

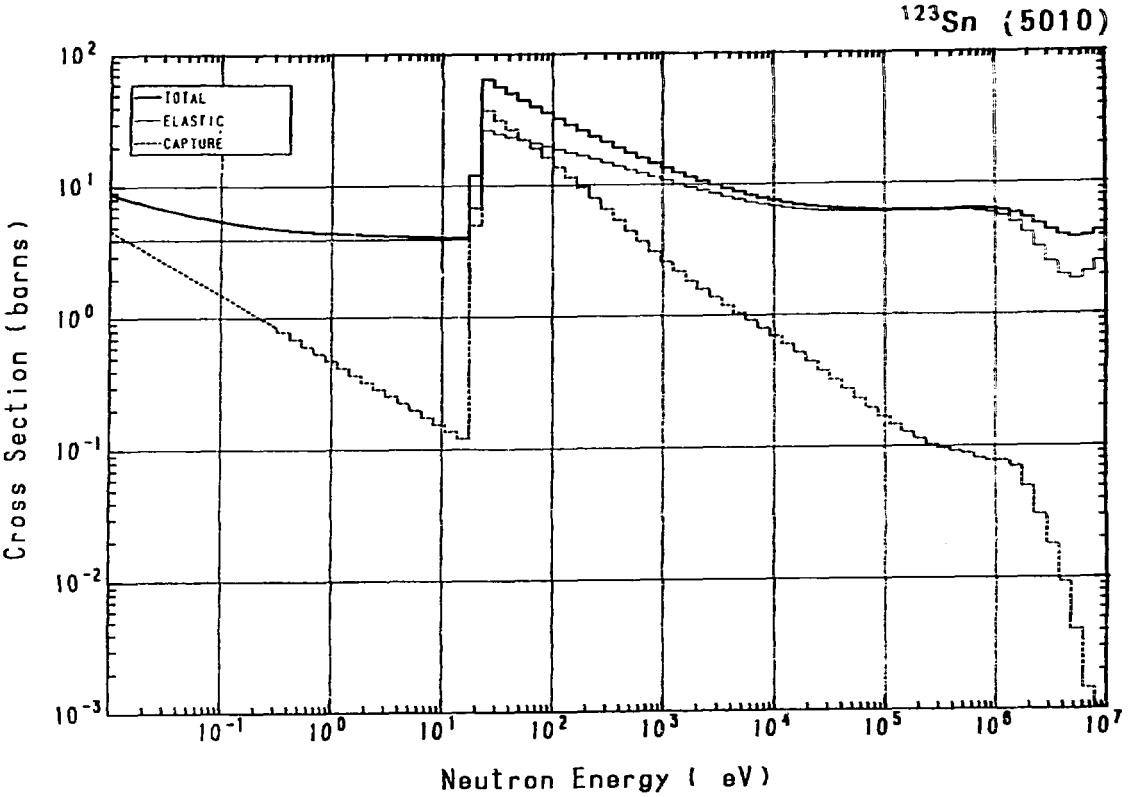

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,np)
(n,γ)
Cross Section (barns)
Neutron Energy (MeV)

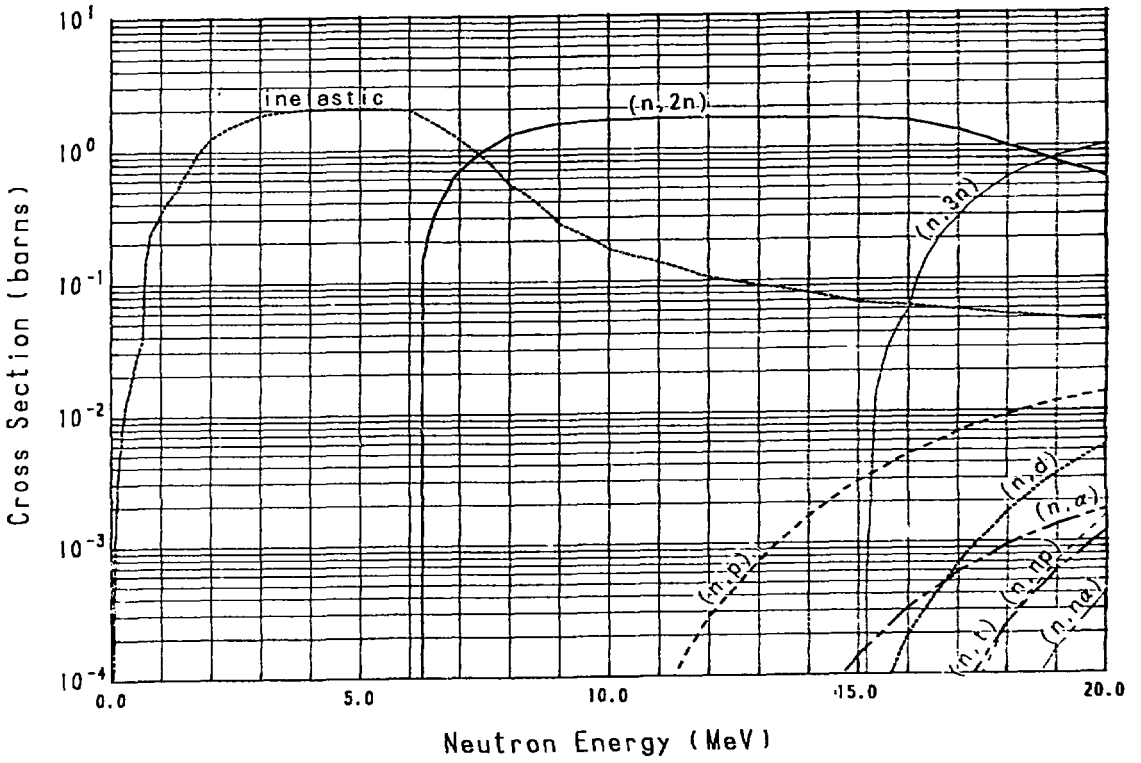

^{122}Sn (5009)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

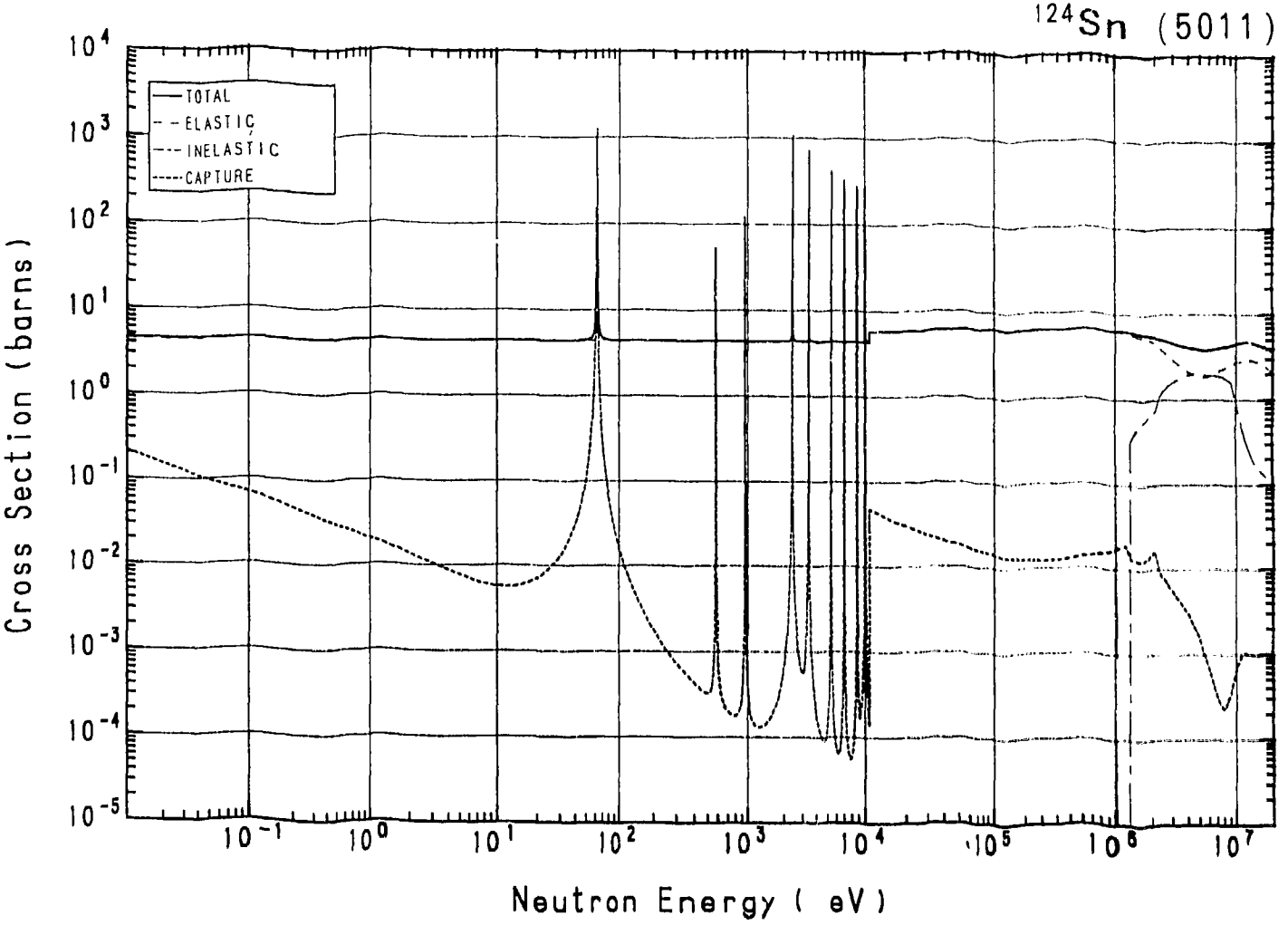

^{122}Sn (5009)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

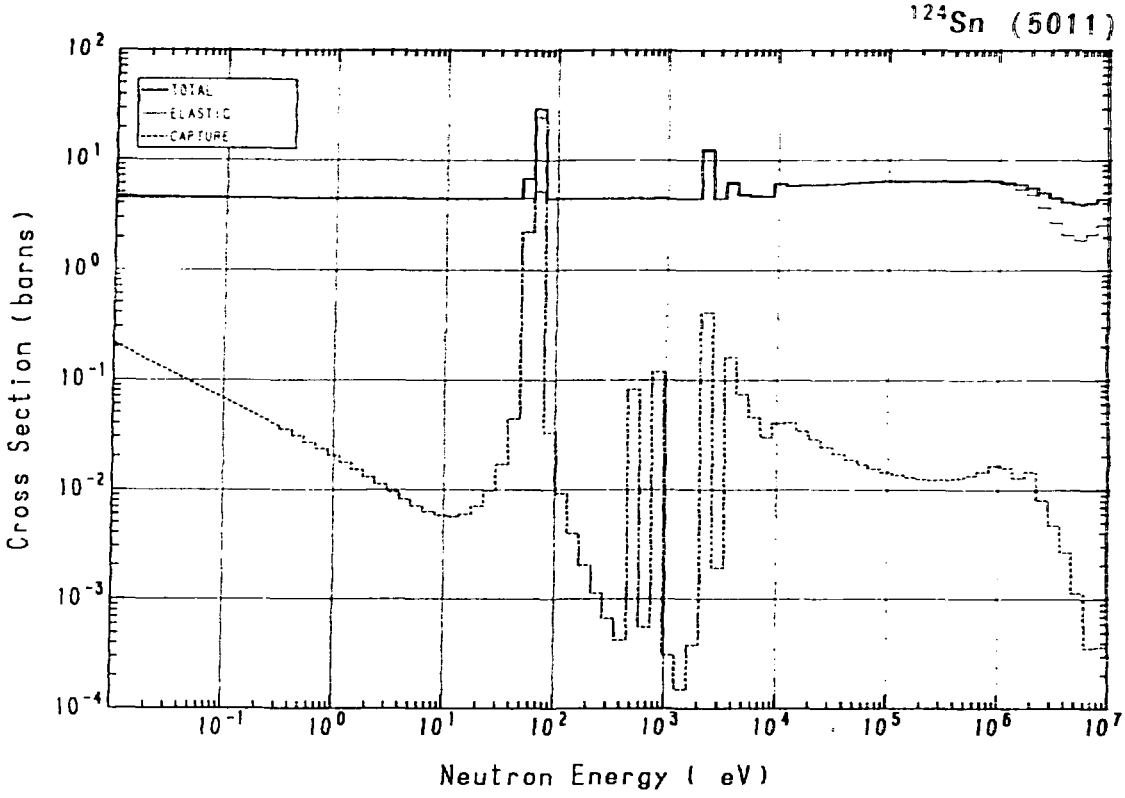

inelastic
(n,2n)
(n,3n)
(n,np)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

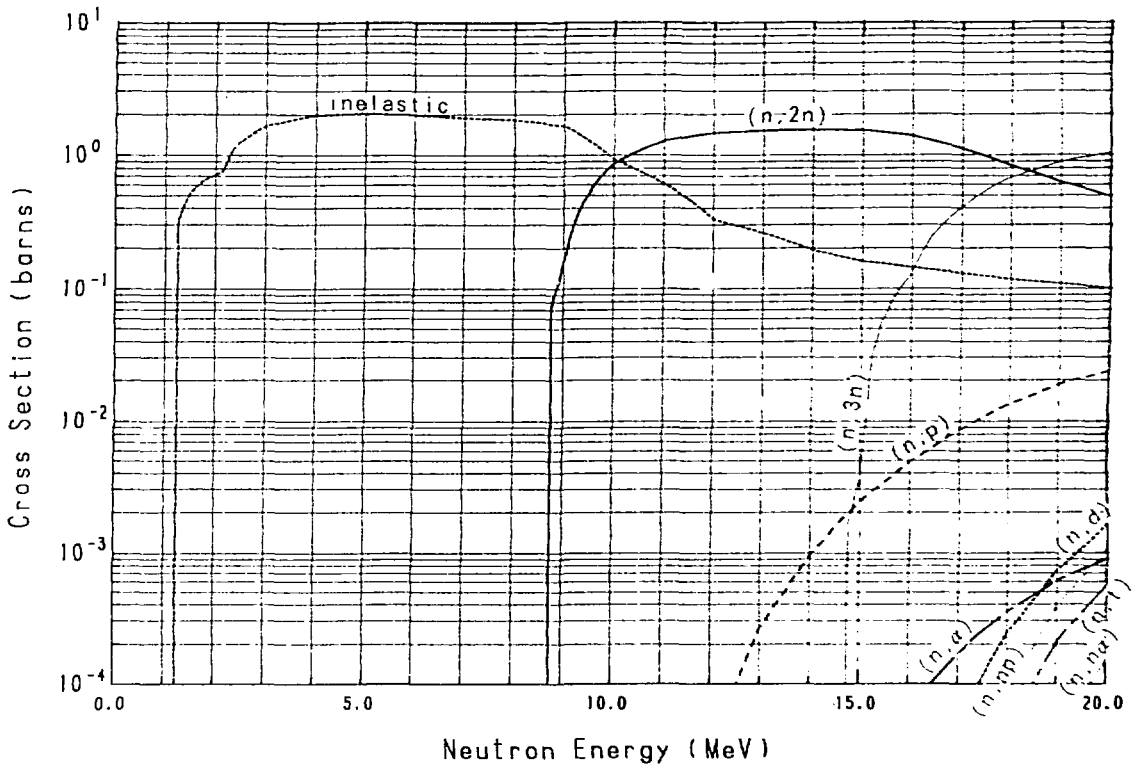

^{123}Sn (5010)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

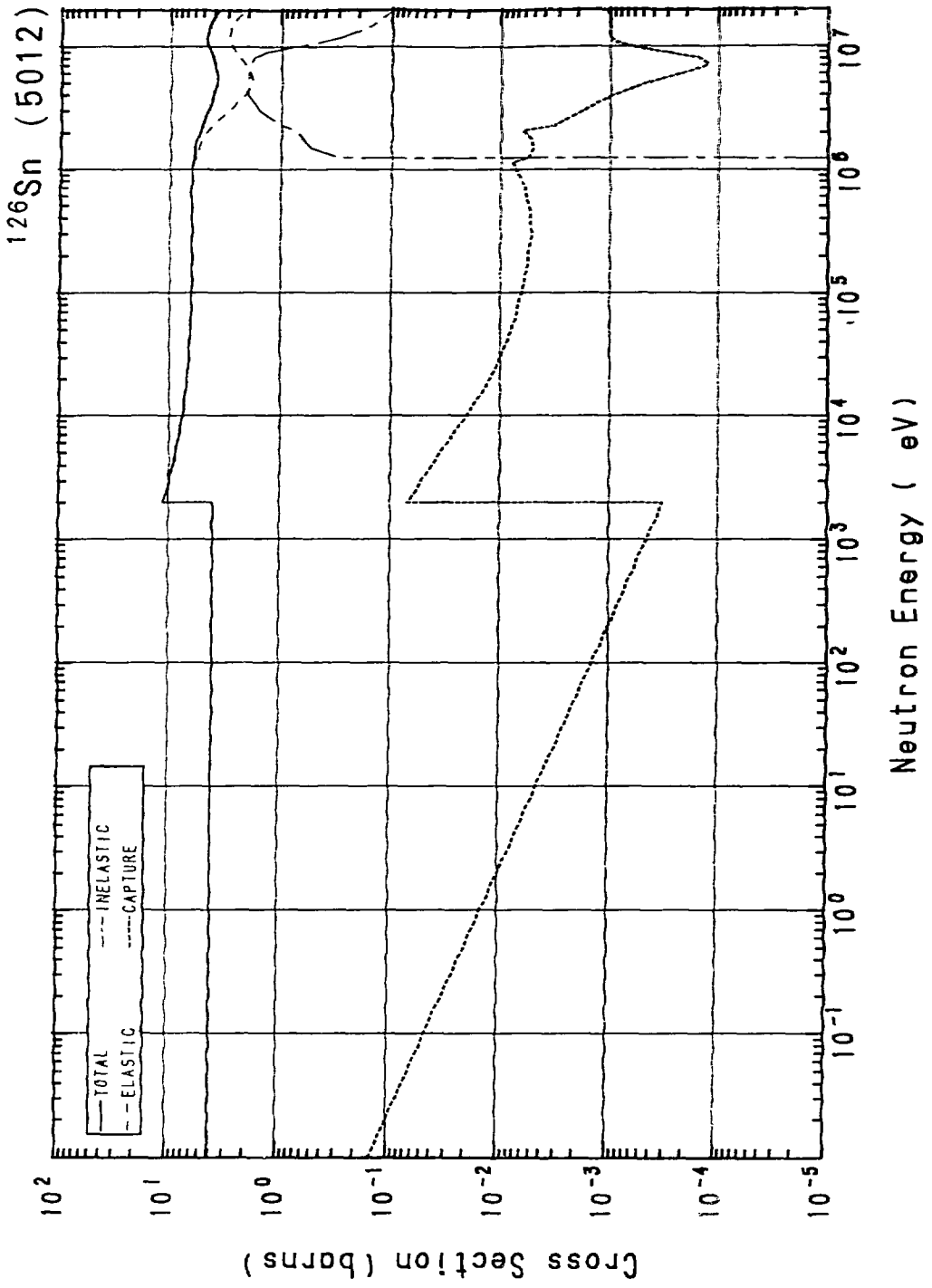

^{123}Sn (5010)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

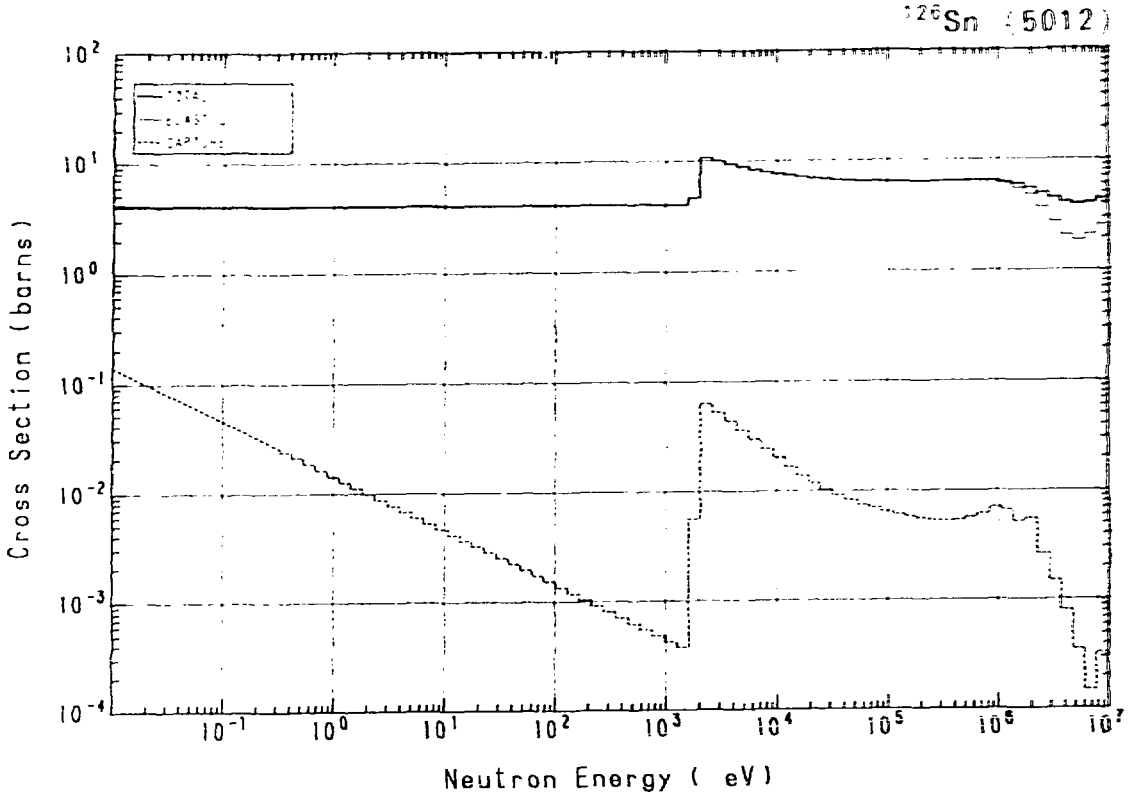

inelastic
(n,2n)
(n,3n)
(n,p)
(n,d)
(n,α)
(n,np)
(n,t)
(n,nα)
Cross Section (barns)
Neutron Energy (MeV)

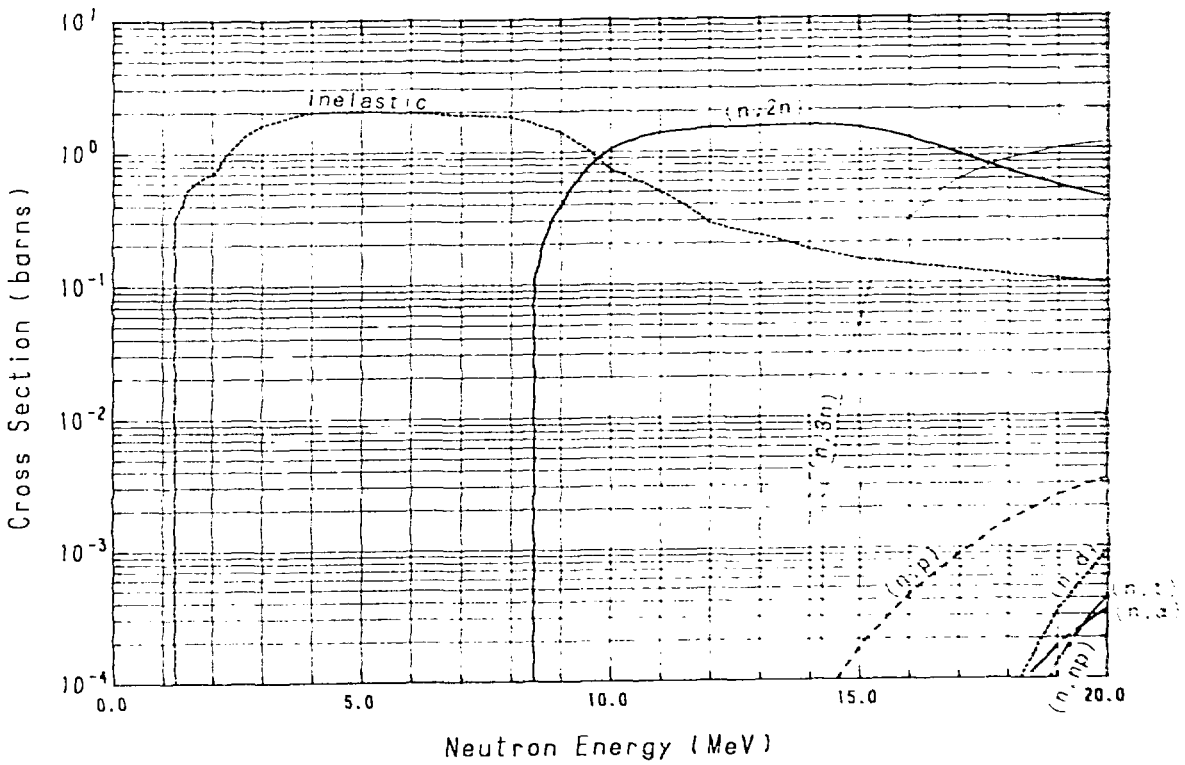

124Sn (5011)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

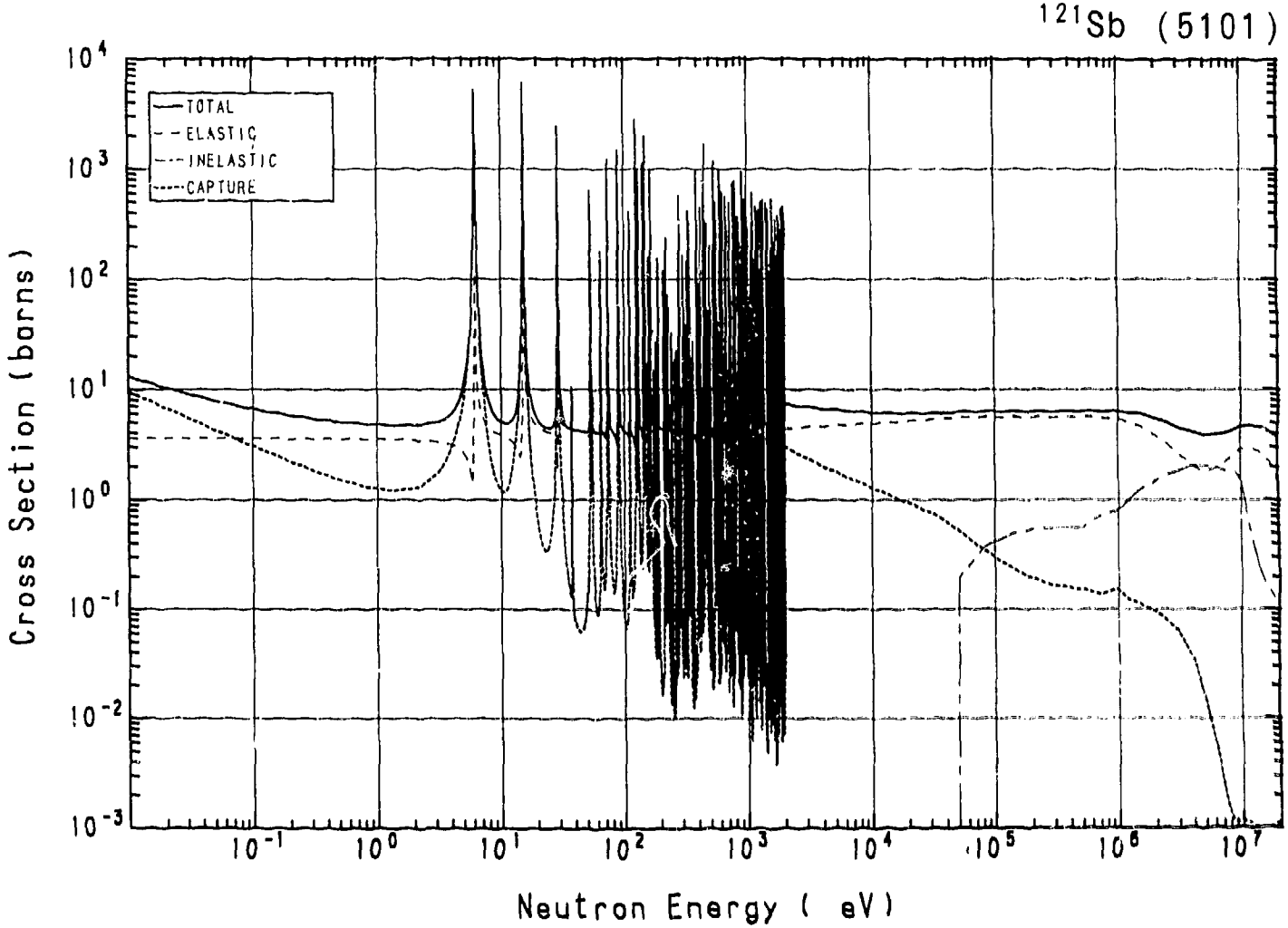

124Sn (5011)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

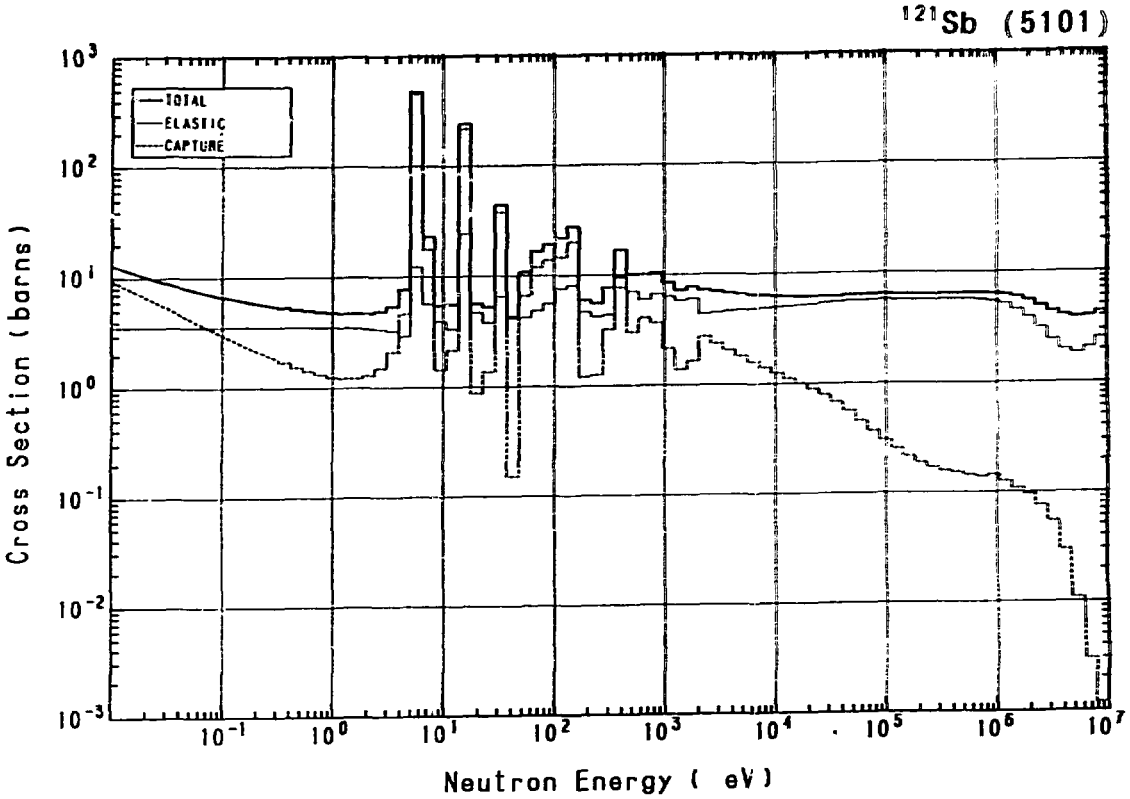

inelastic
(n,2n)
(n,3n)
(n,p)
(n,d)
(n,α)
(n,np)
(n,nα)
(n,γ)
Cross Section (barns)
Neutron Energy (MeV)

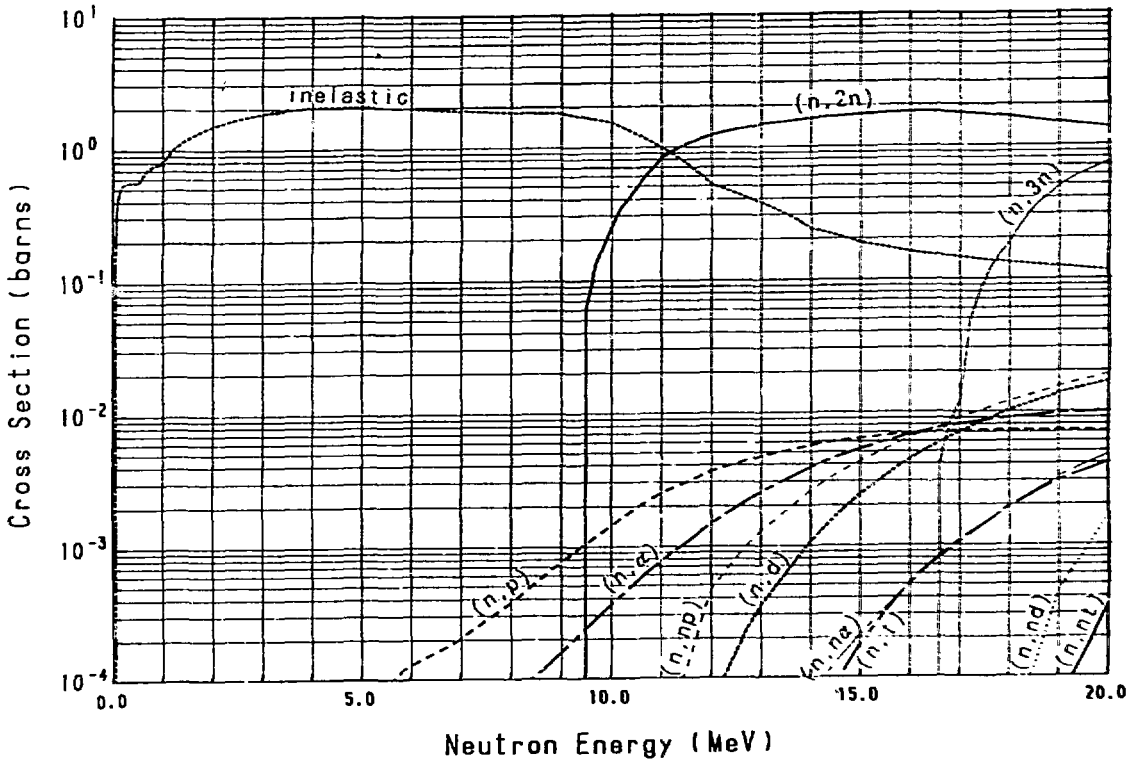

126Sn (5012)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

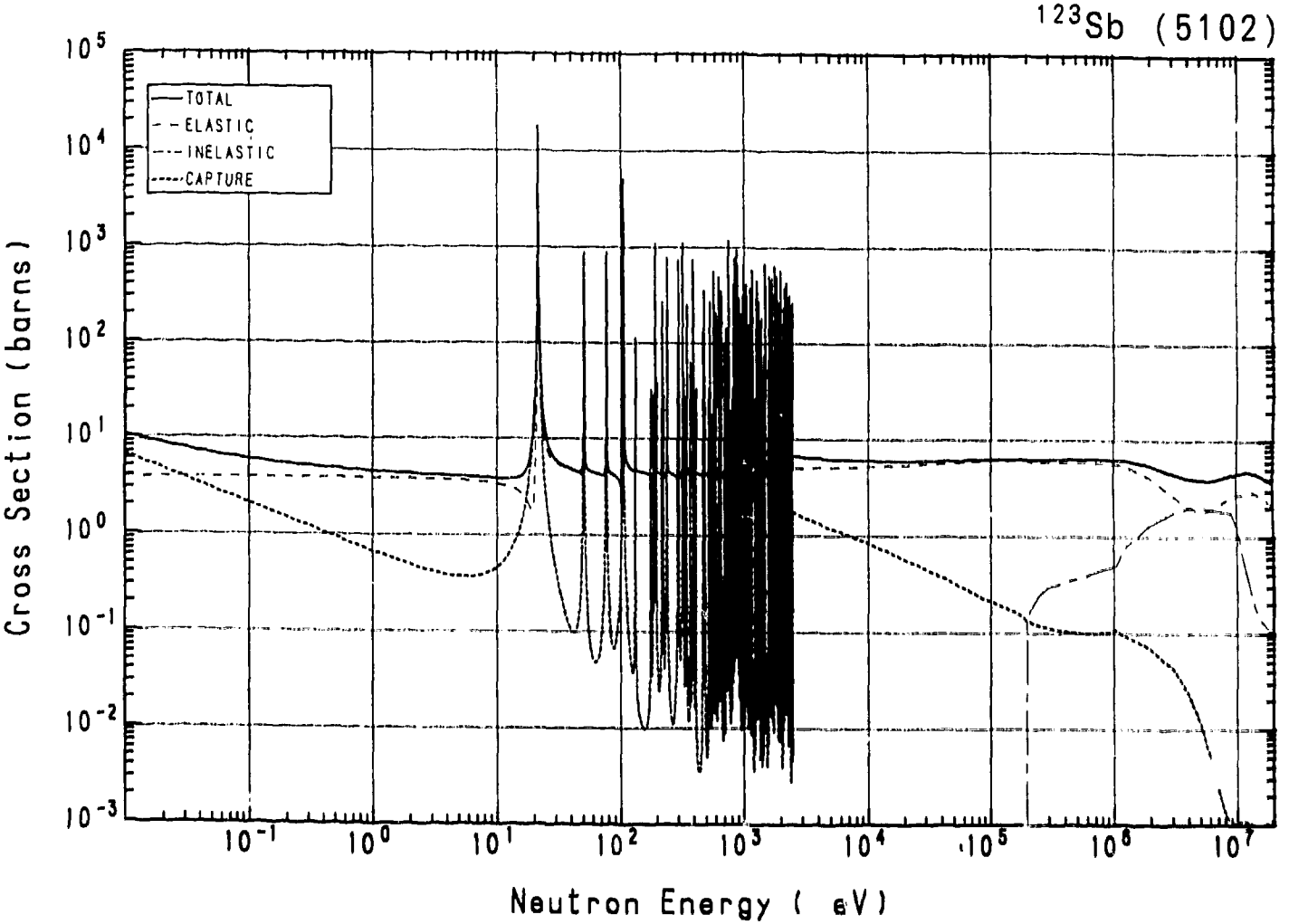

^{126}Sn (5012)
Cross Section (barns)
Neutron Energy (eV)

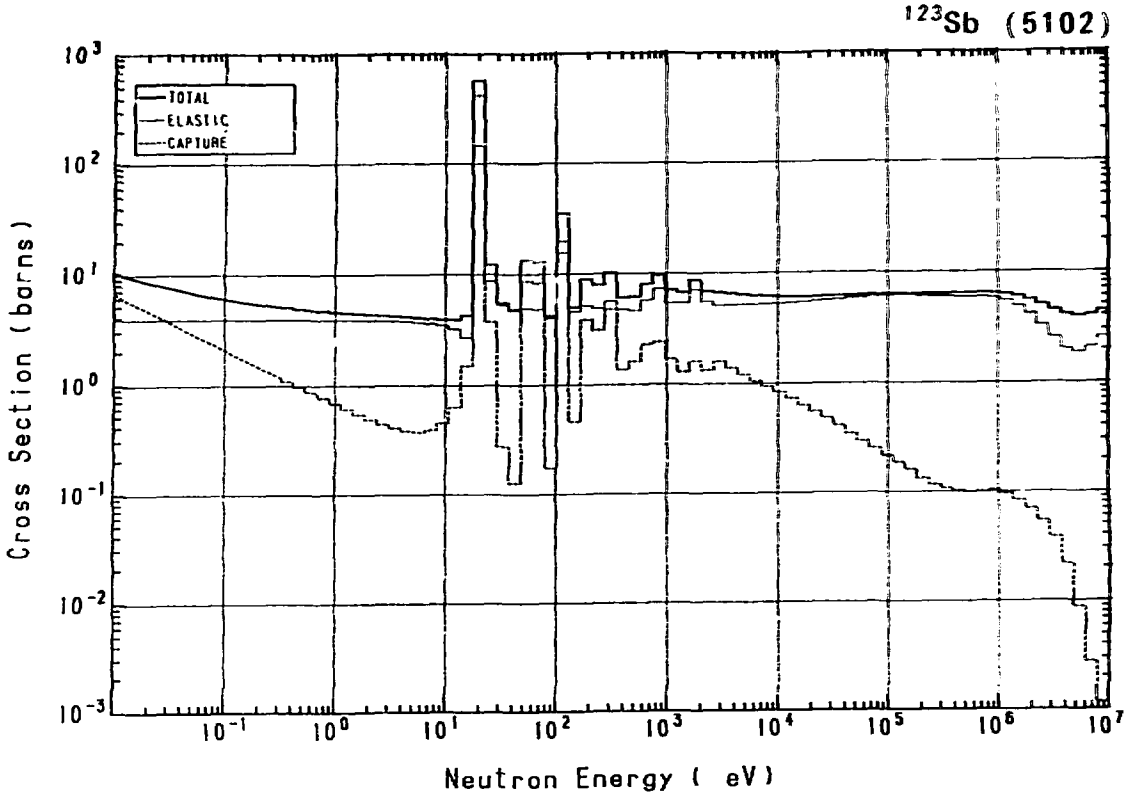

inelastic
(n,2n)
(n,3n)
(n,p)
(n,d)
(n,np)
Cross Section (barns)
Neutron Energy (MeV)

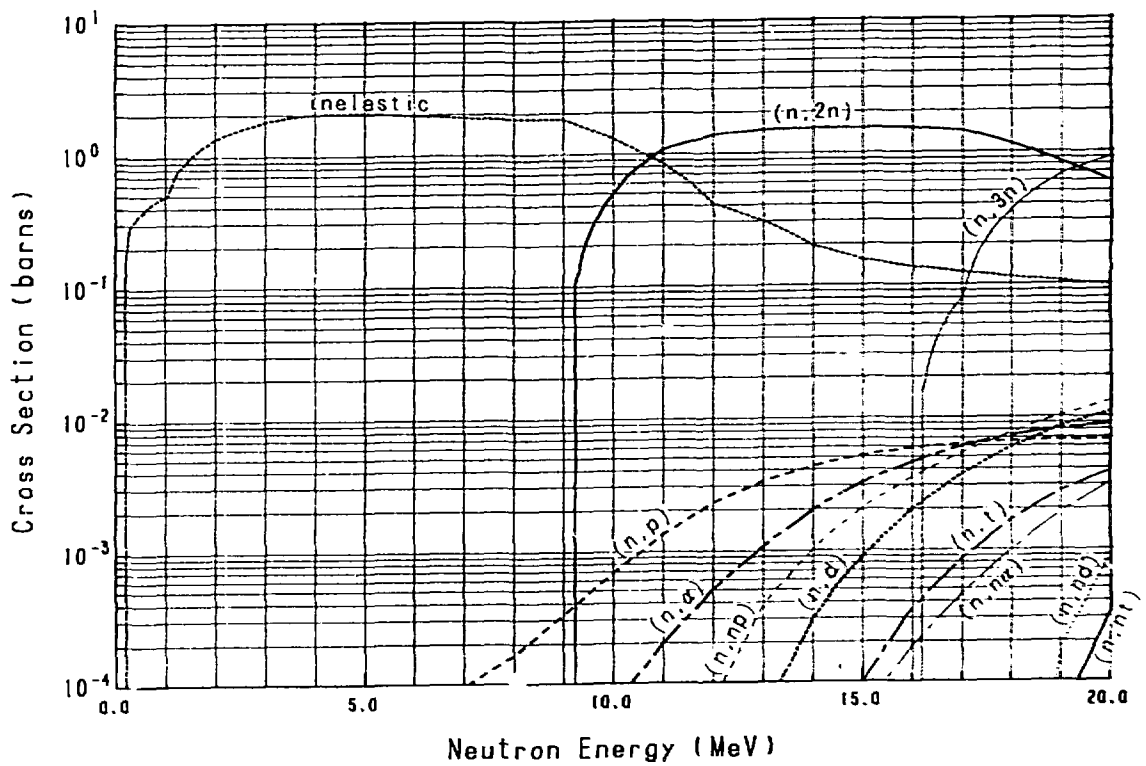

^{121}Sb (5101)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

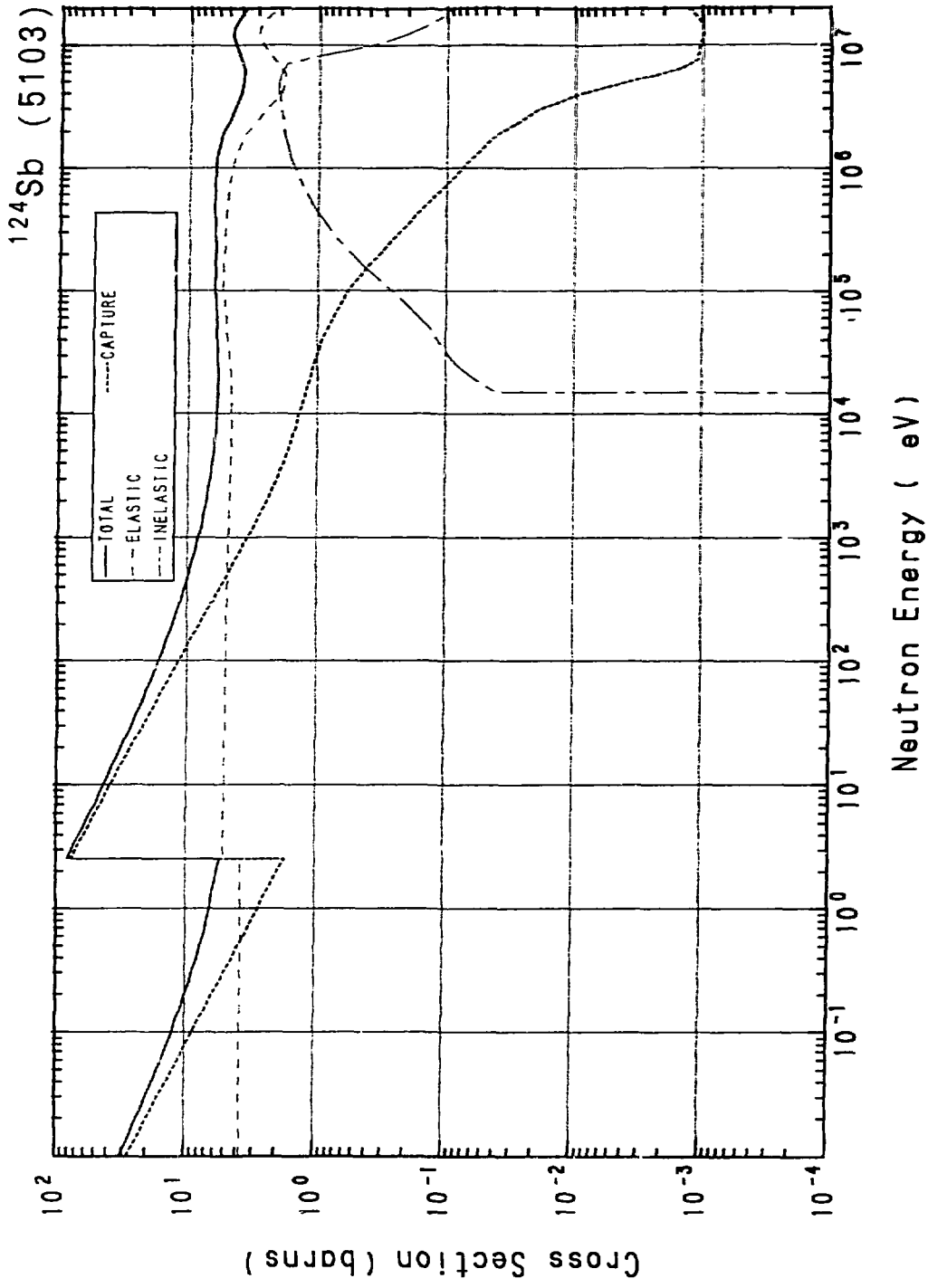

121Sb (5101)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

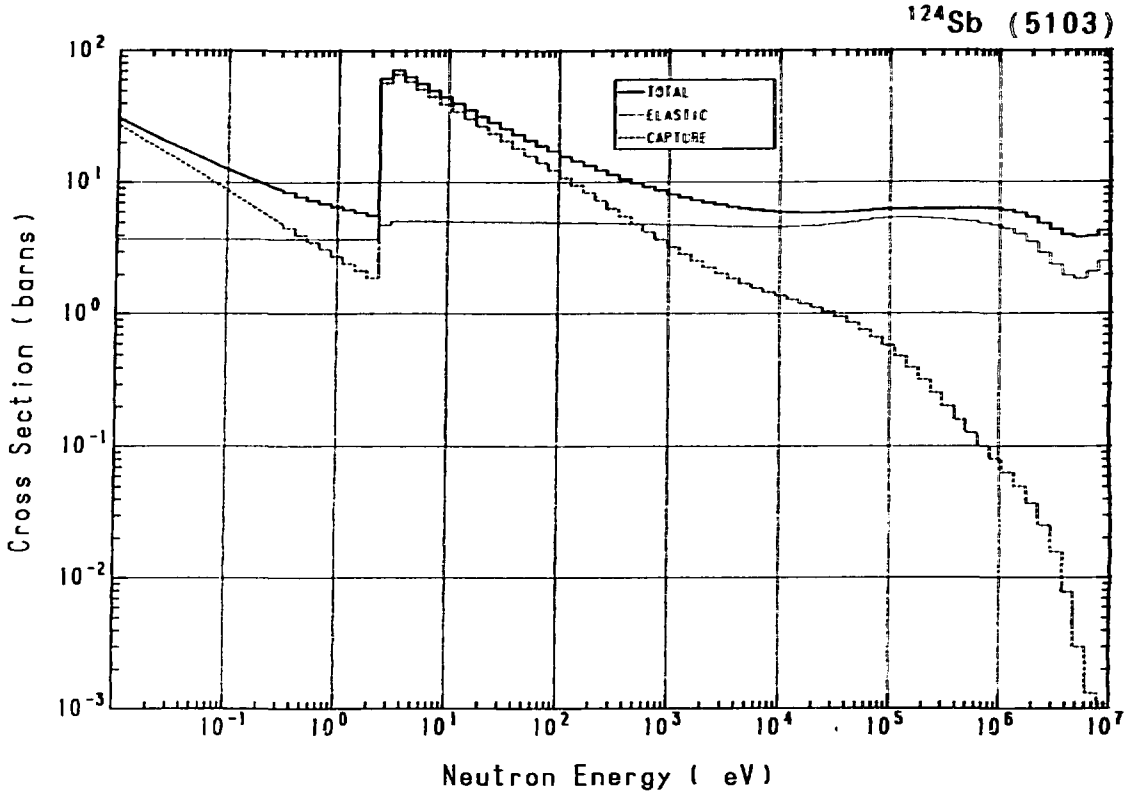

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,nα)
(n,t)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

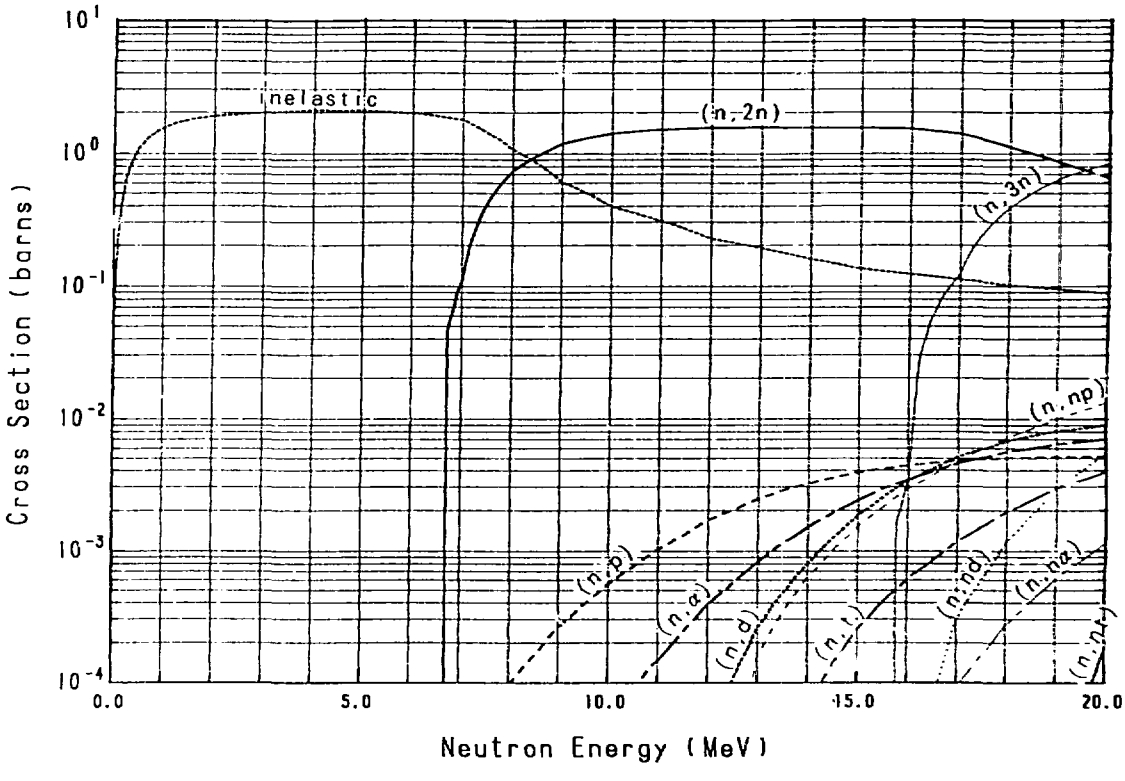

^{123}Sb (5102)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

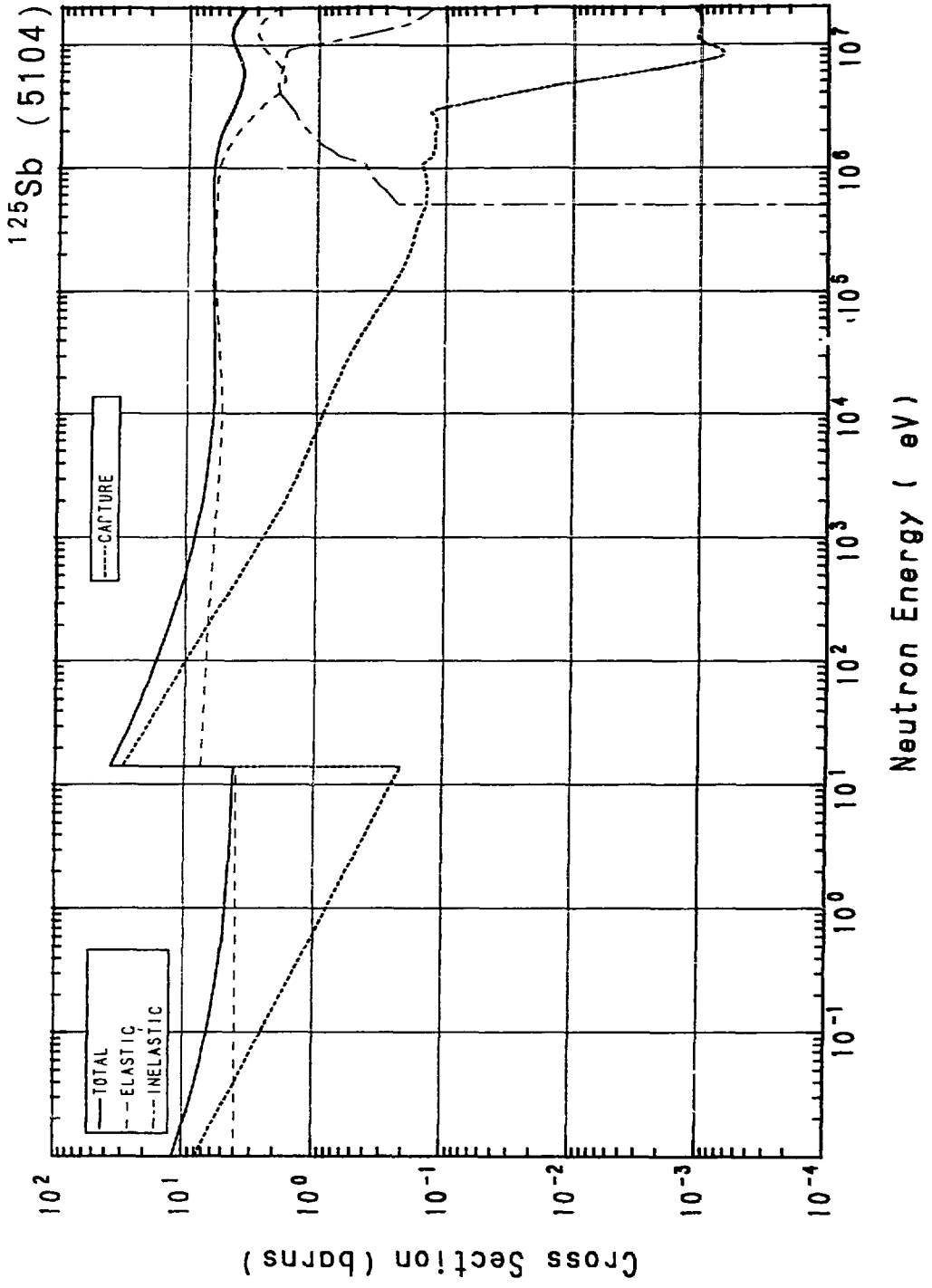

^{123}Sb (5102)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

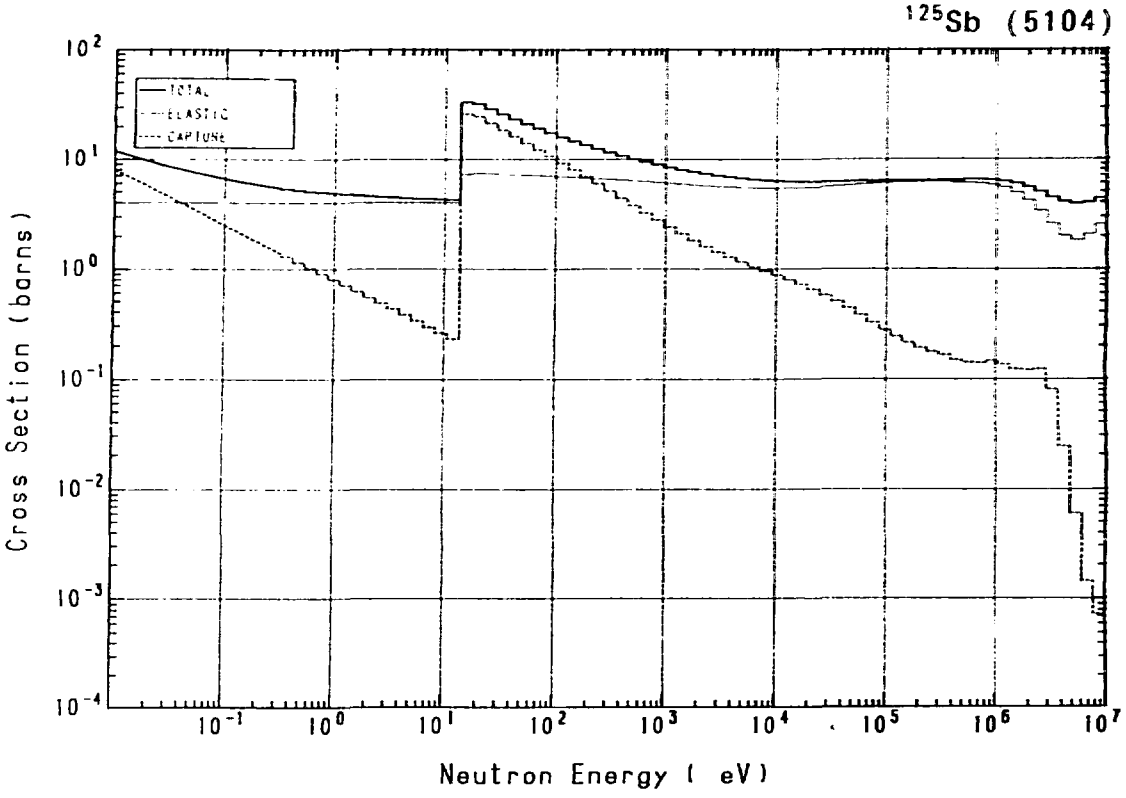

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,t)
(n,nα)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

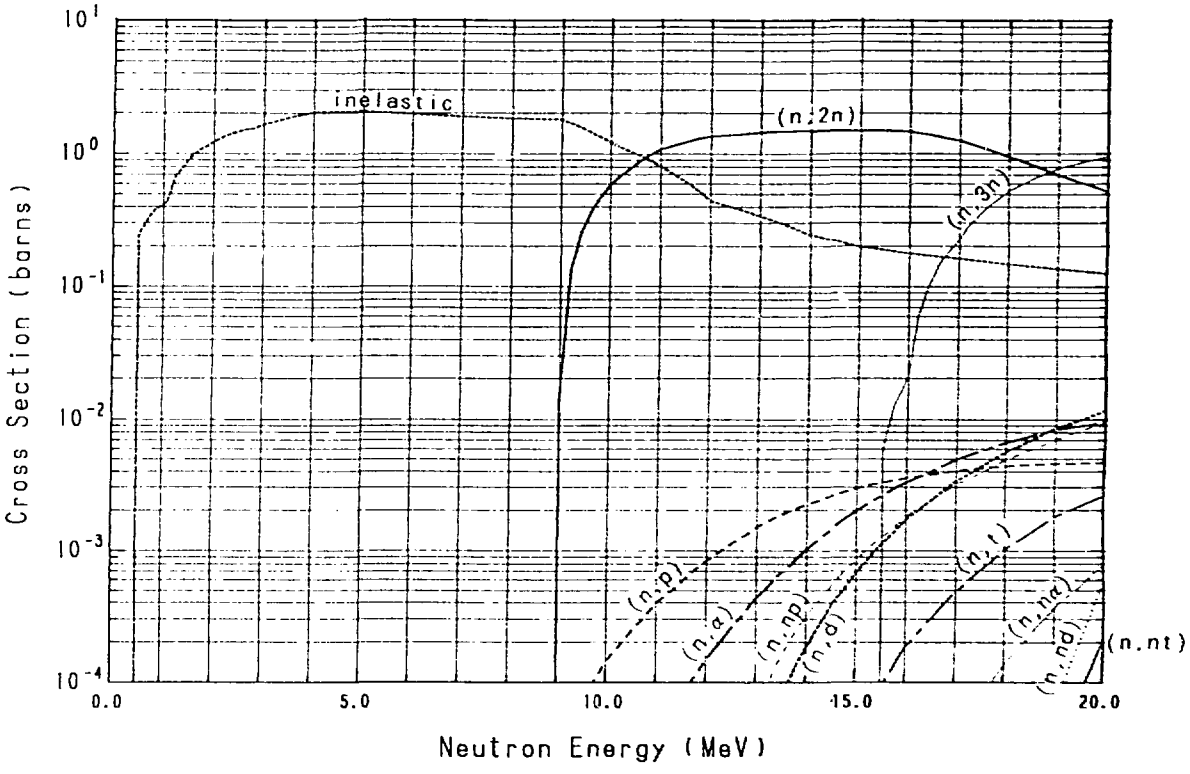

124Sb (5103)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

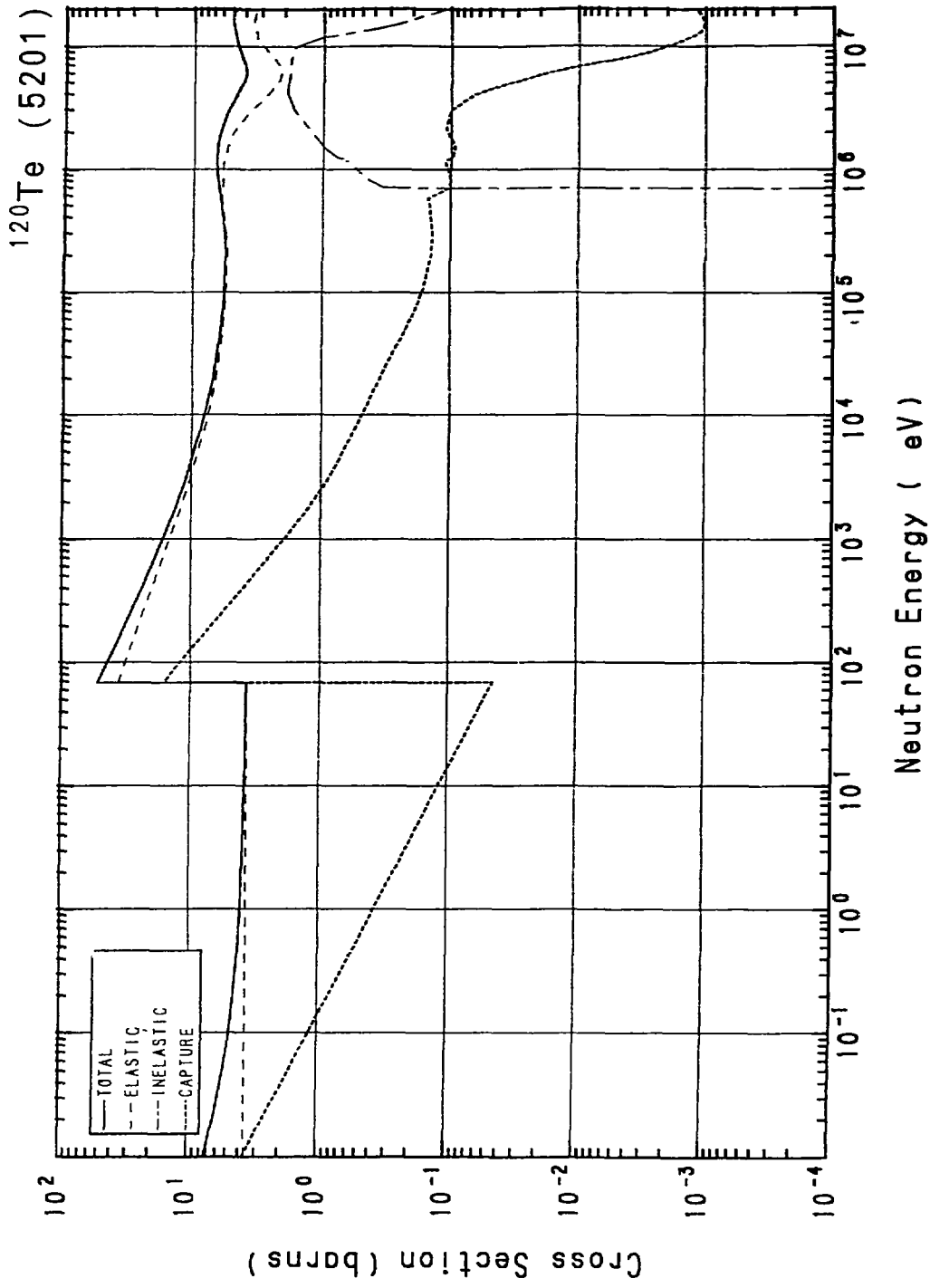

124Sb (5103)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

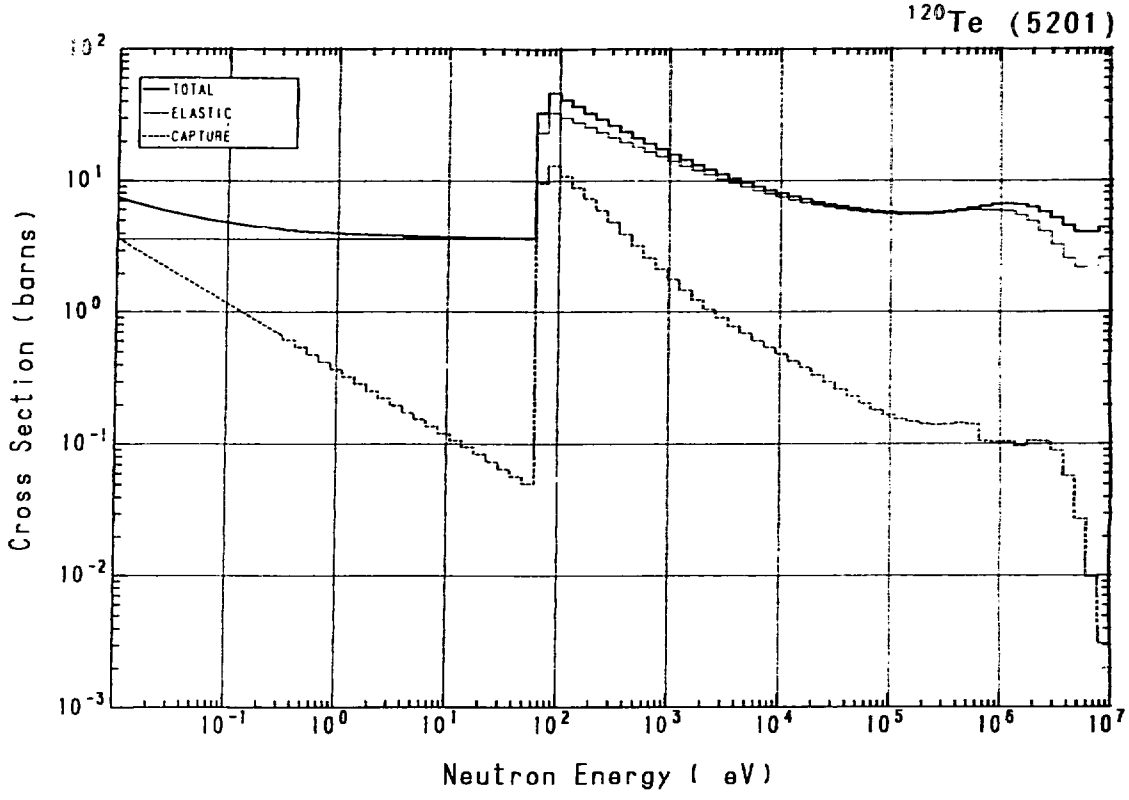

inelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,α)
(n,d)
(n,t)
(n,nd)
(n,nα)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

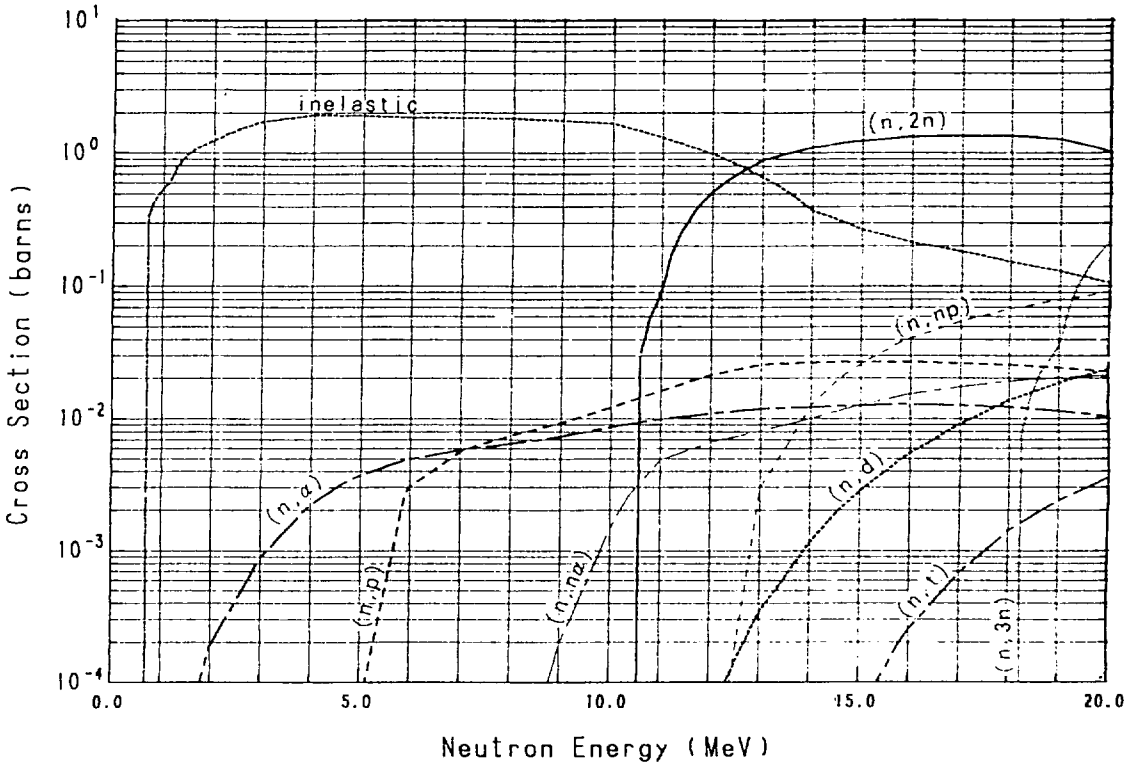

125Sb (5104)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

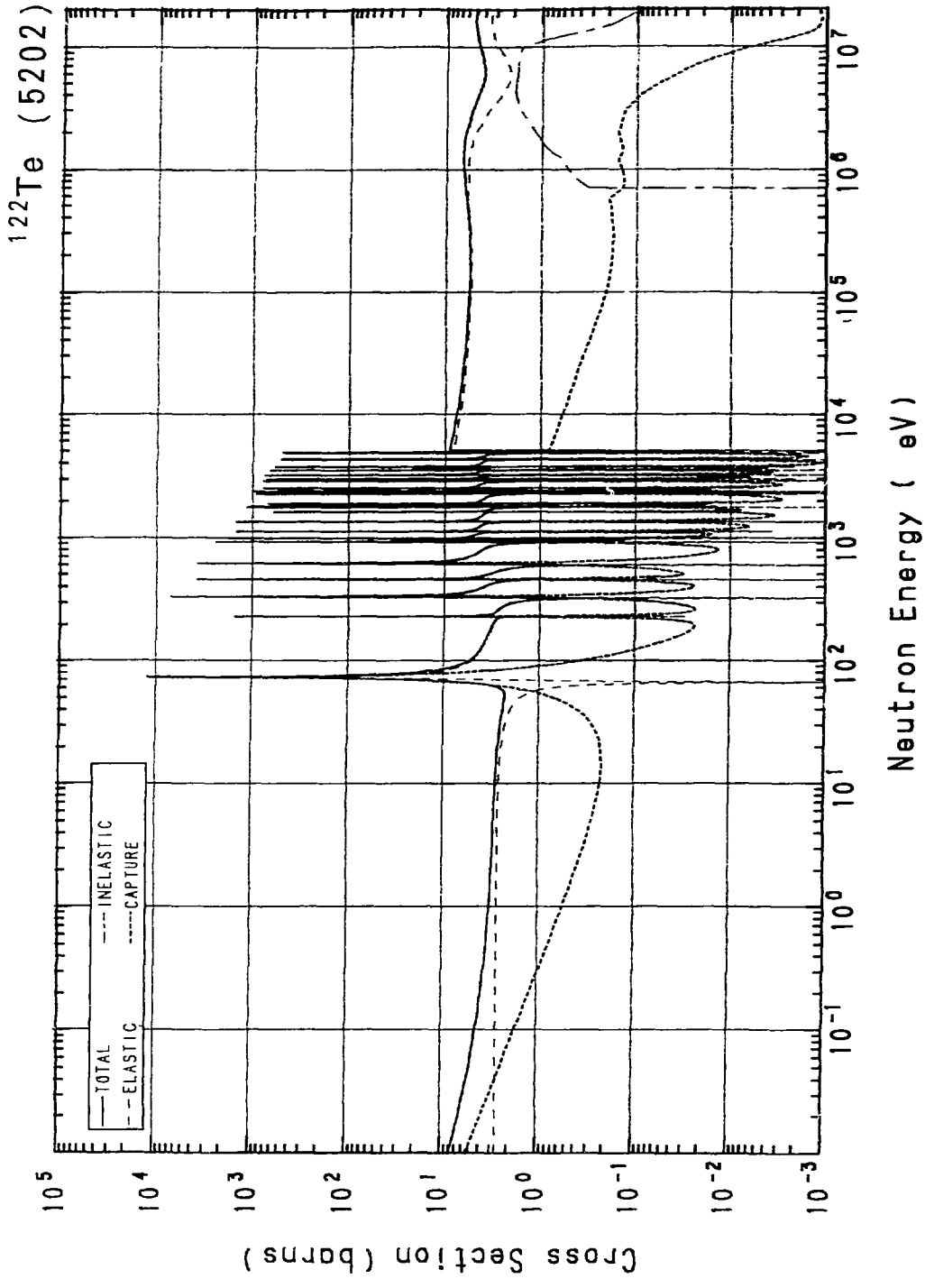

^{125}Sb (5104)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

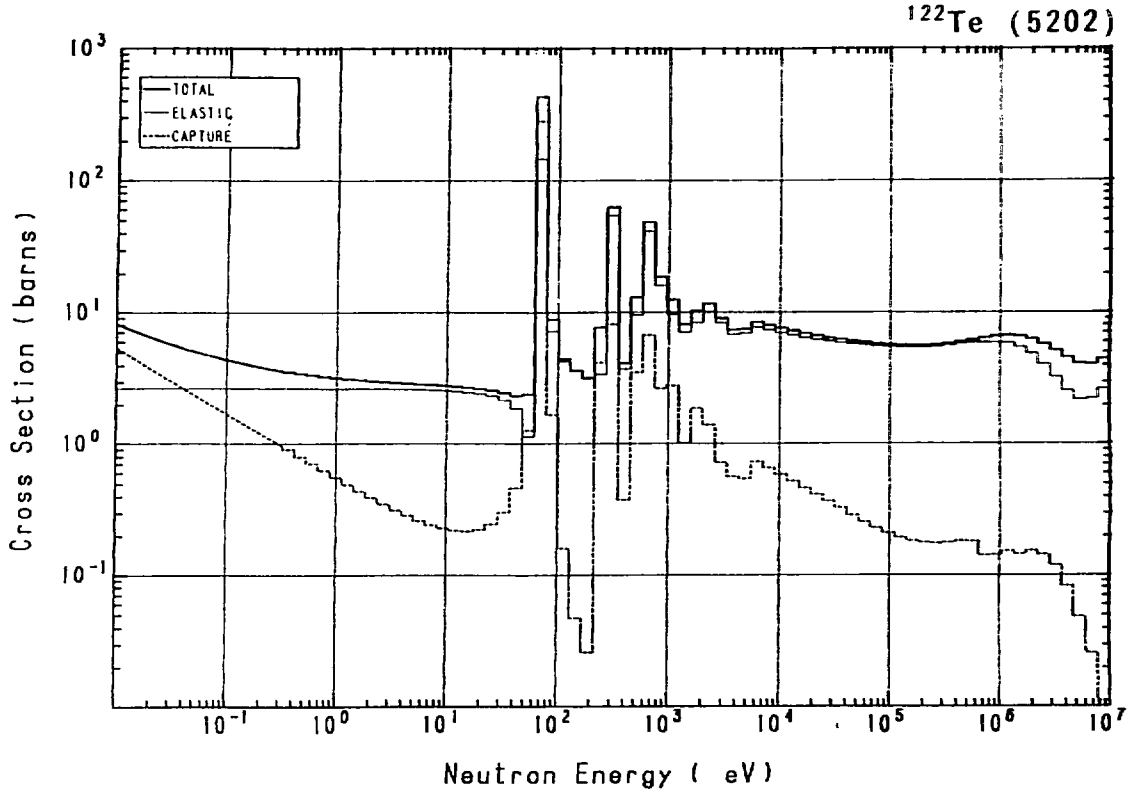

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,t)
(n,nα)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

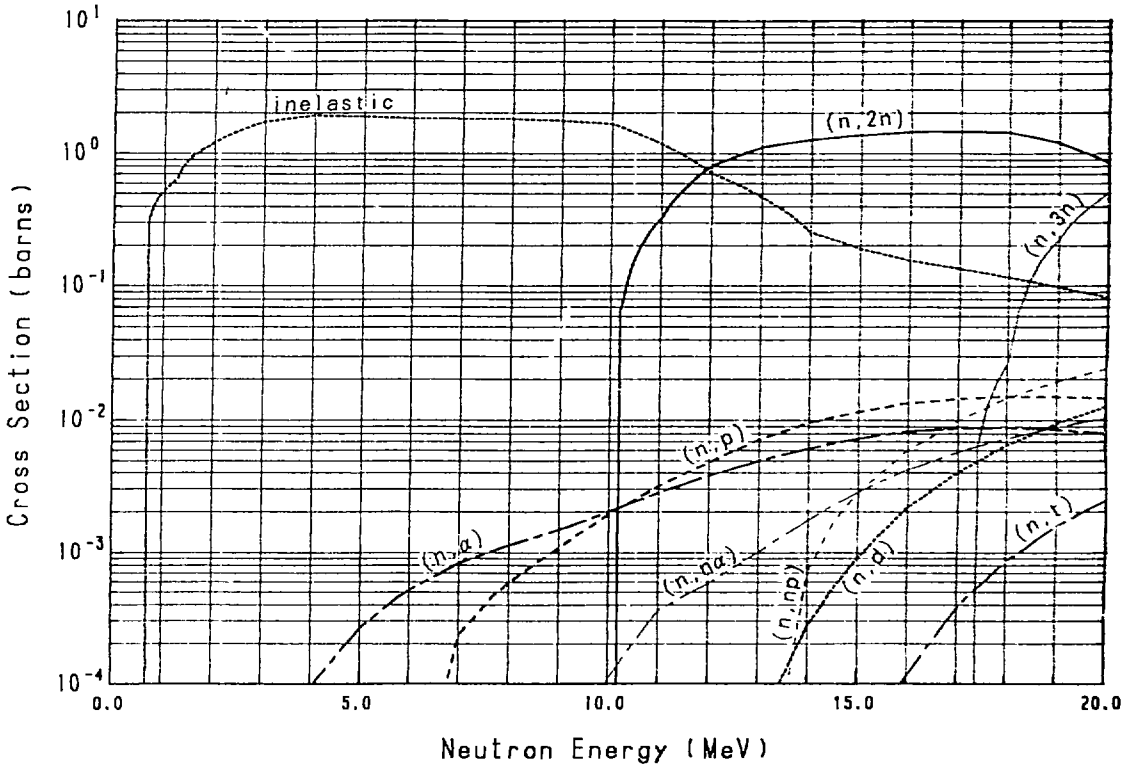

120Te (5201)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

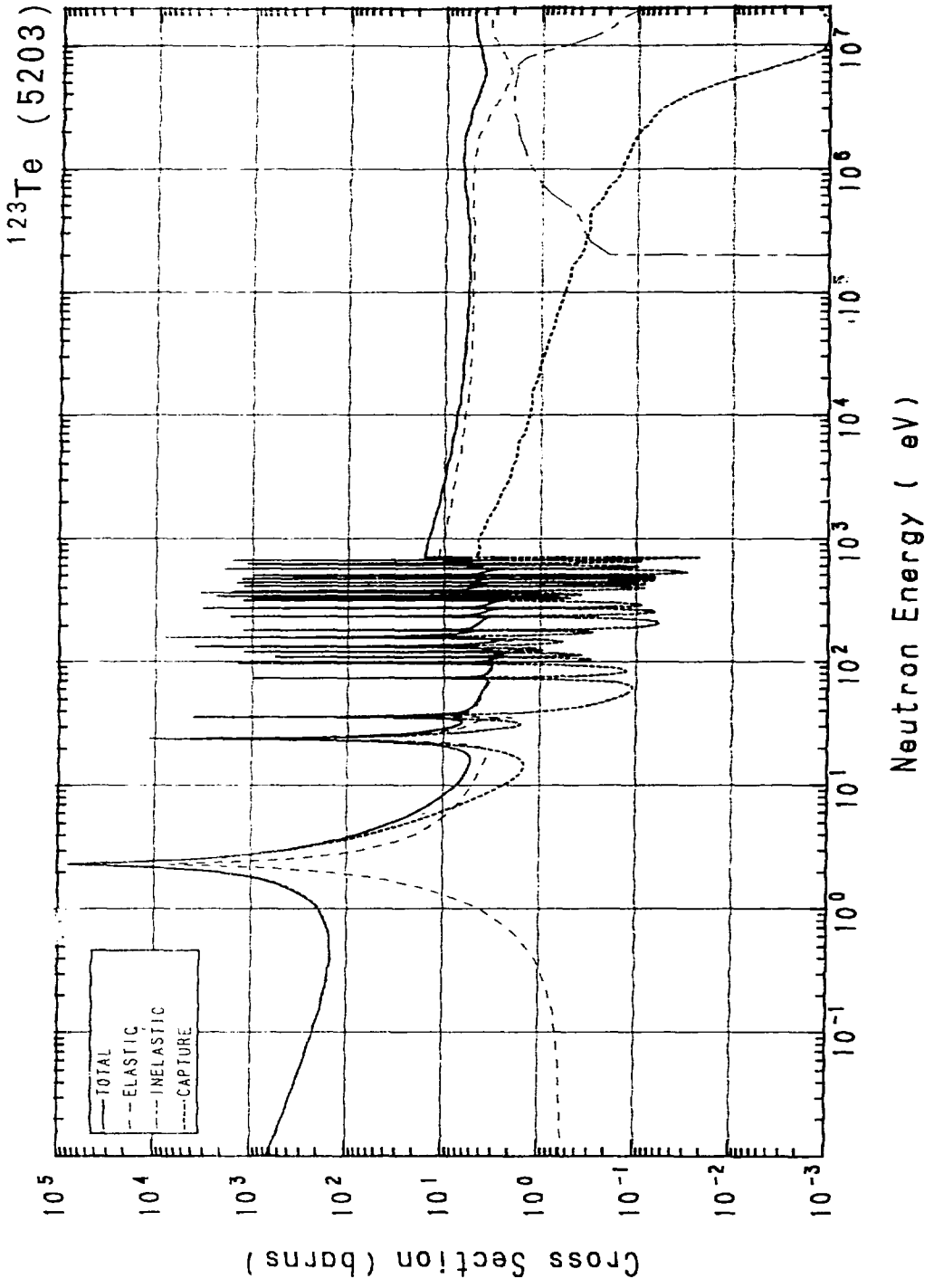

^{120}Te (5201)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

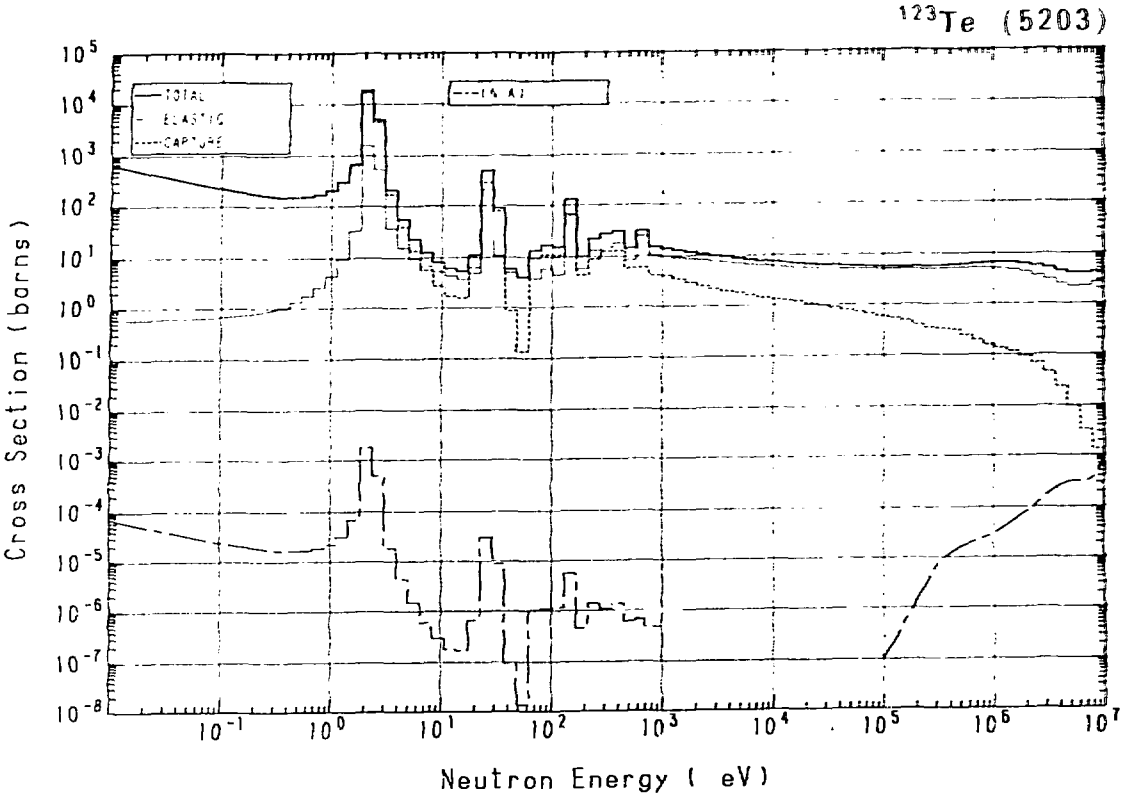

inelastic
(n,2n)
(n,np)
(n,α)
(n,p)
(n,nα)
(n,d)
(n,t)
(n,3n)
Cross Section (barns)
Neutron Energy (MeV)

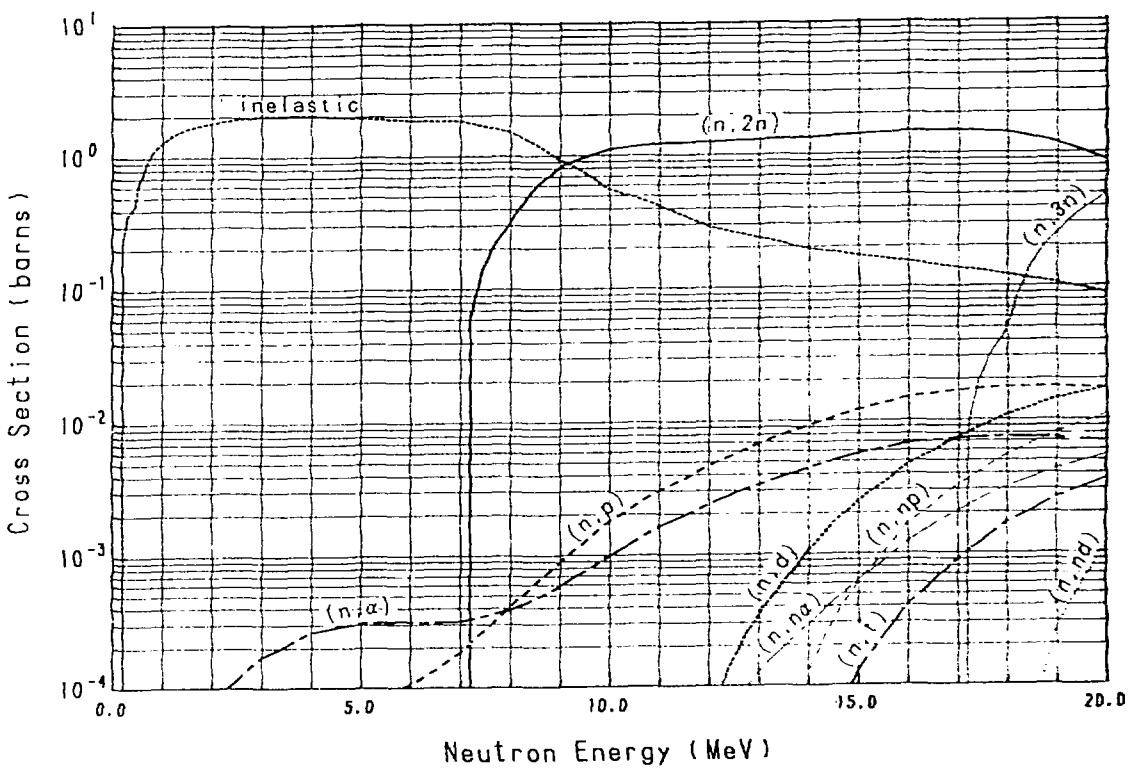

^{122}Te (5202)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

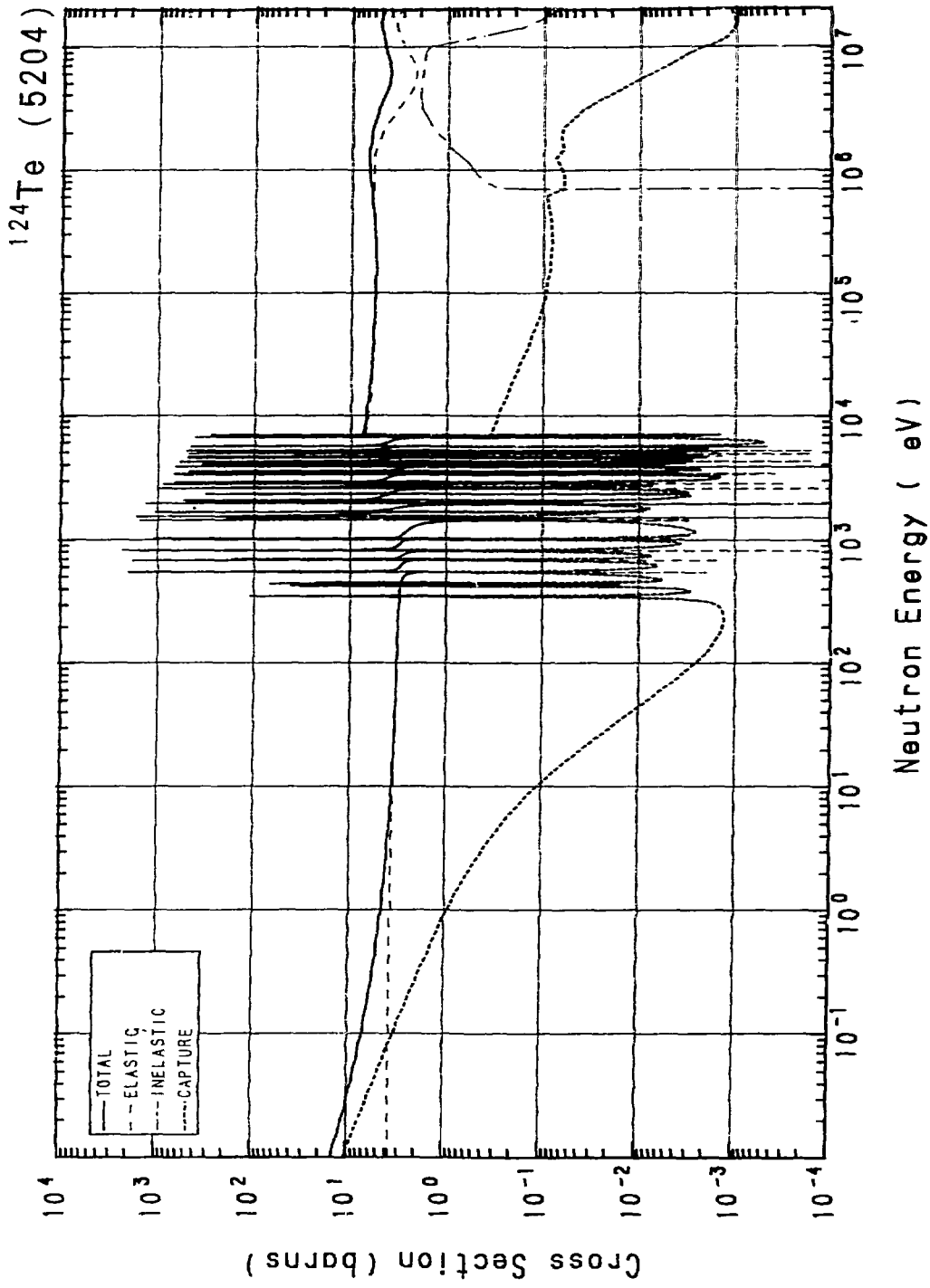

^{122}Te (5202)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

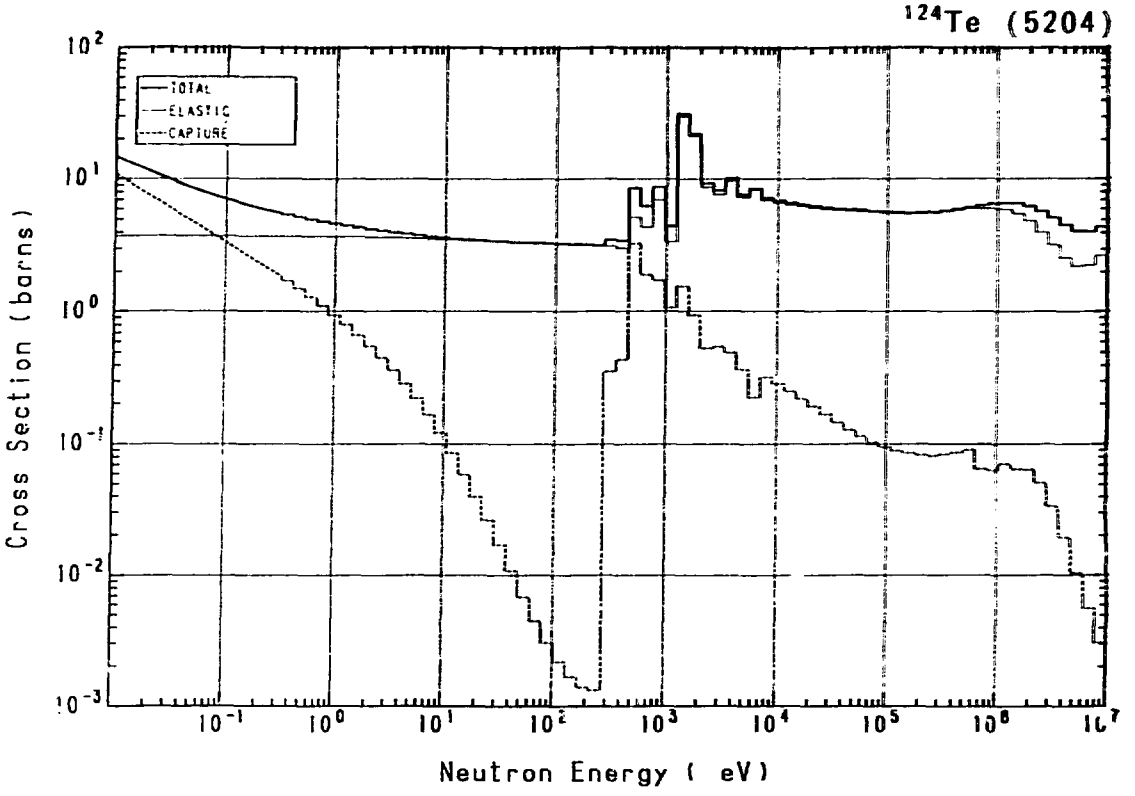

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,nα)
(n,np)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

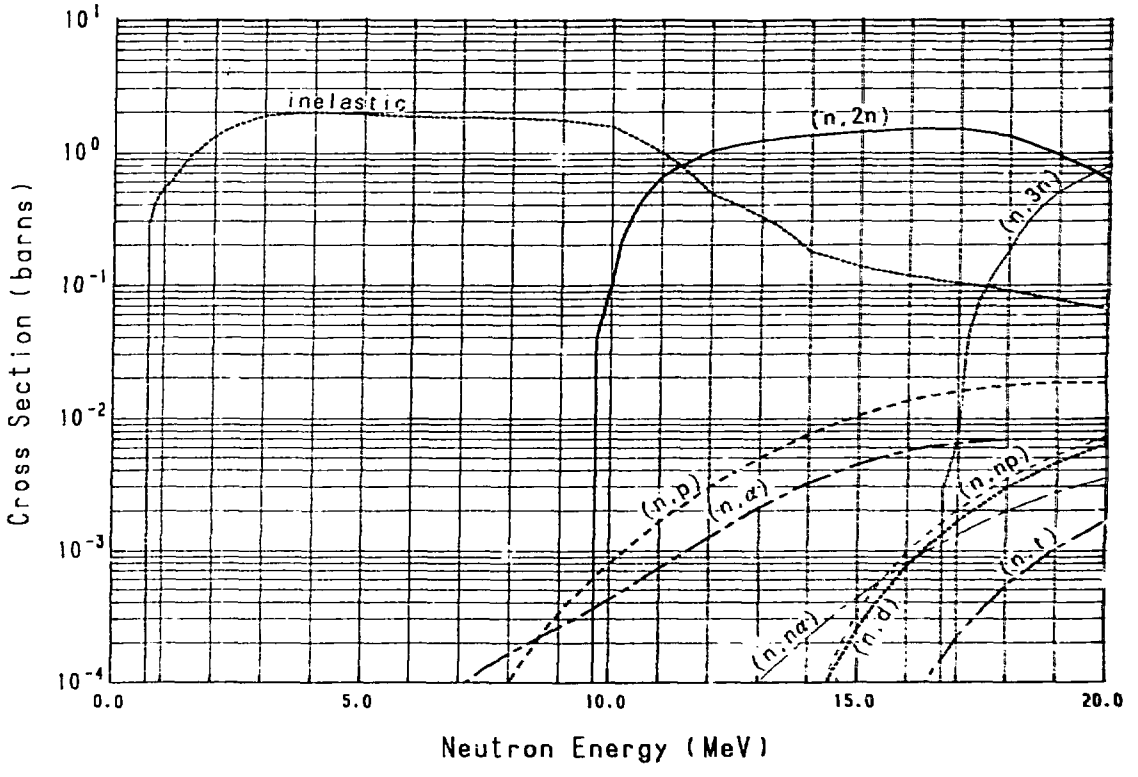

^{123}Te (5203)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

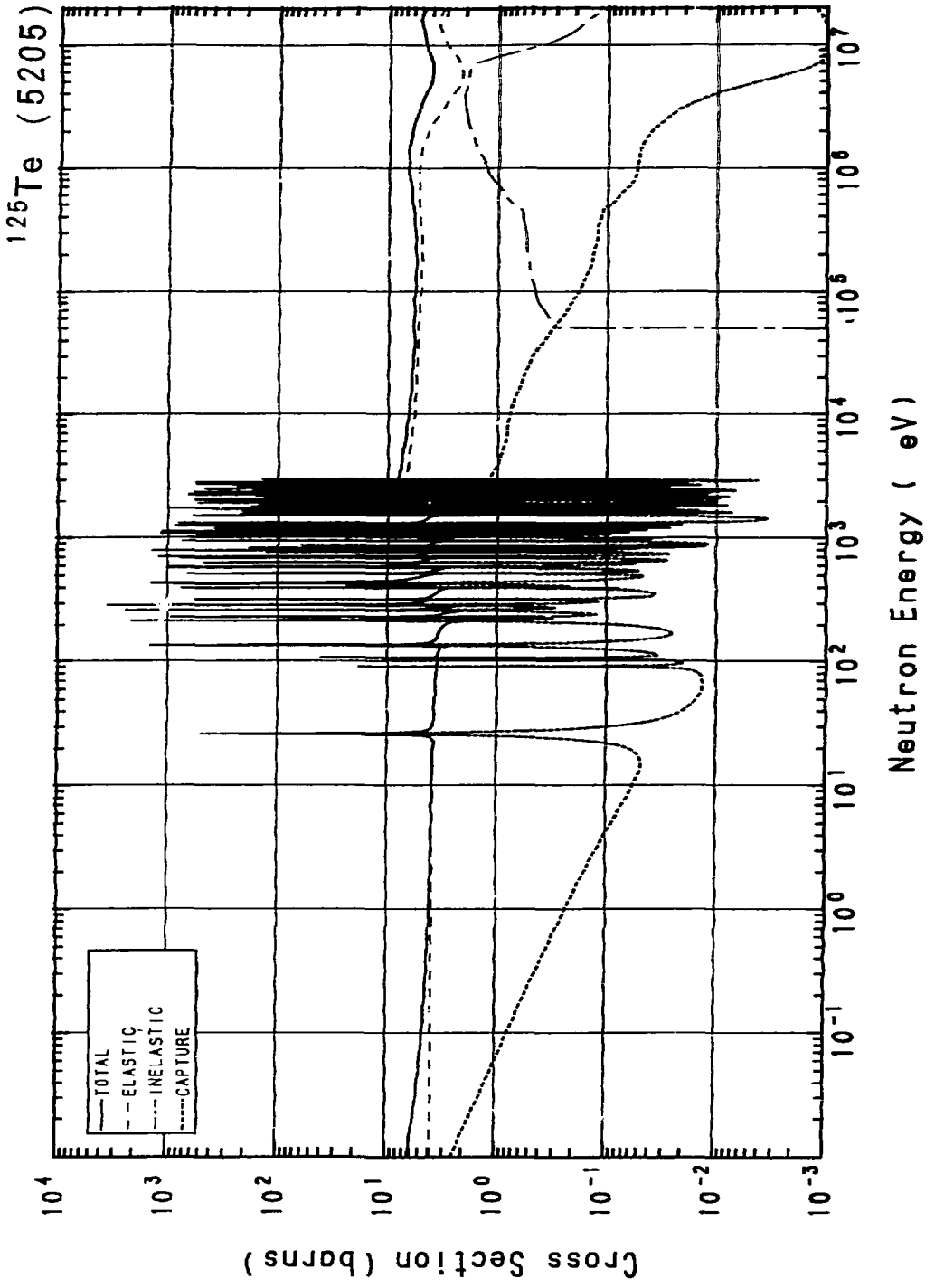

^{123}Te (5203)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

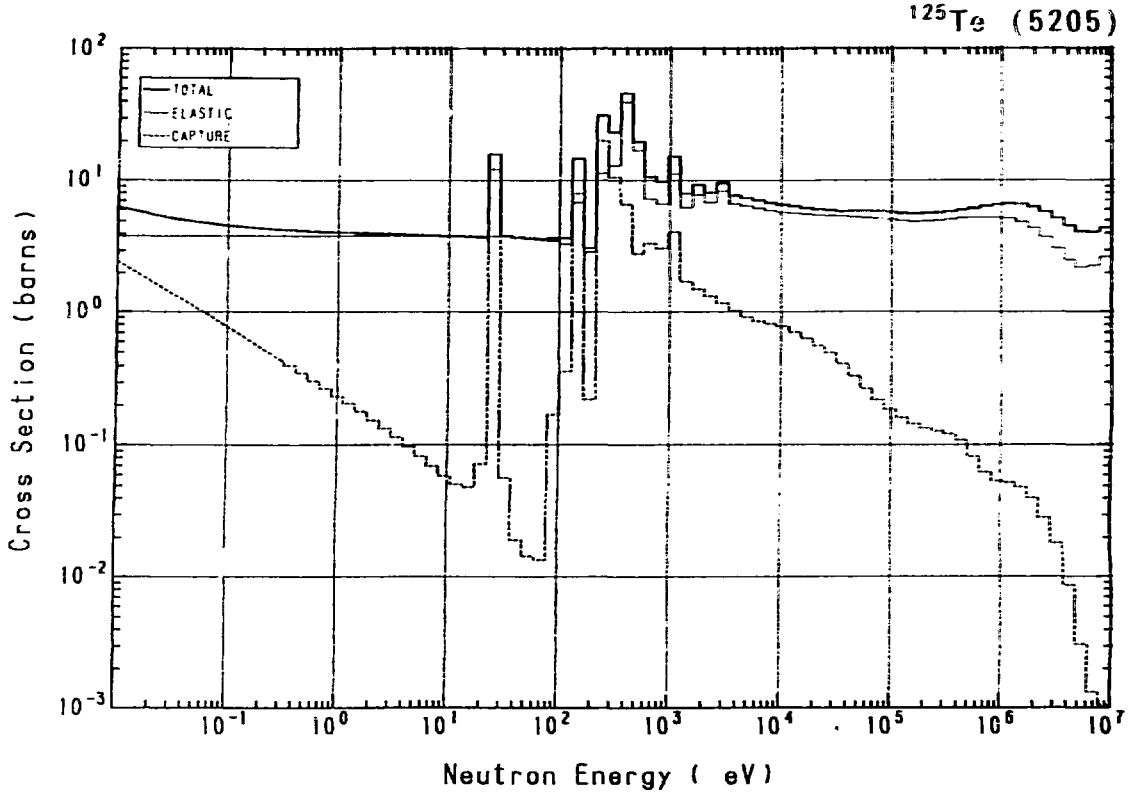

inelastic
(n,2n)
(n,3n)
(n,p)
(n,d)
(n,np)
(n,nd)
(n,na)
(n,t)
(n,α)
Cross Section (barns)
Neutron Energy (MeV)

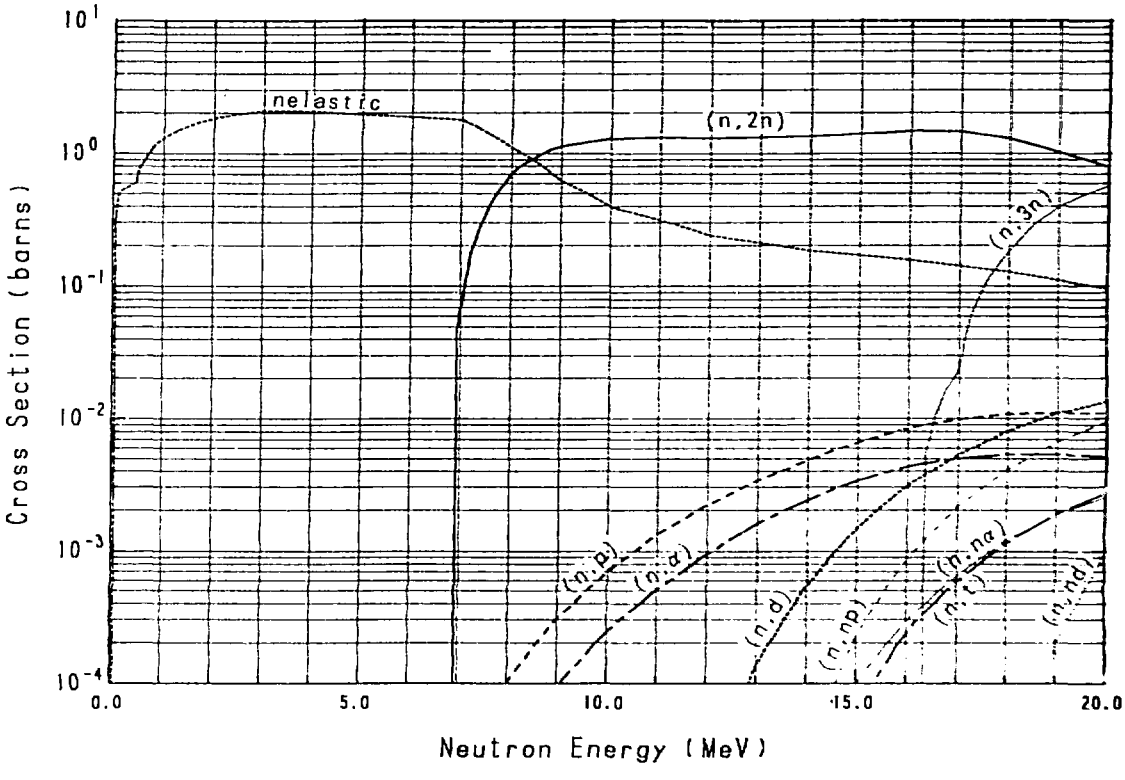

124Te (5204)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

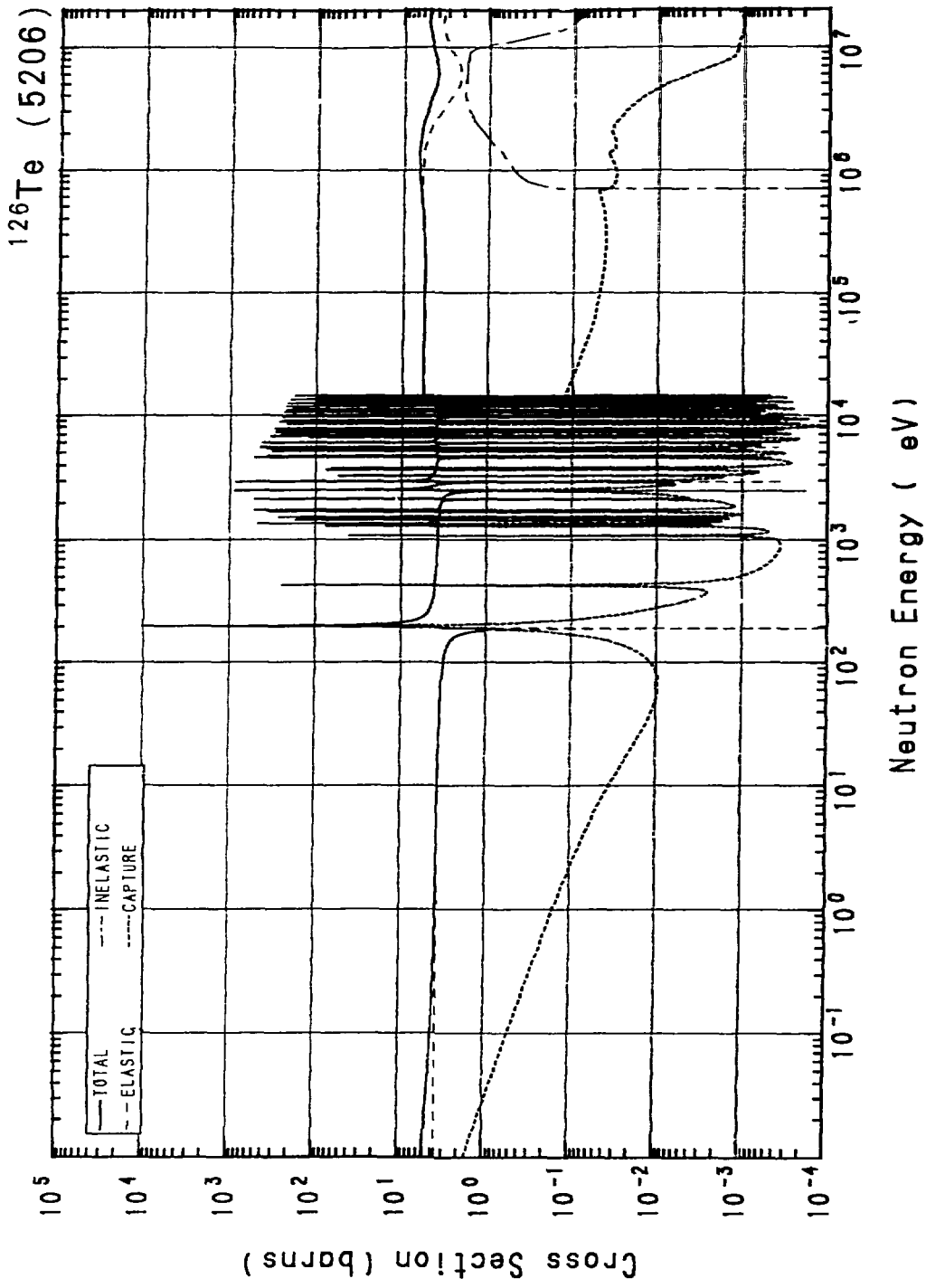

124Te (5204)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

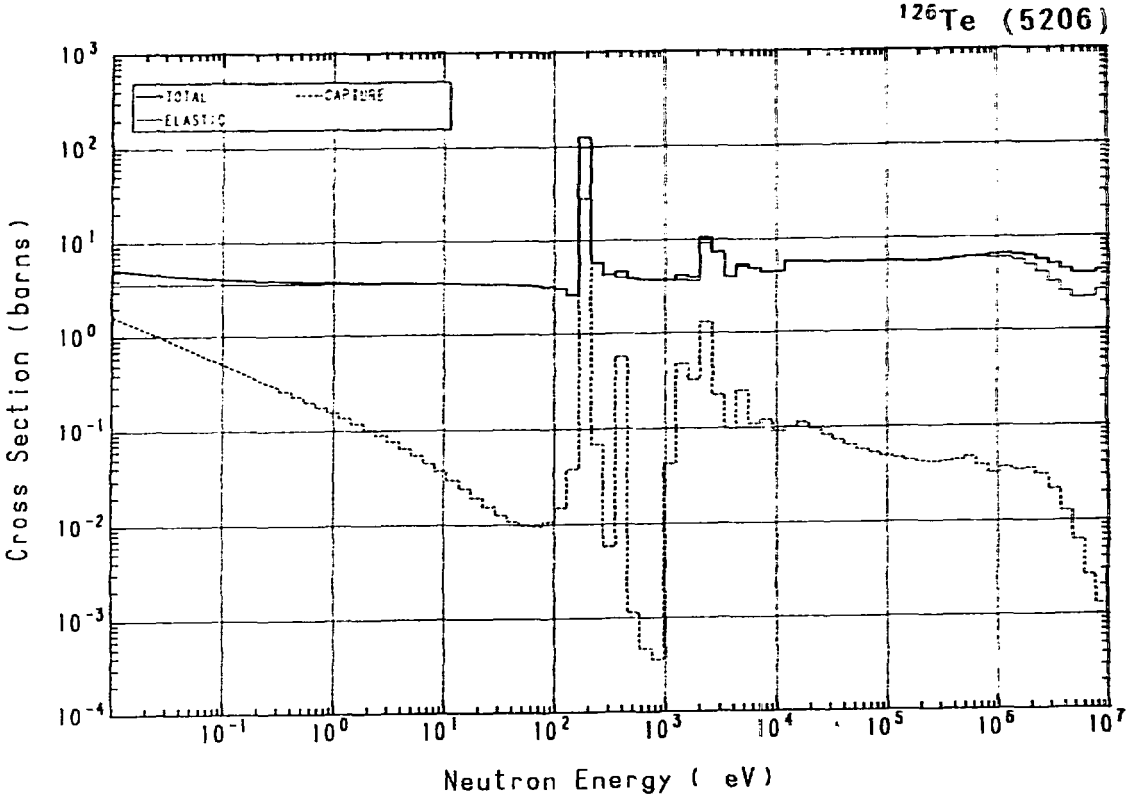

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,γ)
(n,nα)
(n,d)
Cross Section (barns)
Neutron Energy (MeV)

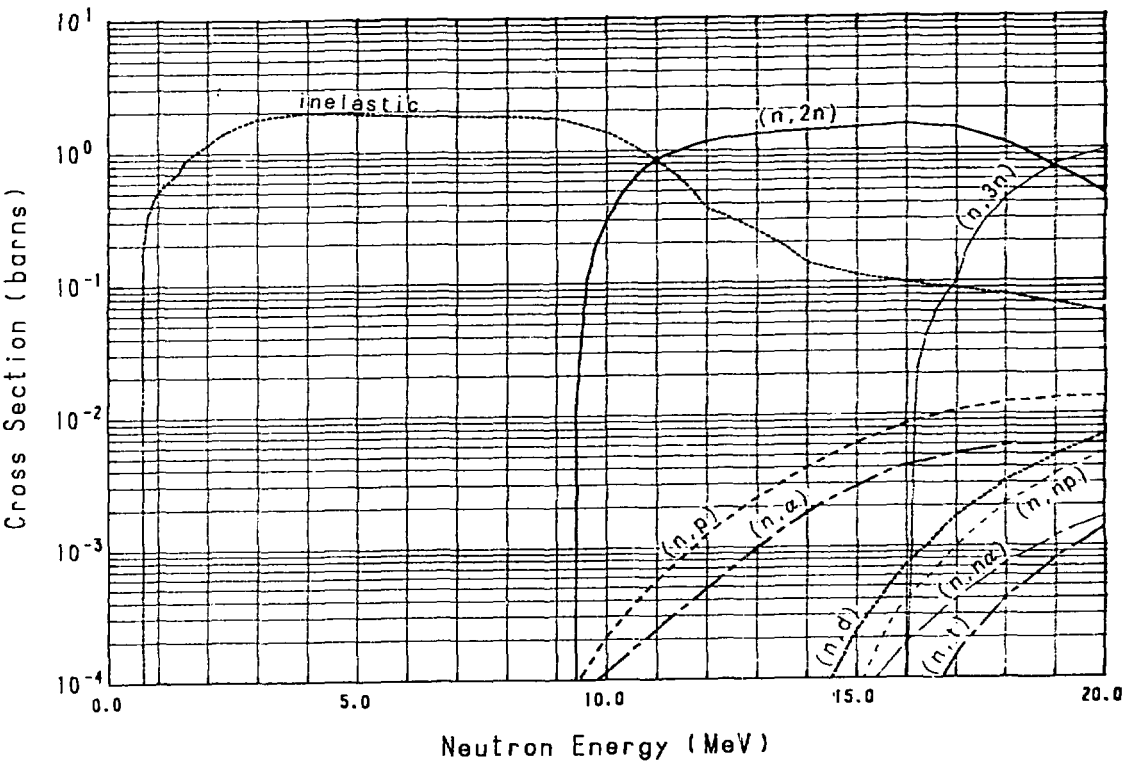

125Te (5205)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

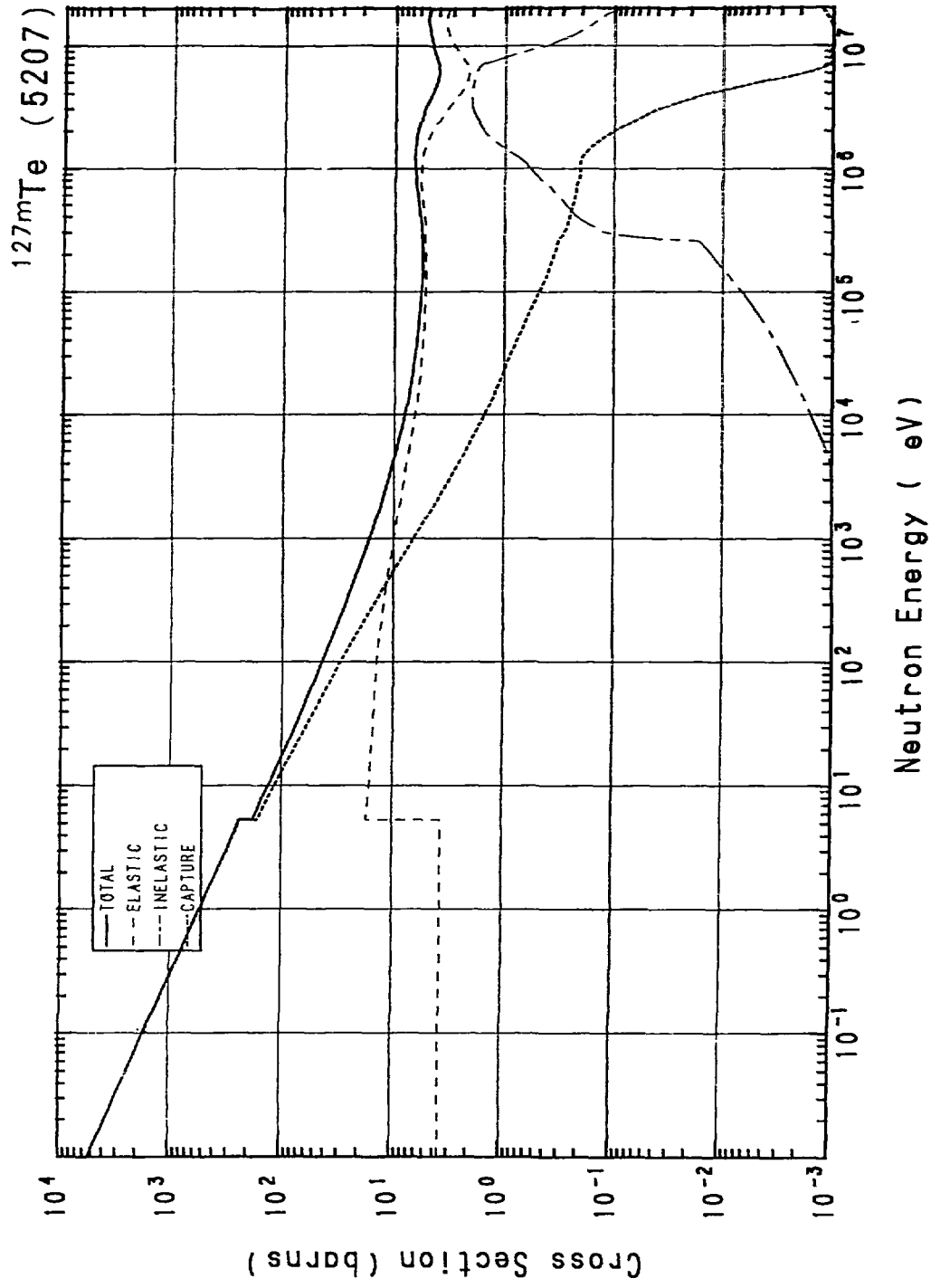

125Te (5205)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

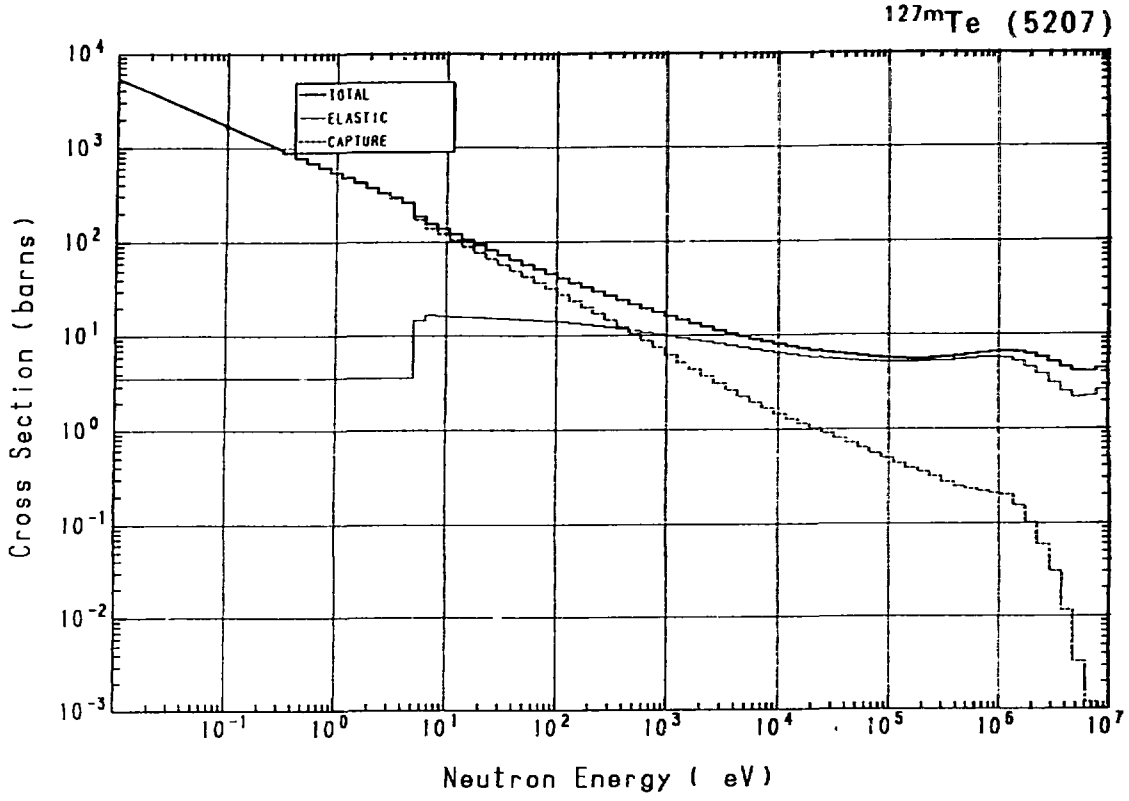

nelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,t)
(n,nα)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

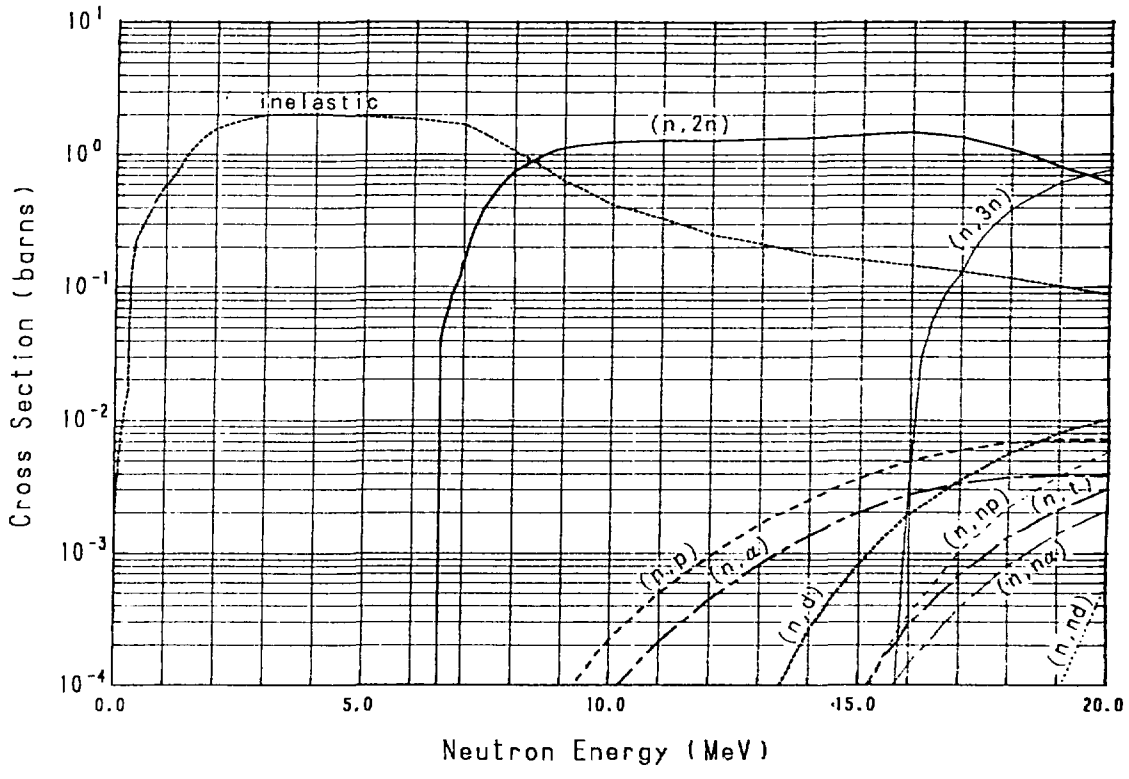

126Te (5206)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

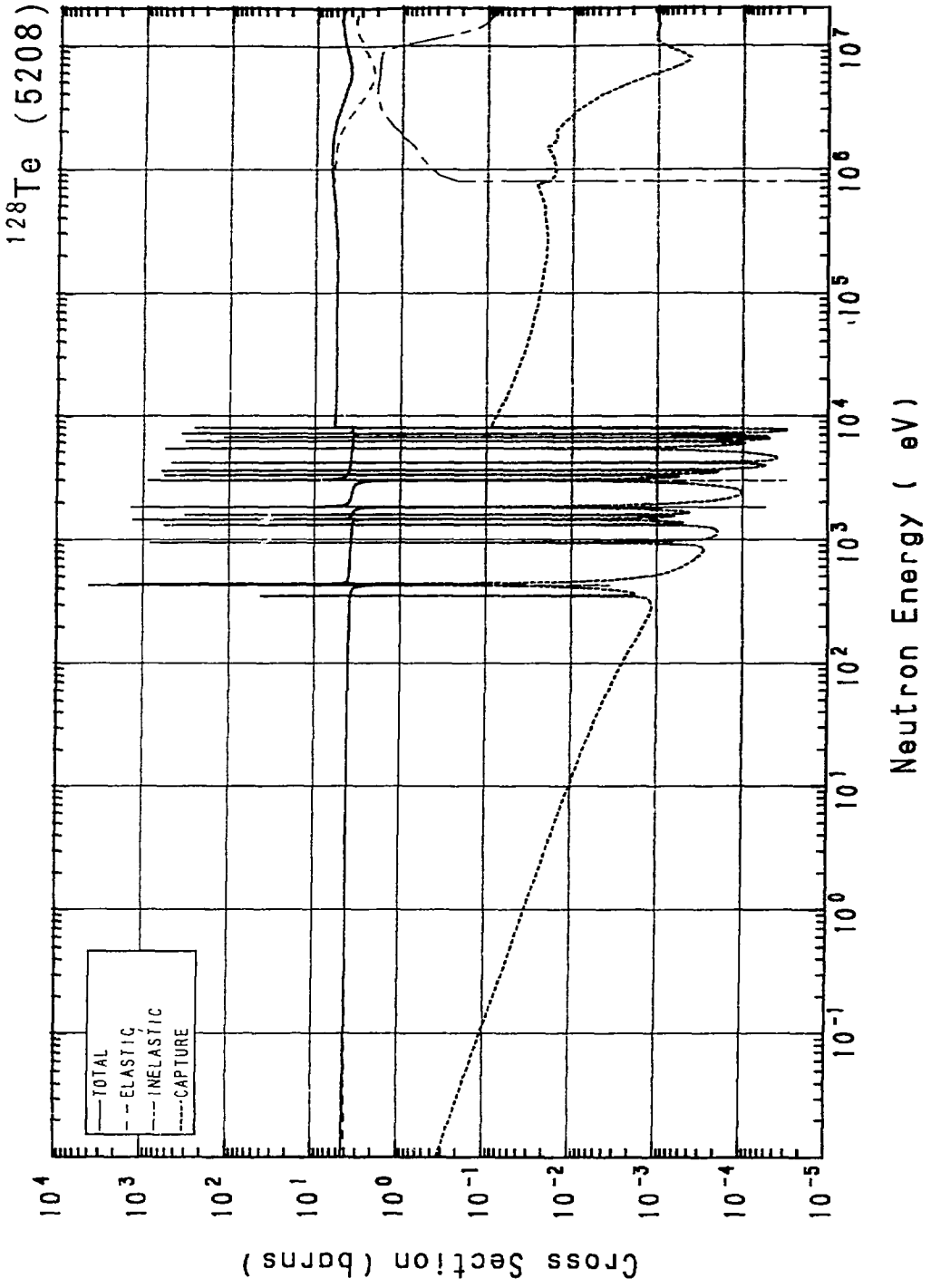

^{126}Te (5206)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

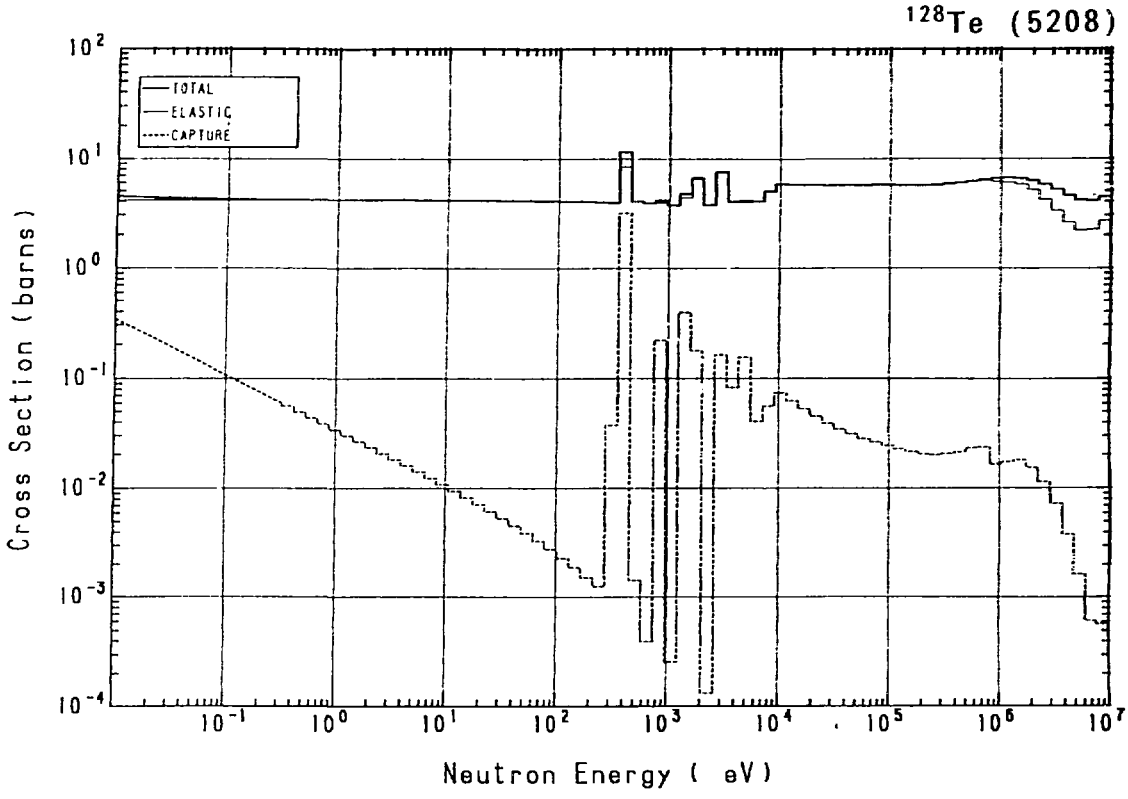

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,np)
Cross Section (barns)
Neutron Energy (MeV)

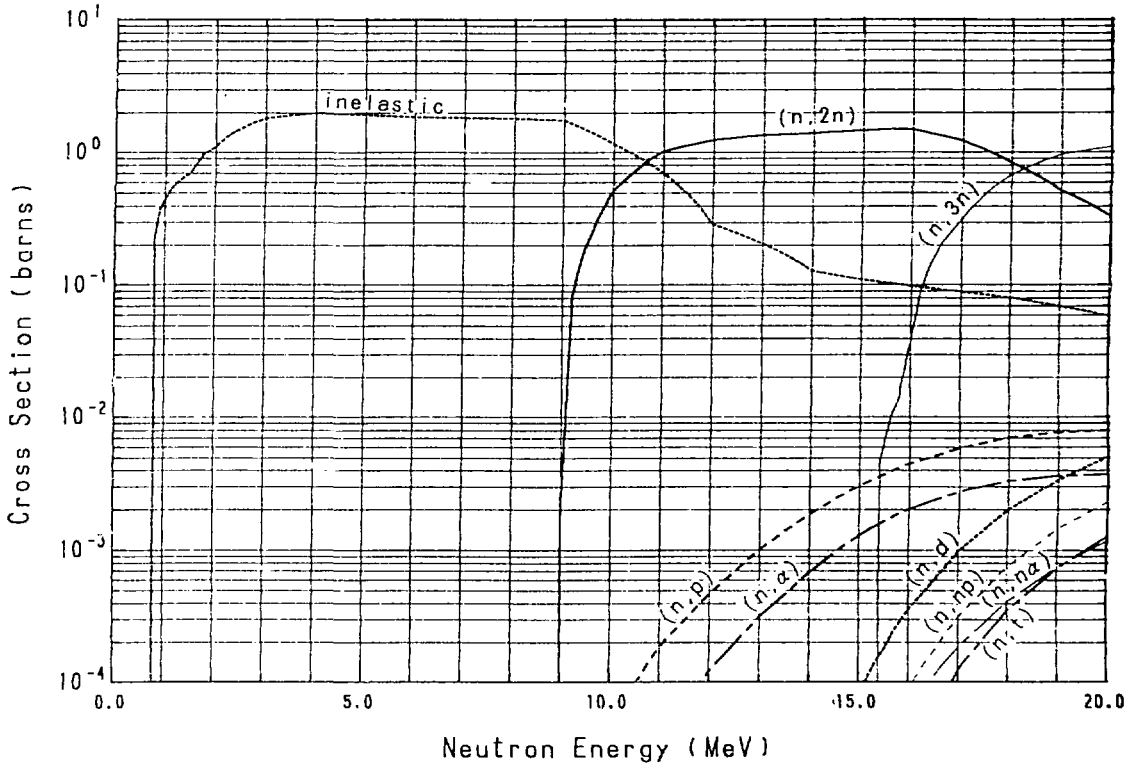

127mTe (5207)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

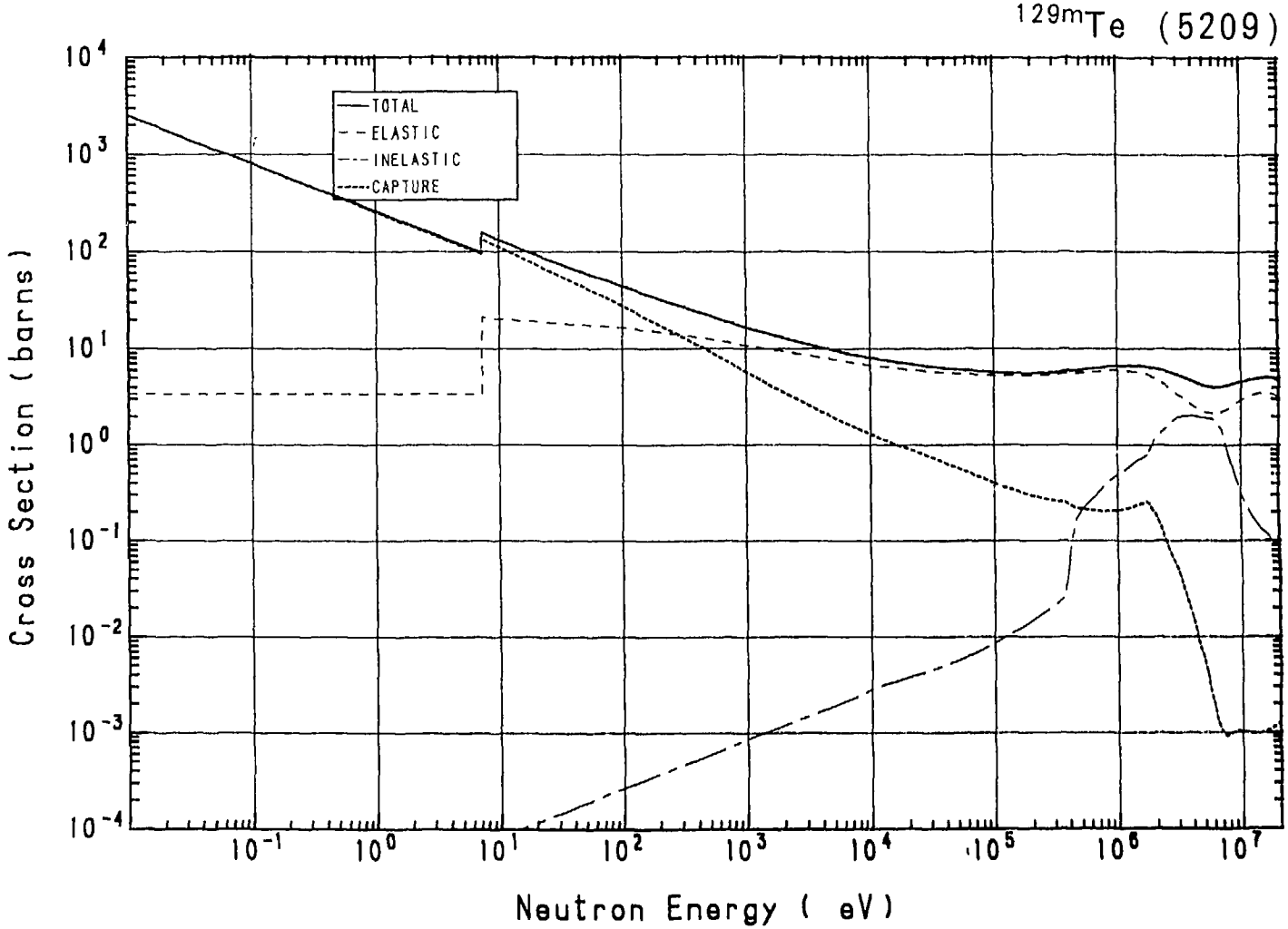

127mTe (5207)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

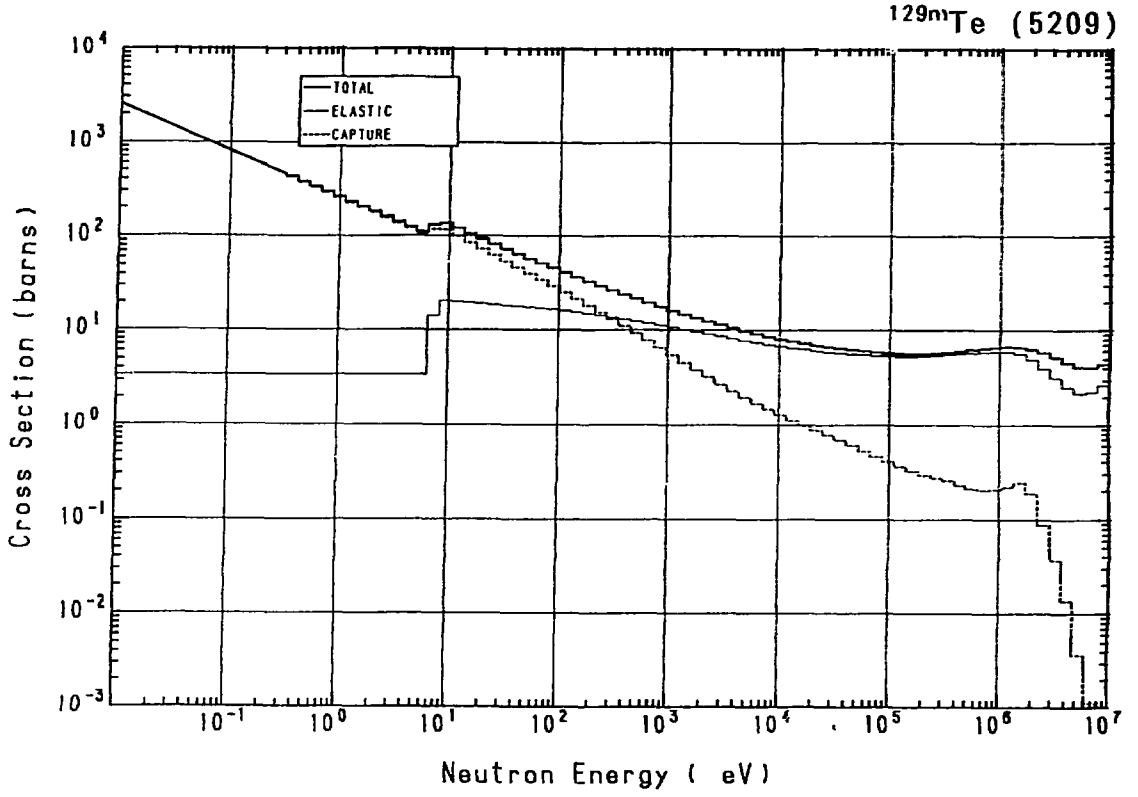

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,t)
(n,nα)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

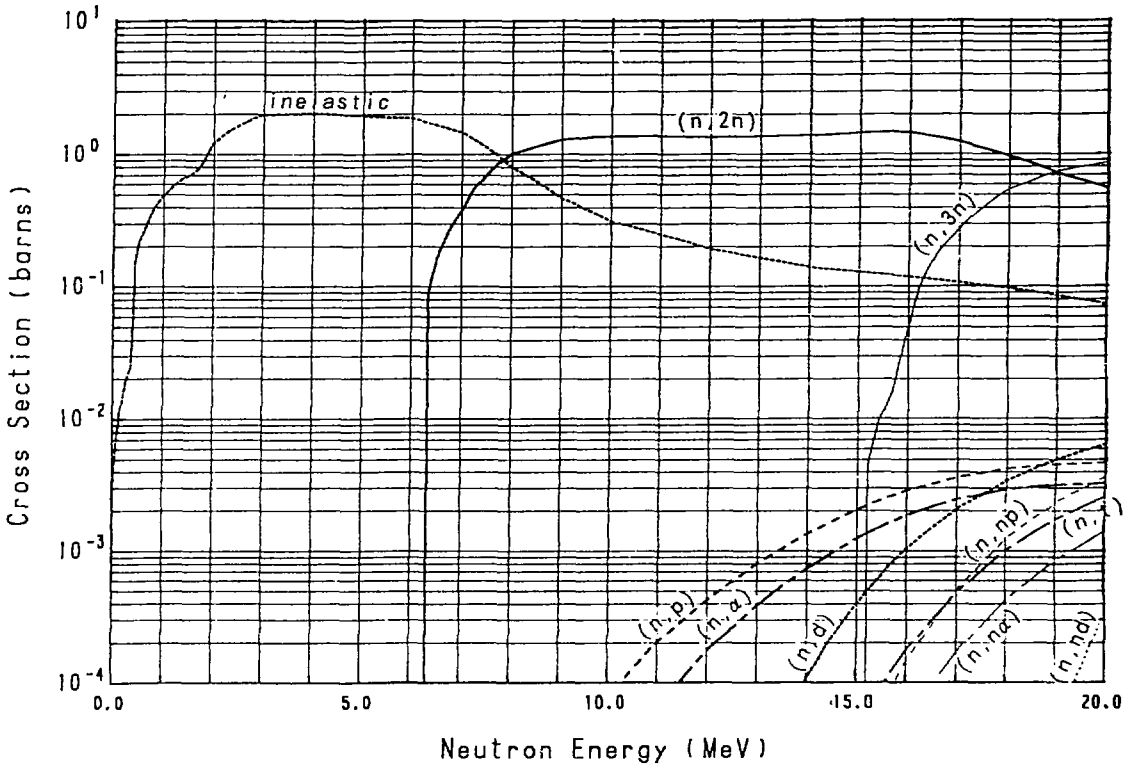

128Te (5208)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

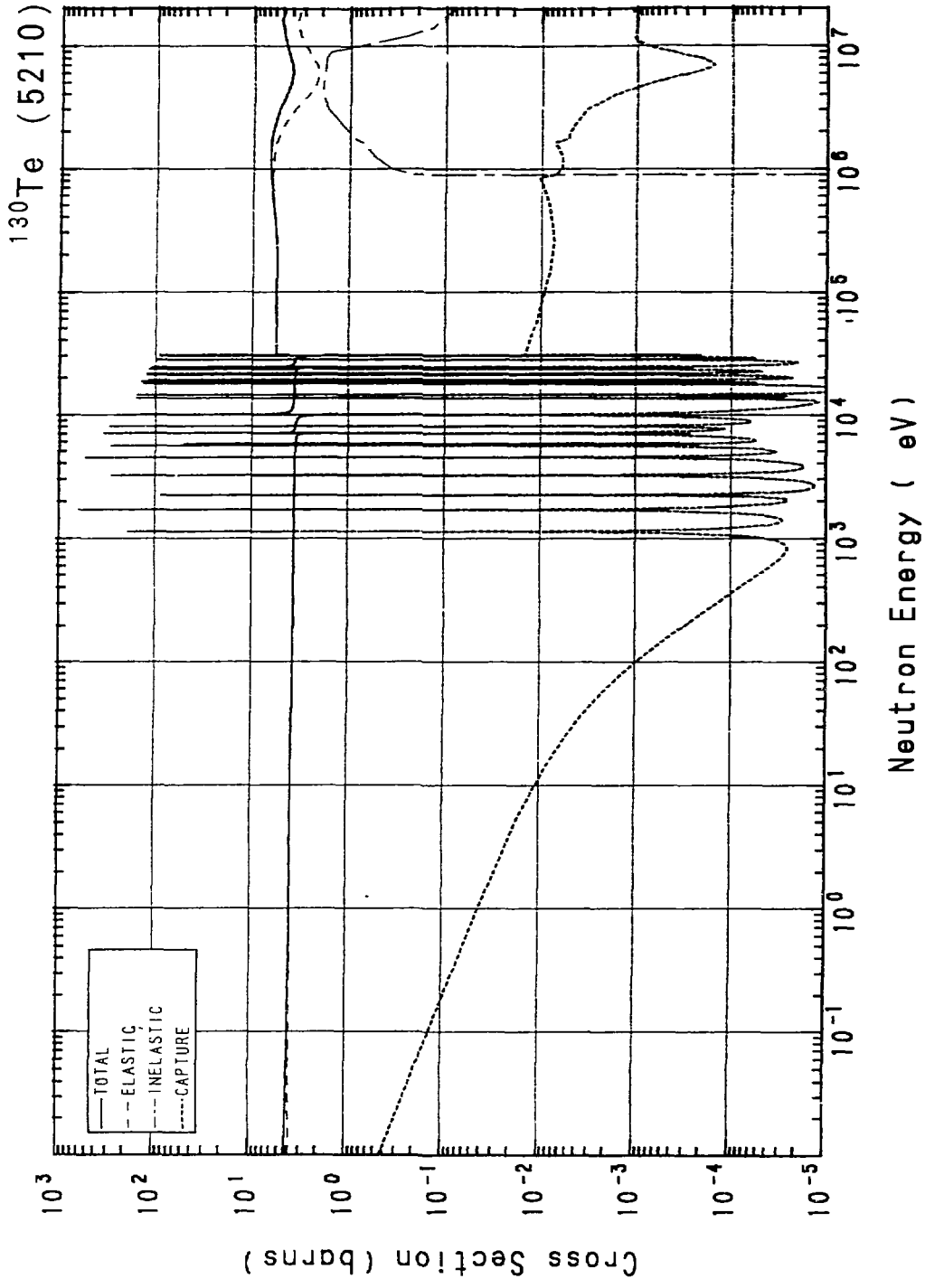

^{128}Te (5208)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

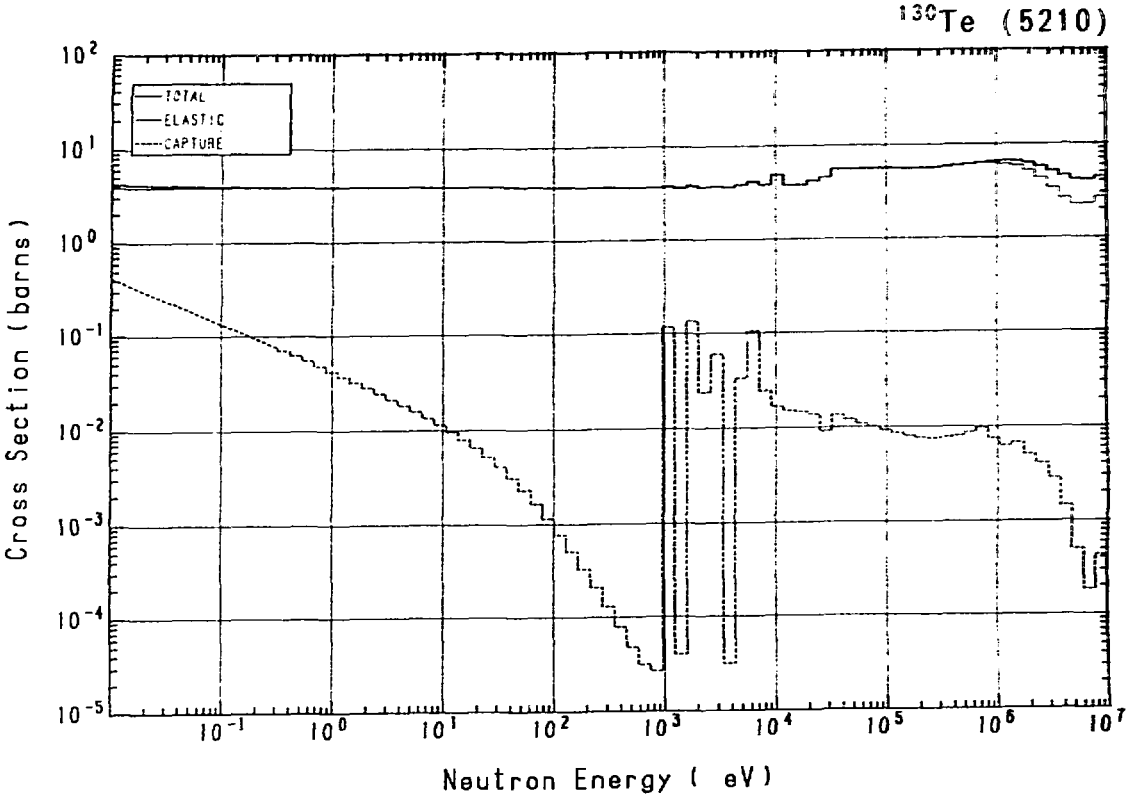

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

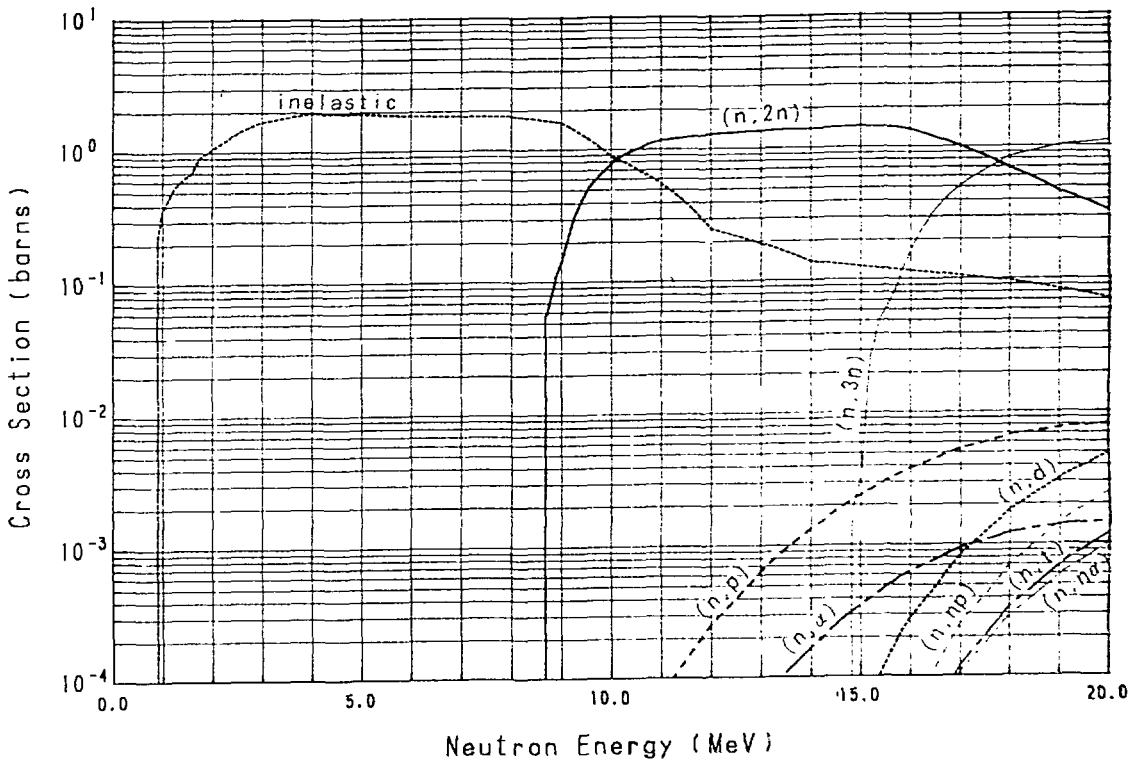

129mTe (5209)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

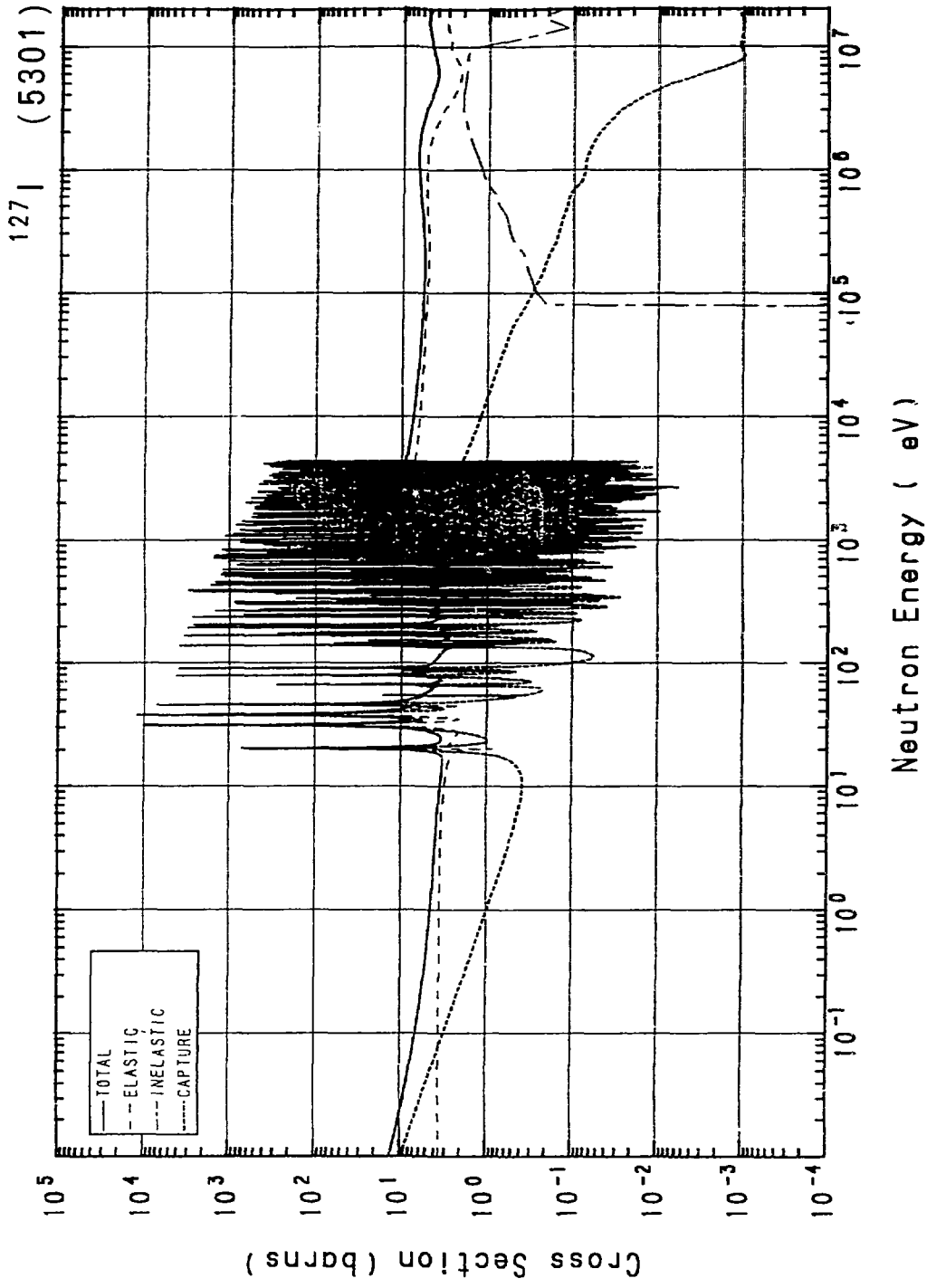

^{129m1}Te (5209)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

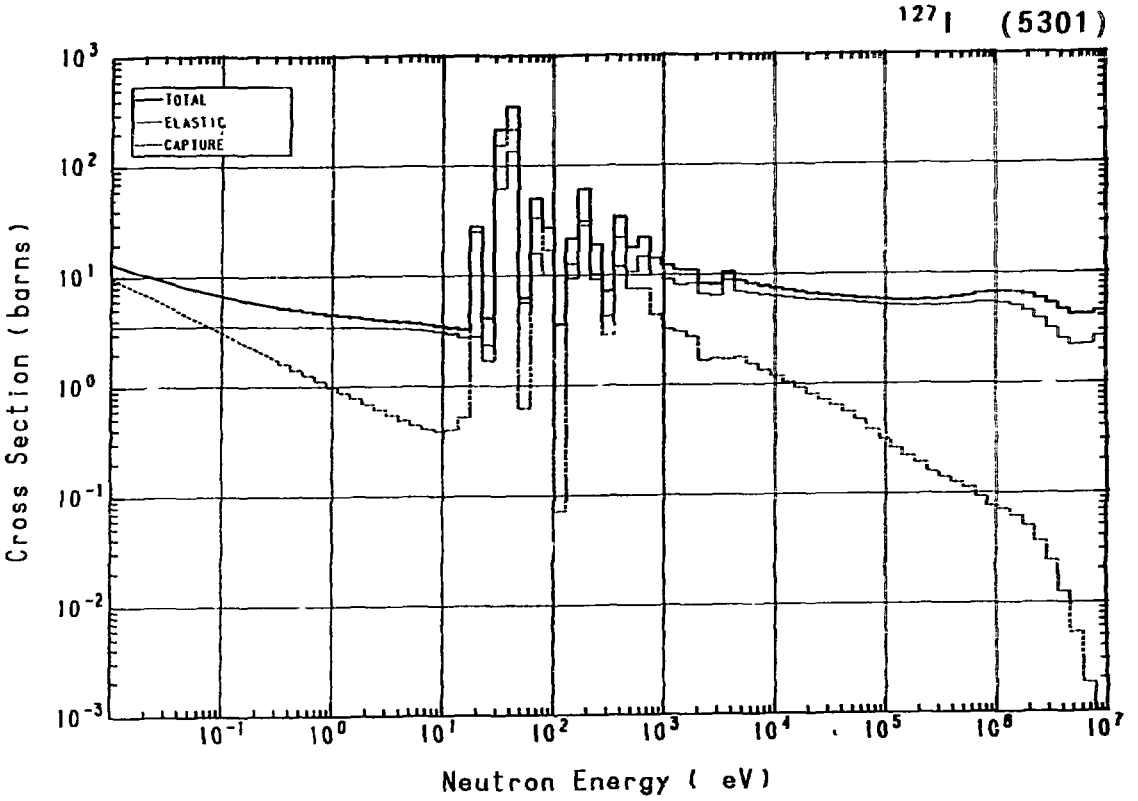

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

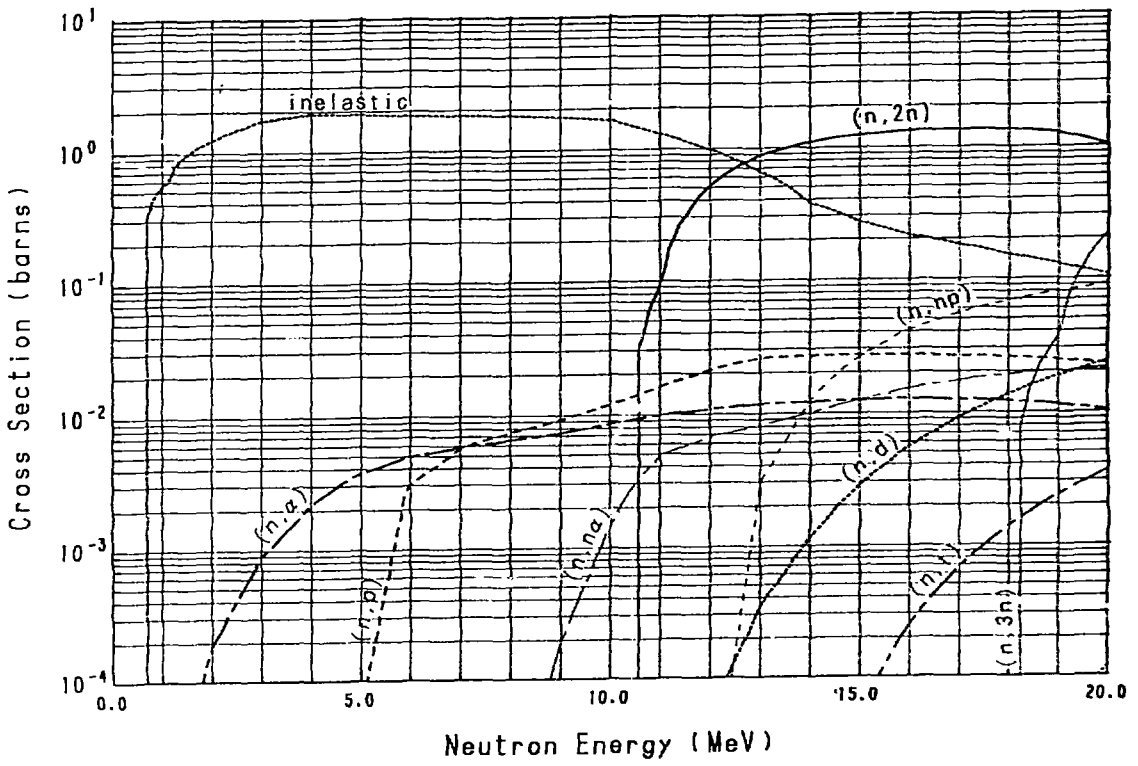

130Te (5210)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

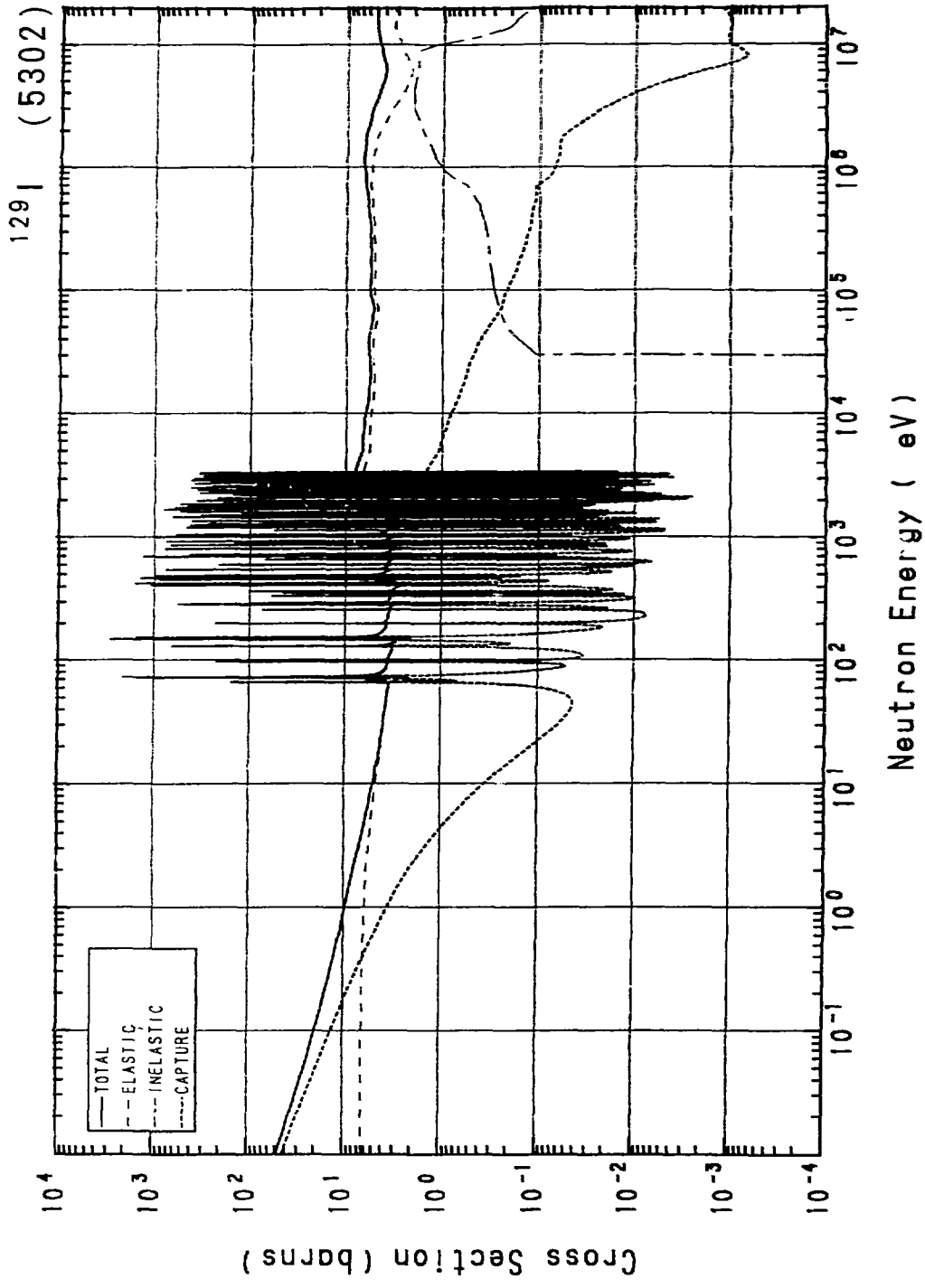

^{130}Te (5210)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

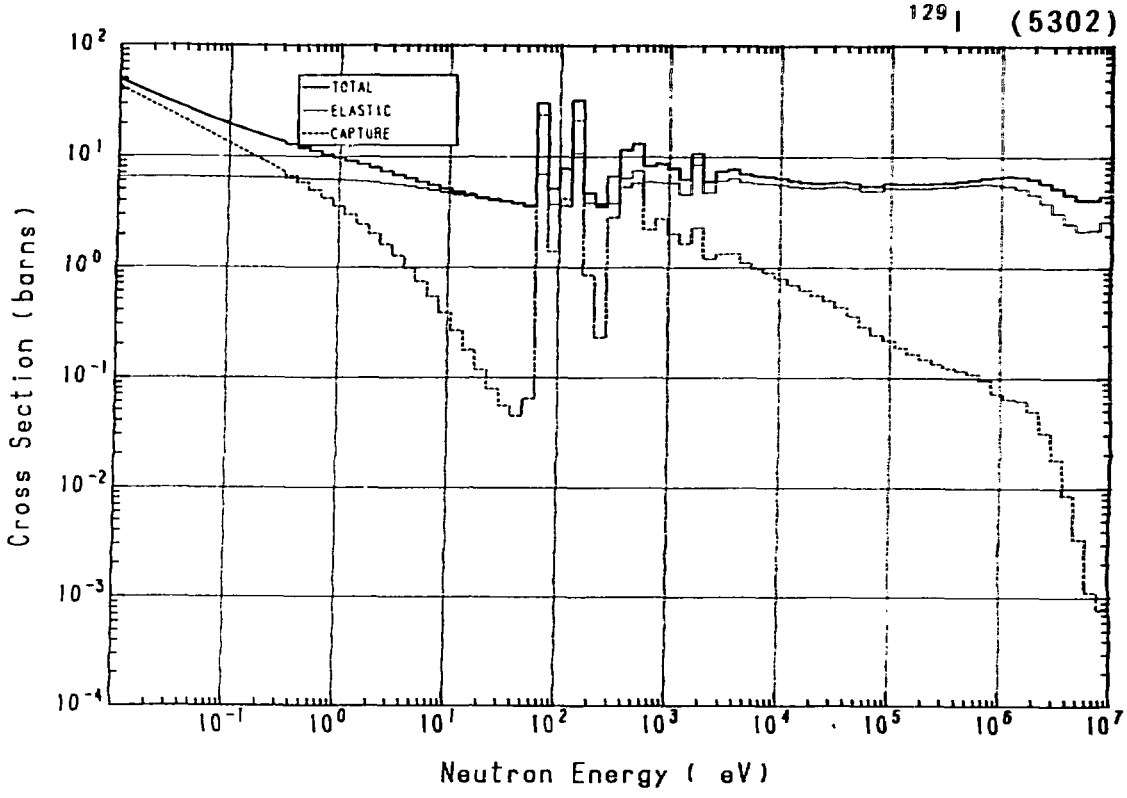

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,t)
(n,nα)
Cross Section (barns)
Neutron Energy (MeV)

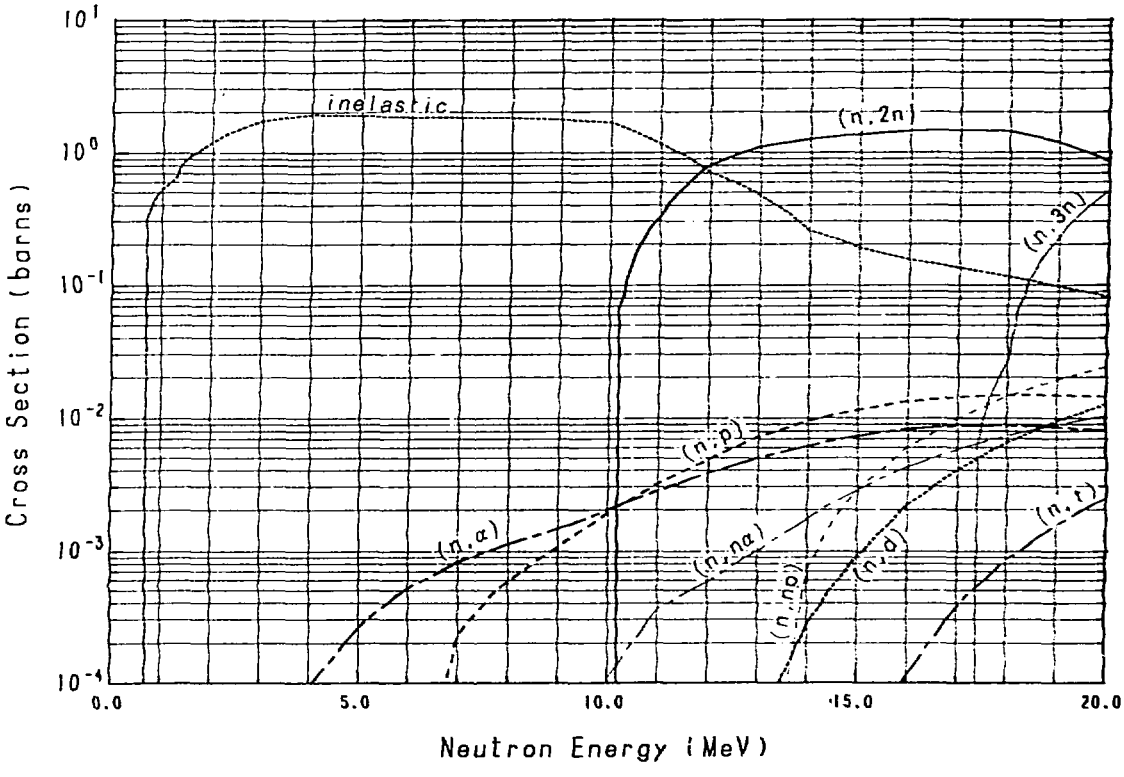

127I (5301)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

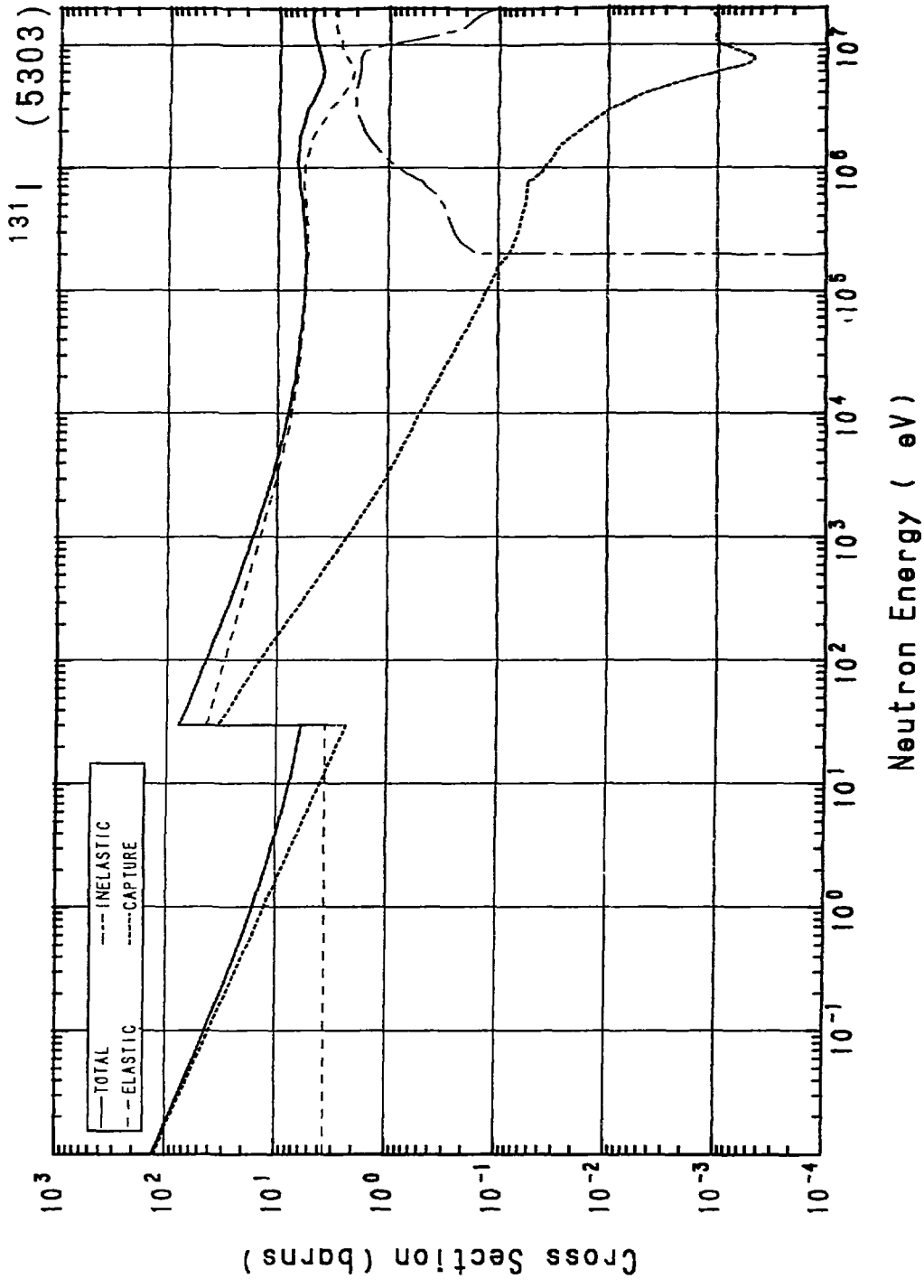

127I (5301)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

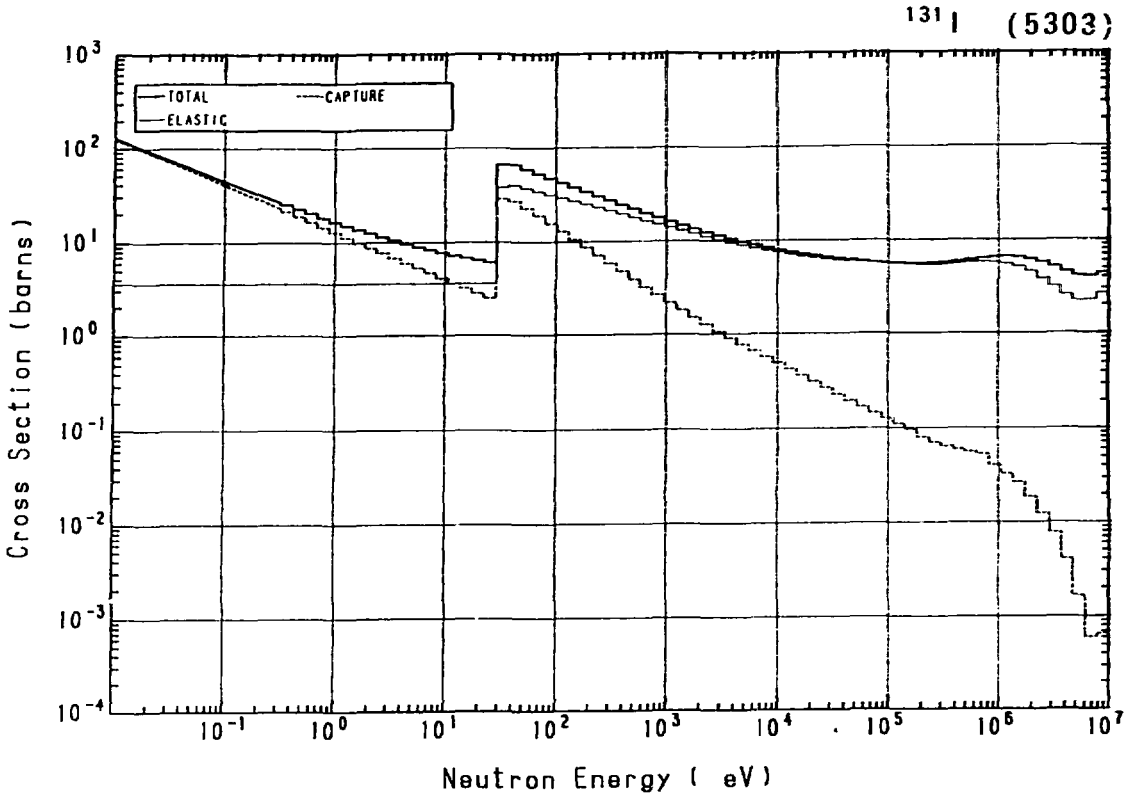

inelastic
(n,2n)
(n,np)
(n,d)
(n,α)
(n,p)
(n,nα)
(n,t)
(n,3n)
Cross Section (barns)
Neutron Energy (MeV)

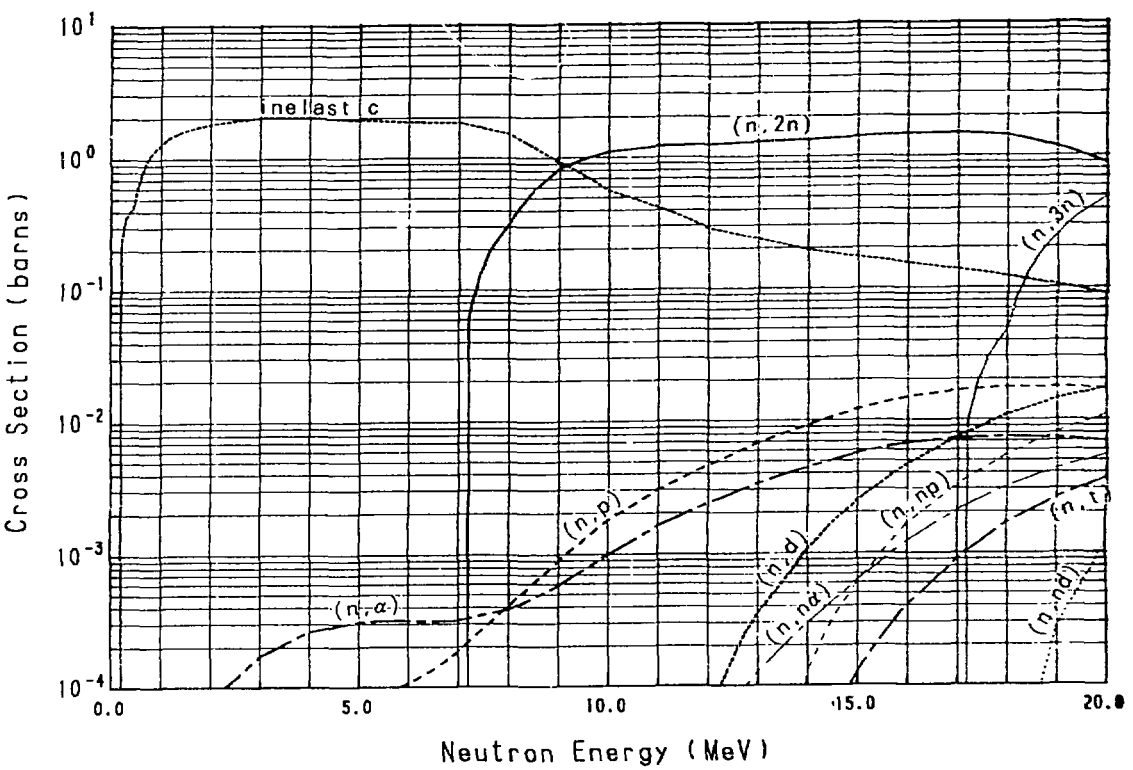

129I (5302)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

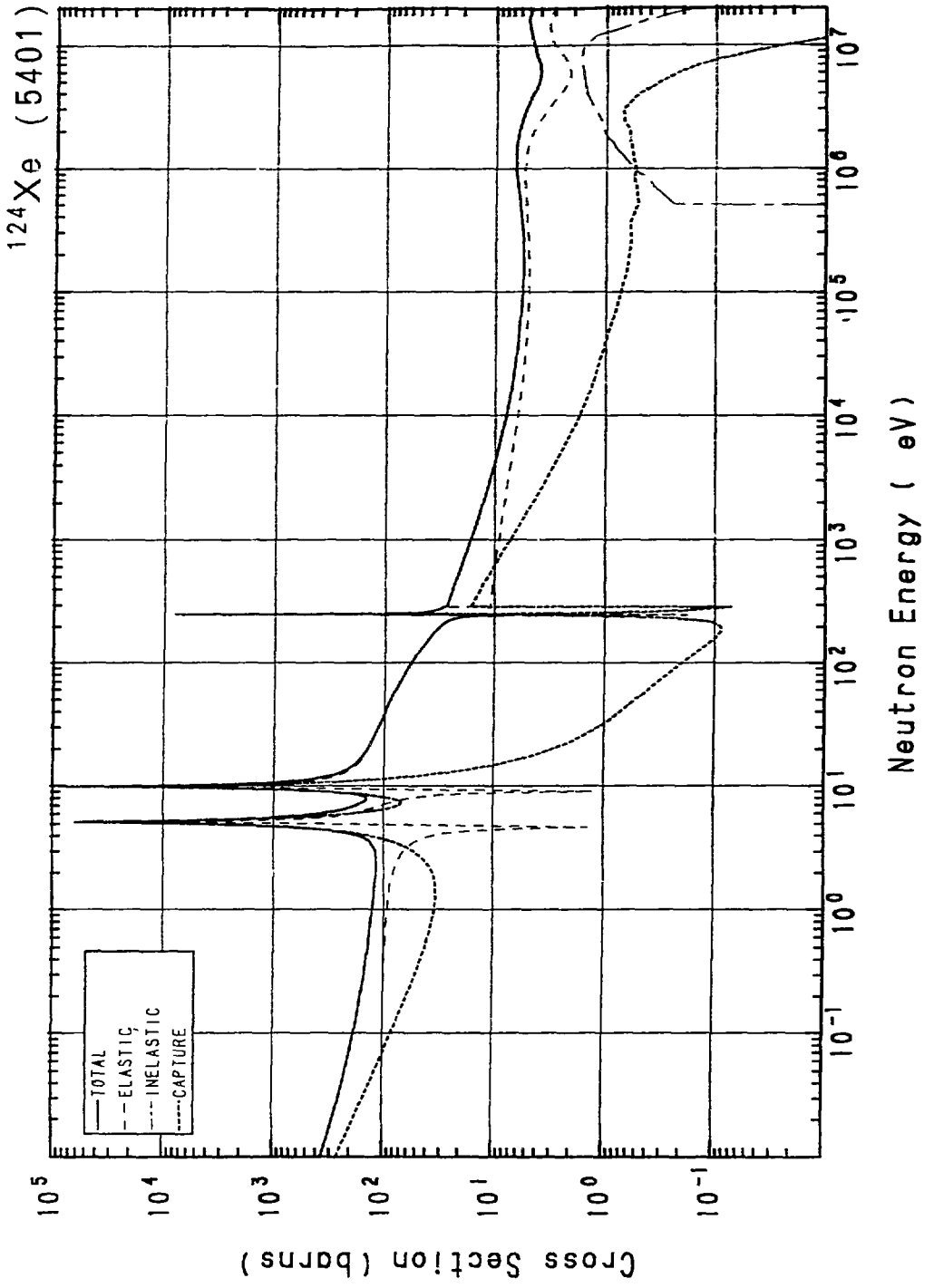

129I (5302)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

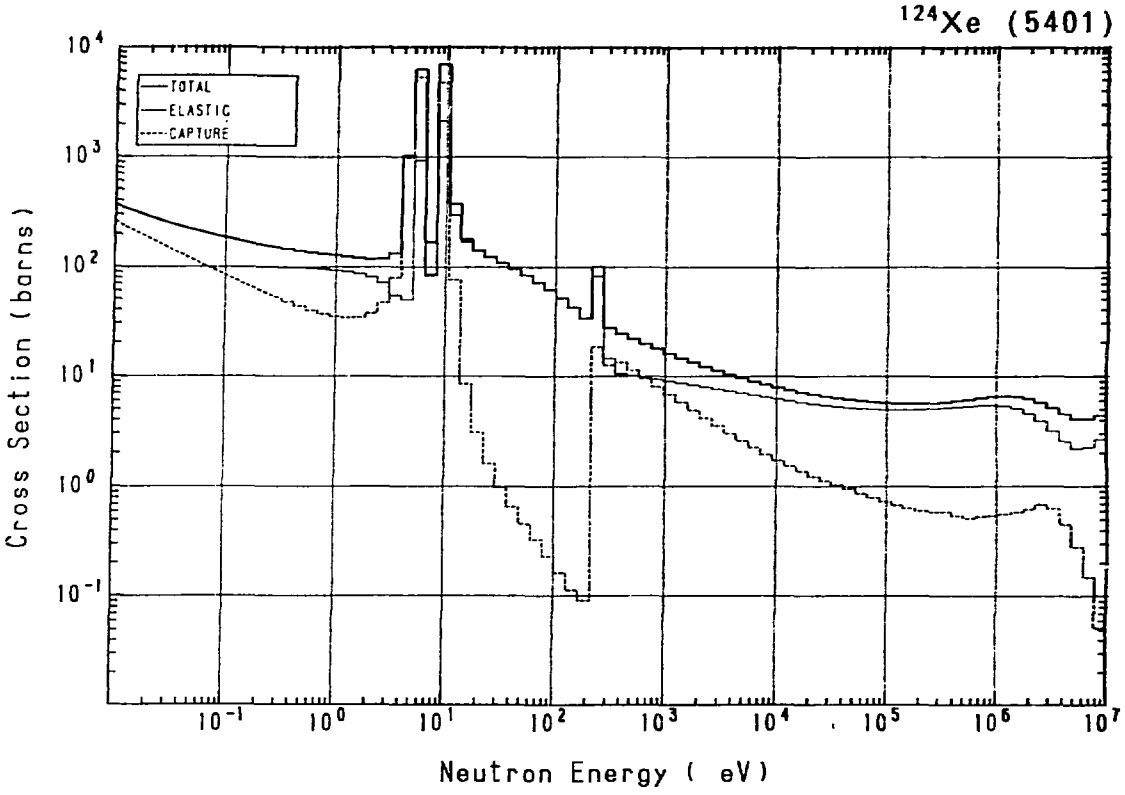

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,nα)
(n,np)
(n,d)
(n,γ)
Cross Section (barns)
Neutron Energy (MeV)

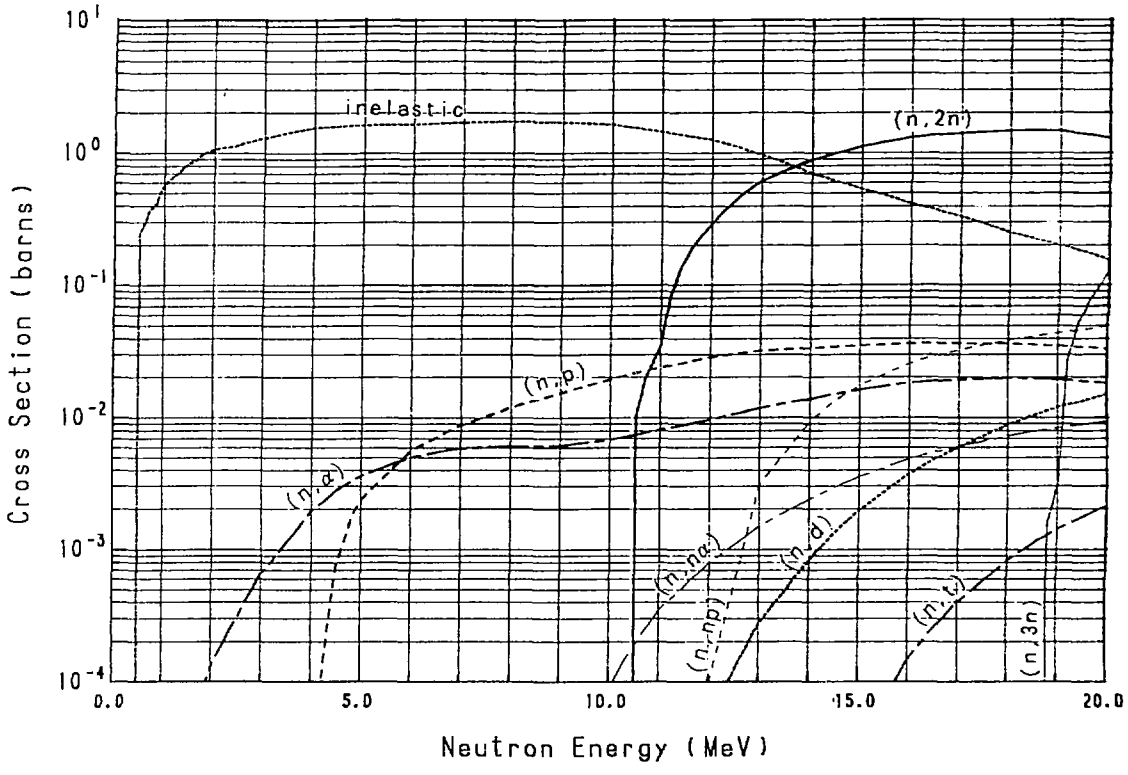

131I (5303)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

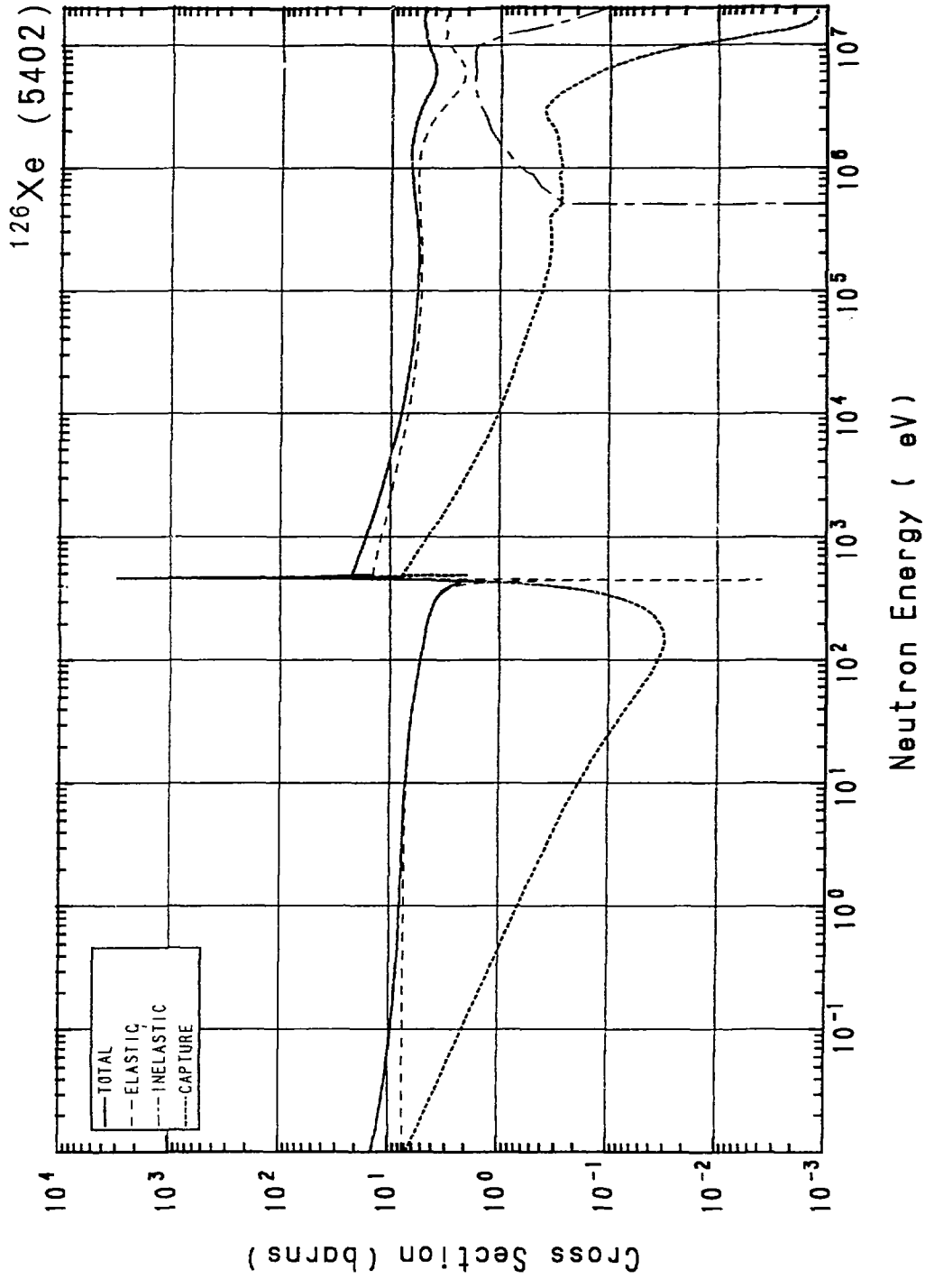

131 I (5303)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

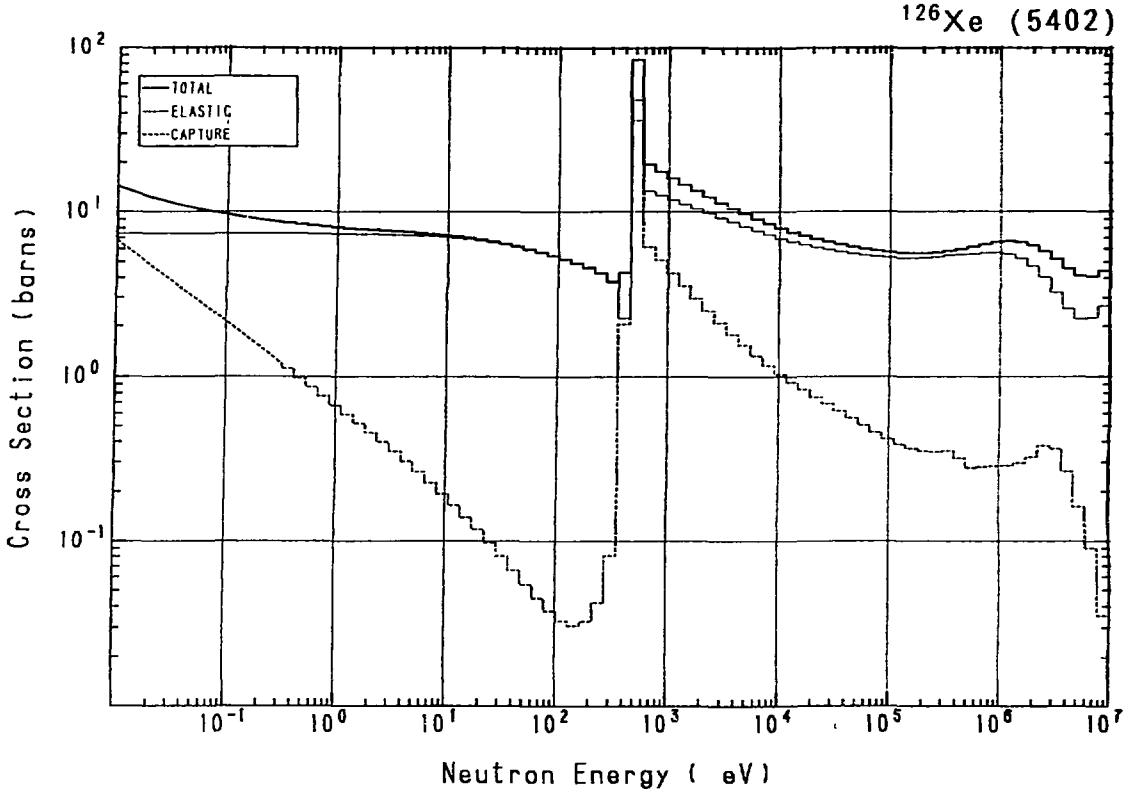

inelastic
(n,2n)
(n,3n)
(n,p)
(n,np)
(n,d)
(n,nd)
(n,α)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

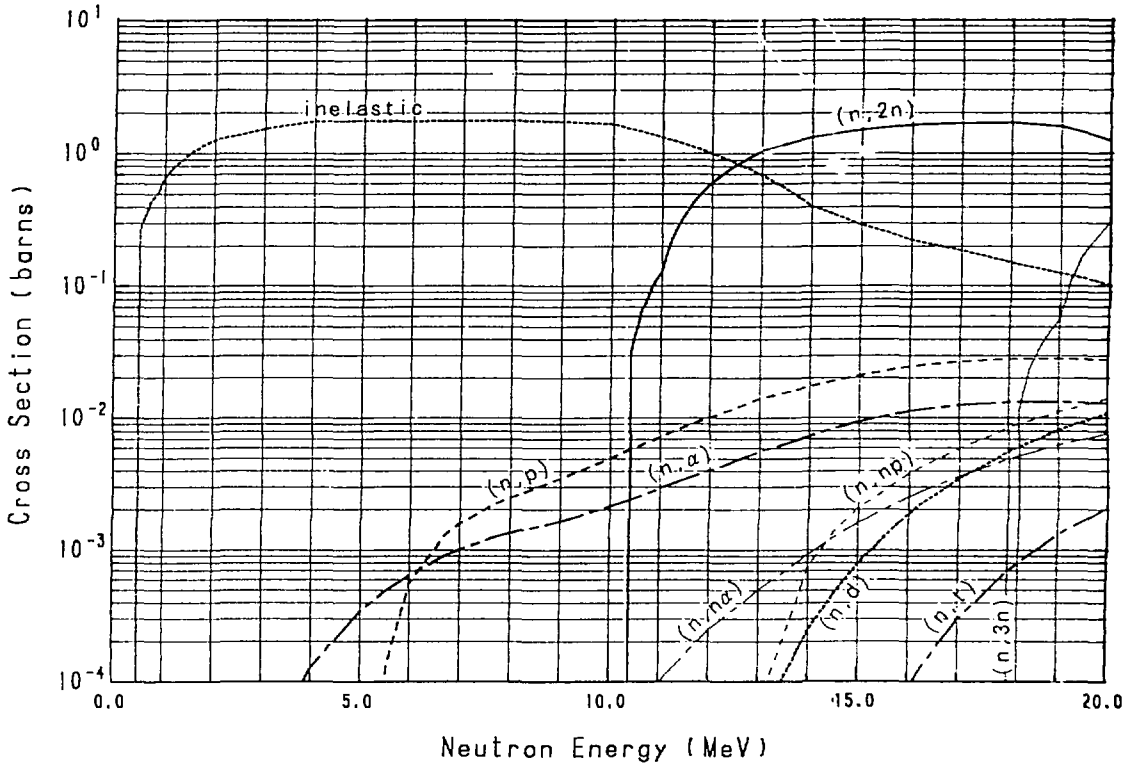

124Xe (5401)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

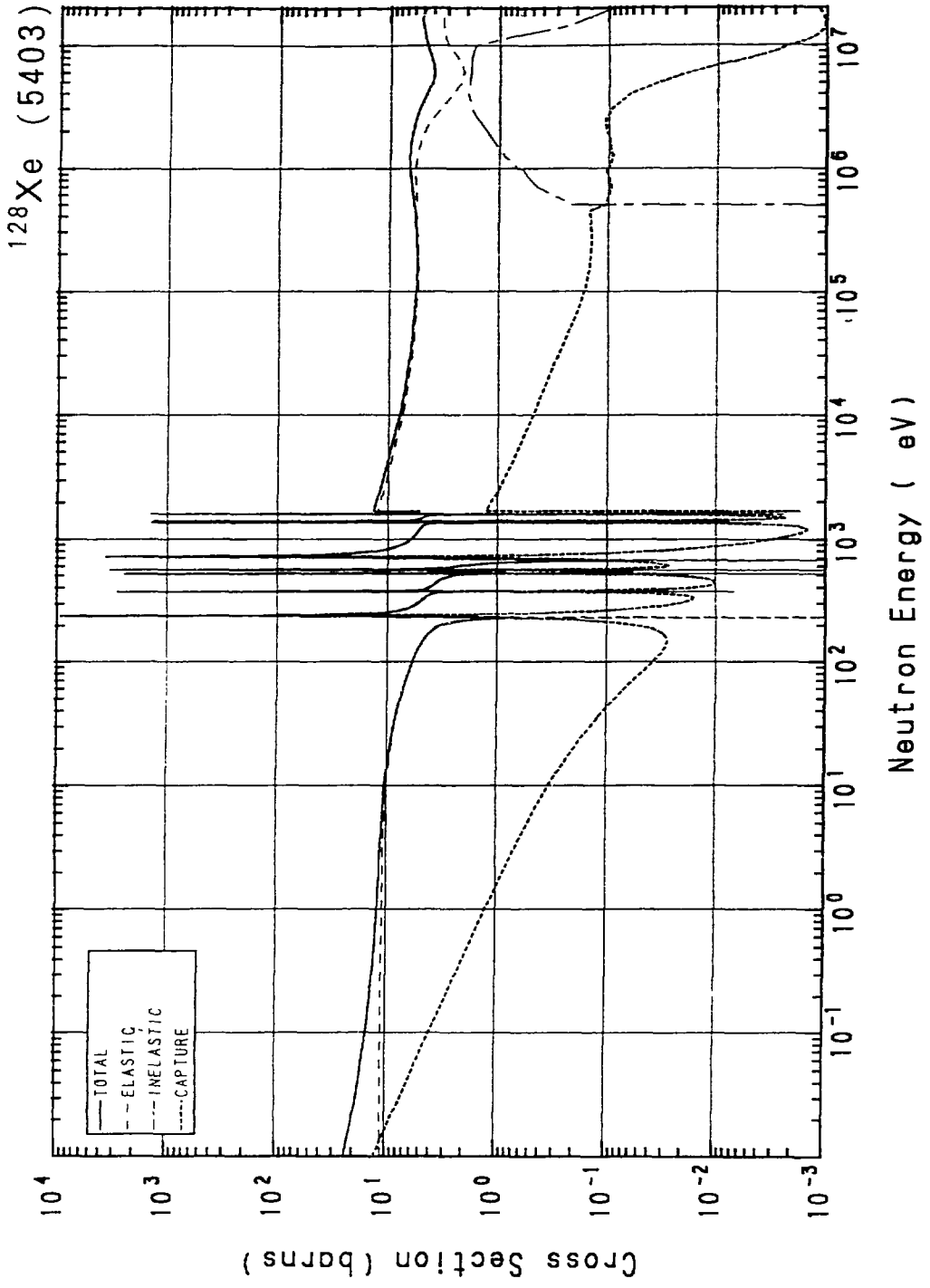

124Xe (5401)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

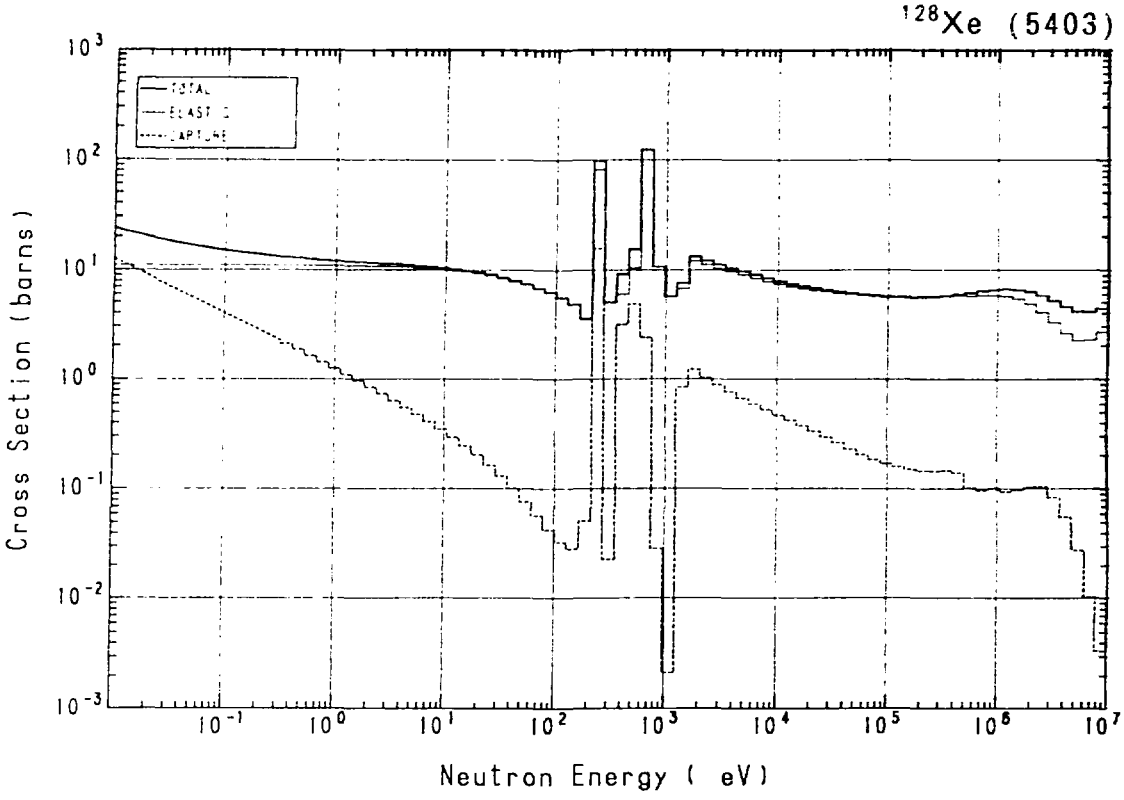

inelastic
(n,2n)
(n,p)
(n,α)
(n,nα)
(n,np)
(n,d)
(n,t)
(n,3n)
Cross Section (barns)
Neutron Energy (MeV)

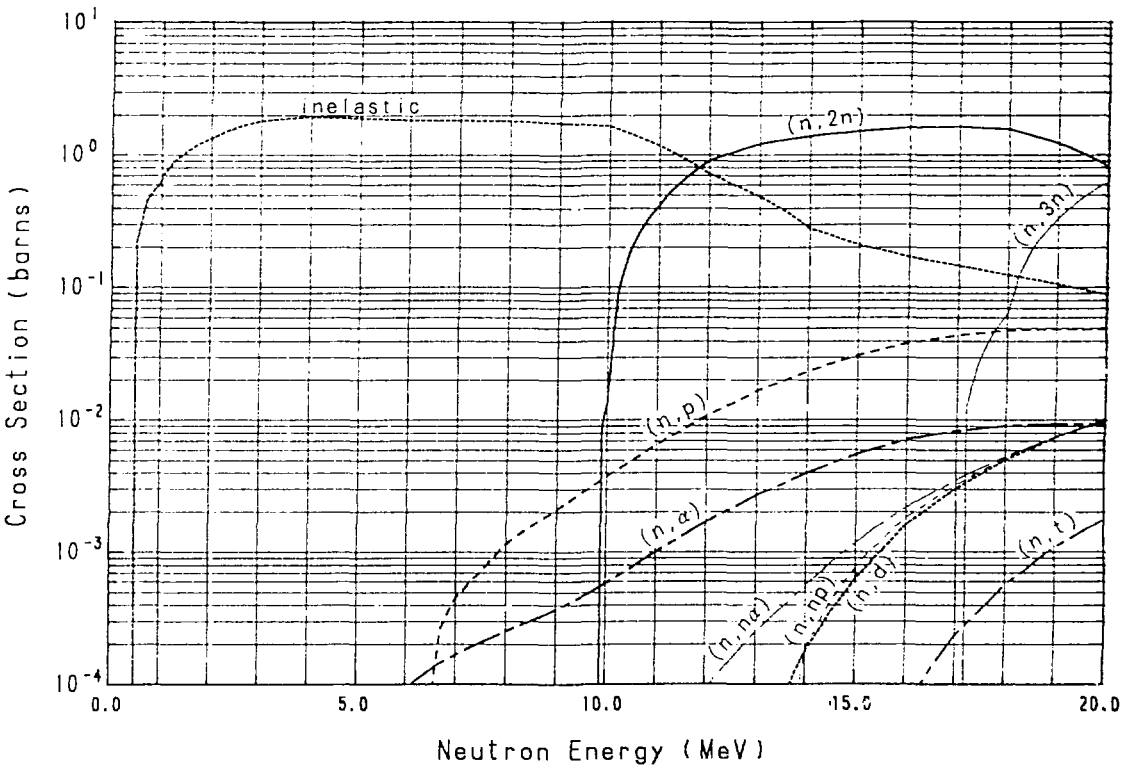

126Xe (5402)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

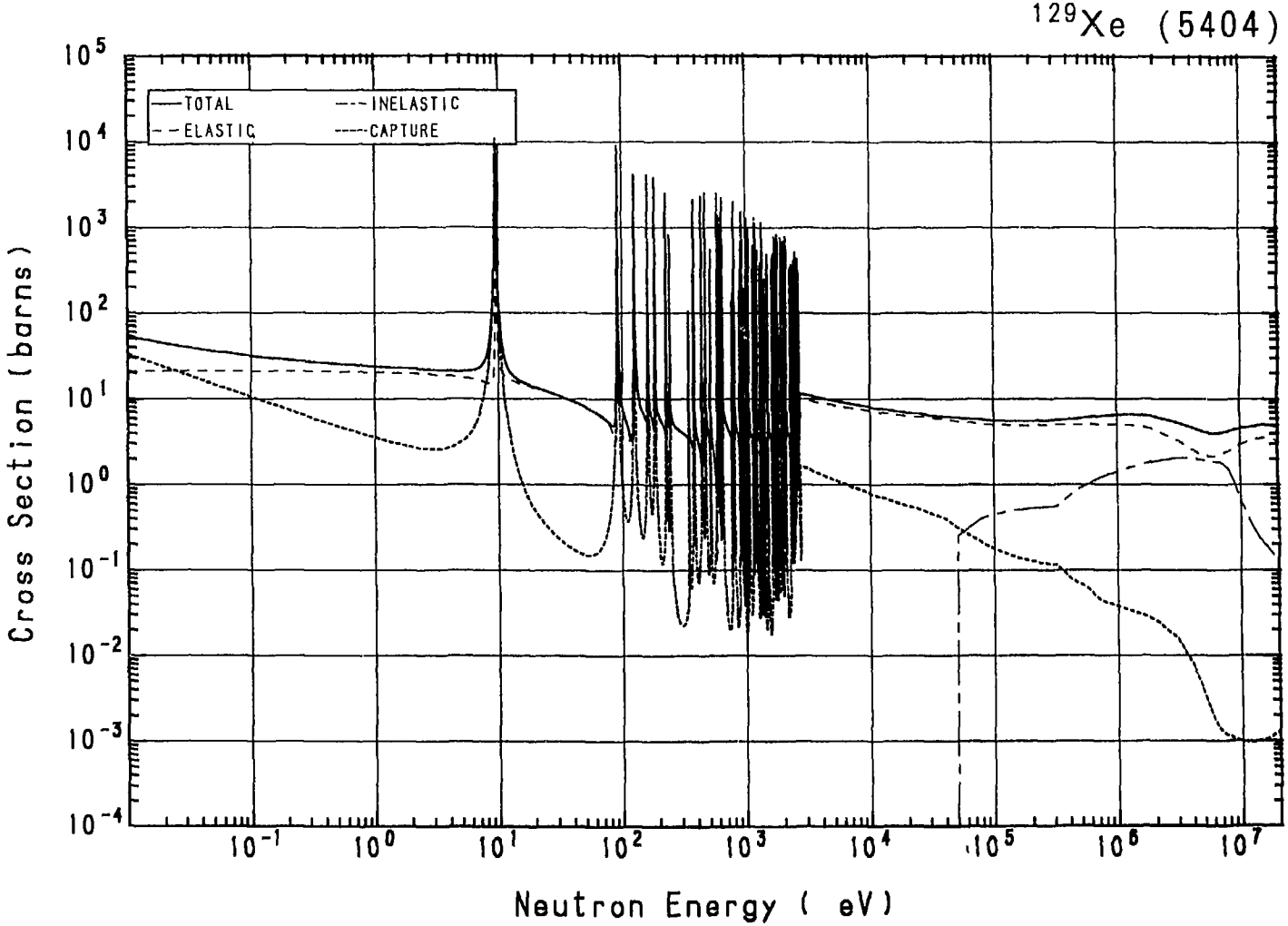

126Xe (5402)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

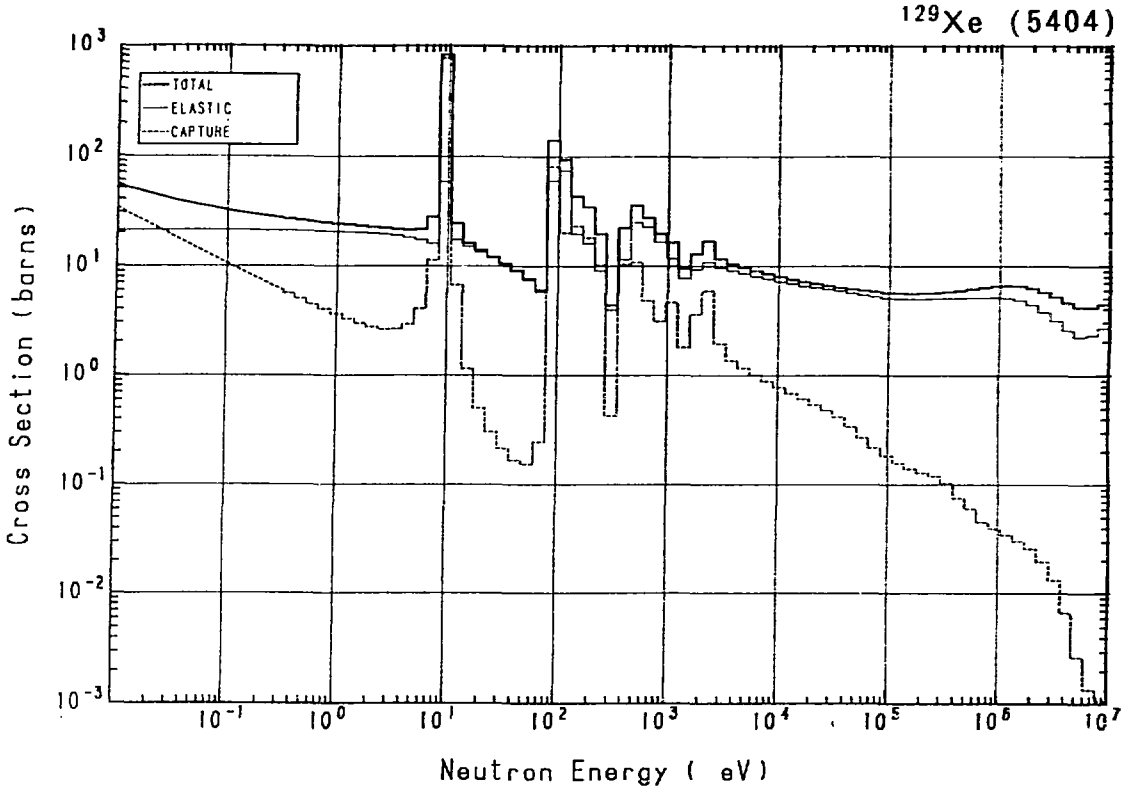

inelastic
(n,2n)
(n,p)
(n,α)
(n,np)
(n,nα)
(n,d)
(n,t)
(n,3n)
Cross Section (barns)
Neutron Energy (MeV)

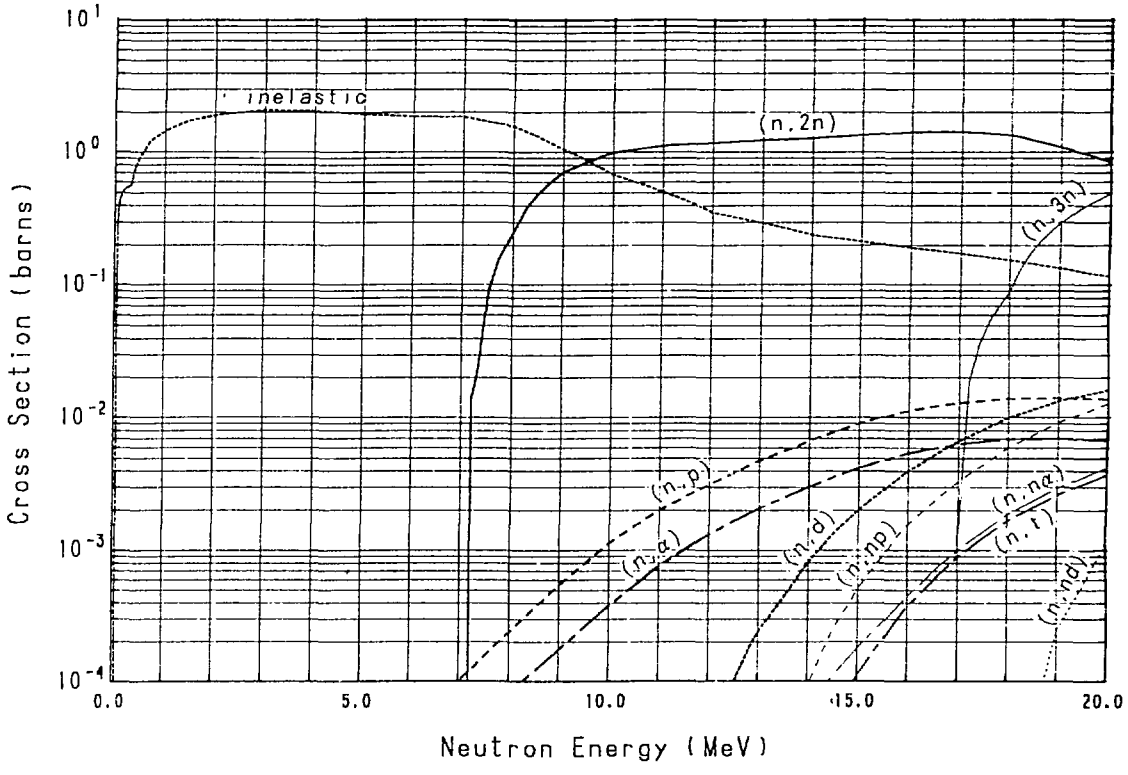

^{128}Xe (5403)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

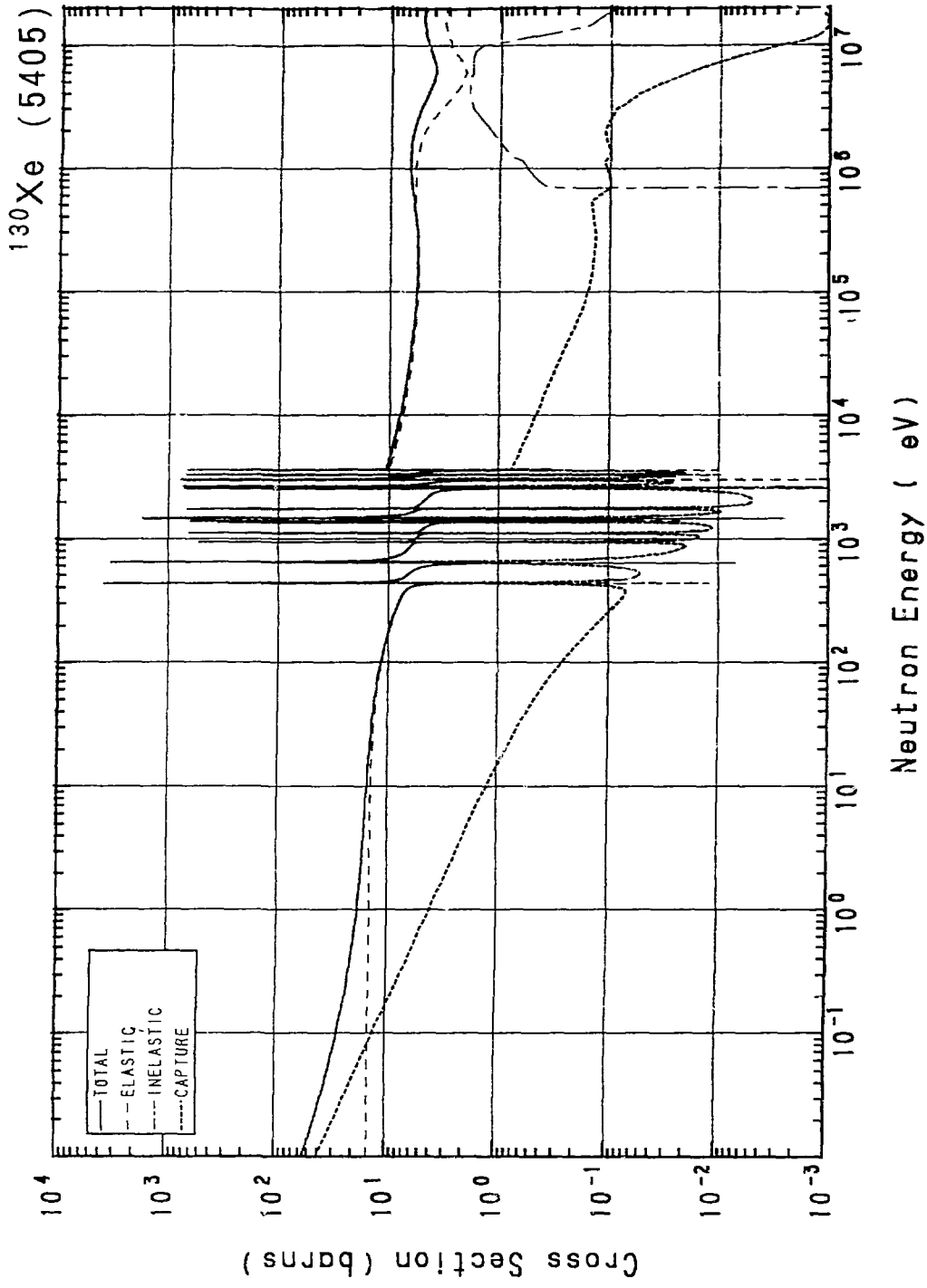

^{128}Xe (5403)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

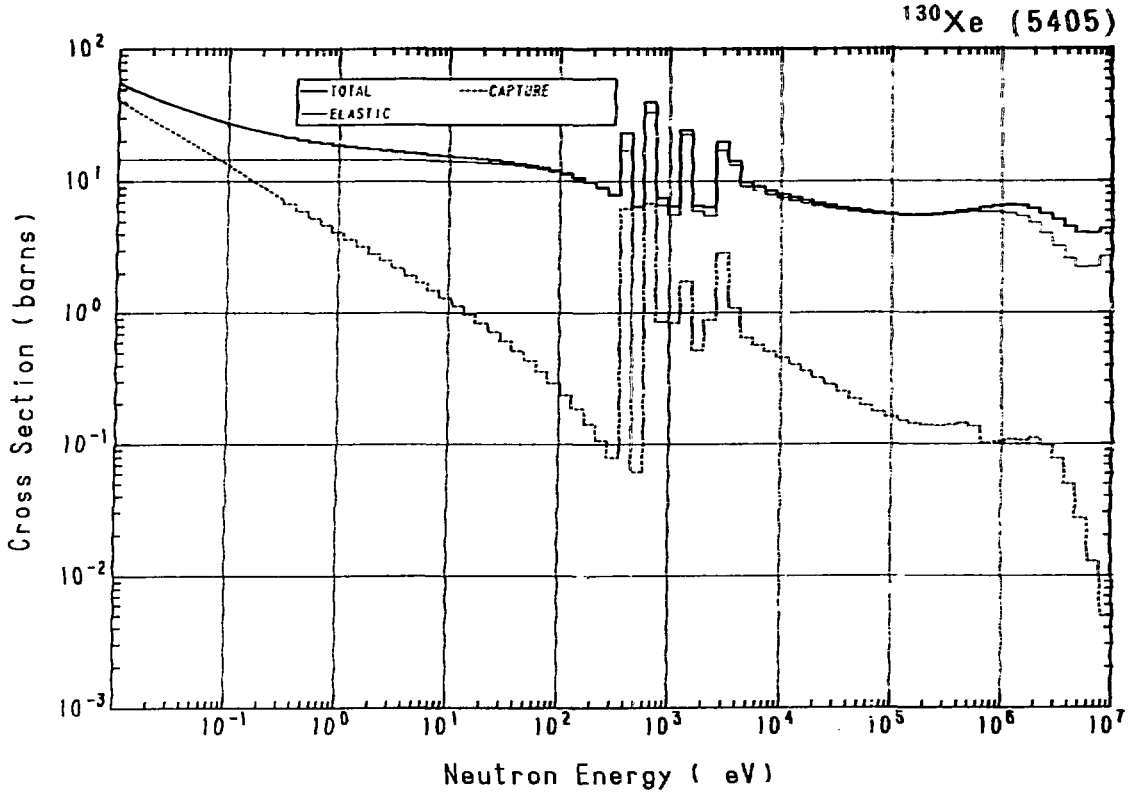

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,nα)
(n,np)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

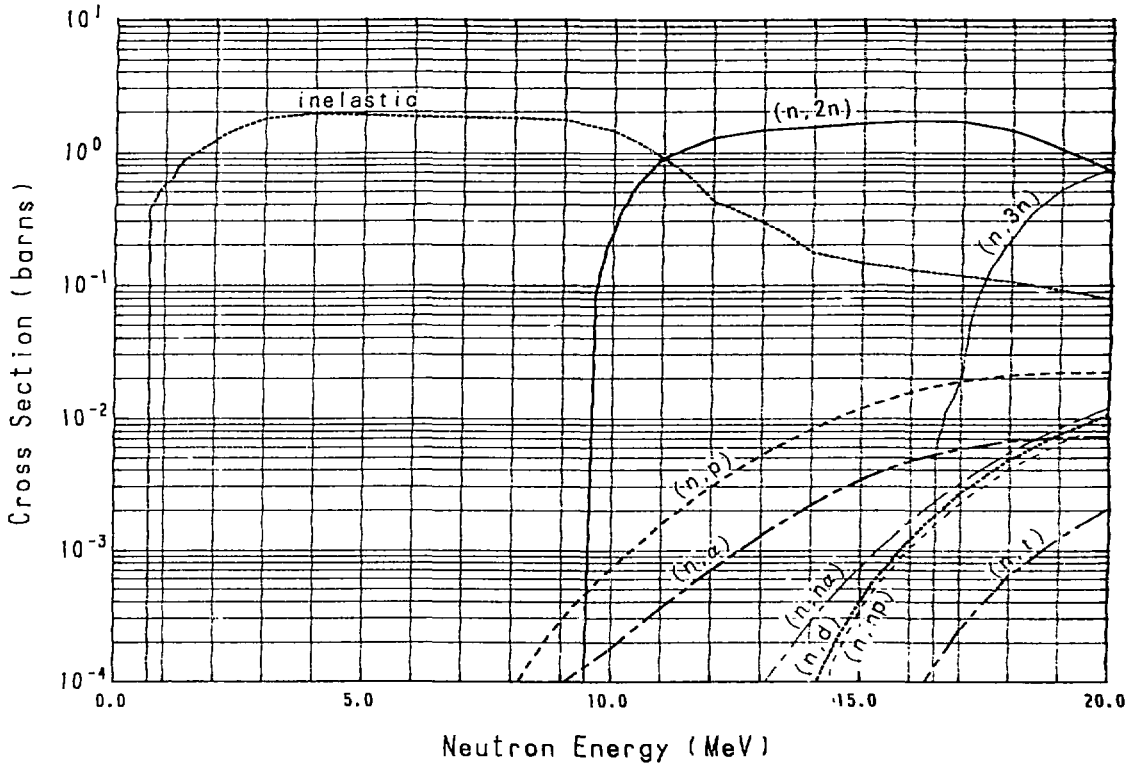

^{129}Xe (5404)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

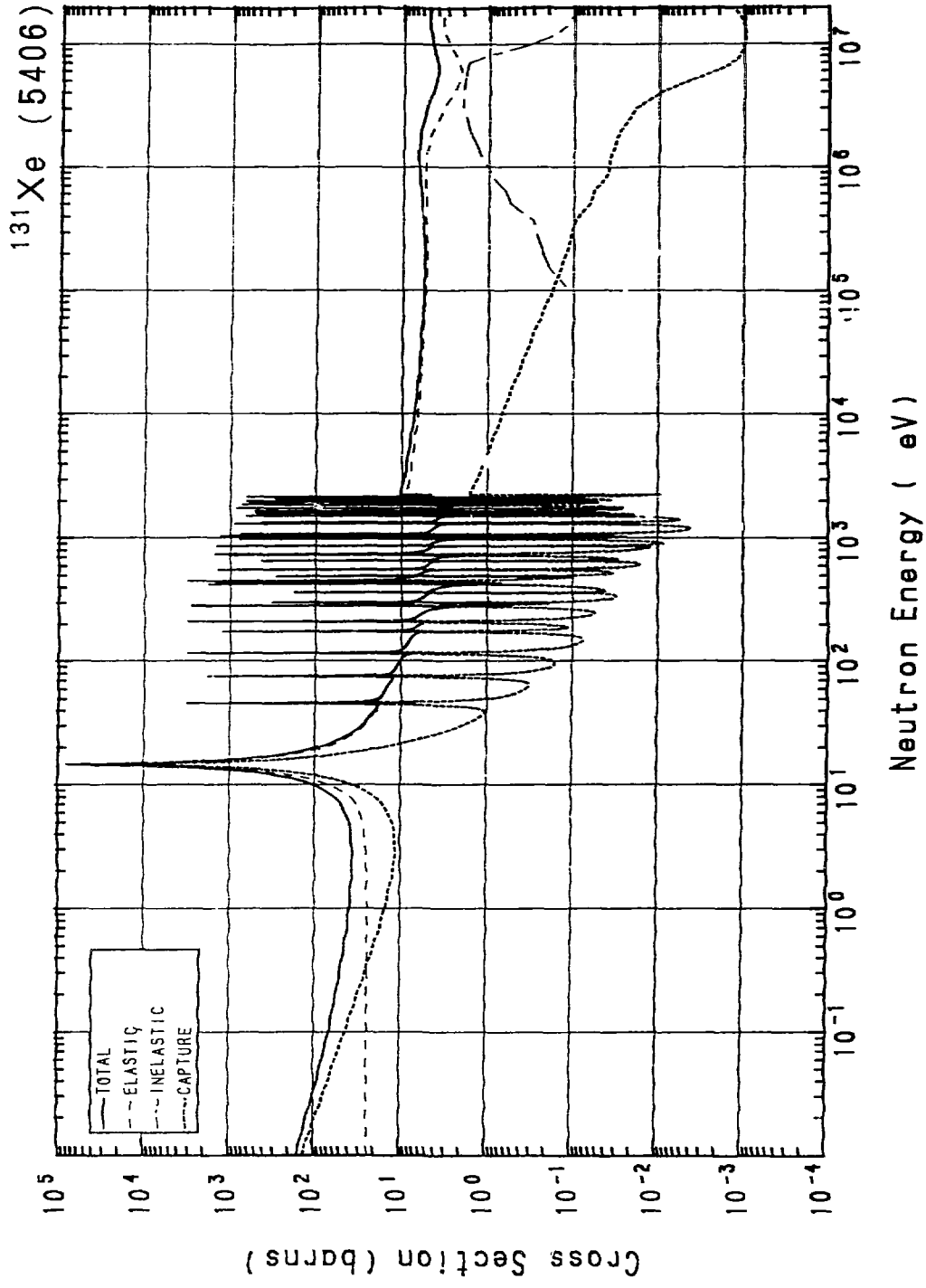

^{129}Xe (5404)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

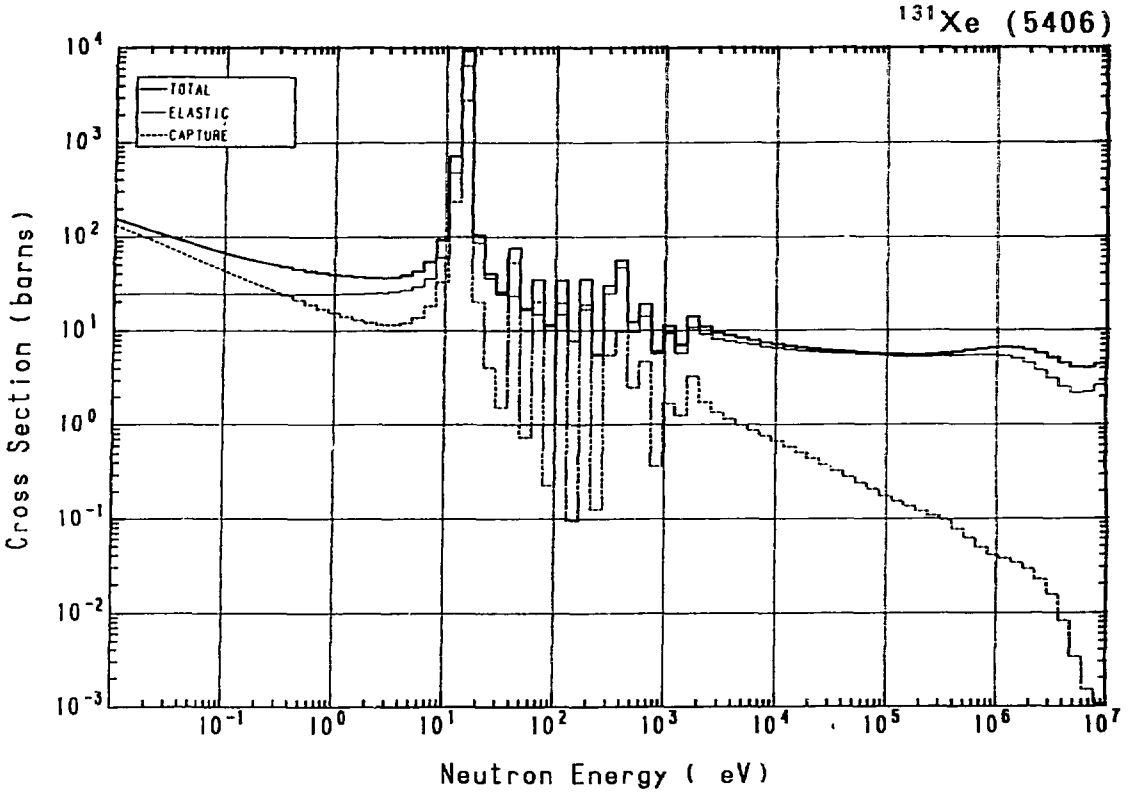

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

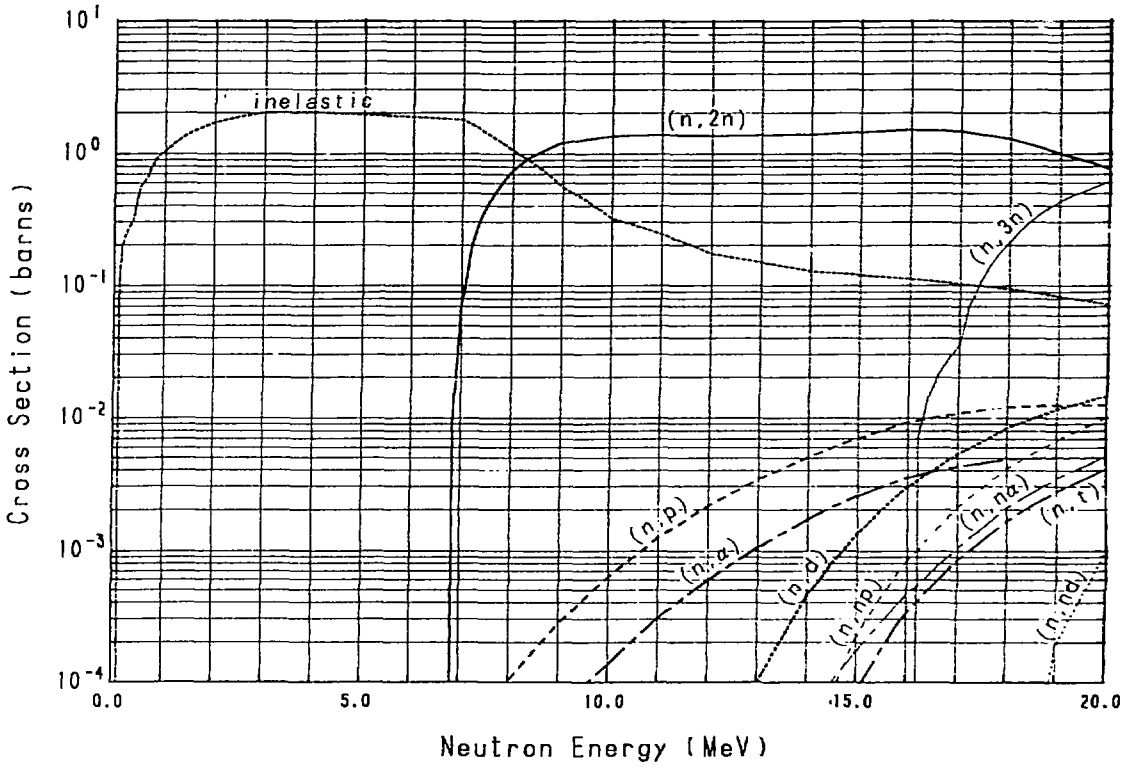

130Xe (5405)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

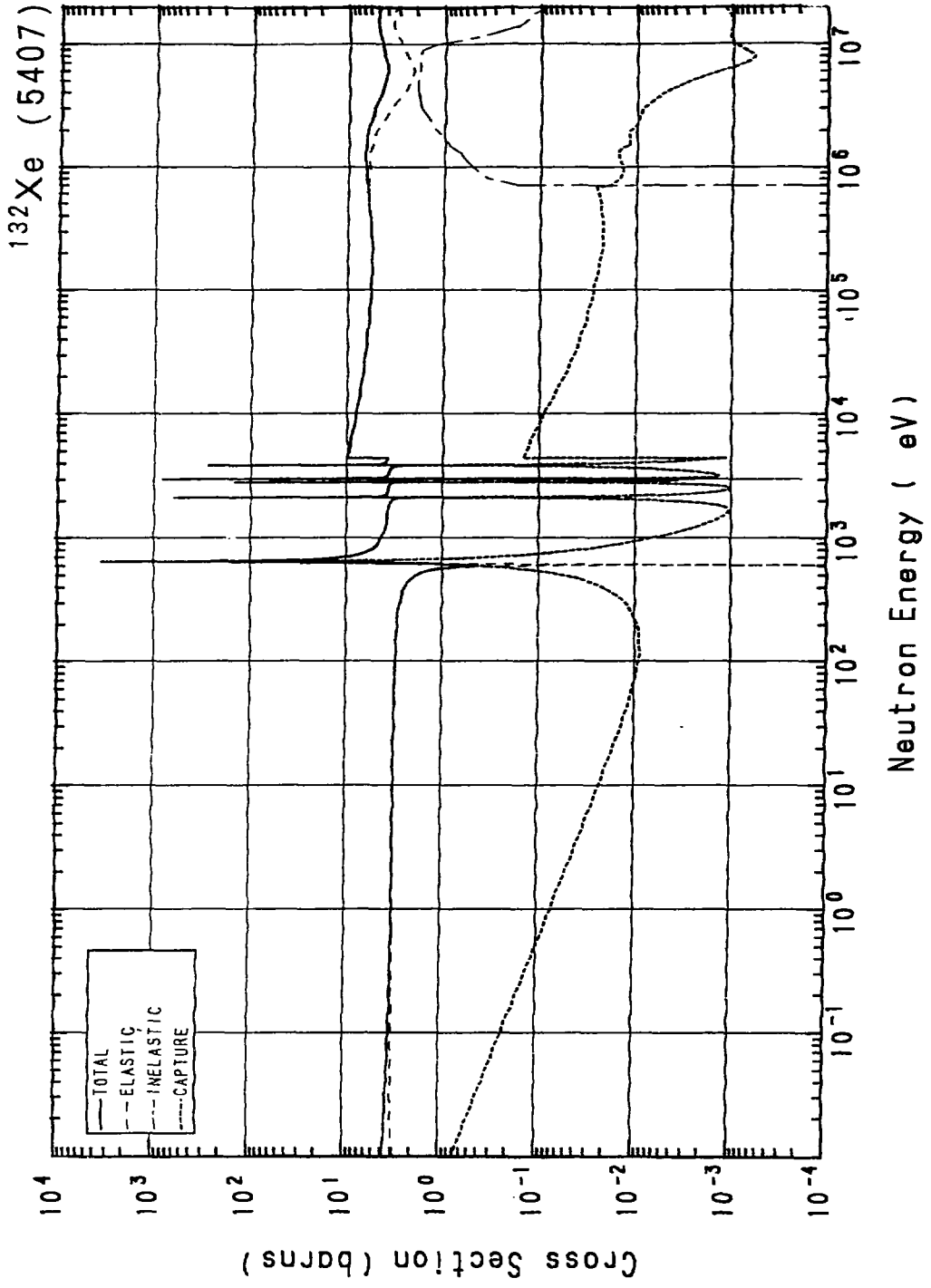

^{130}Xe (5405)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

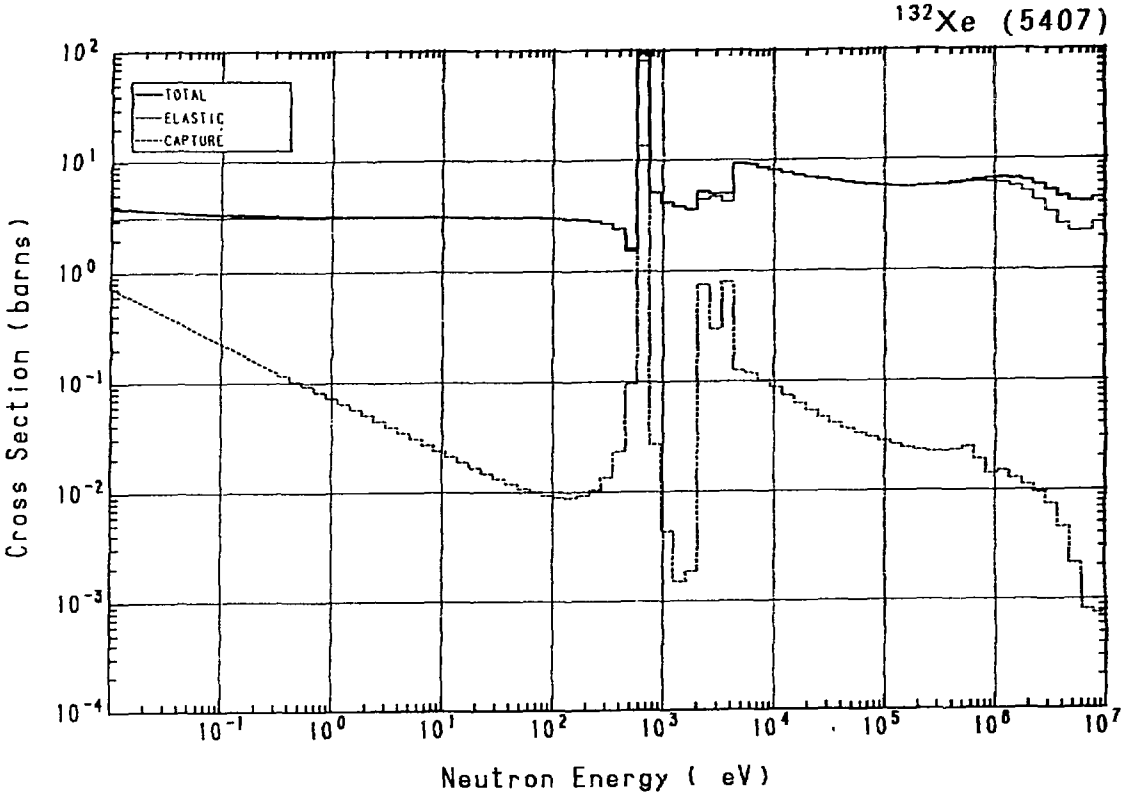

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,nα)
(n,d)
(n,np)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

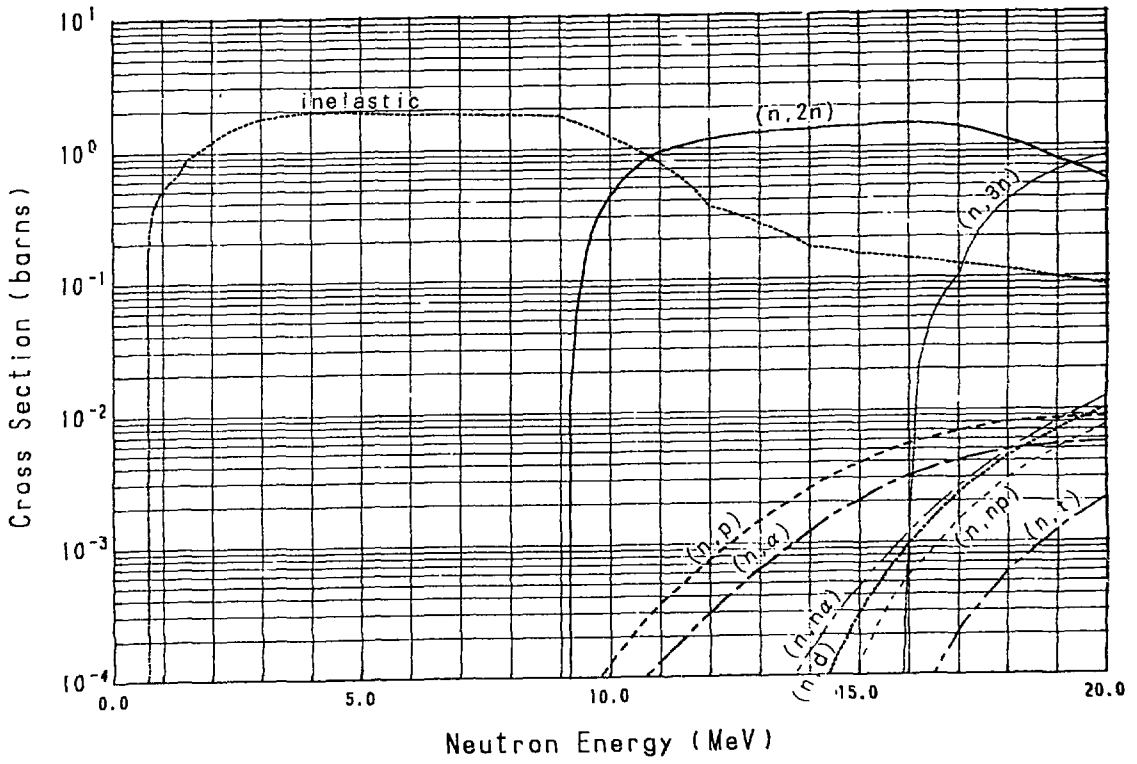

131Xe (5406)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

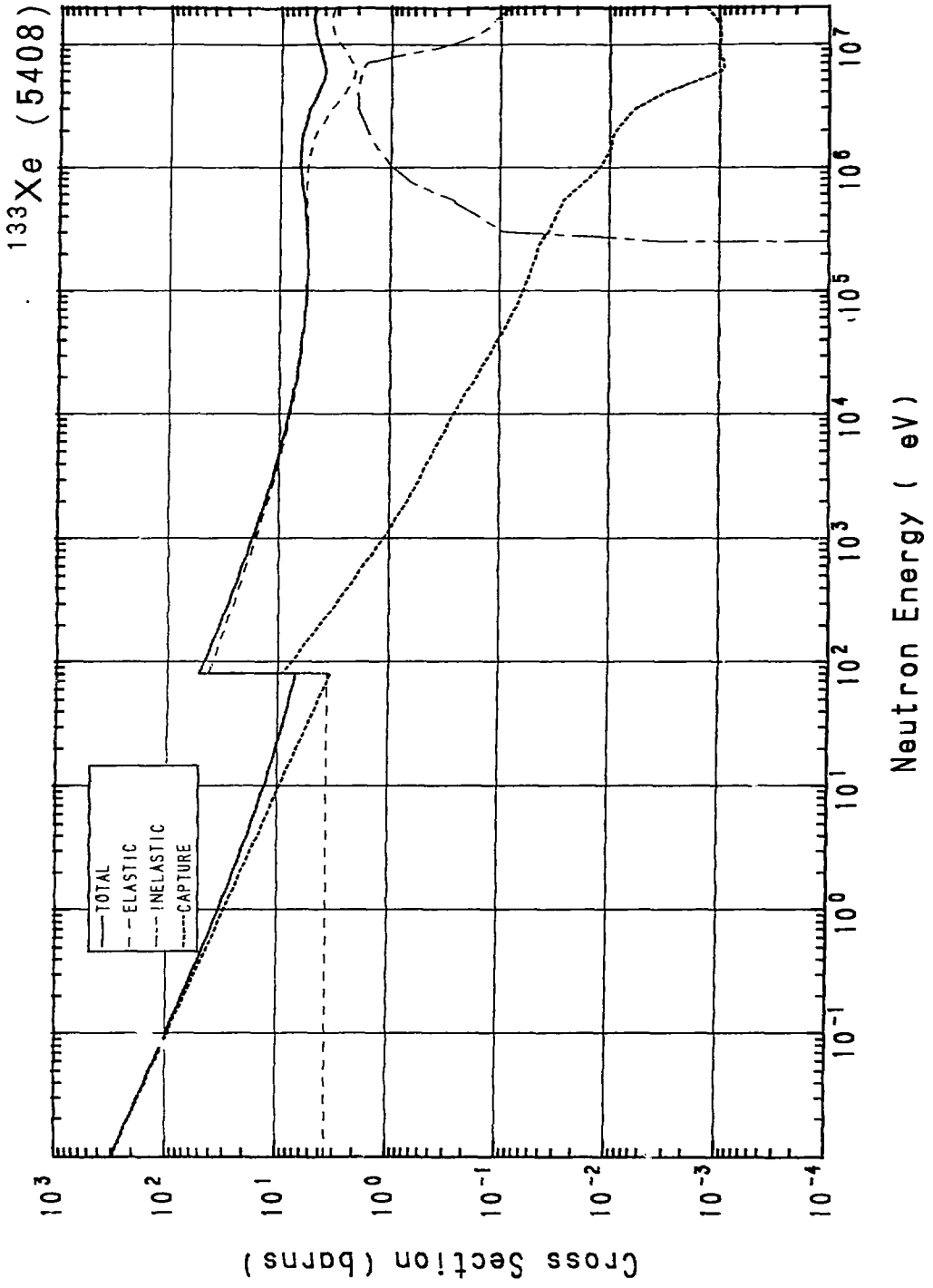

131Xe (5406)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

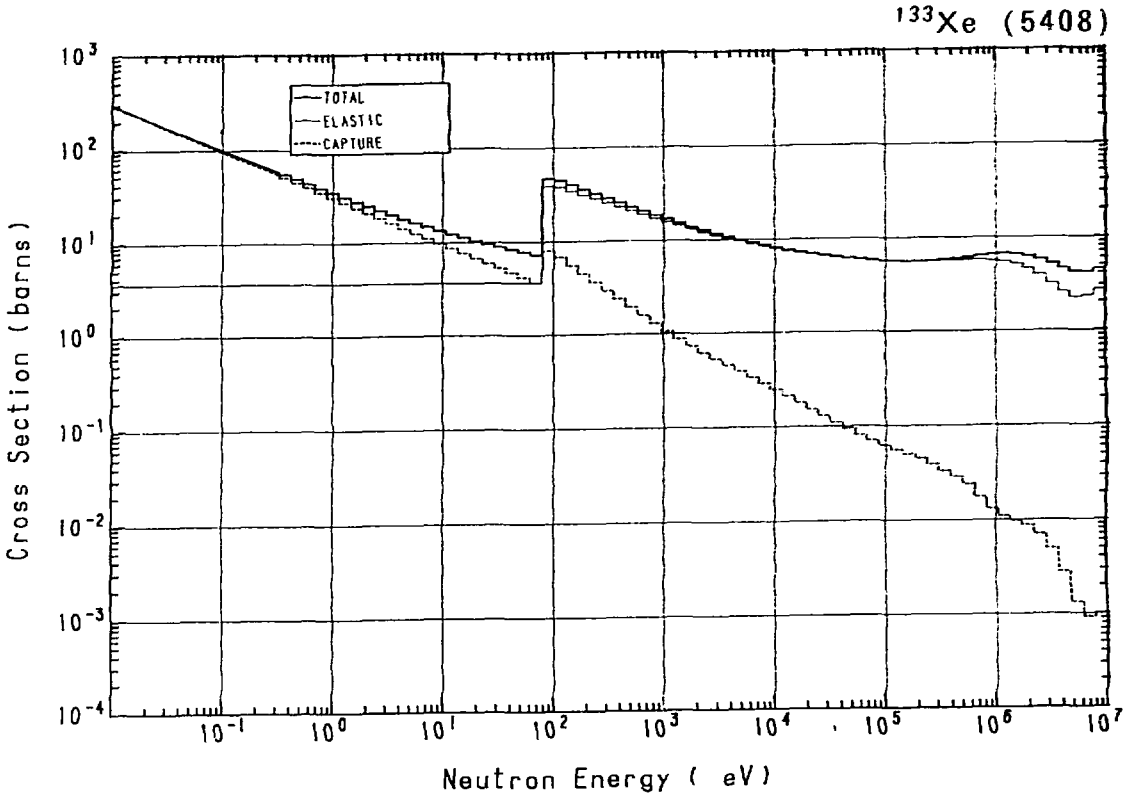

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

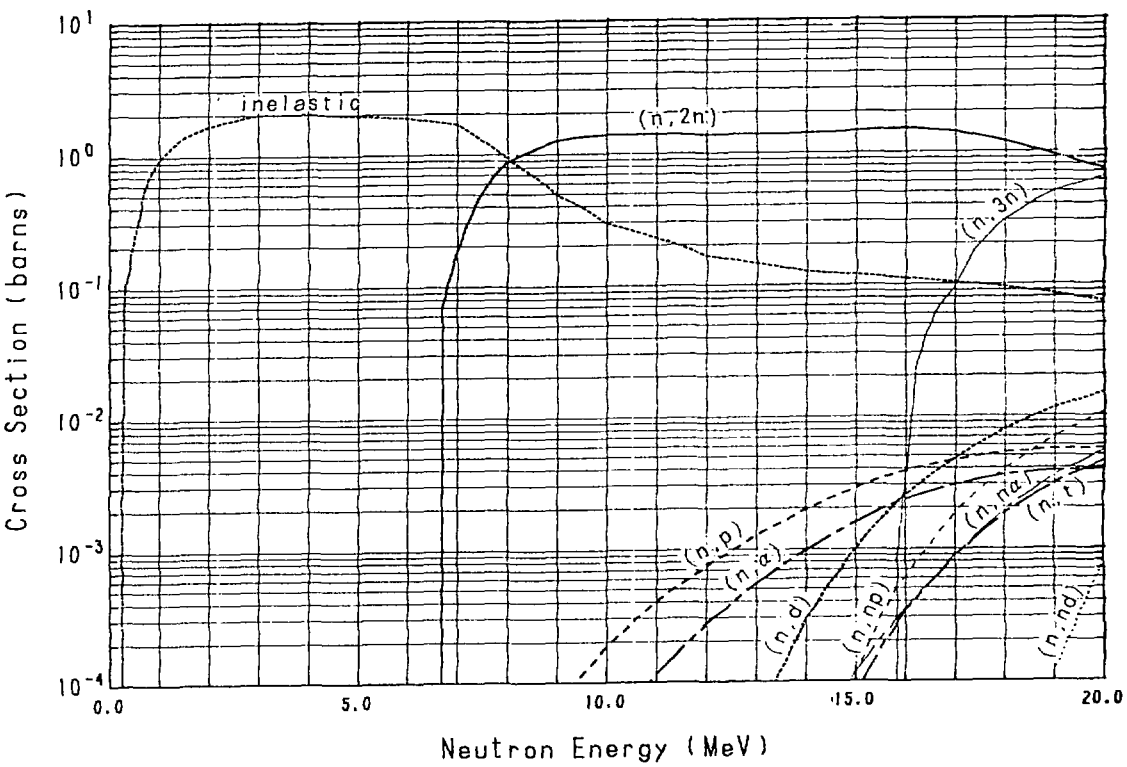

^{132}Xe (5407)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

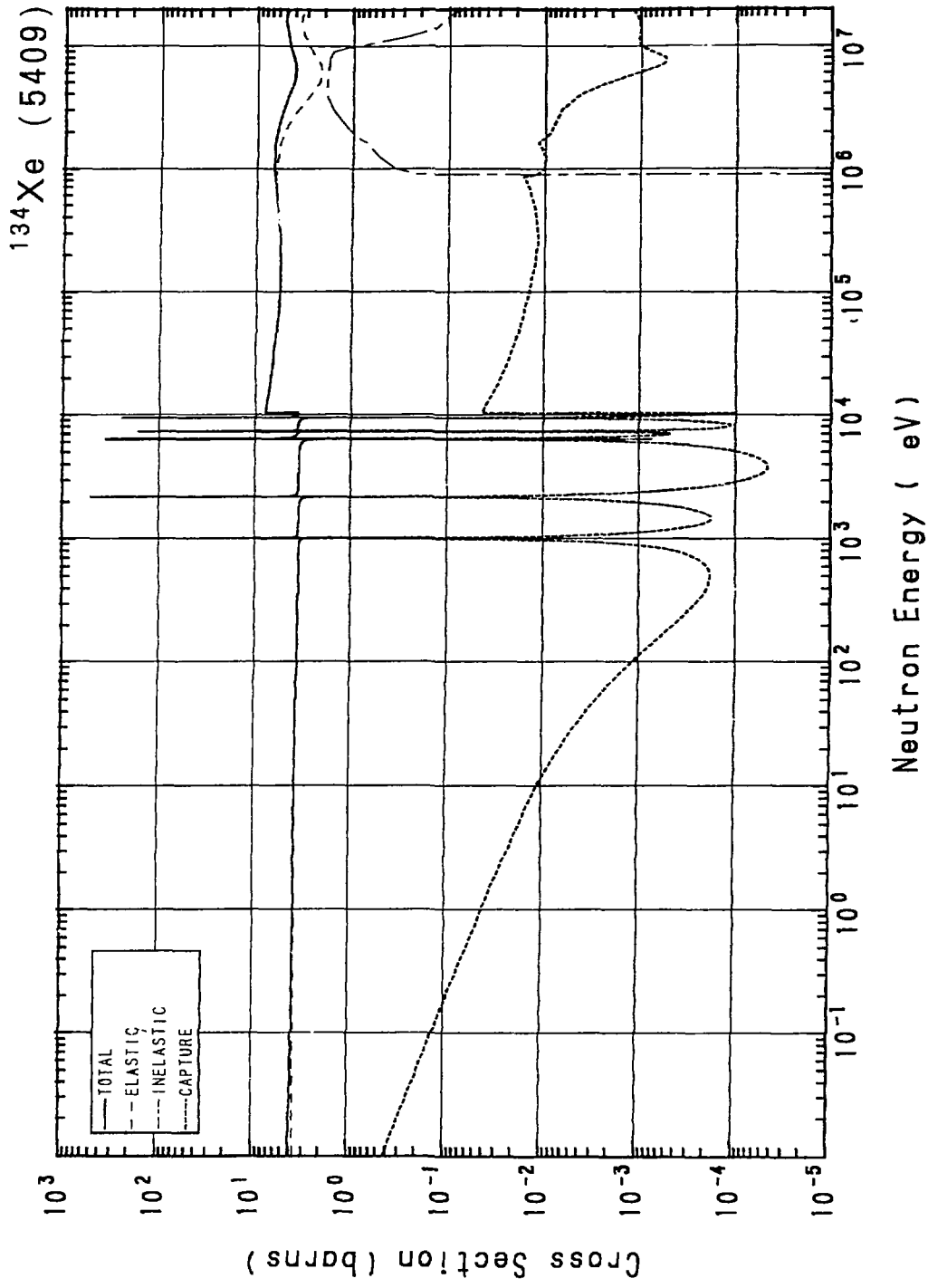

^{132}Xe (5407)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

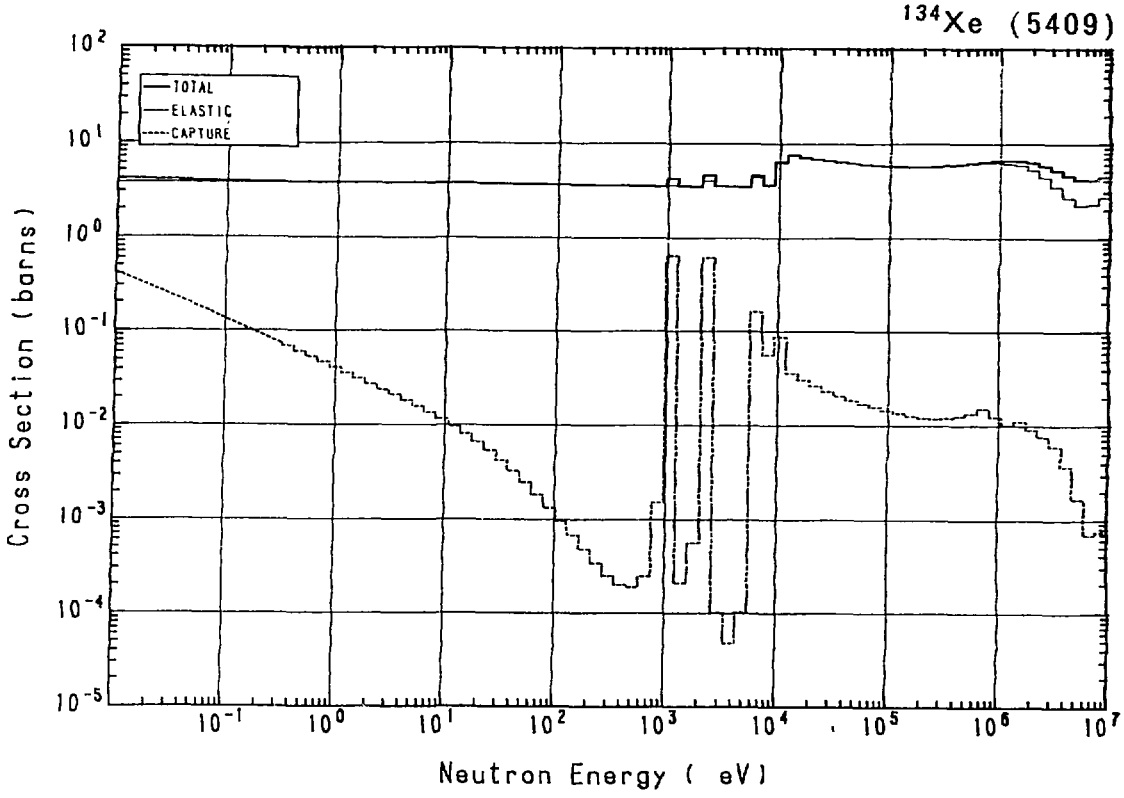

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,nα)
(n,d)
(n,np)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

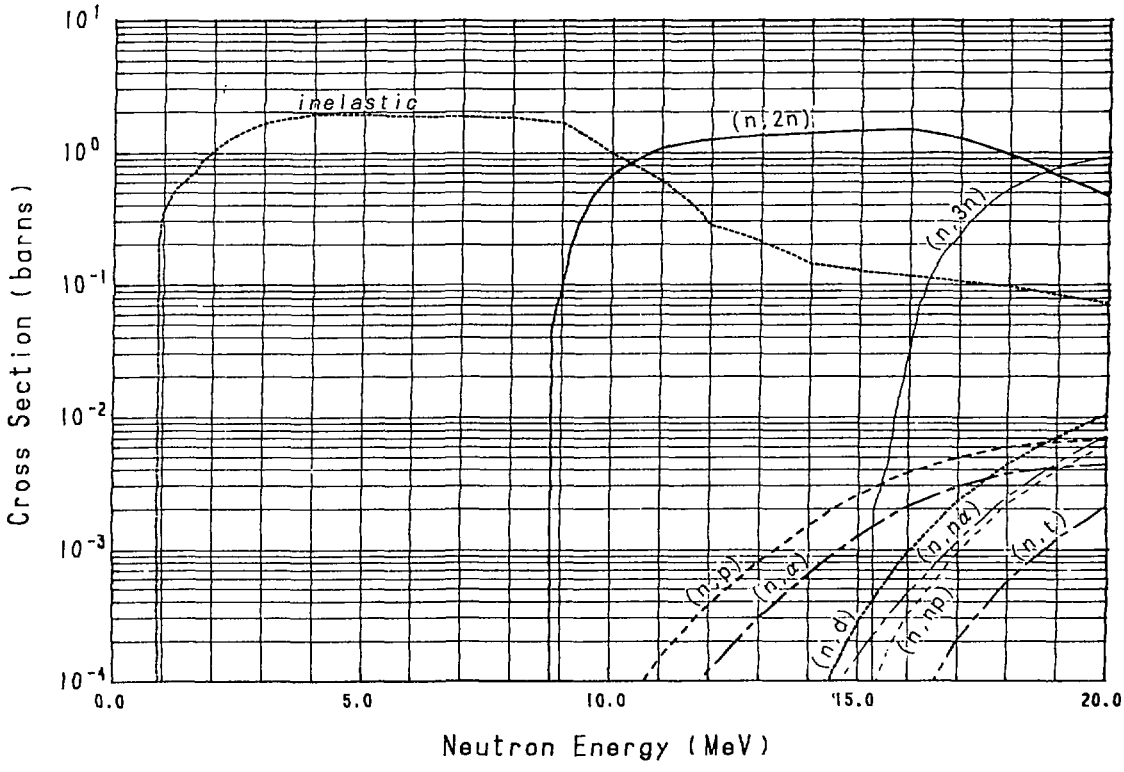

133Xe (5408)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

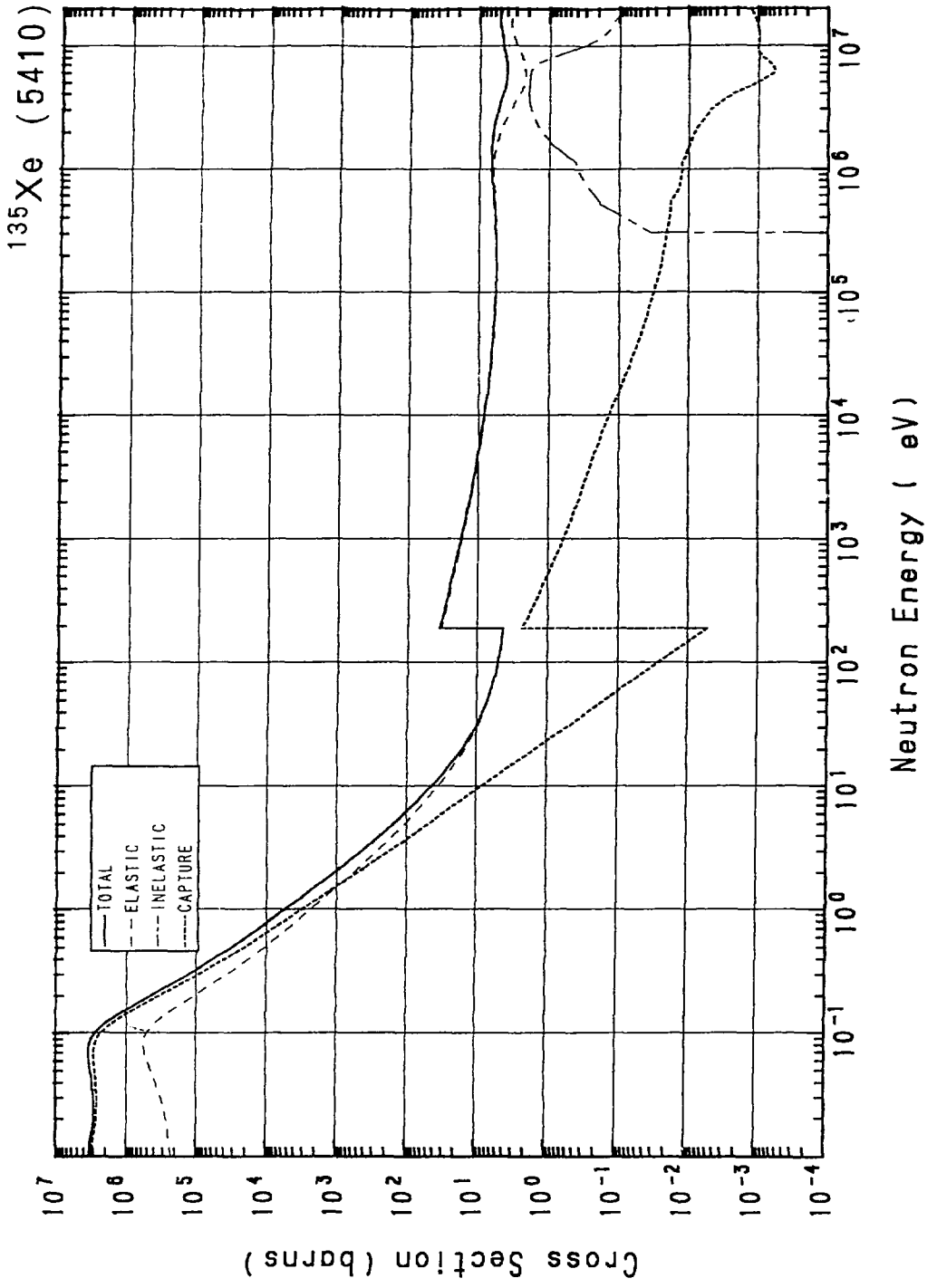

133Xe (5408)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

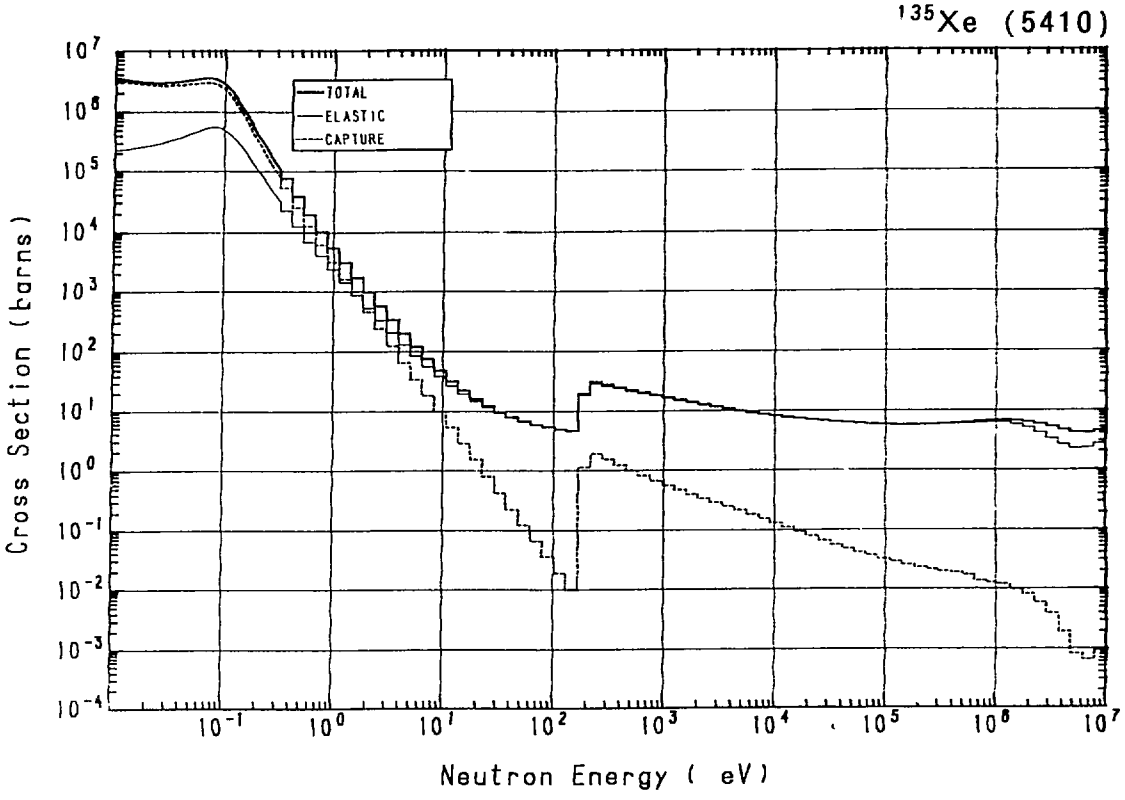

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,γ)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

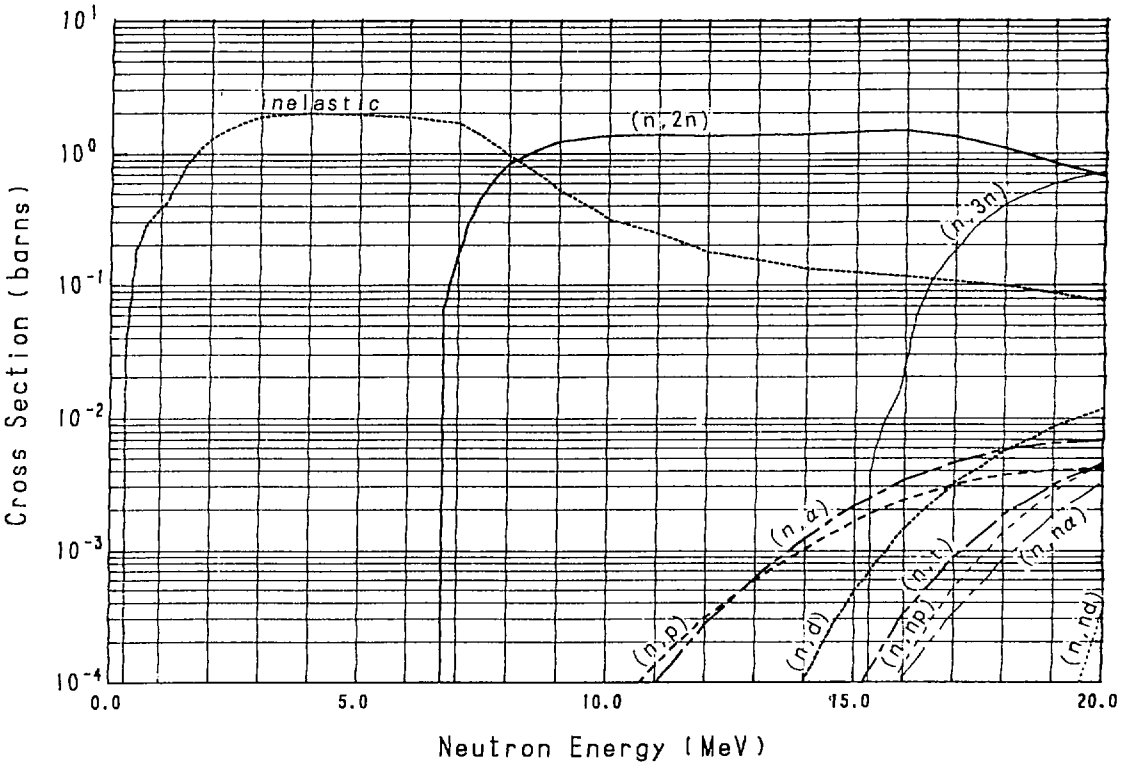

^{134}Xe (5409)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

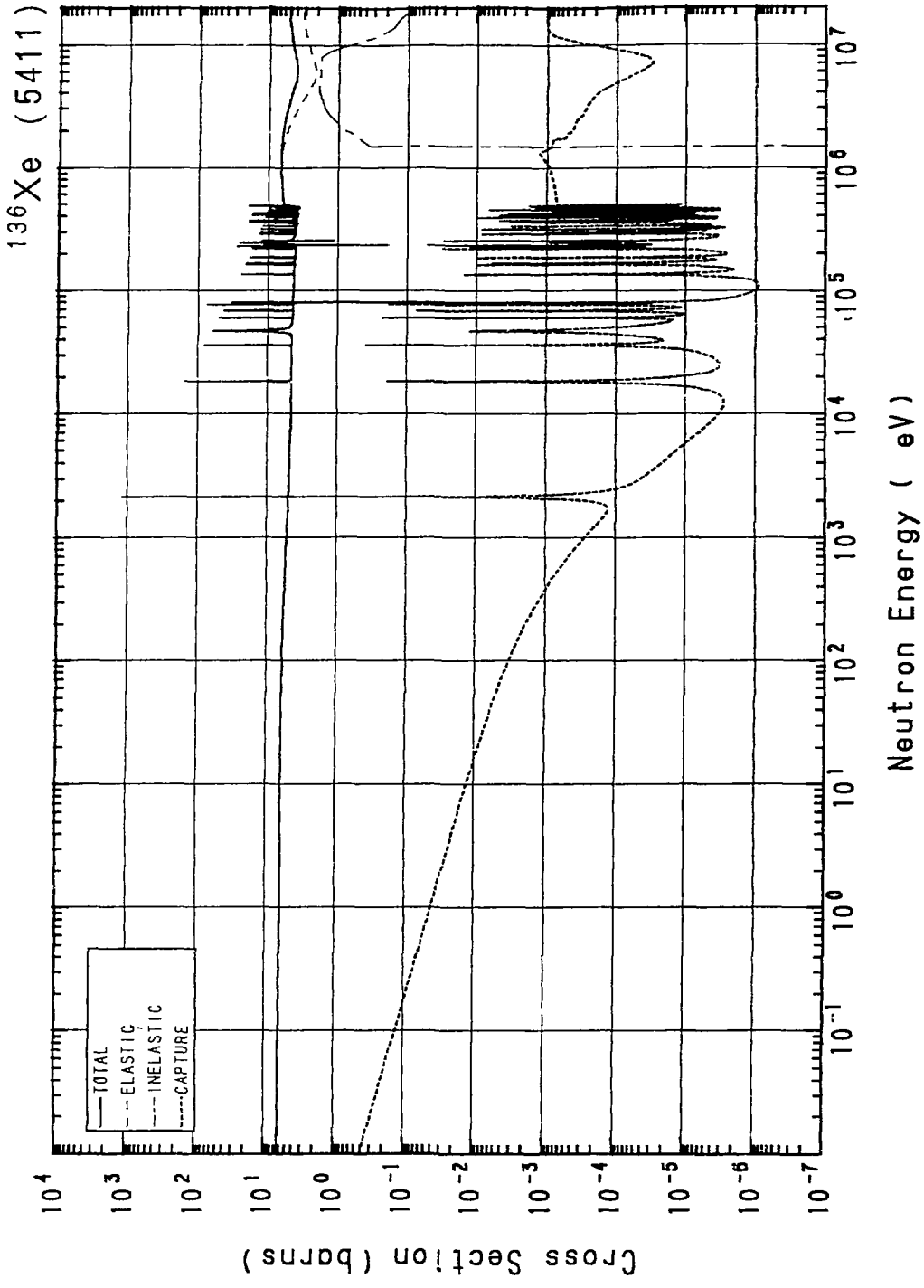

^{134}Xe (5409)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

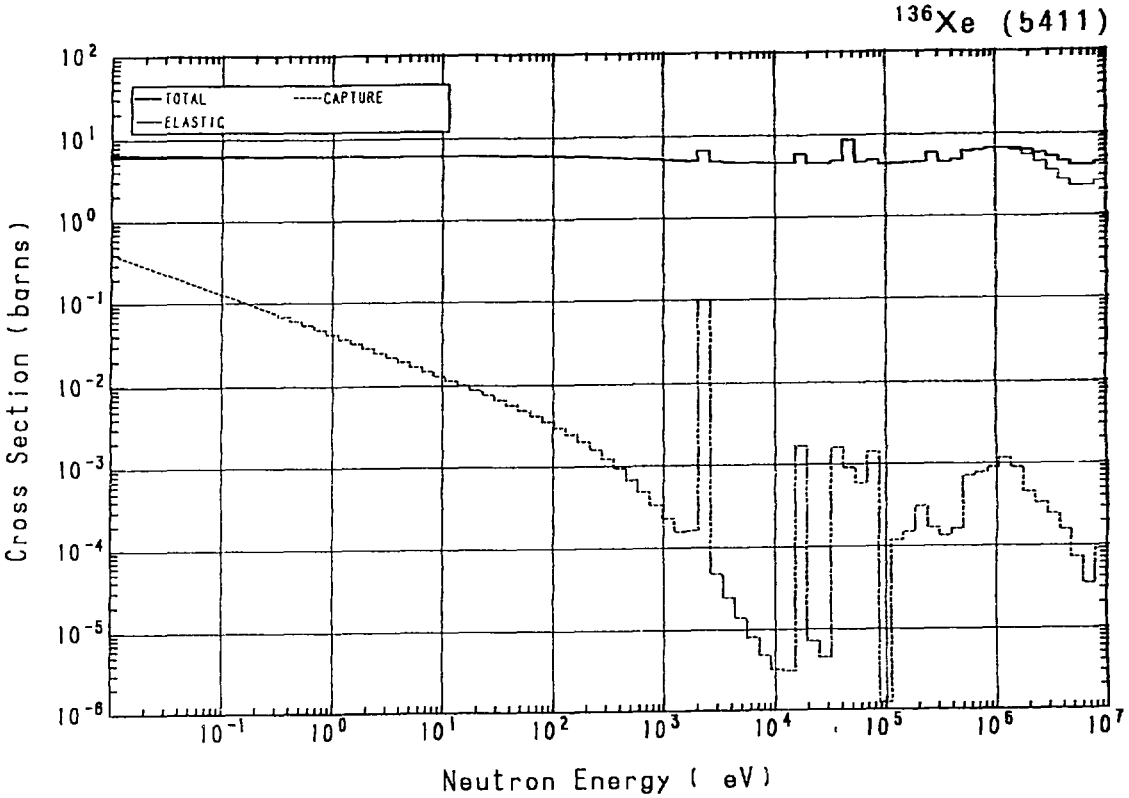

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,np)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

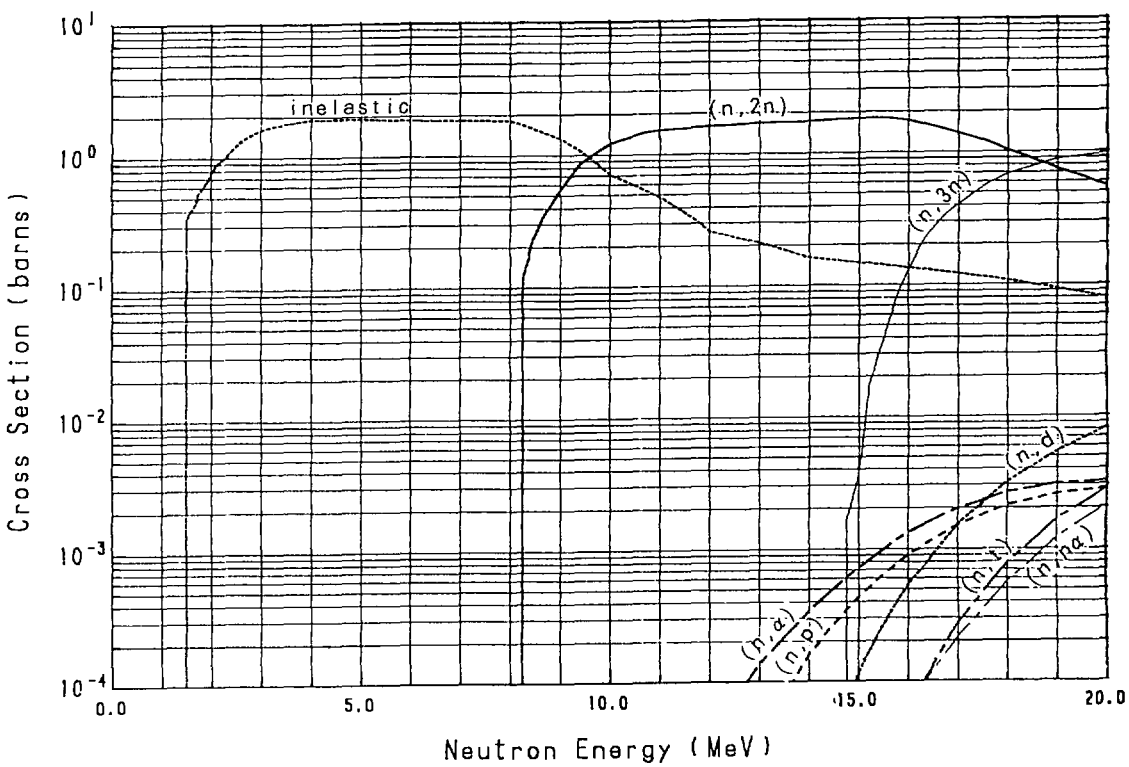

135Xe (5410)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^7
10^6
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

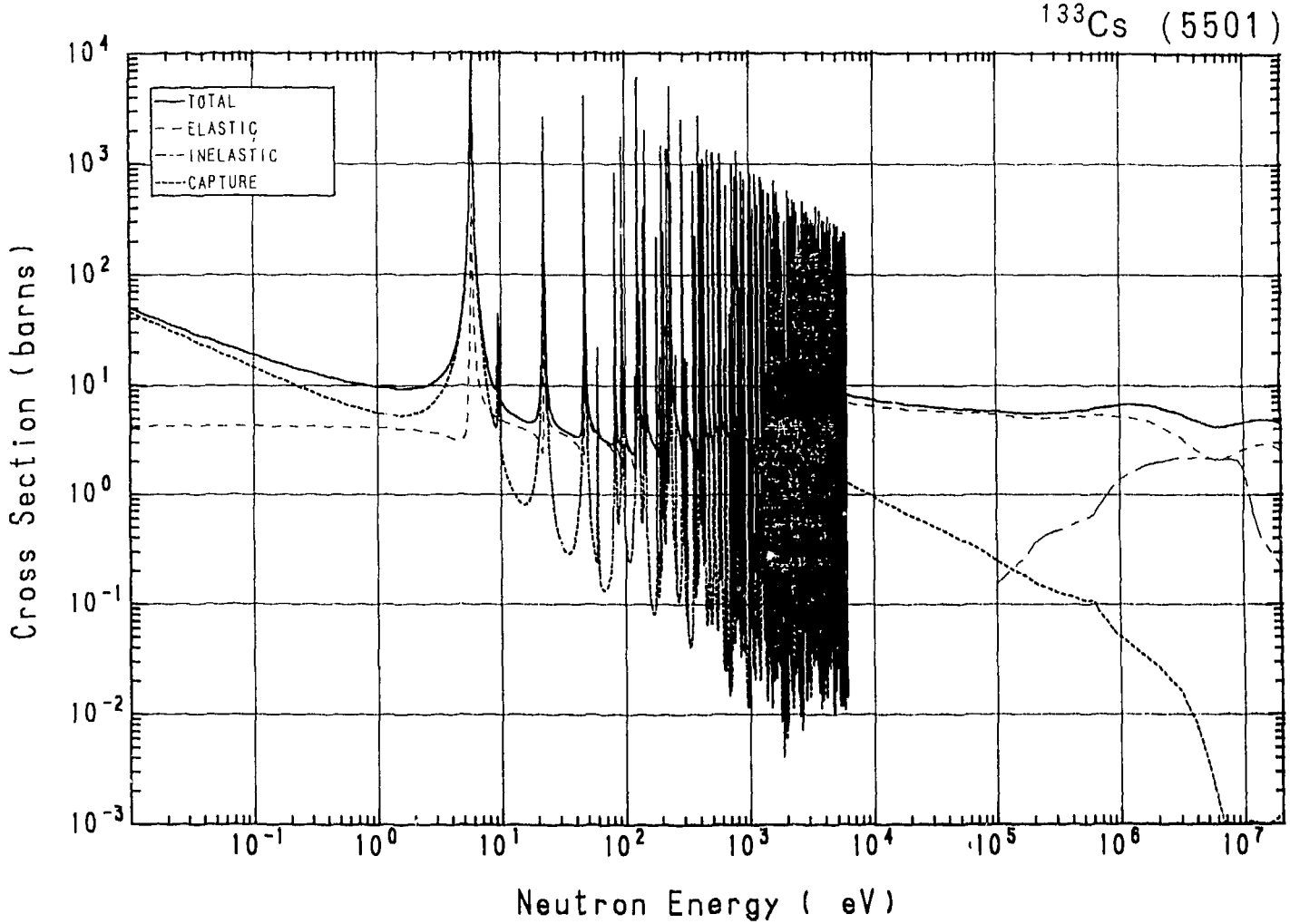

^{135}Xe (5410)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

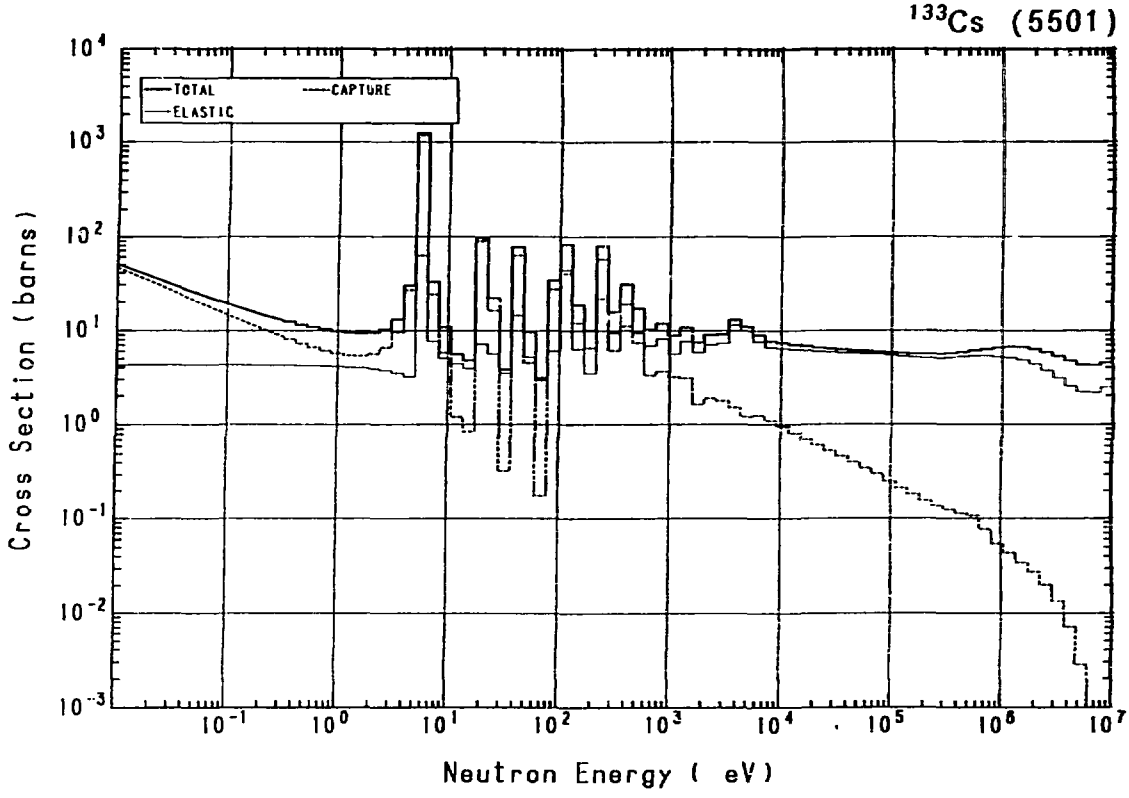

inelastic
(n,2n)
(n,3n)
(n,α)
(n,p)
(n,d)
(n,np)
(n,t)
(n,nα)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

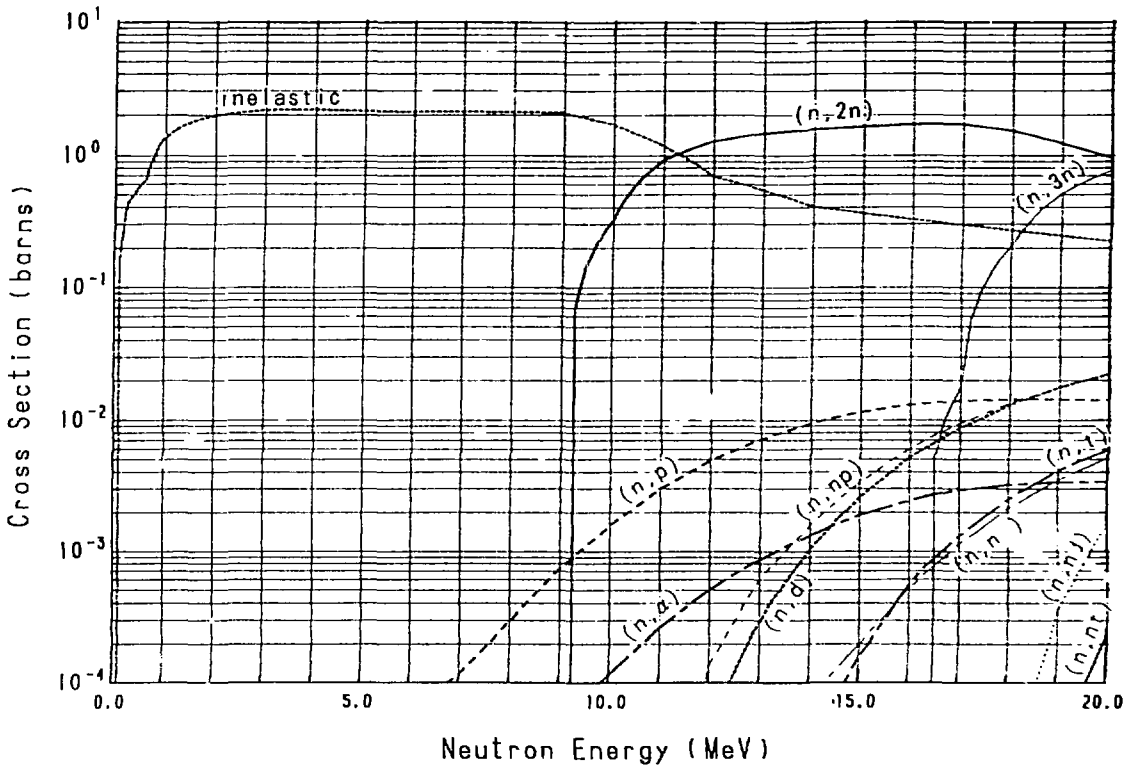

136Xe (5411)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

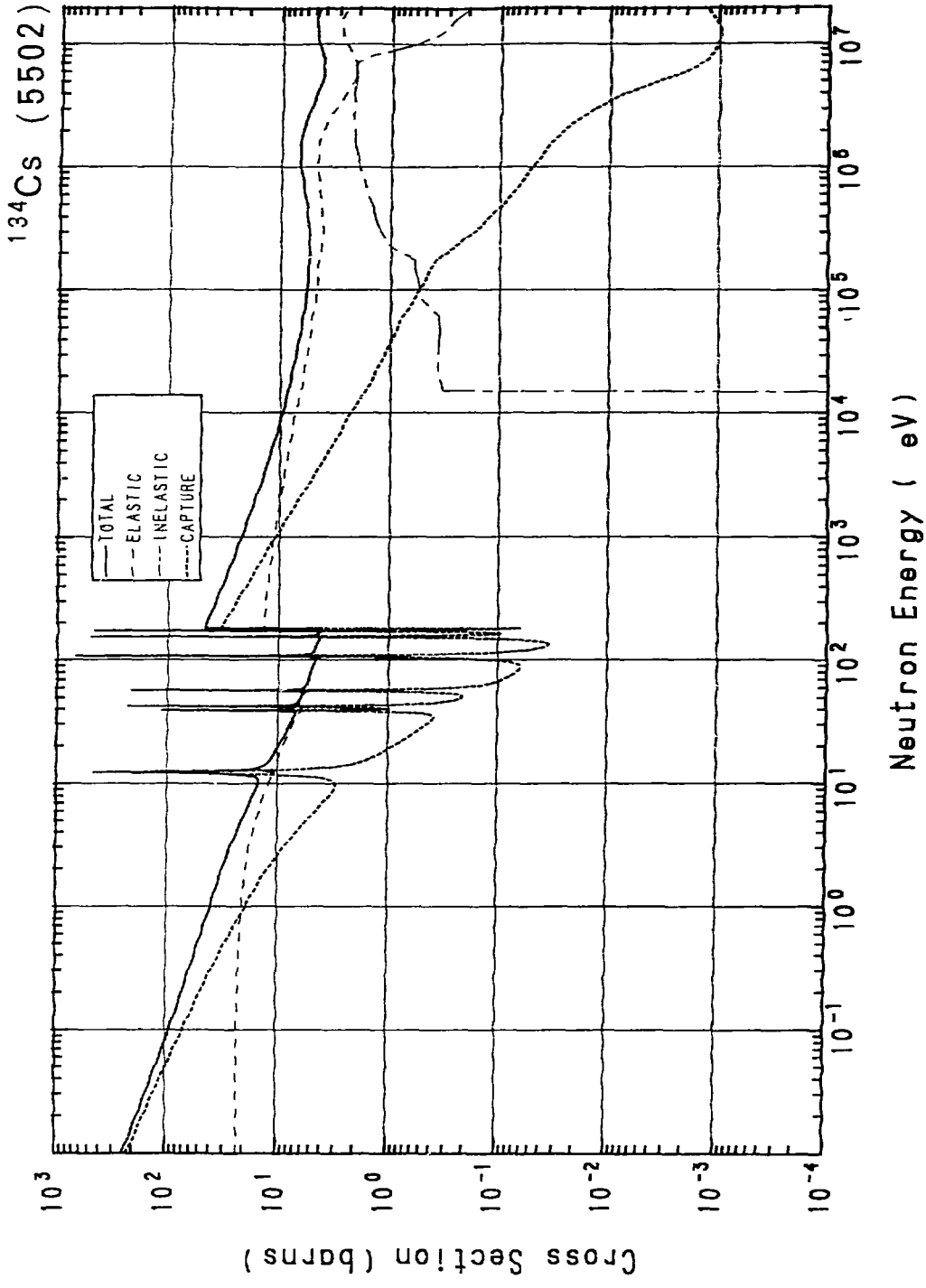

^{136}Xe (5411)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

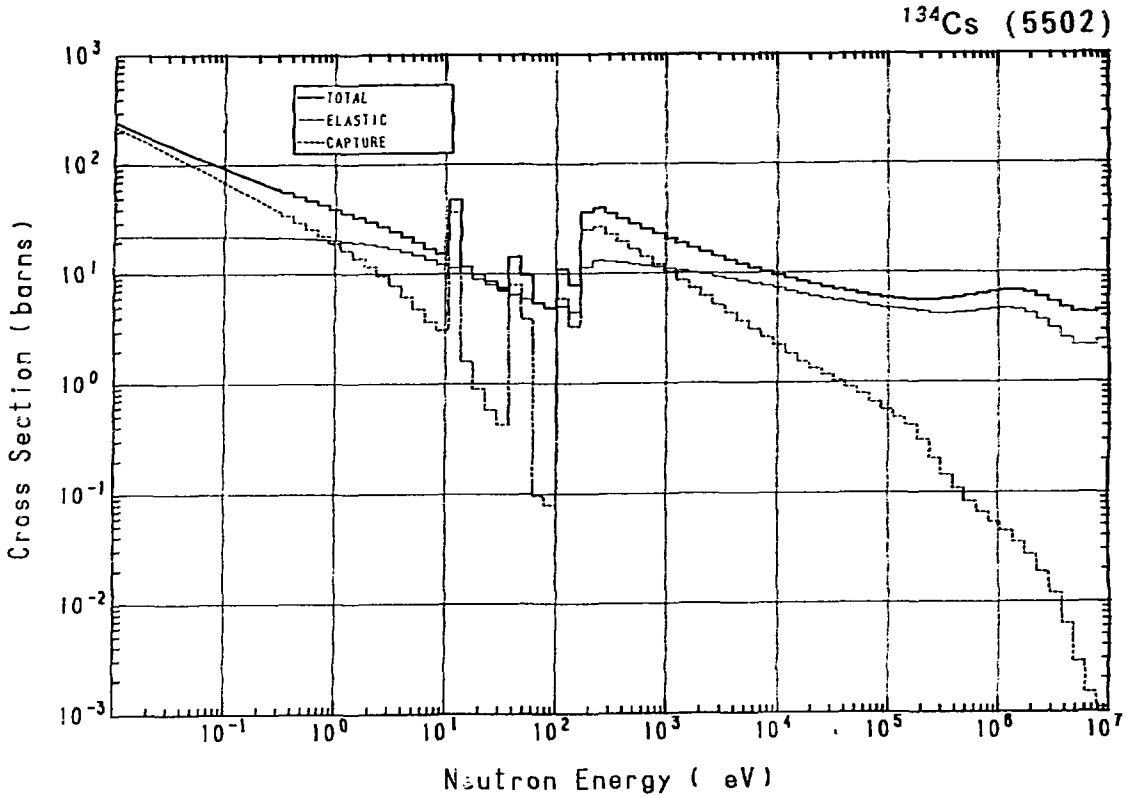

inelastic
(n,2n)
(n,3n)
(n,d)
(n,t)
(n,nα)
(n,α)
(n,p)
Cross Section (barns)
Neutron Energy (MeV)

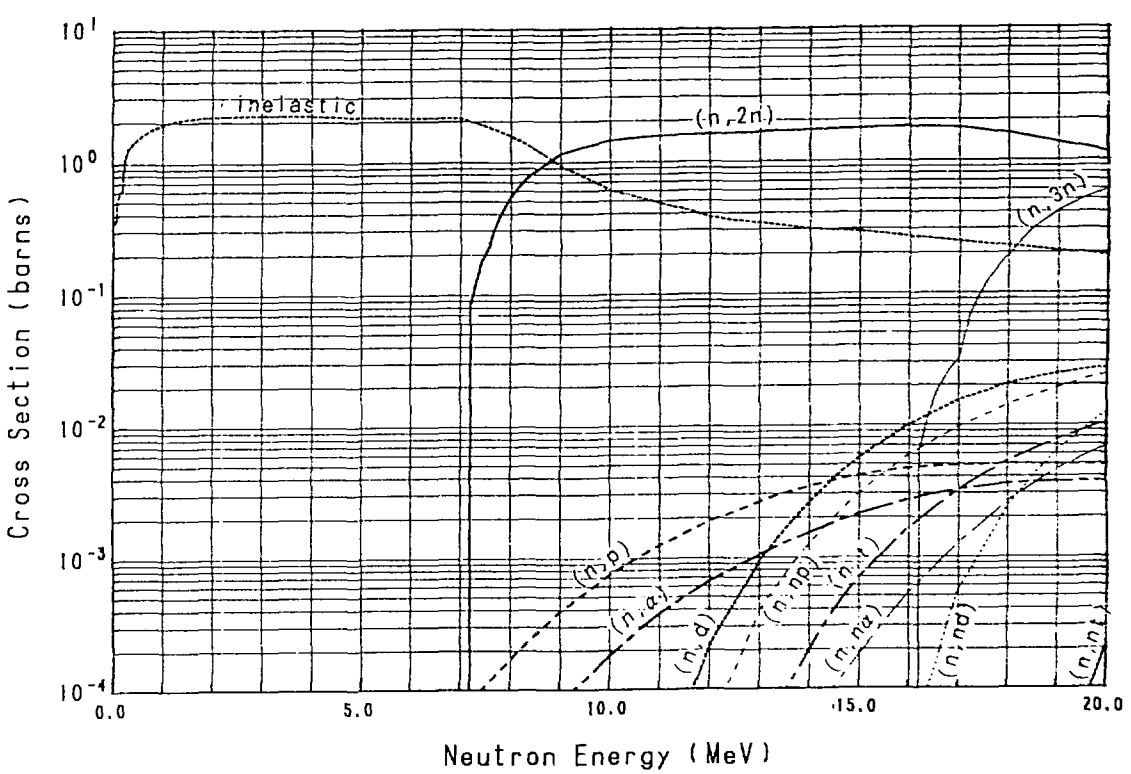

^{133}Cs (5501)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

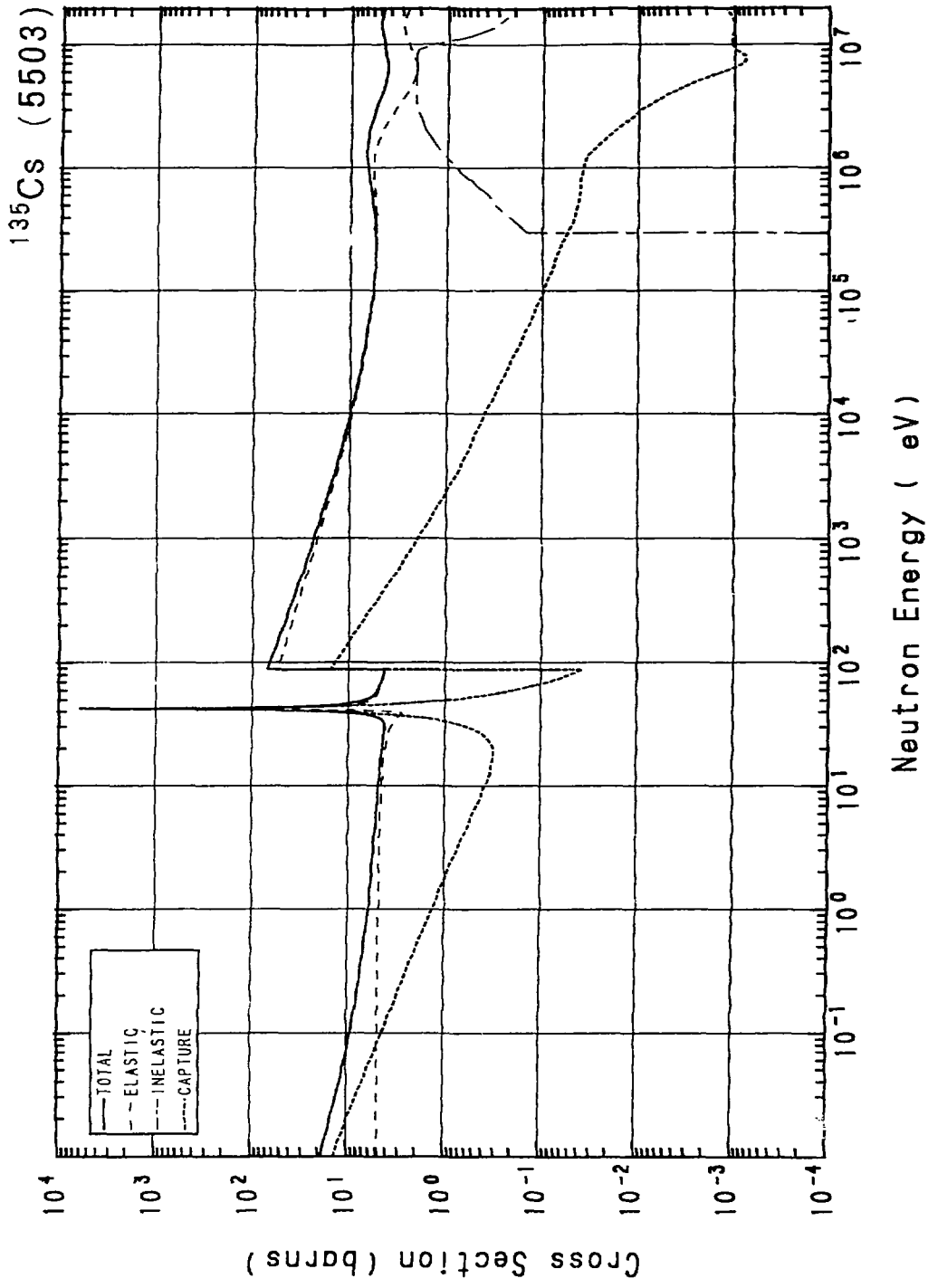

^{133}Cs (5501)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

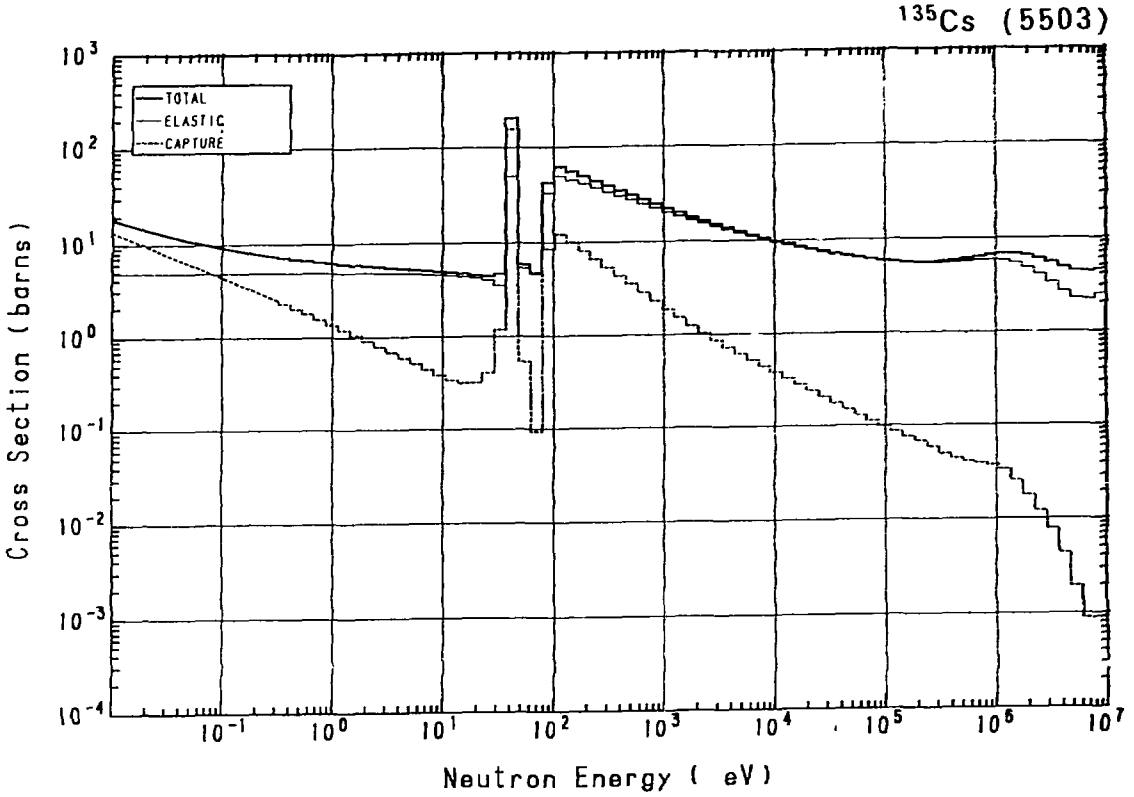

inelastic
(n,2n)
(n,3n)
(n,p)
(n,np)
(n,α)
(n,d)
(n,n')
(n,γ)
(n,nt)
(n,nt')
Cross Section (barns)
Neutron Energy (MeV)

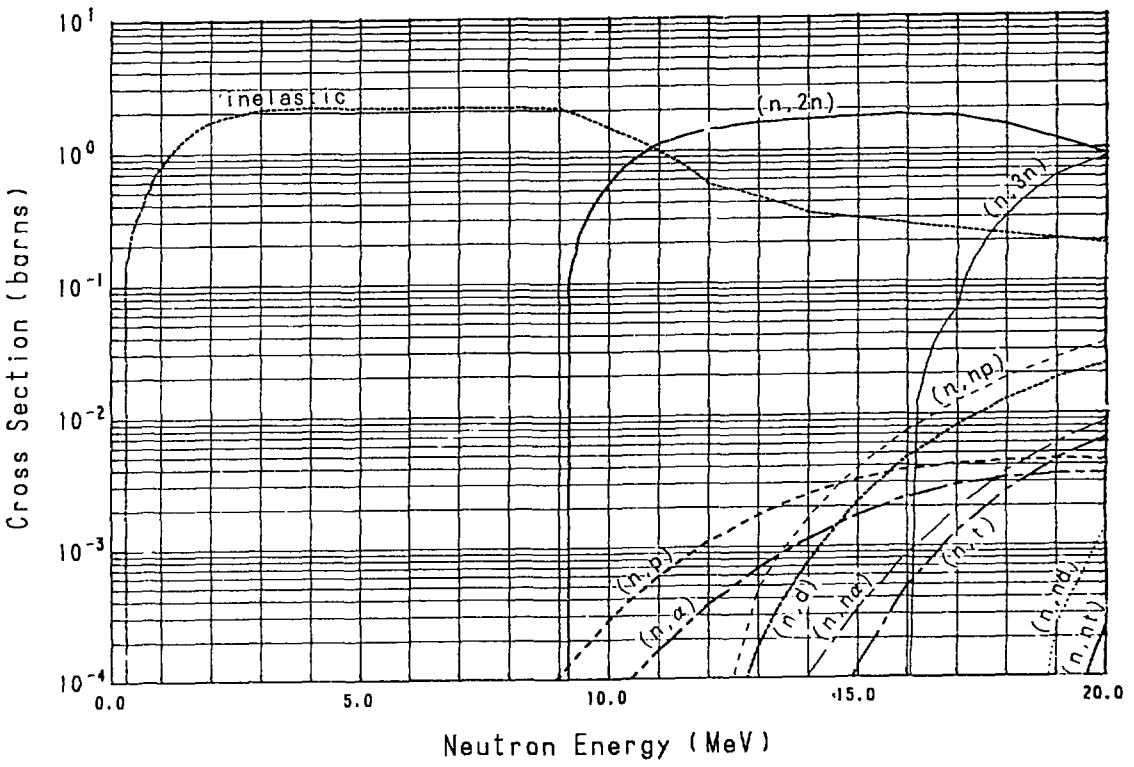

^{134}Cs (5502)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

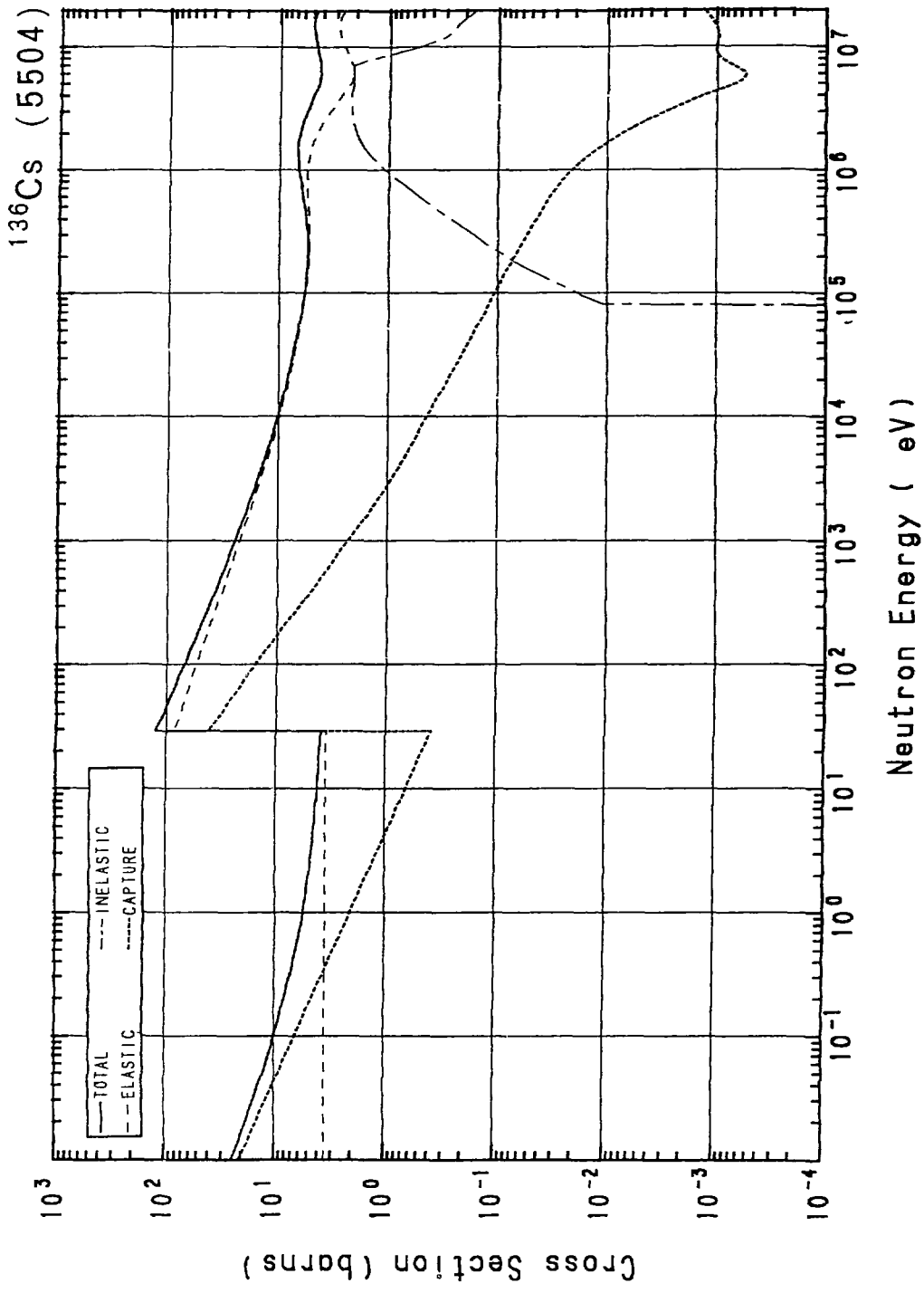

^{134}Cs (5502)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

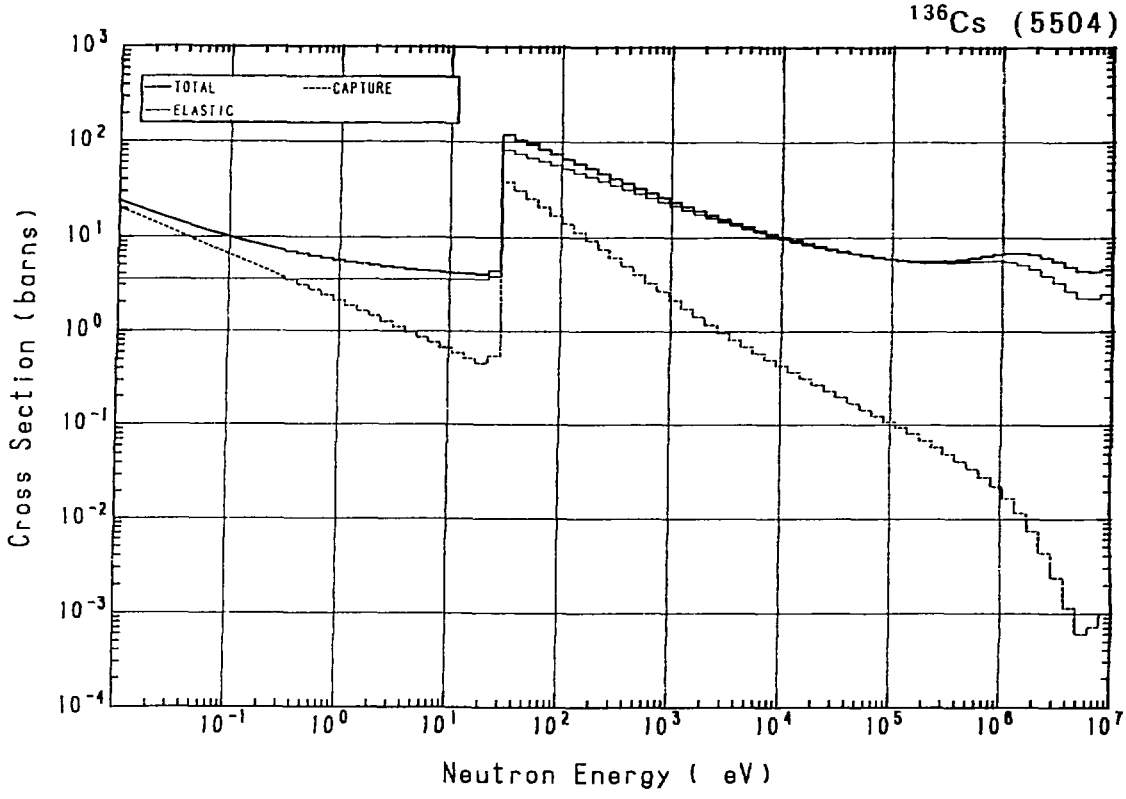

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nt)
(n,nα)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

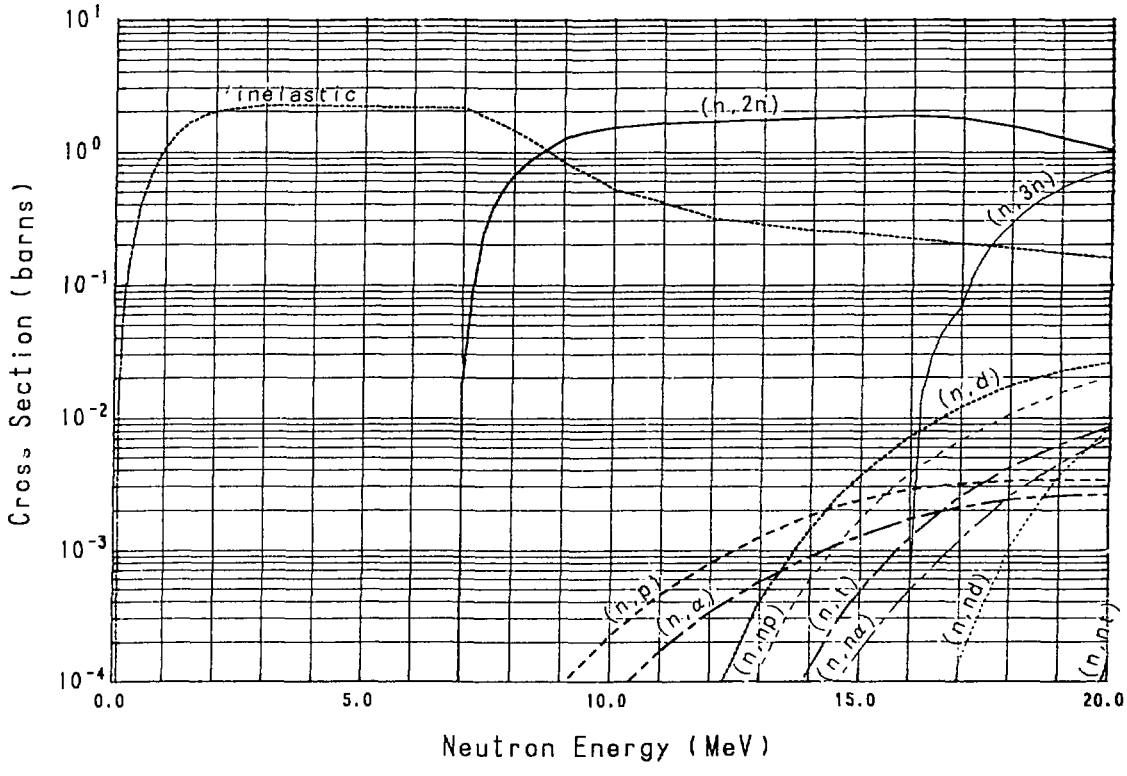

^{135}Cs (5503)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

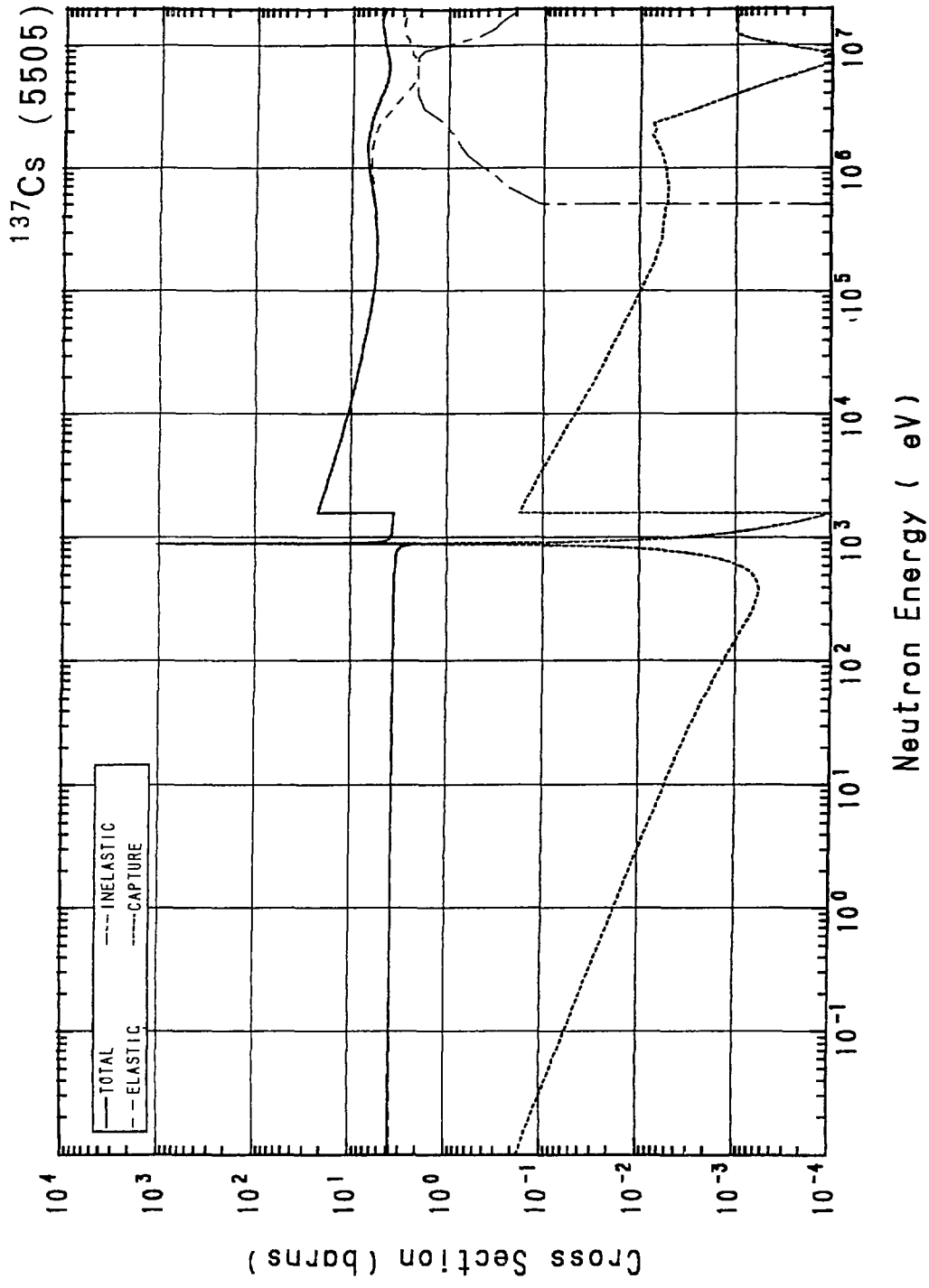

^{135}Cs (5503)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

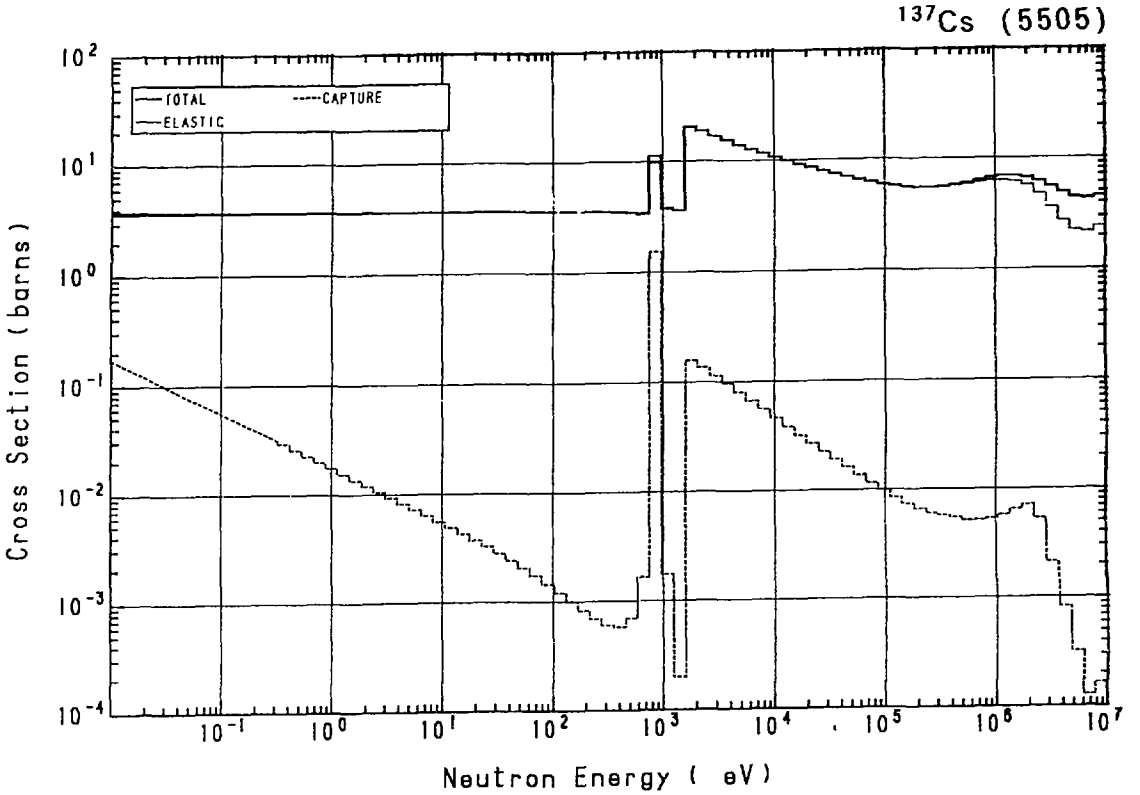

inelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

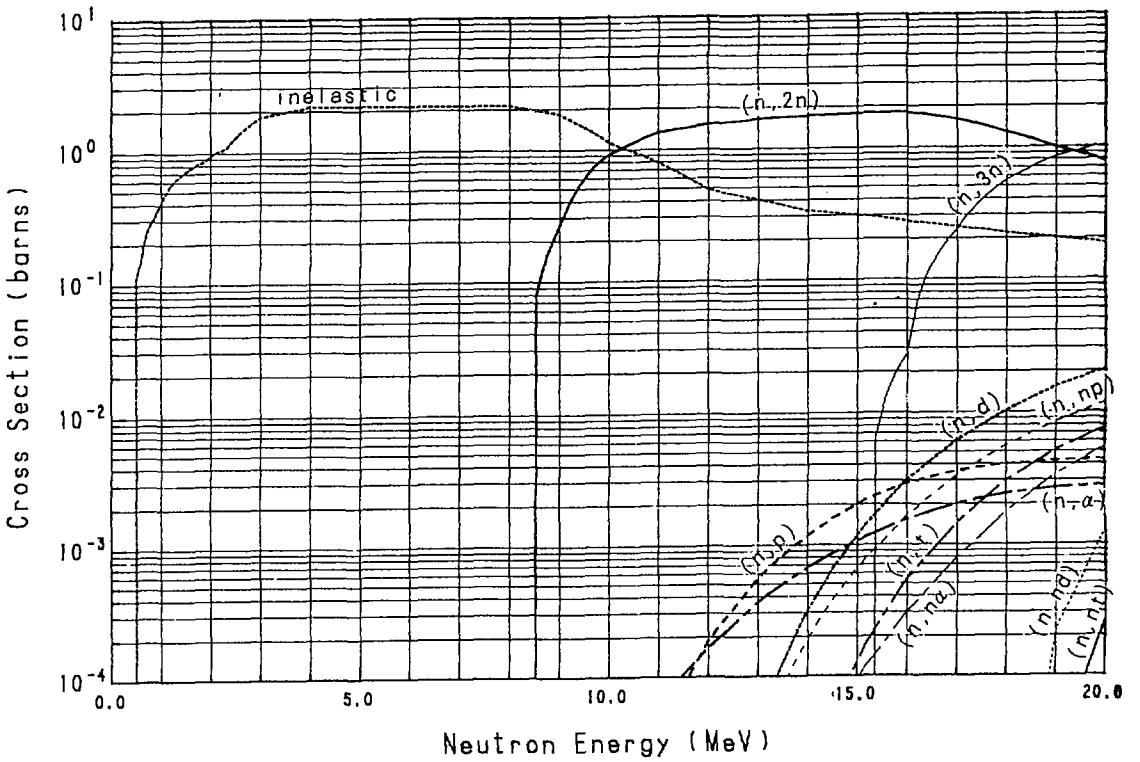

^{136}Cs (5504)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

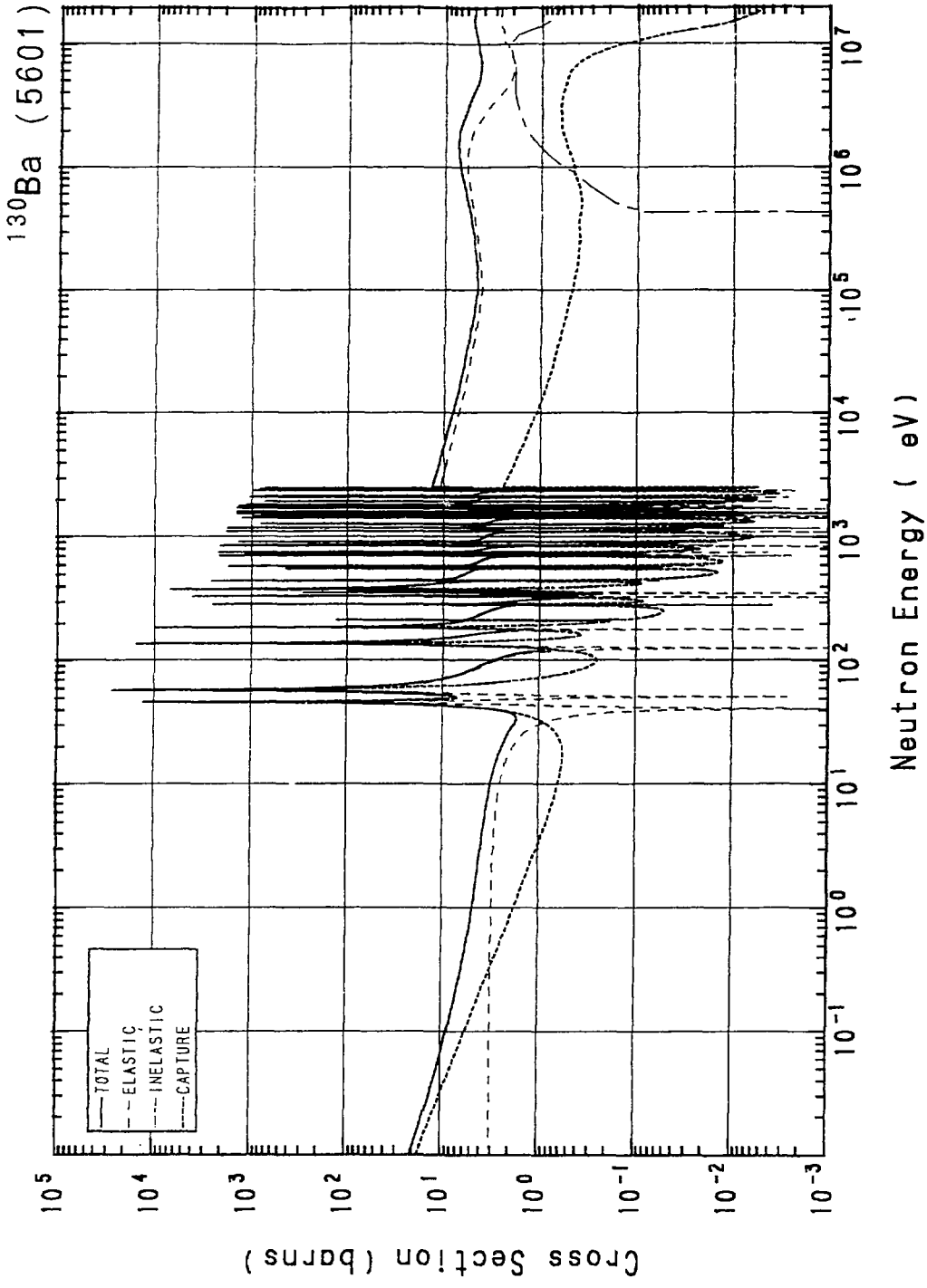

^{136}Cs (5504)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

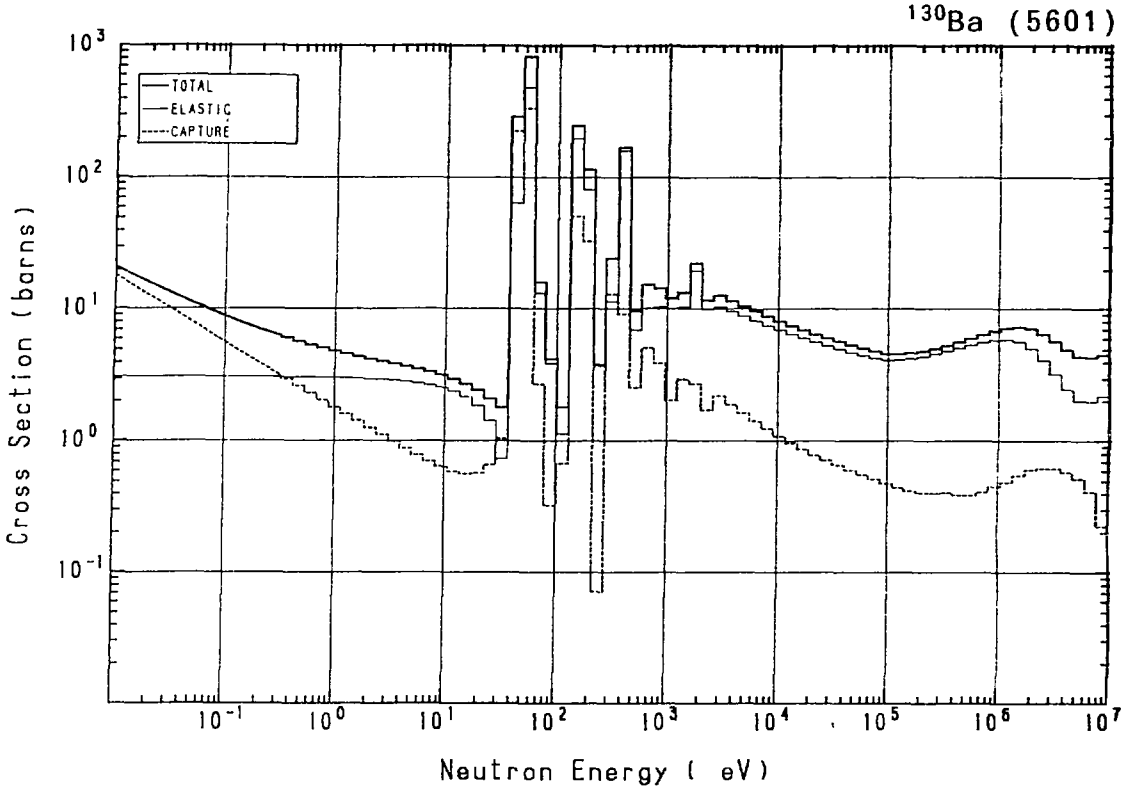

inelastic
(n,2n)
(n,3n)
(n,d)
(n,p)
(n,α)
(n,np)
(n,t)
(n,nα)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

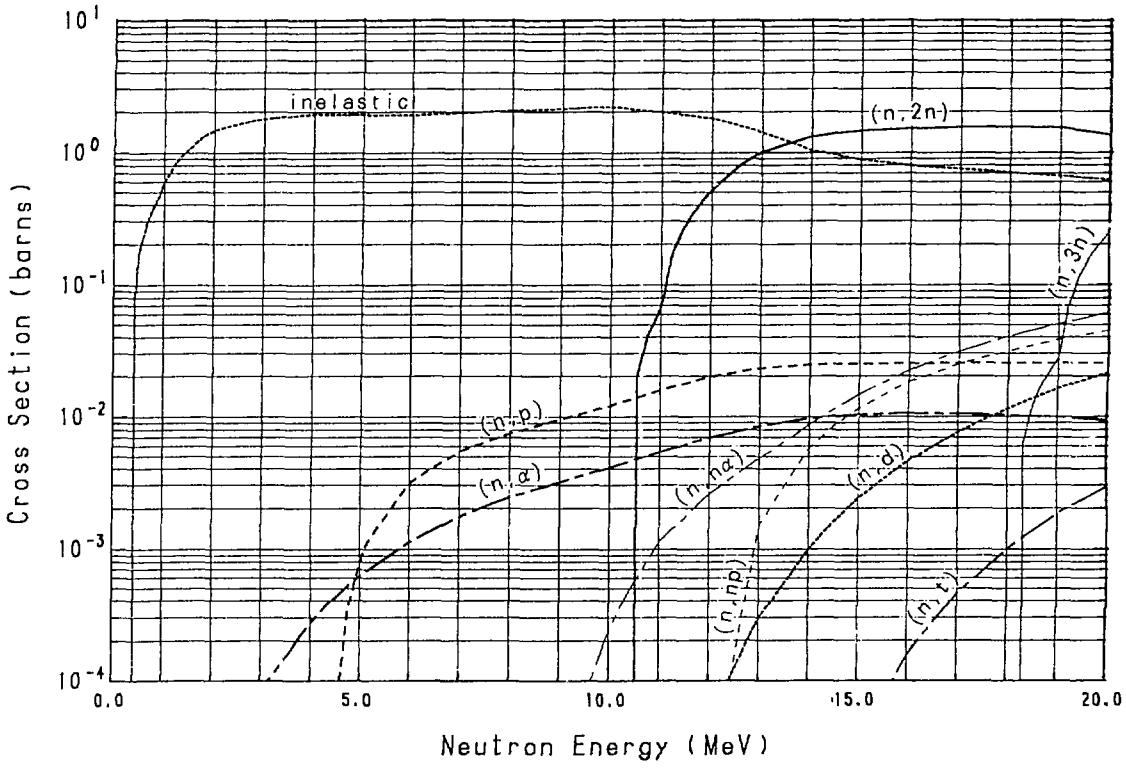

^{137}Cs (5505)
TOTAL
INELASTIC
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

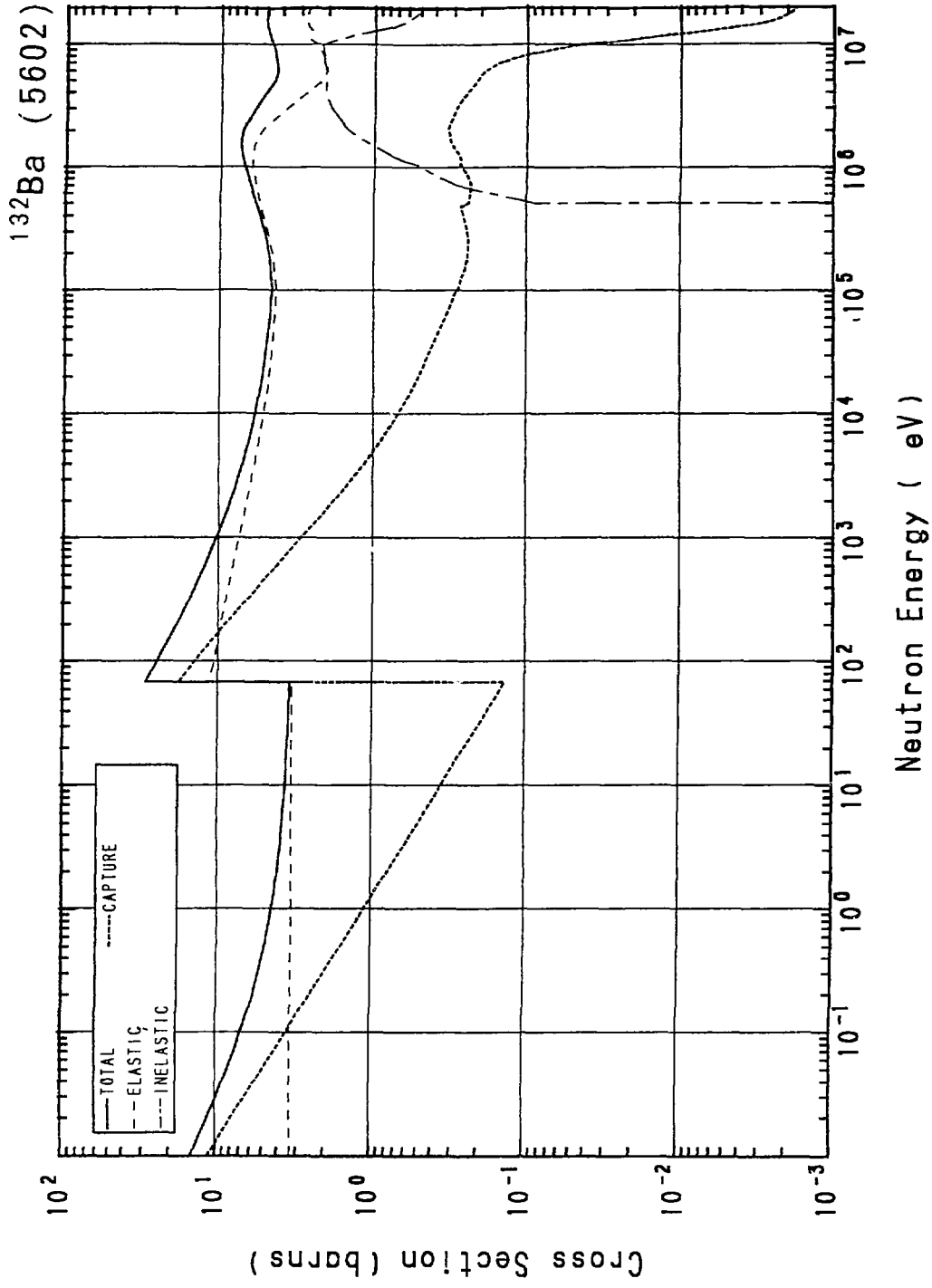

137Cs (5505)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

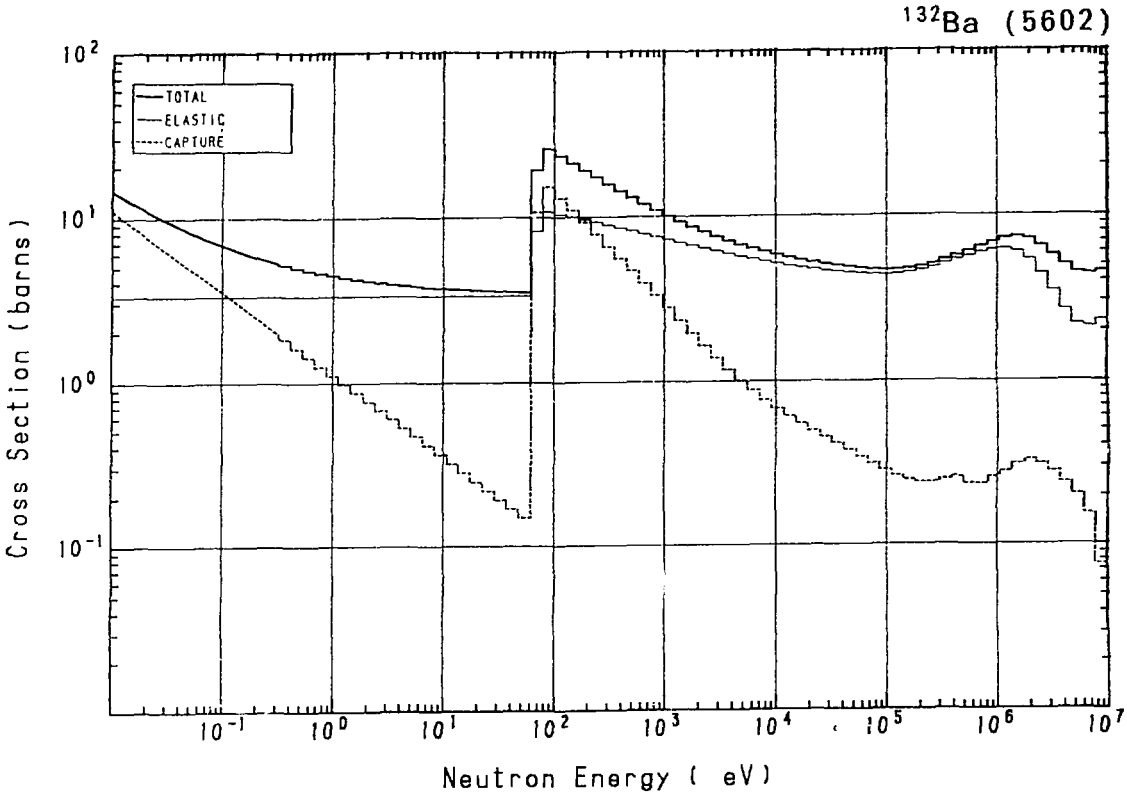

inelastic
(n,2n)
(n,3n)
(n,d)
(n,np)
(n,α)
(n,p)
(n,γ)
(n,nα)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

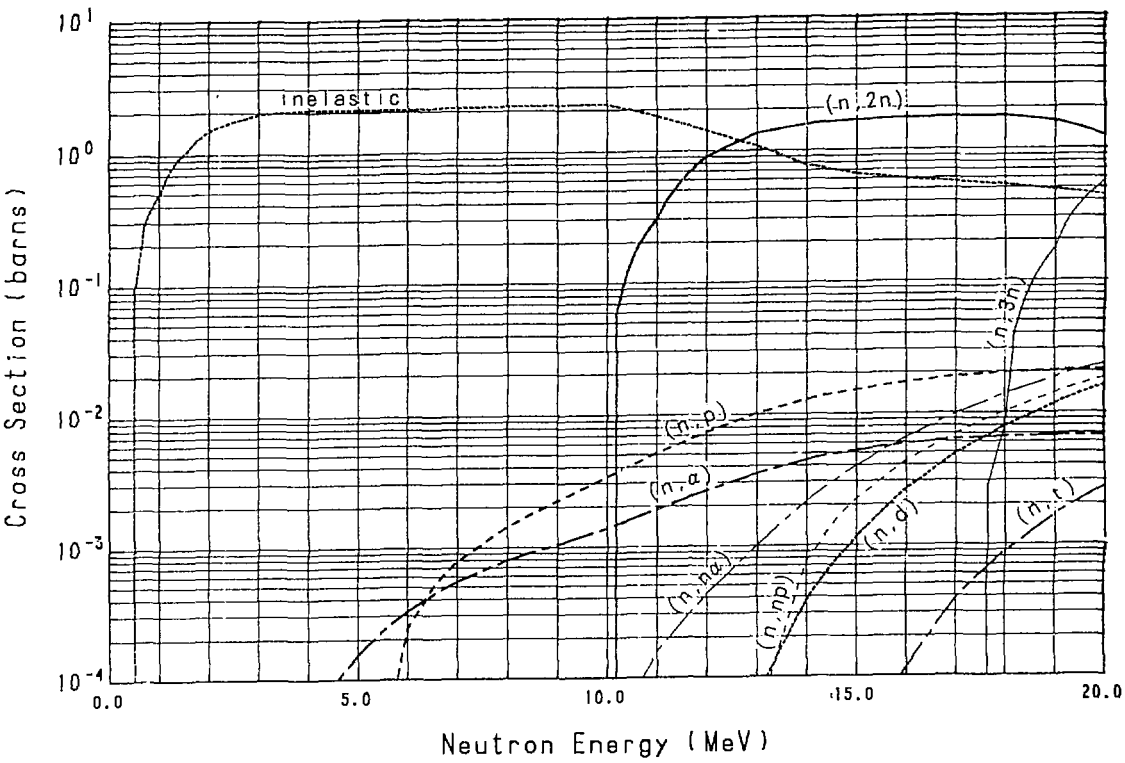

130Ba (5601)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

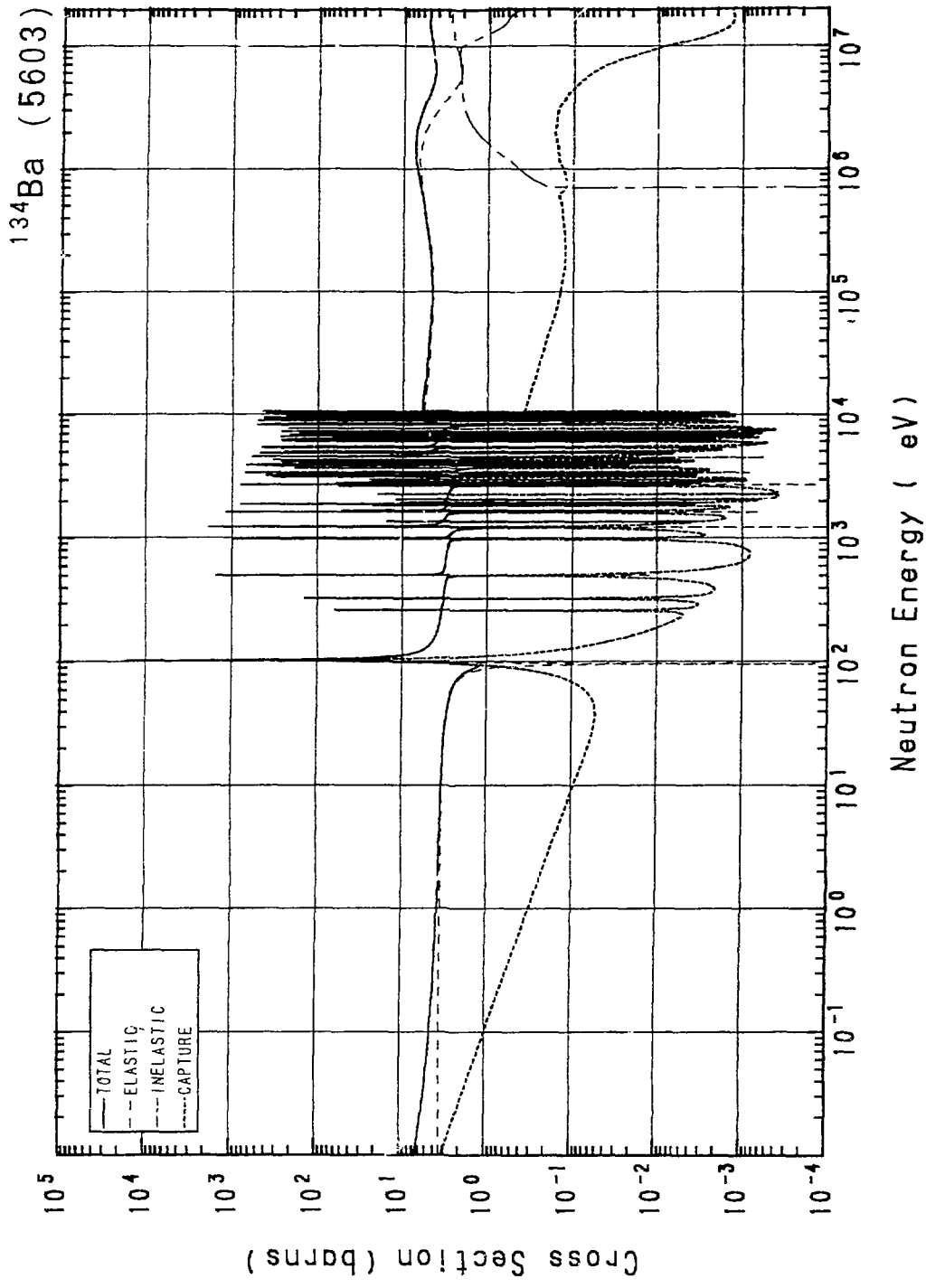

^{130}Ba (5601)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

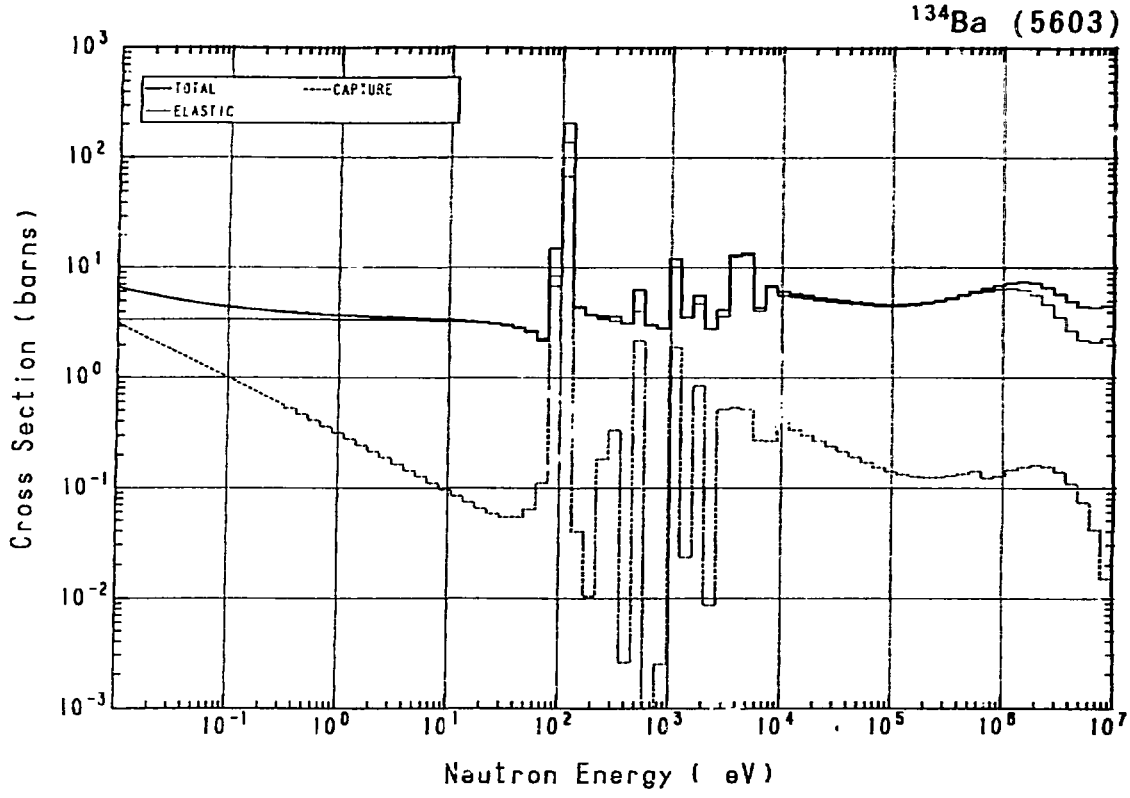

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,nα)
(n,d)
(n,np)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

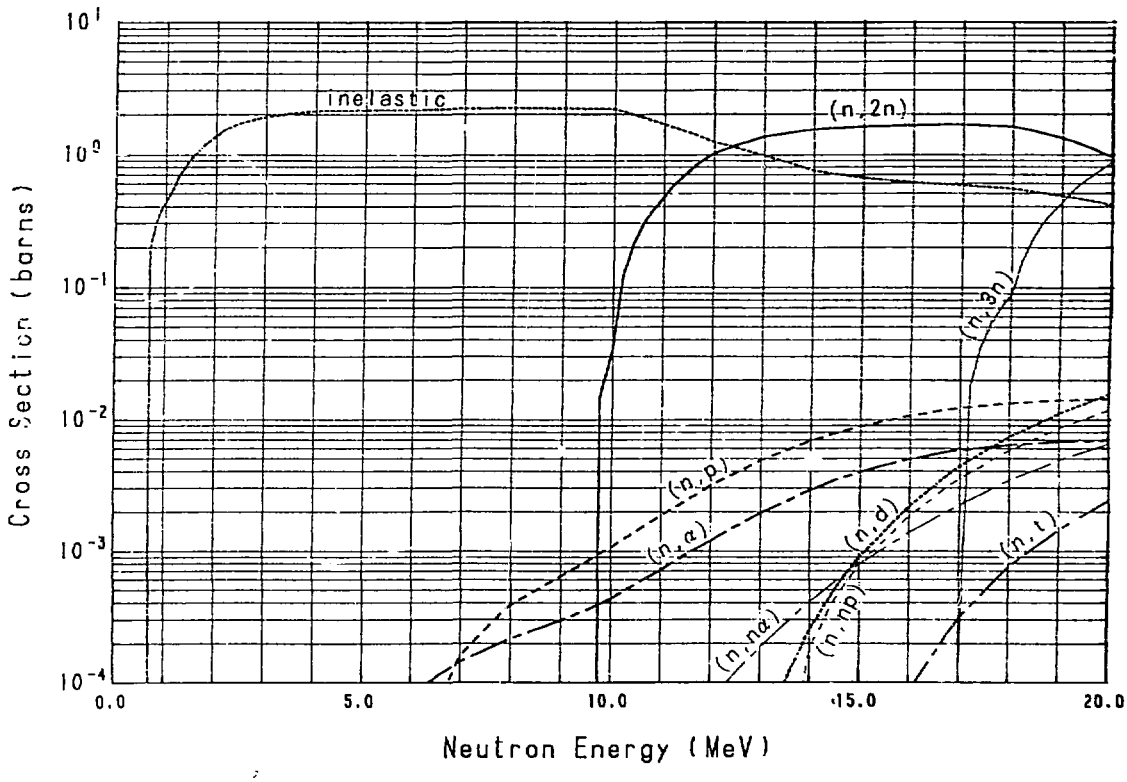

^{132}Ba (5602)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

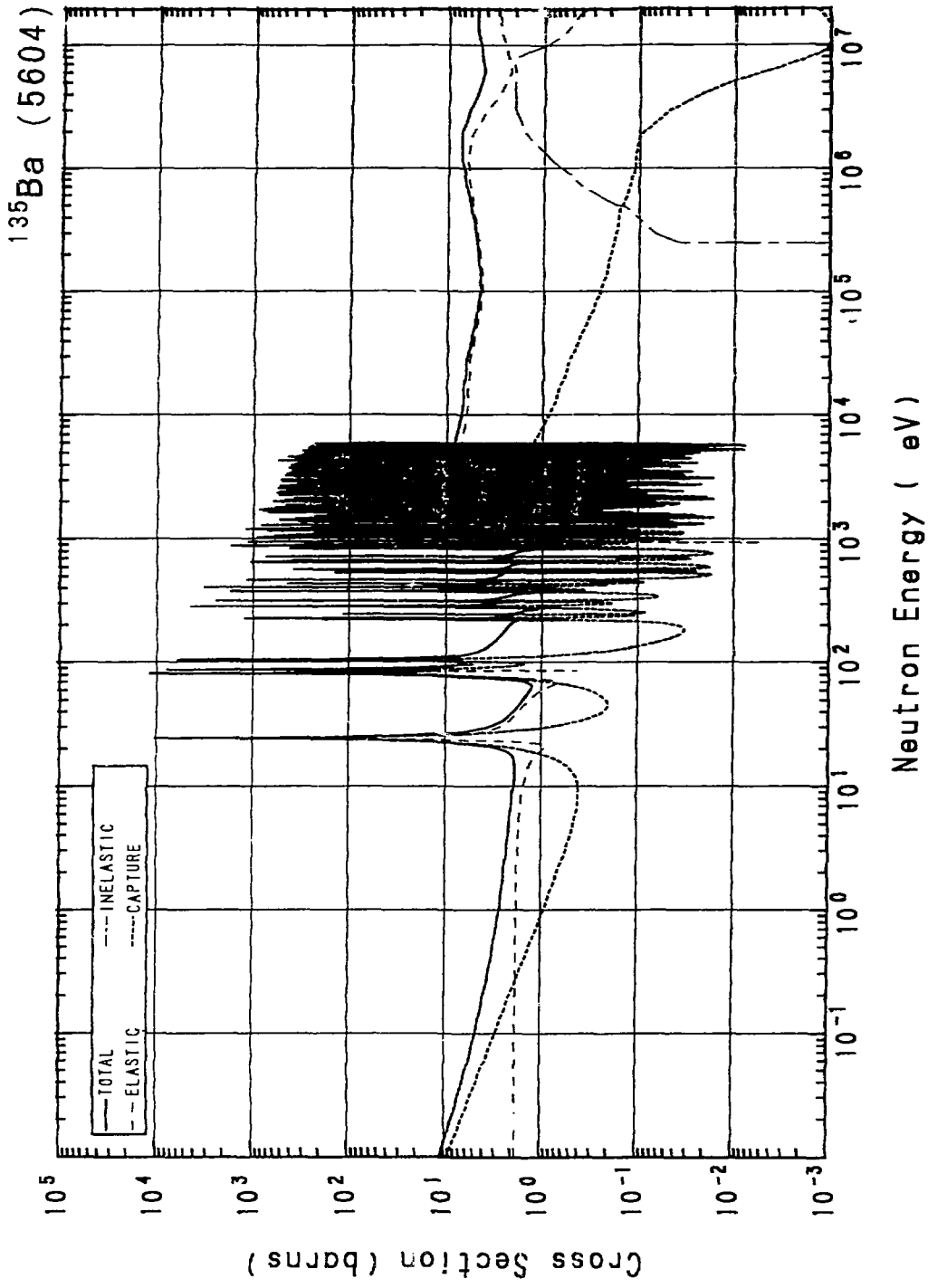

^{132}Ba (5602)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

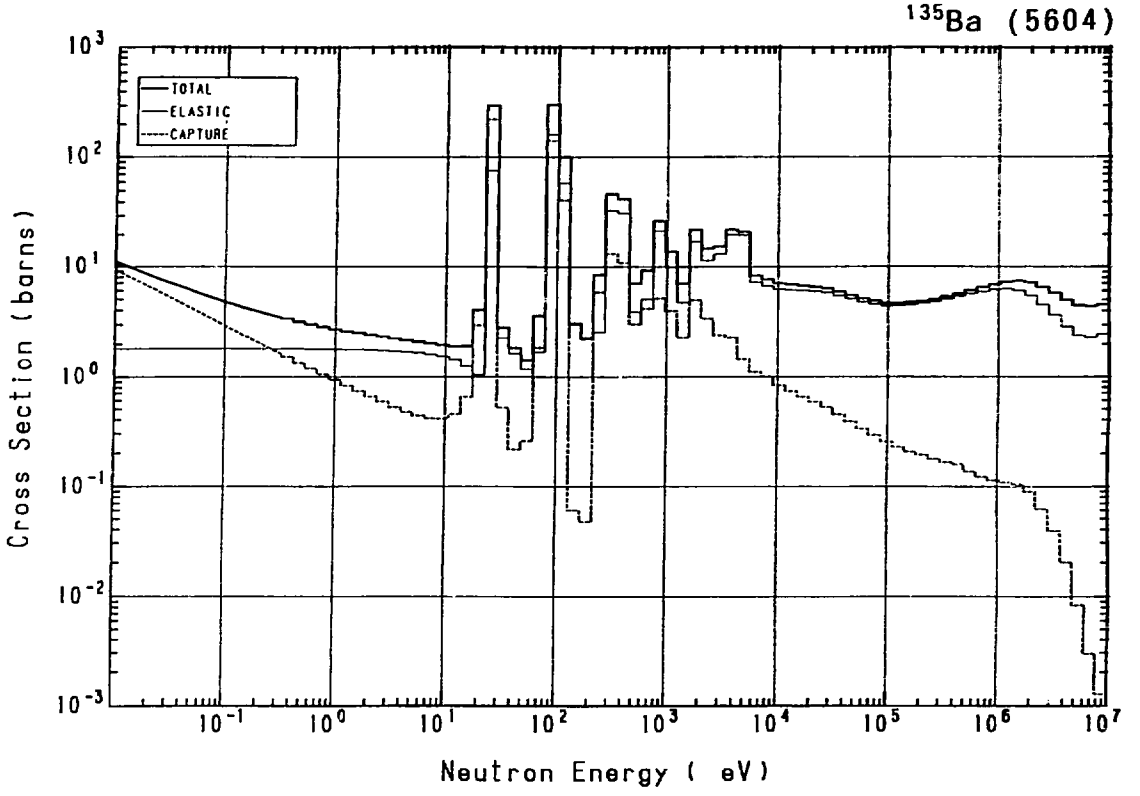

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,t)
(n,nα)
(n,np)
Cross Section (barns)
Neutron Energy (MeV)

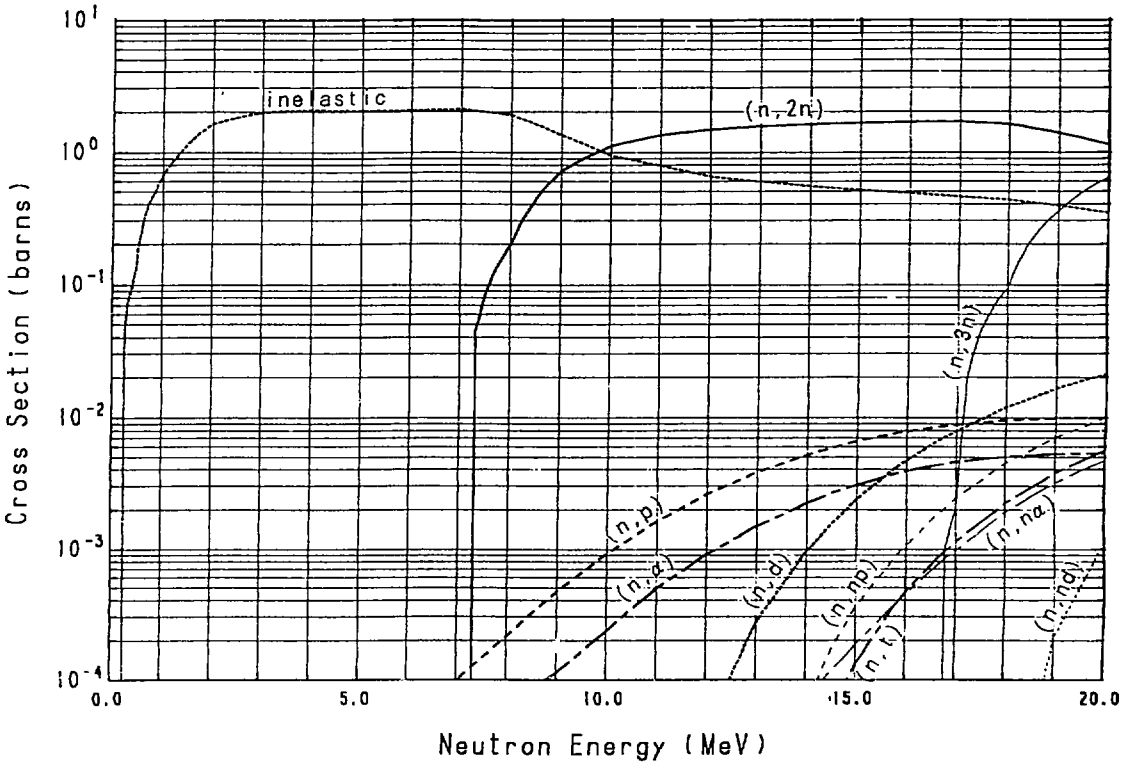

^{134}Ba (5603)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

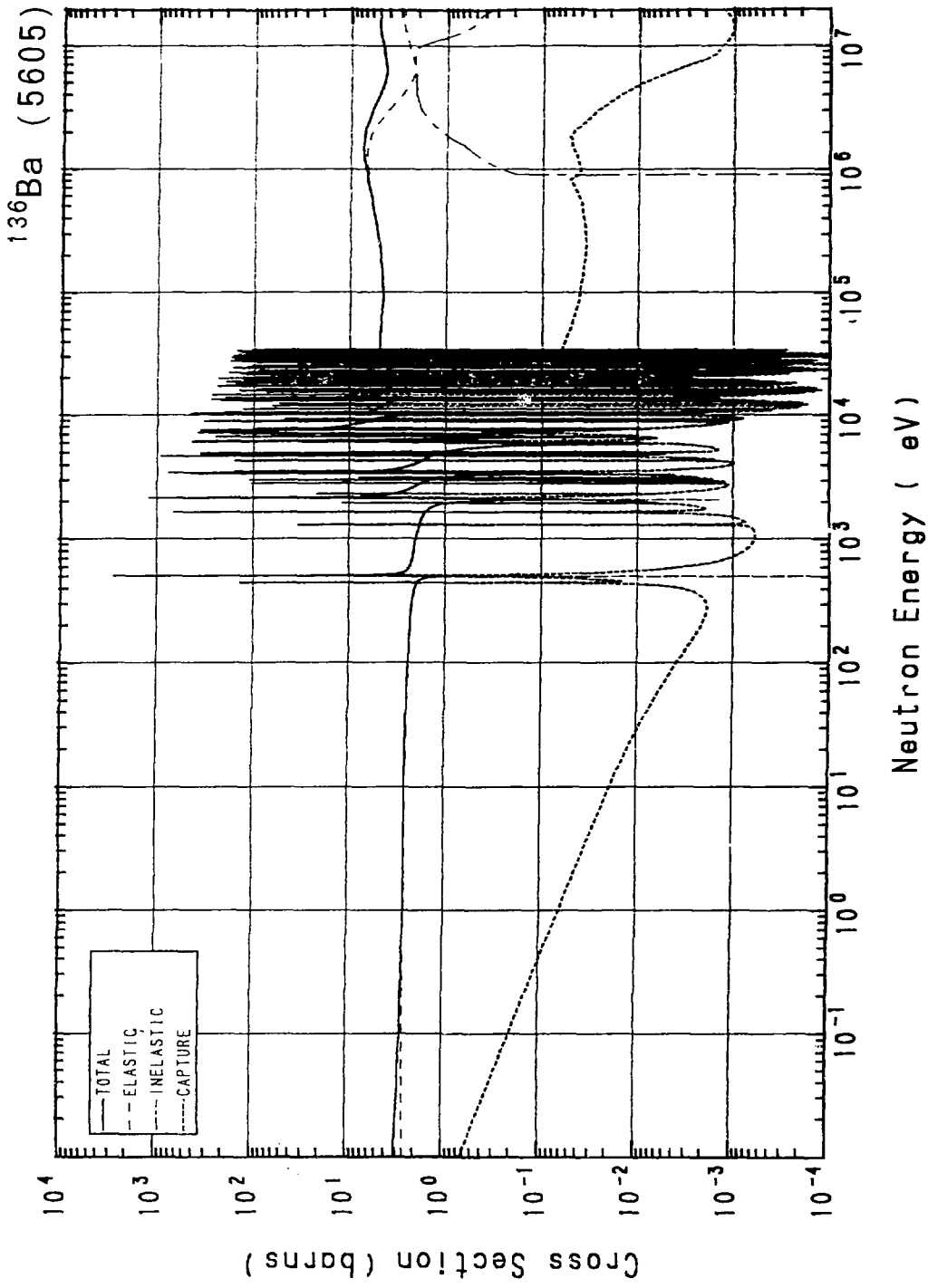

^{134}Ba (5603)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

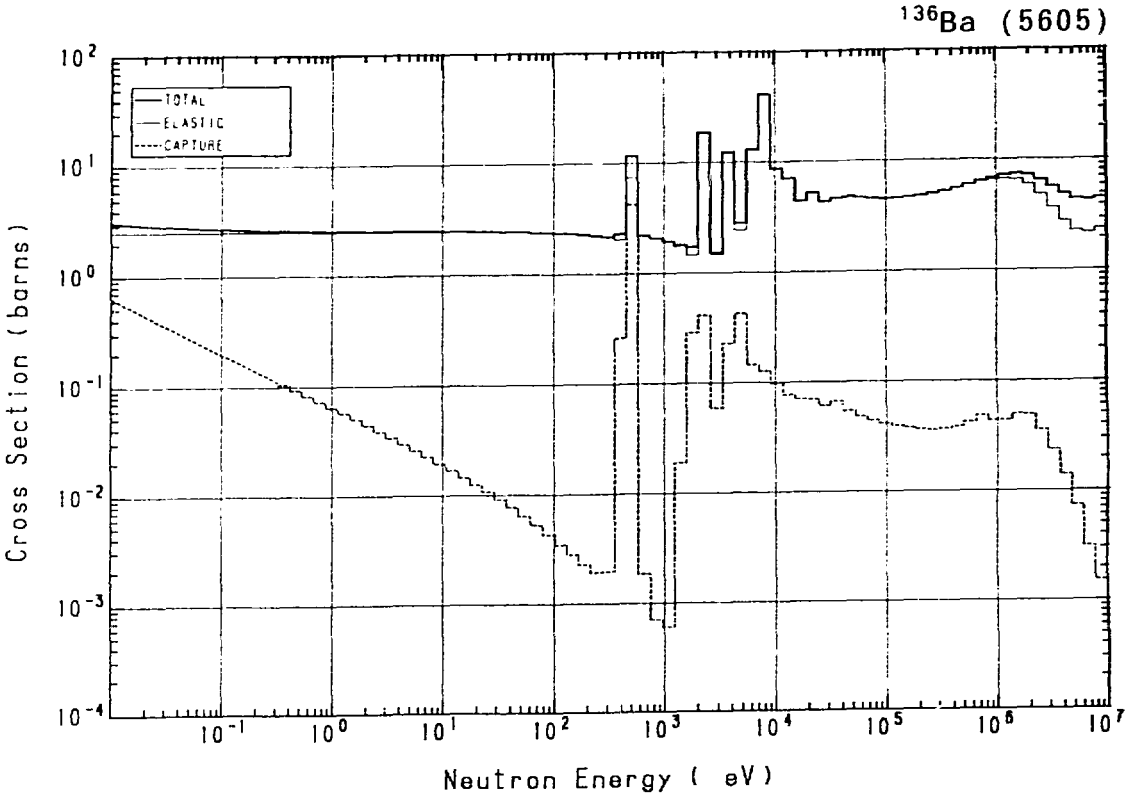

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,t)
(n,nα)
(n,np)
Cross Section (barns)
Neutron Energy (MeV)

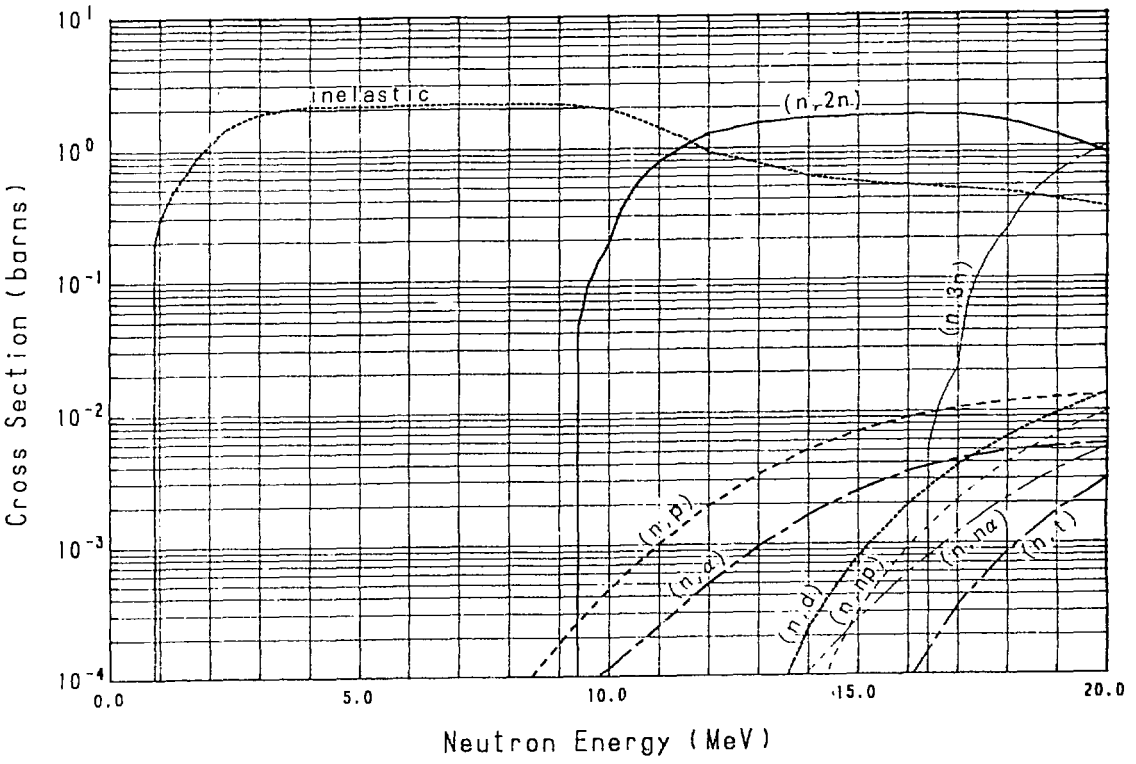

^{135}Ba (5604)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

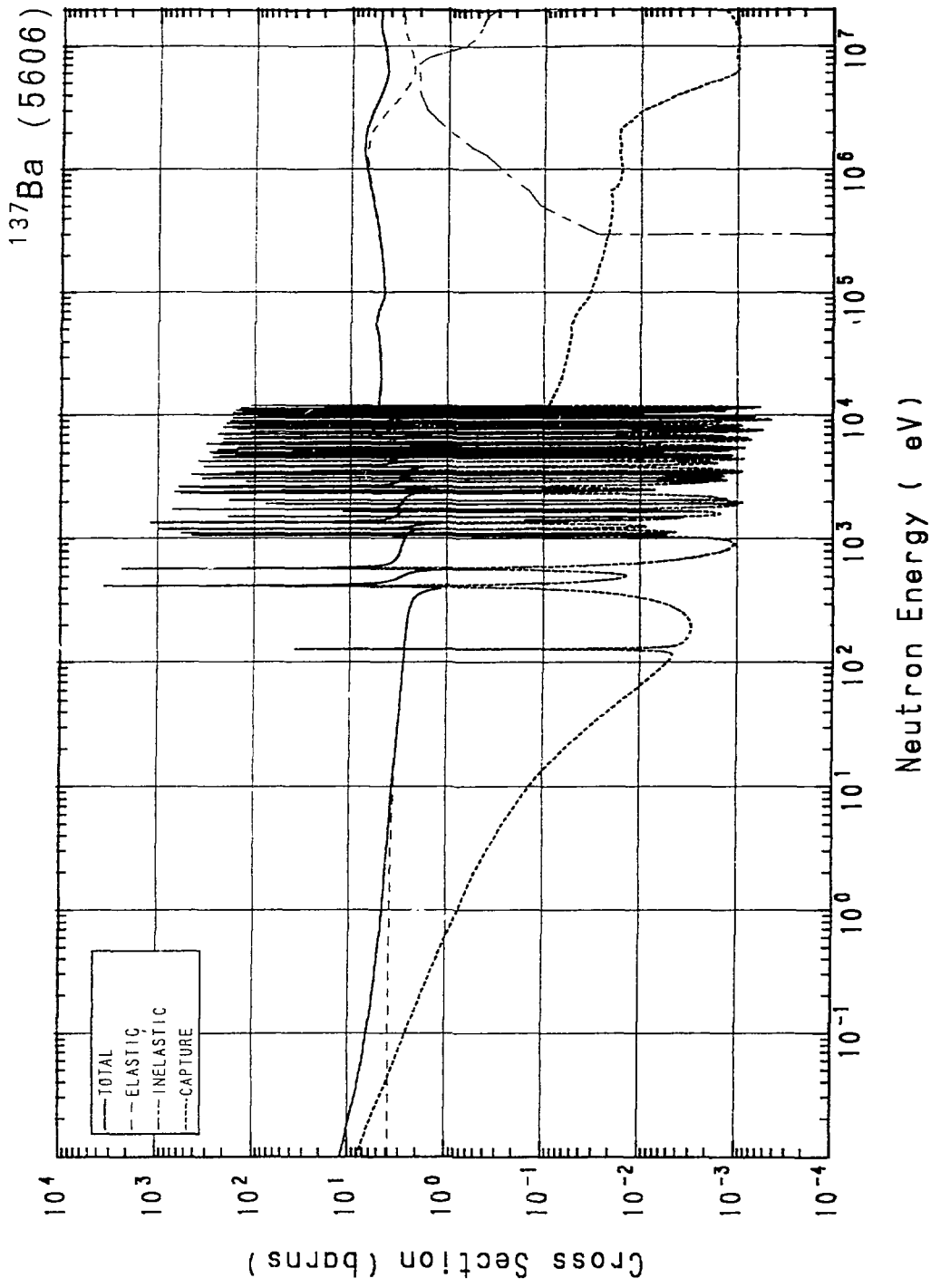

^{135}Ba (5604)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

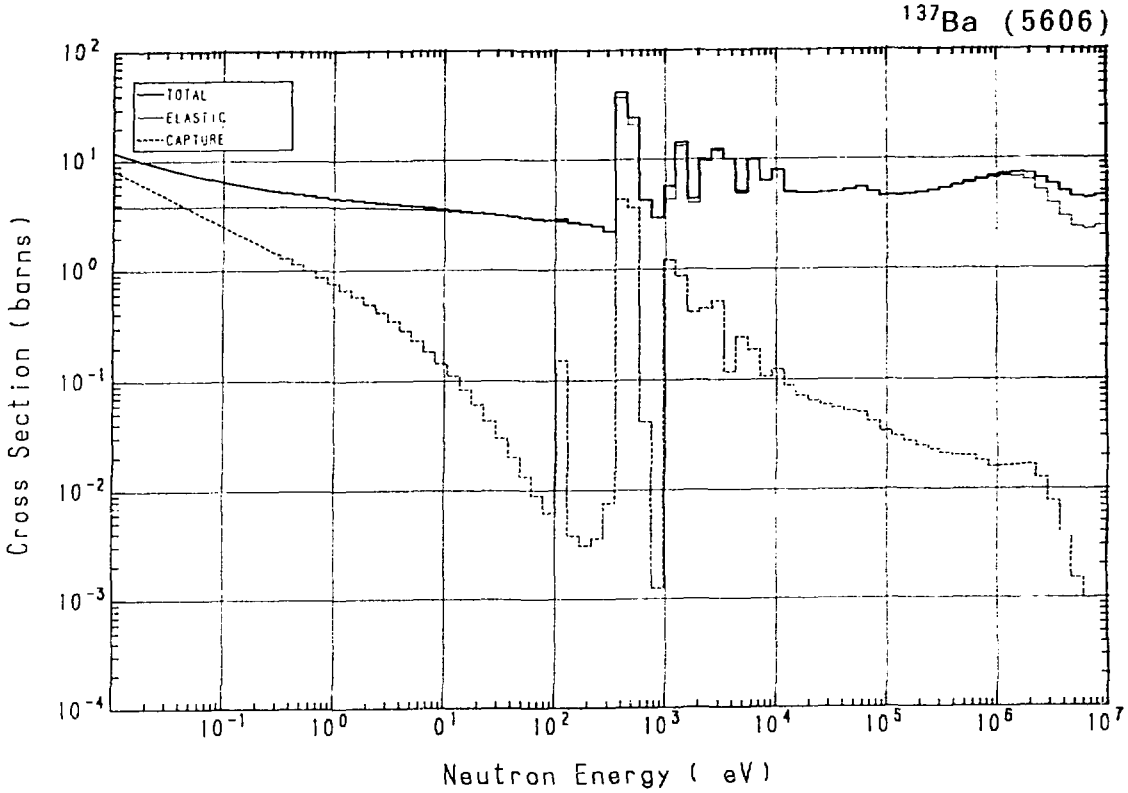

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,t)
(n,nα)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

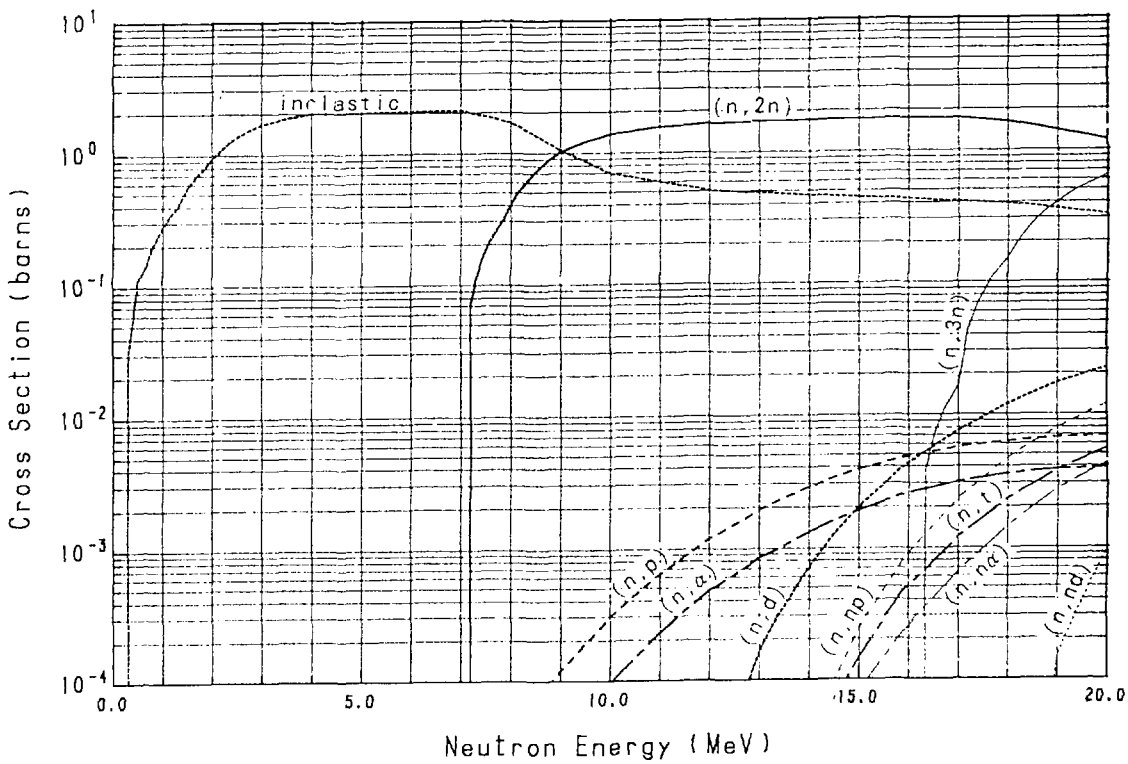

^{136}Ba (5605)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

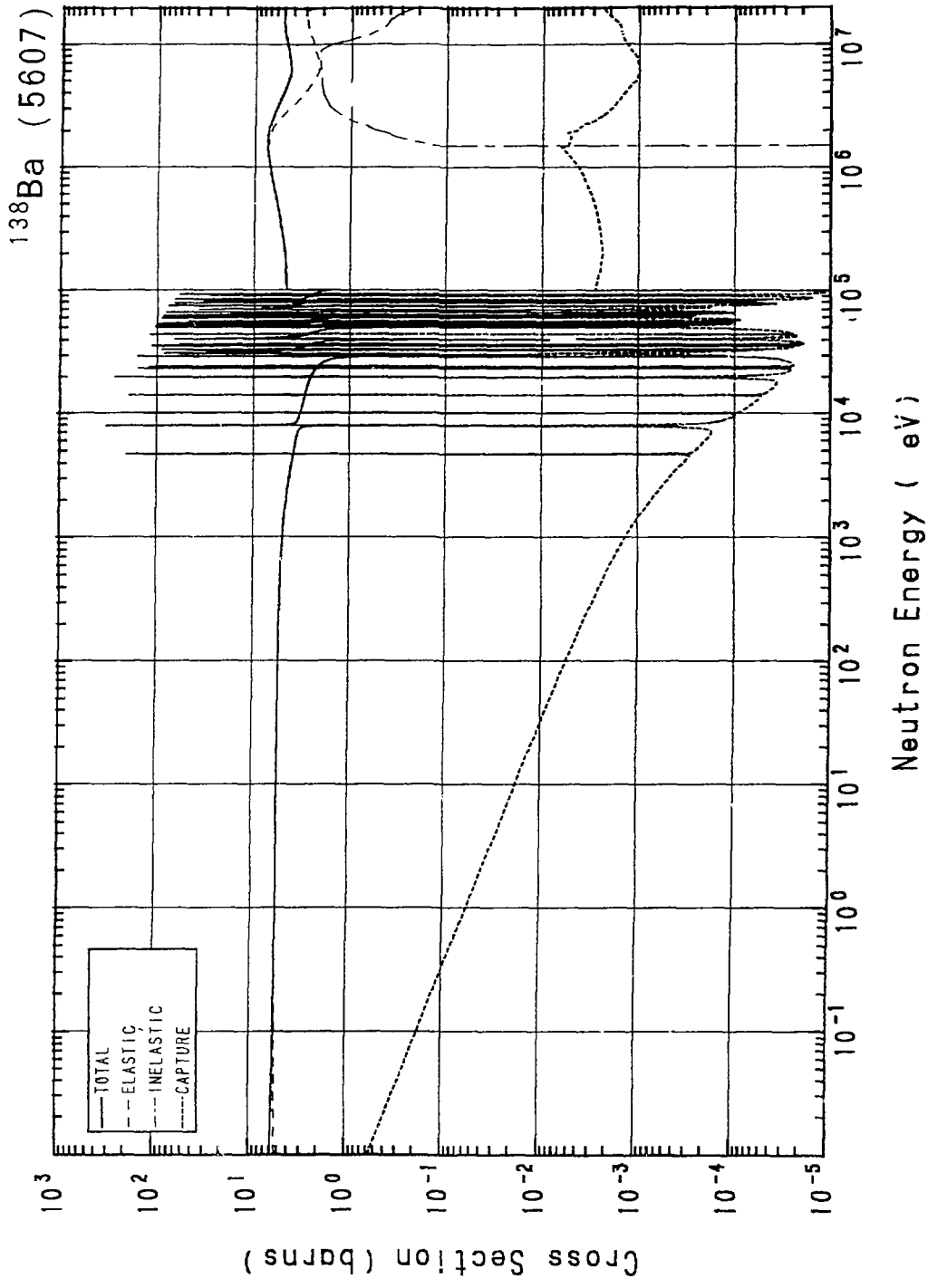

^{136}Ba (5605)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

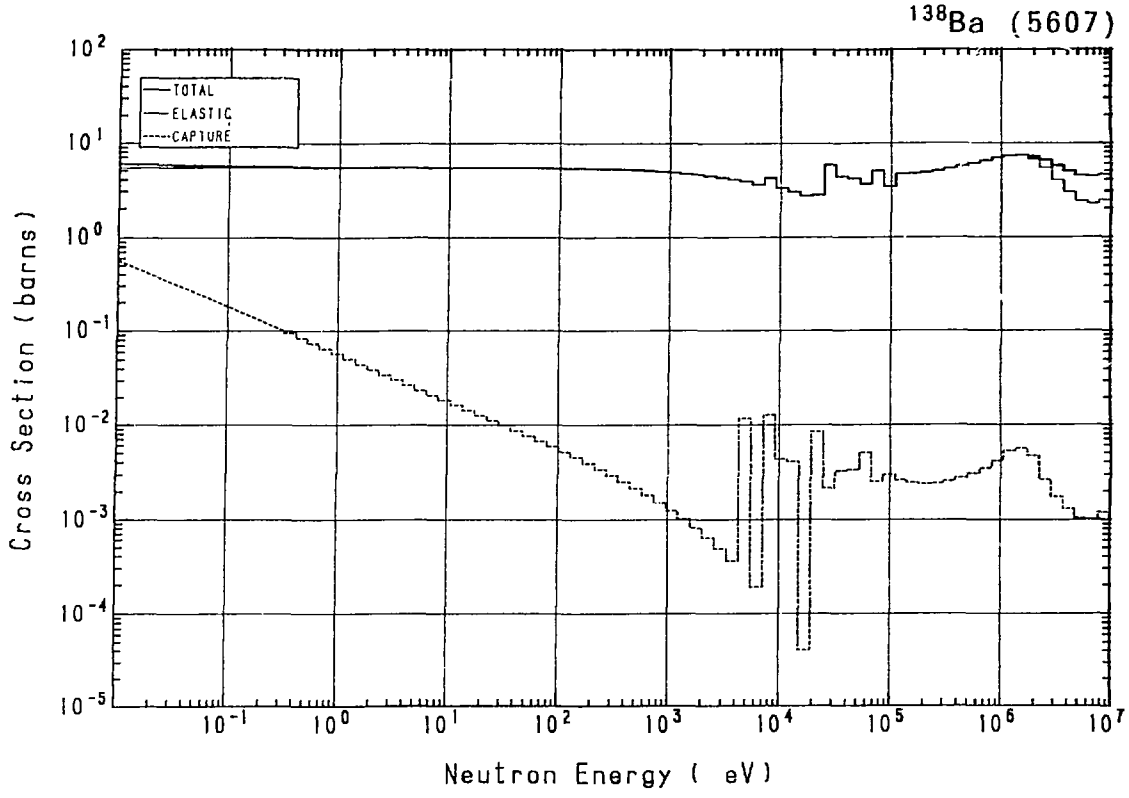

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

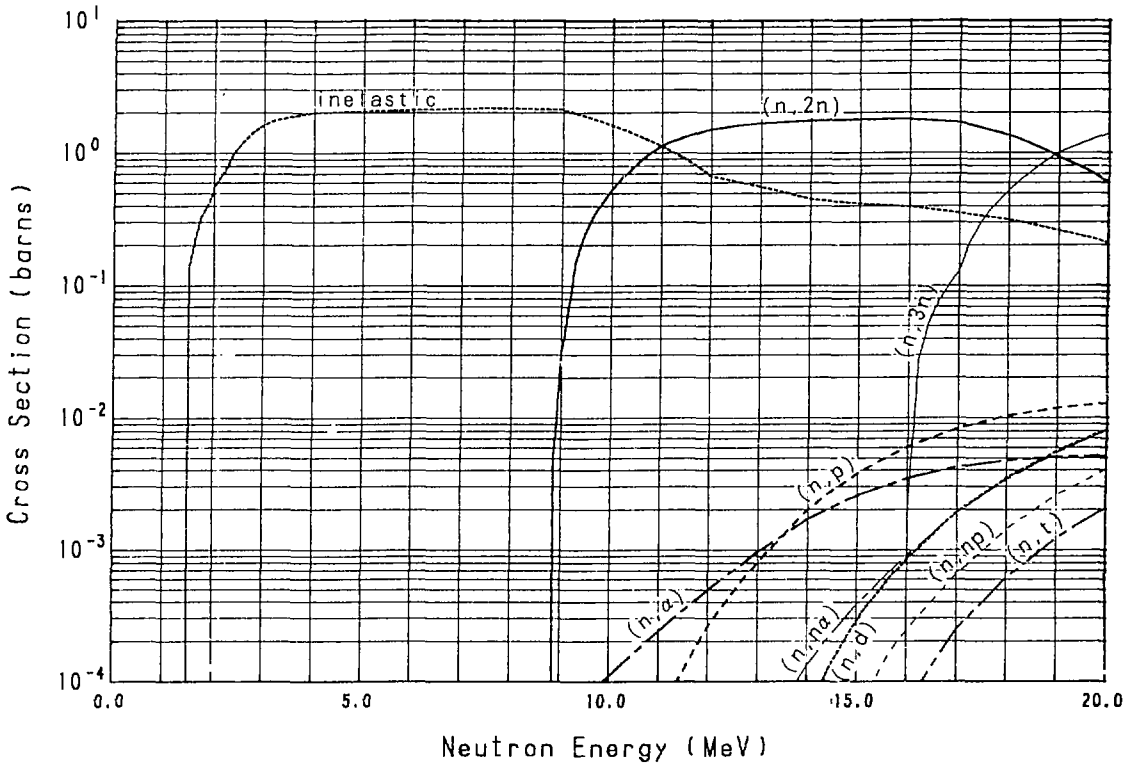

^{137}Ba (5606)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

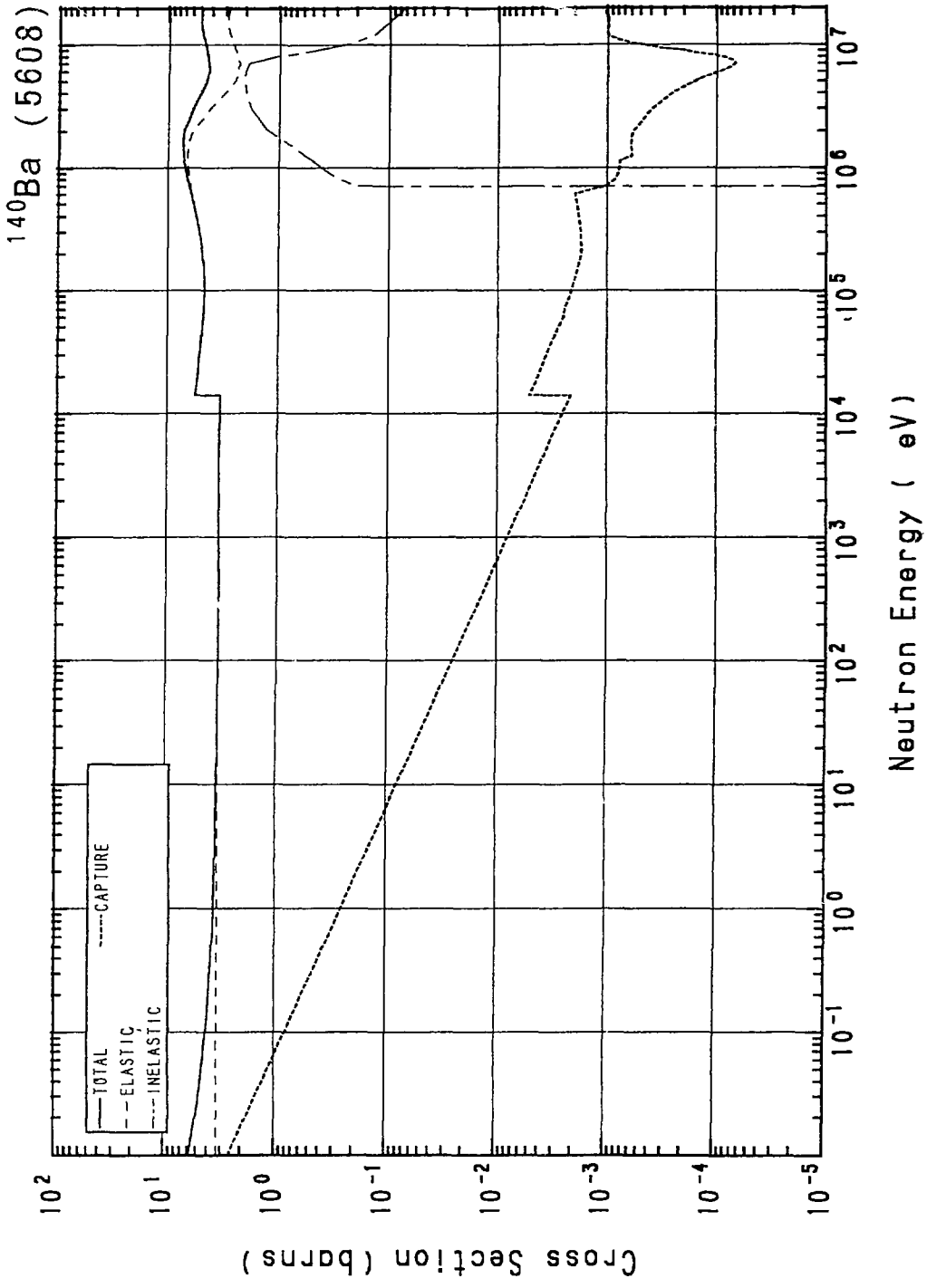

^{137}Ba (5606)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

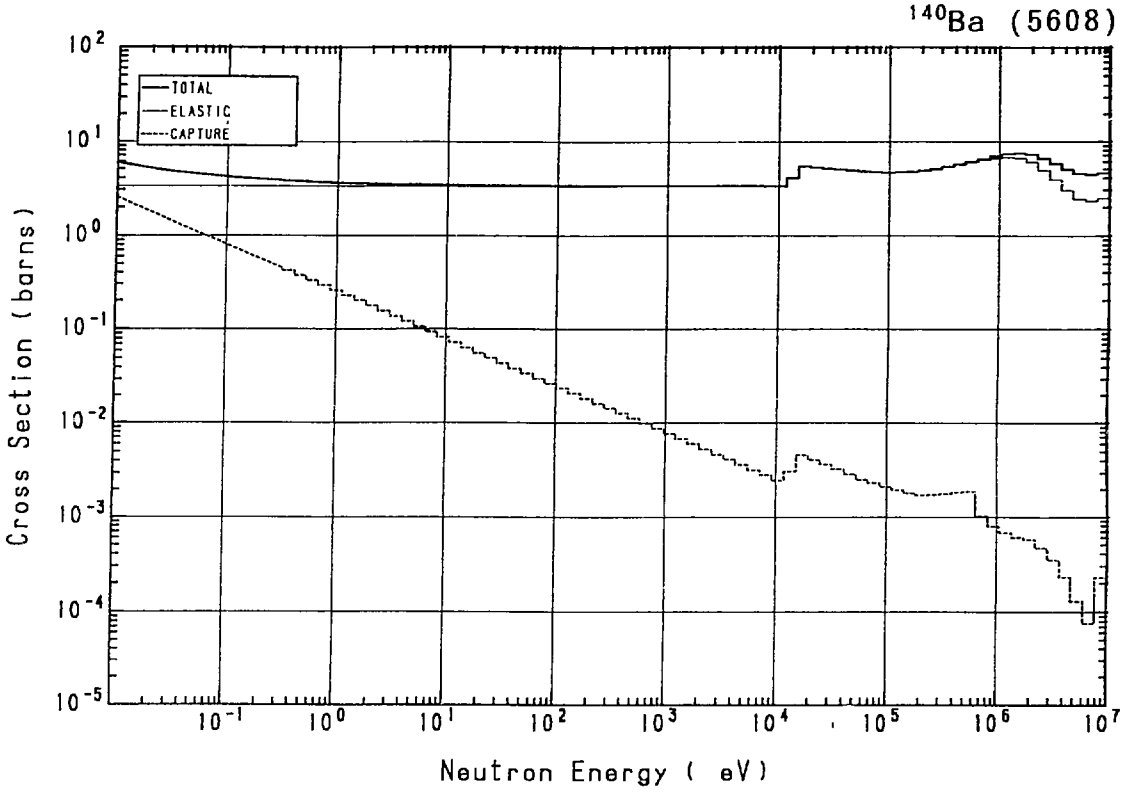

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,t)
(n,nα)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

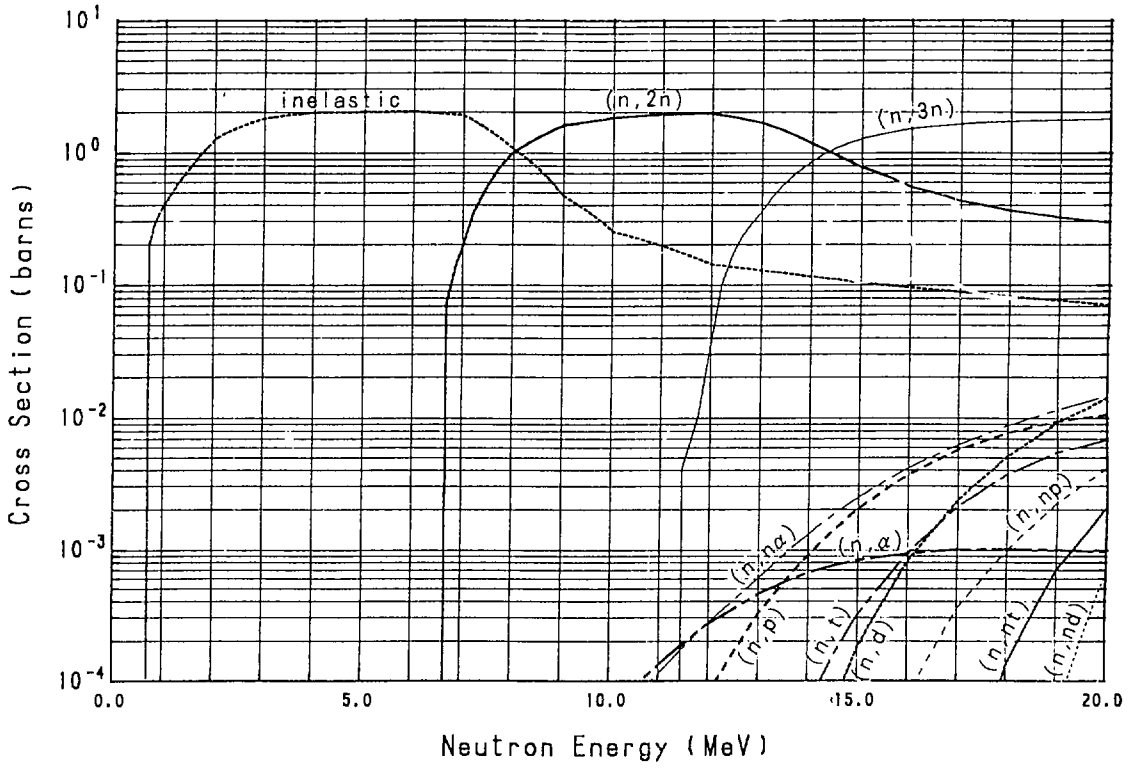

138Ba (5607)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

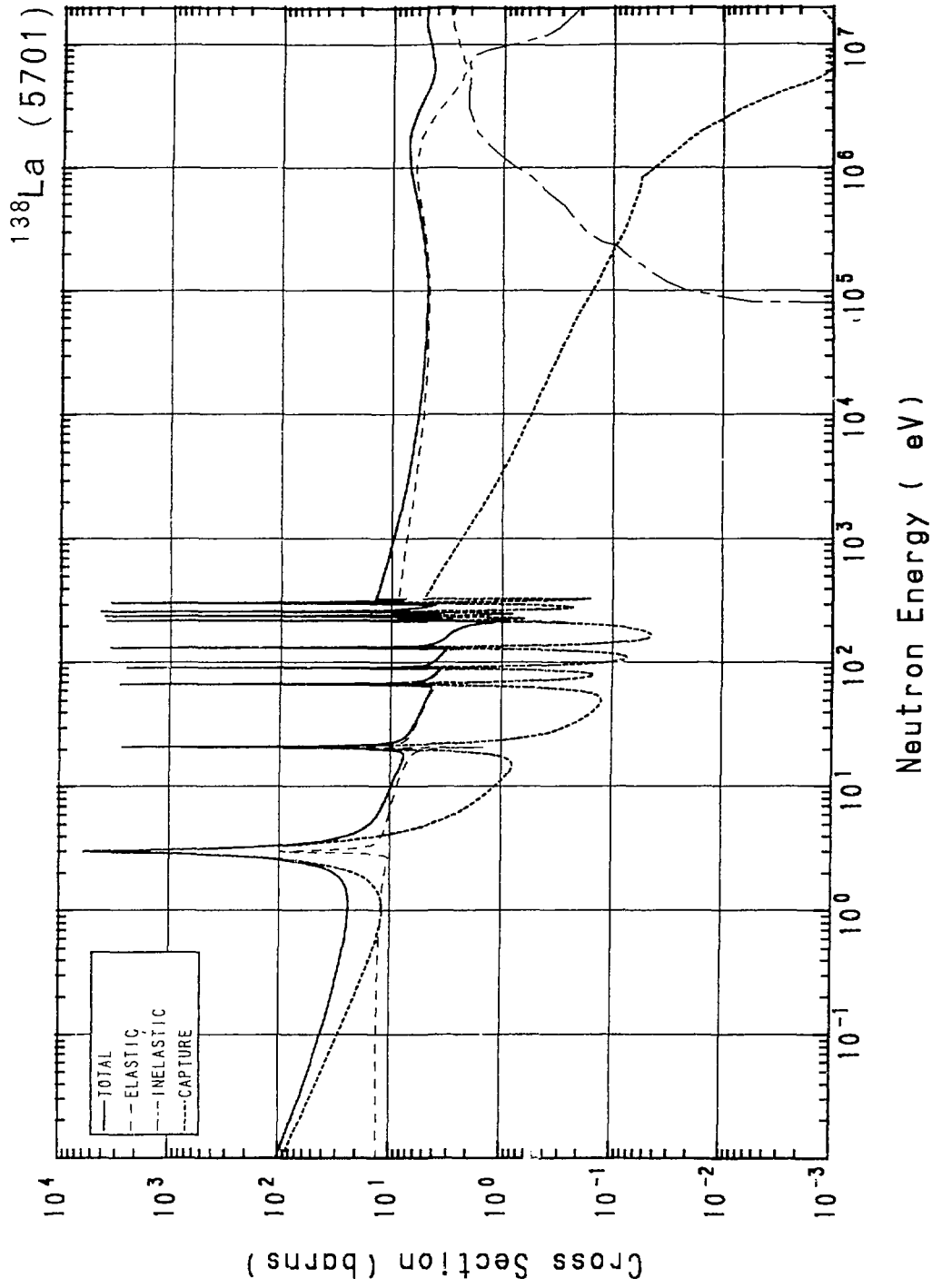

^{138}Ba (5607)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

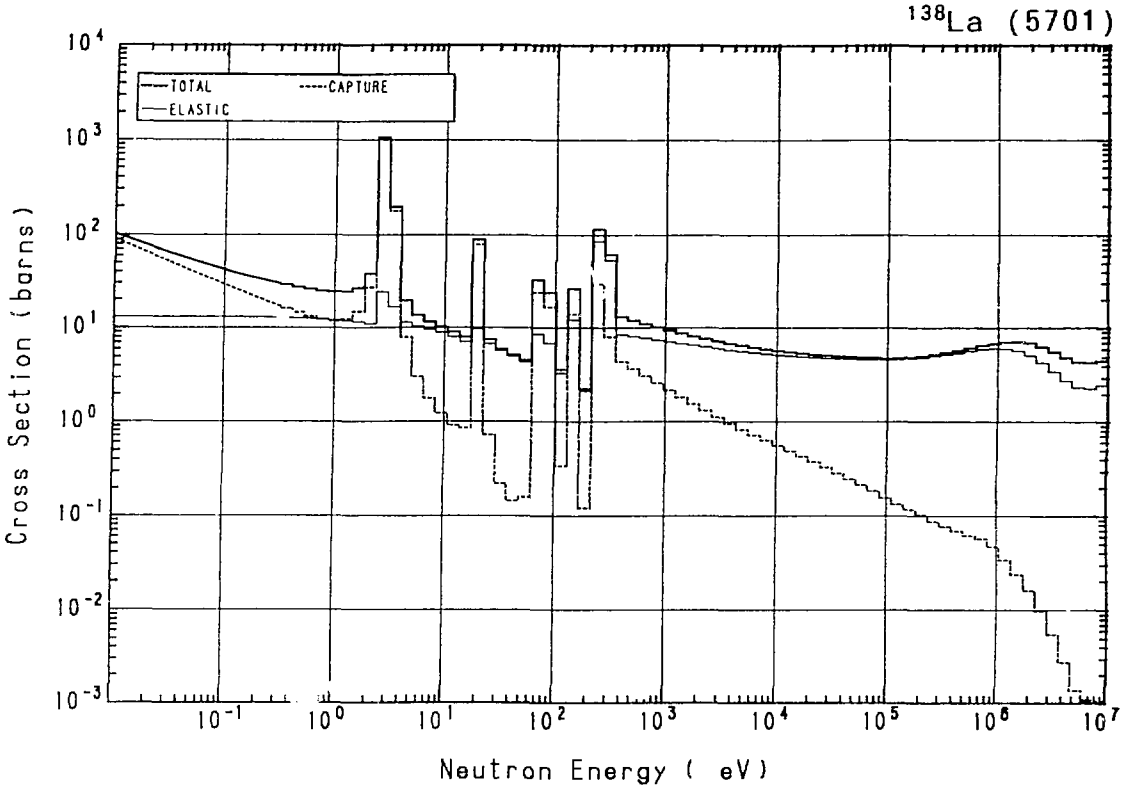

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,nα)
(n,d)
(n,np)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

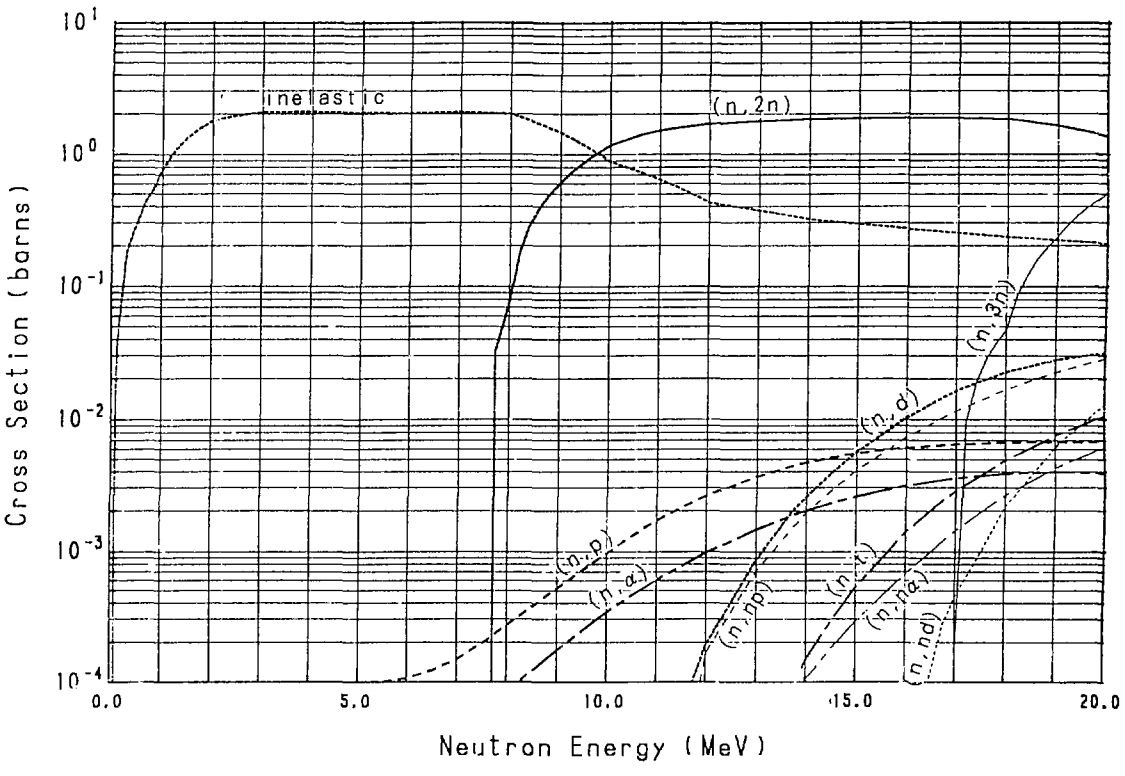

140Ba (5608)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

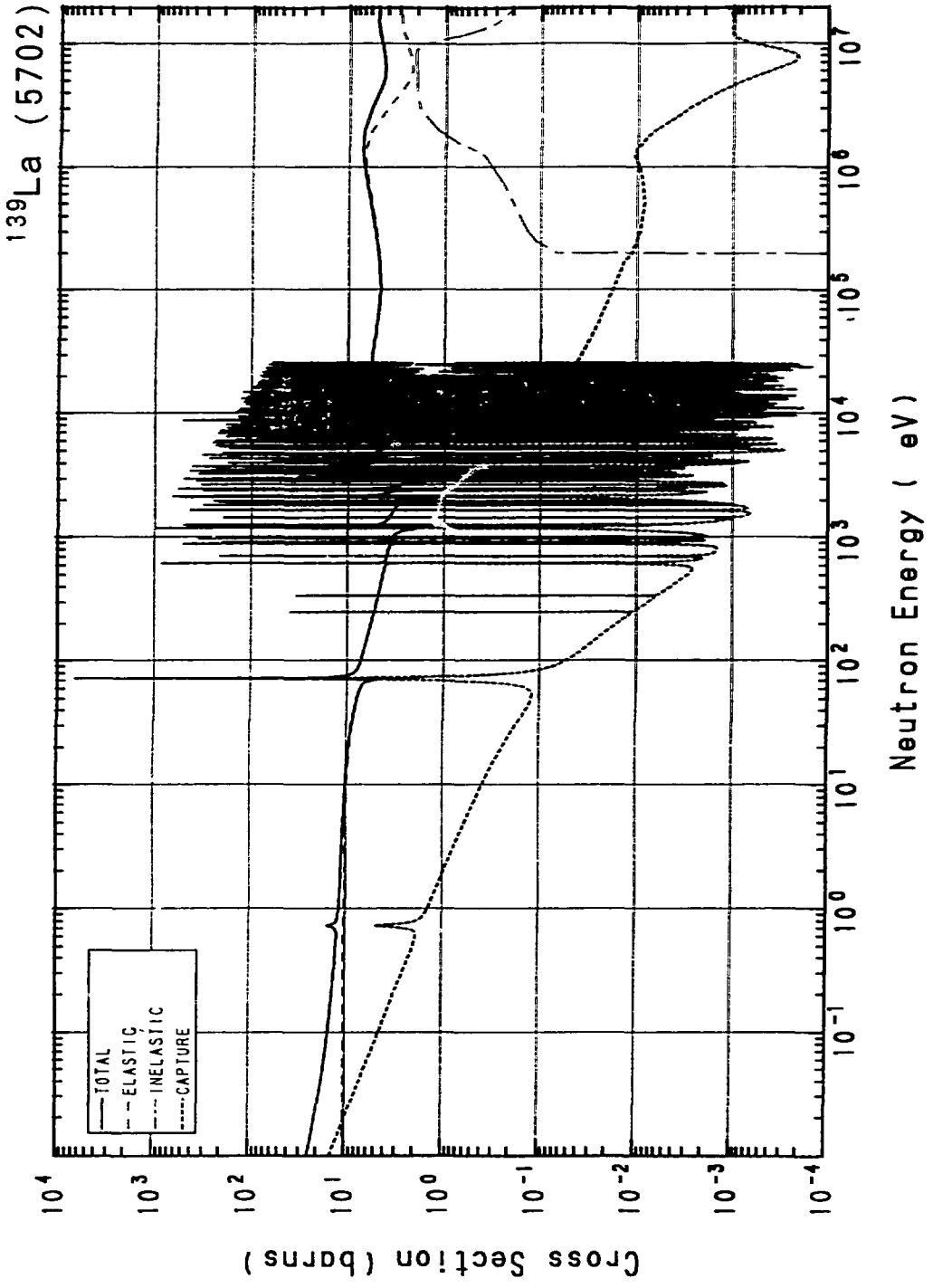

^{140}Ba (5608)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

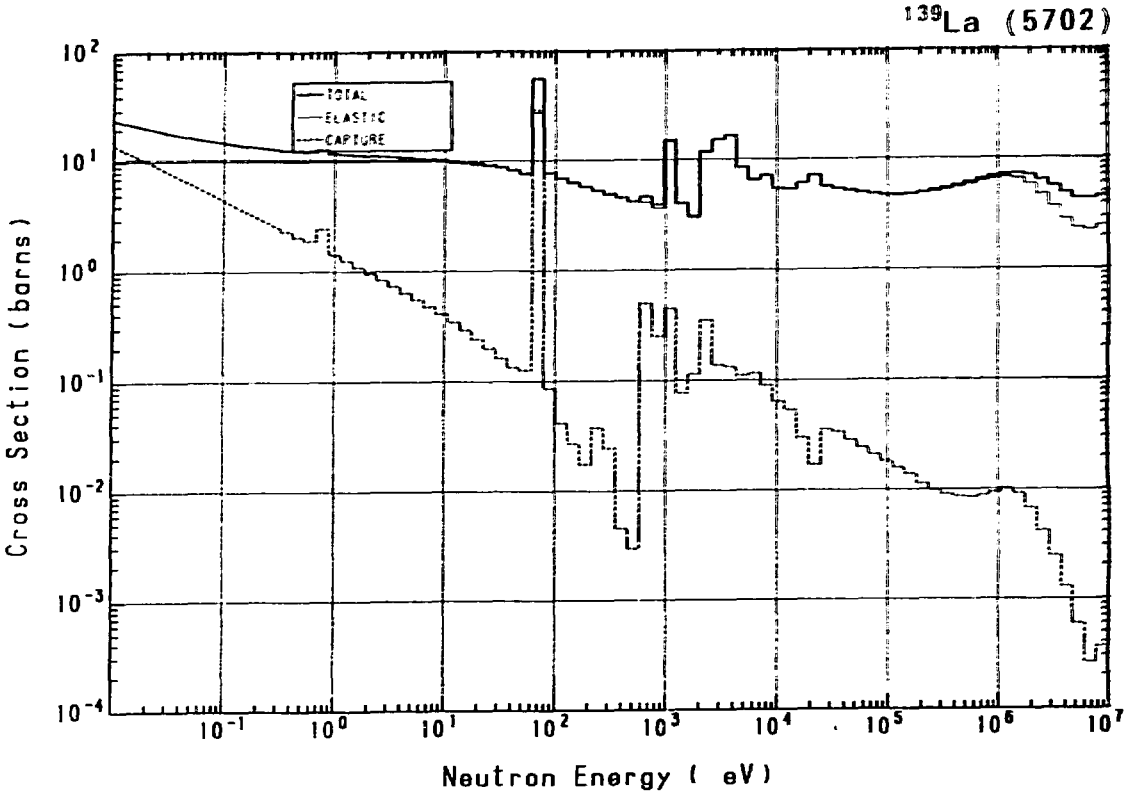

inelastic
(n,2n)
(n,3n)
(n,na)
(n,α)
(n,np)
(n,p)
(n,t)
(n,d)
(n,nt)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

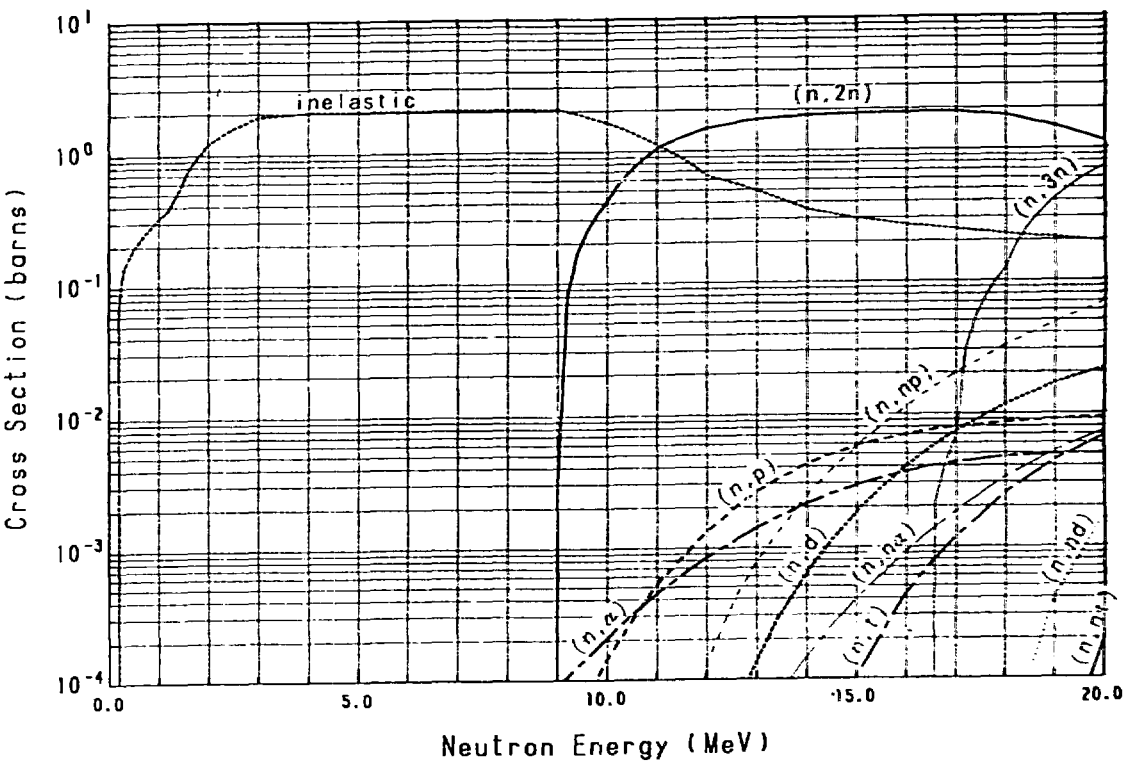

138La (5701)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

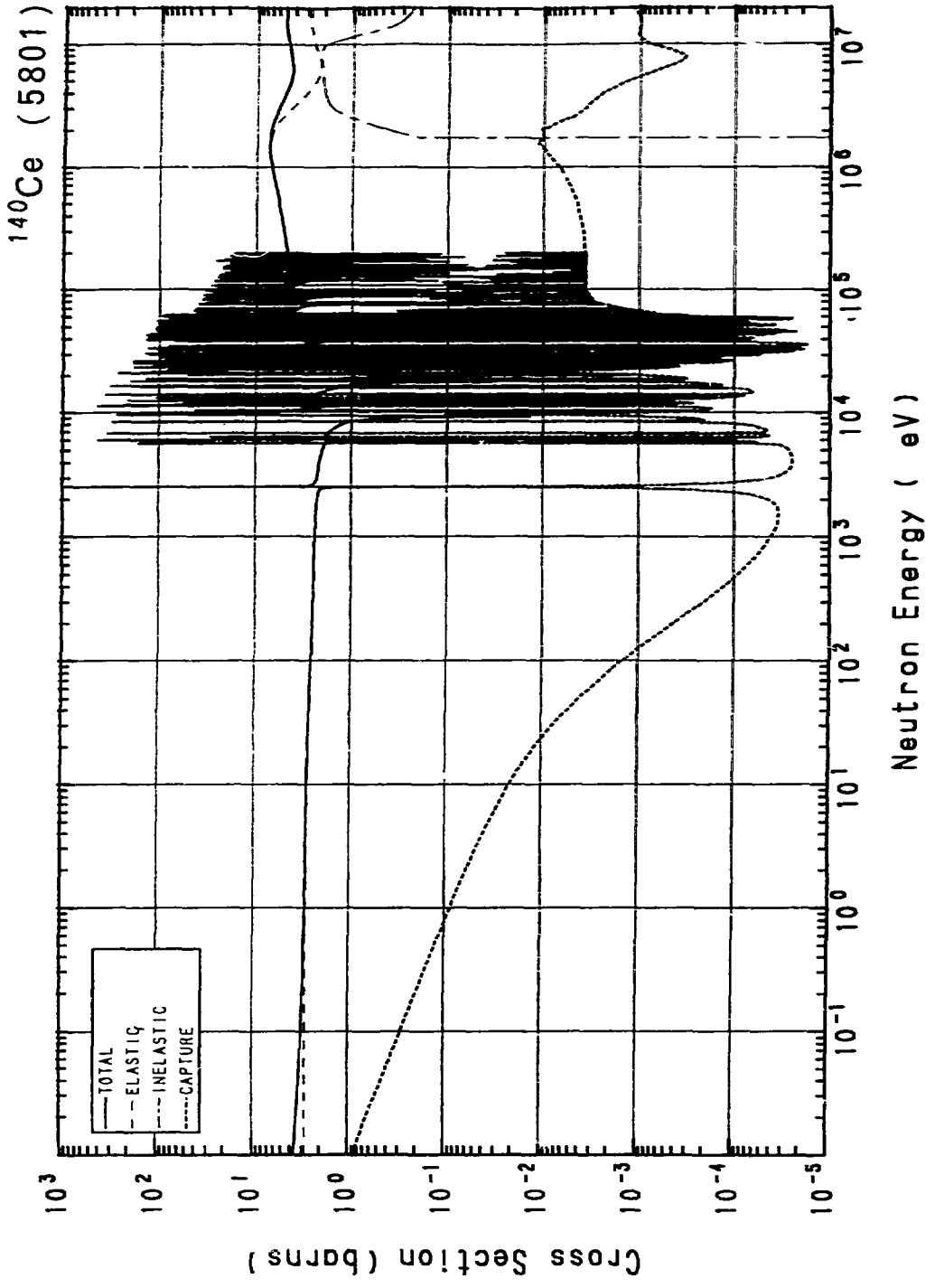

^{138}La (5701)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

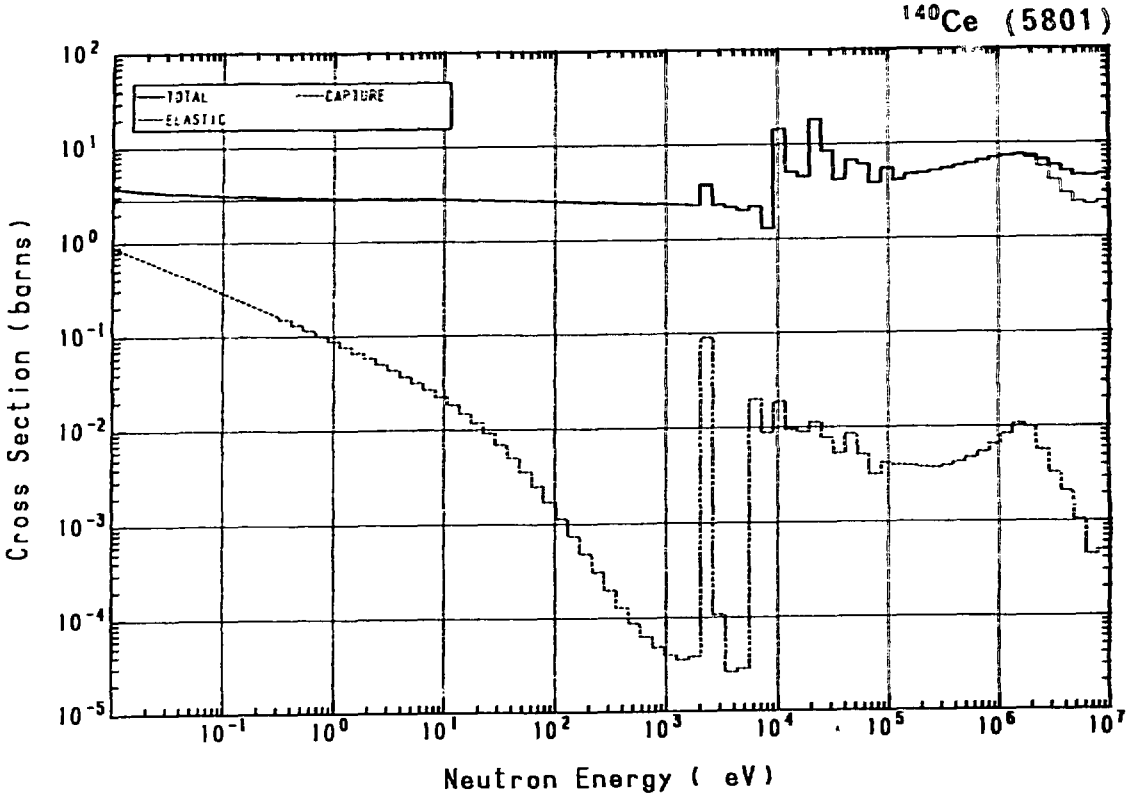

inelastic
(n,2n)
(n,3n)
(n,d)
(n,p)
(n,α)
(n,np)
(n,t)
(n,nα)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

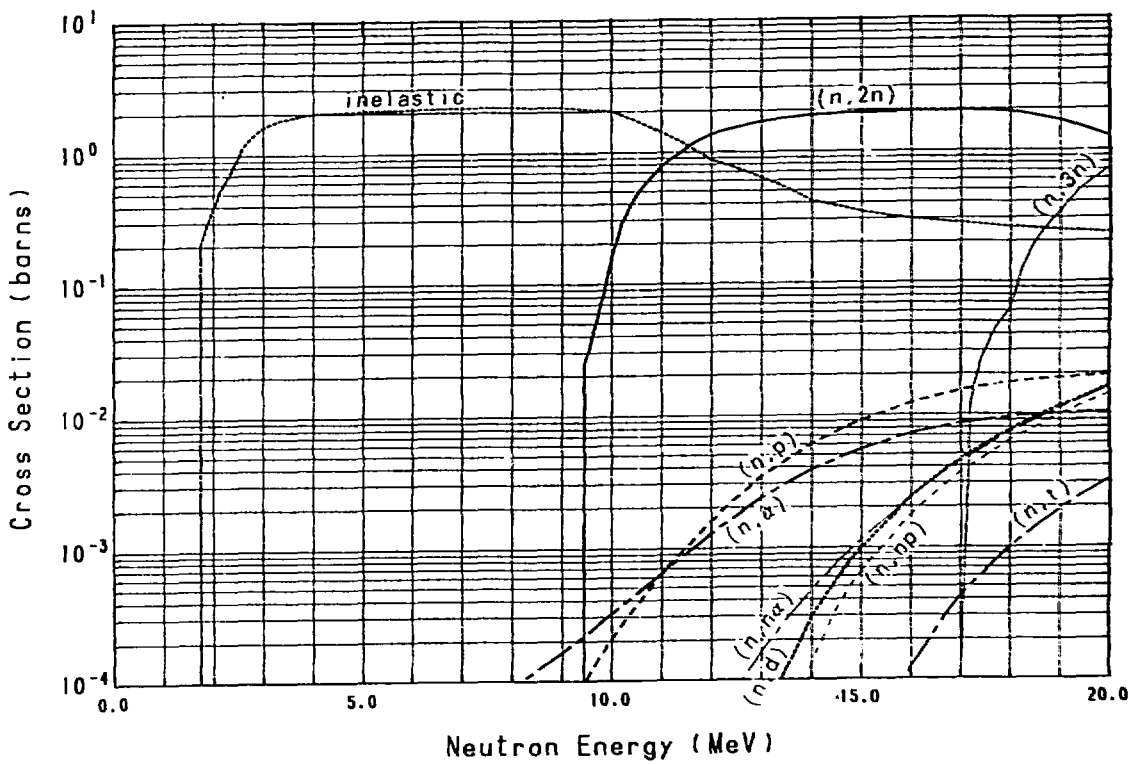

^{139}La (5702)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

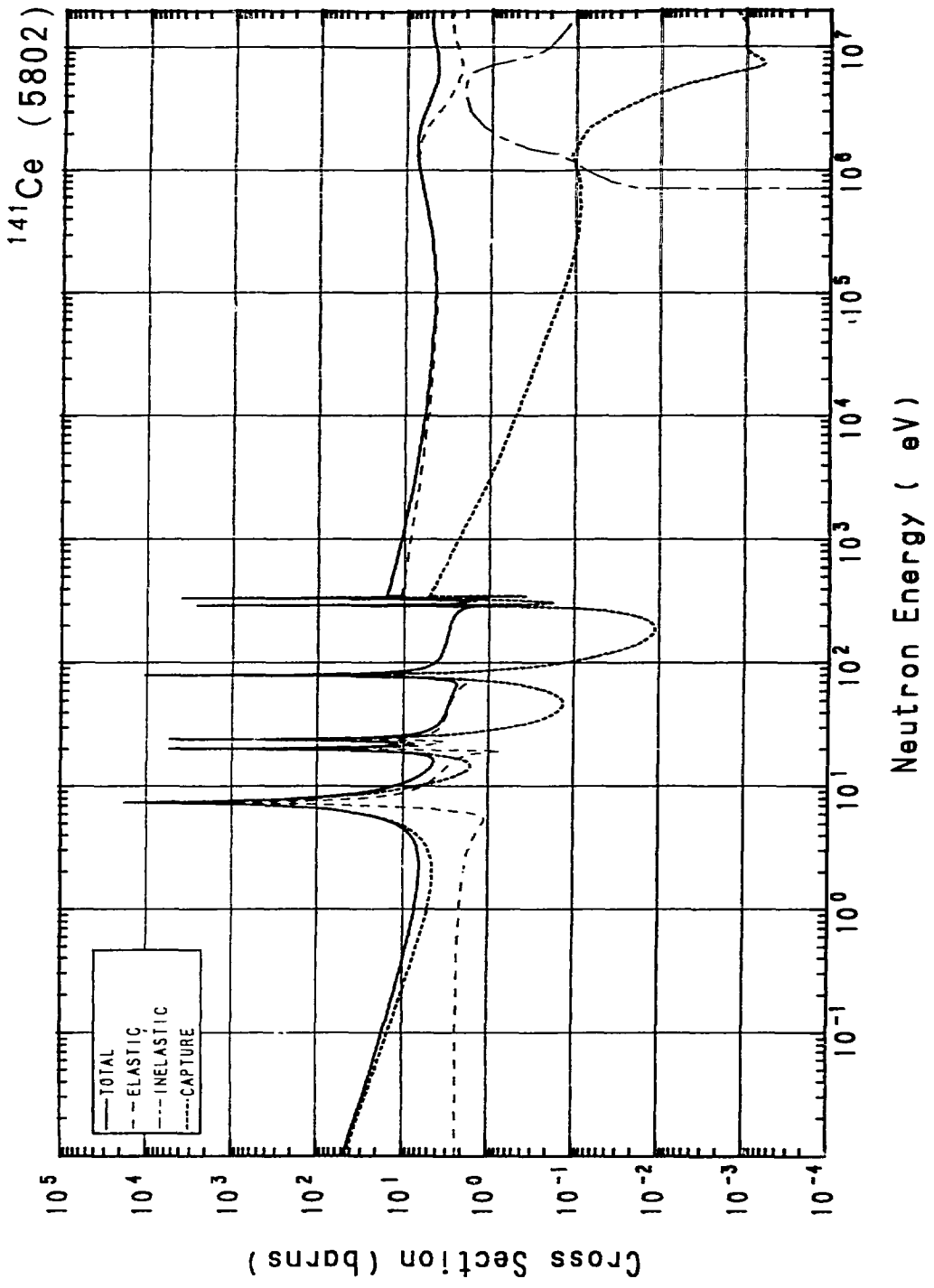

^{139}La (5702)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

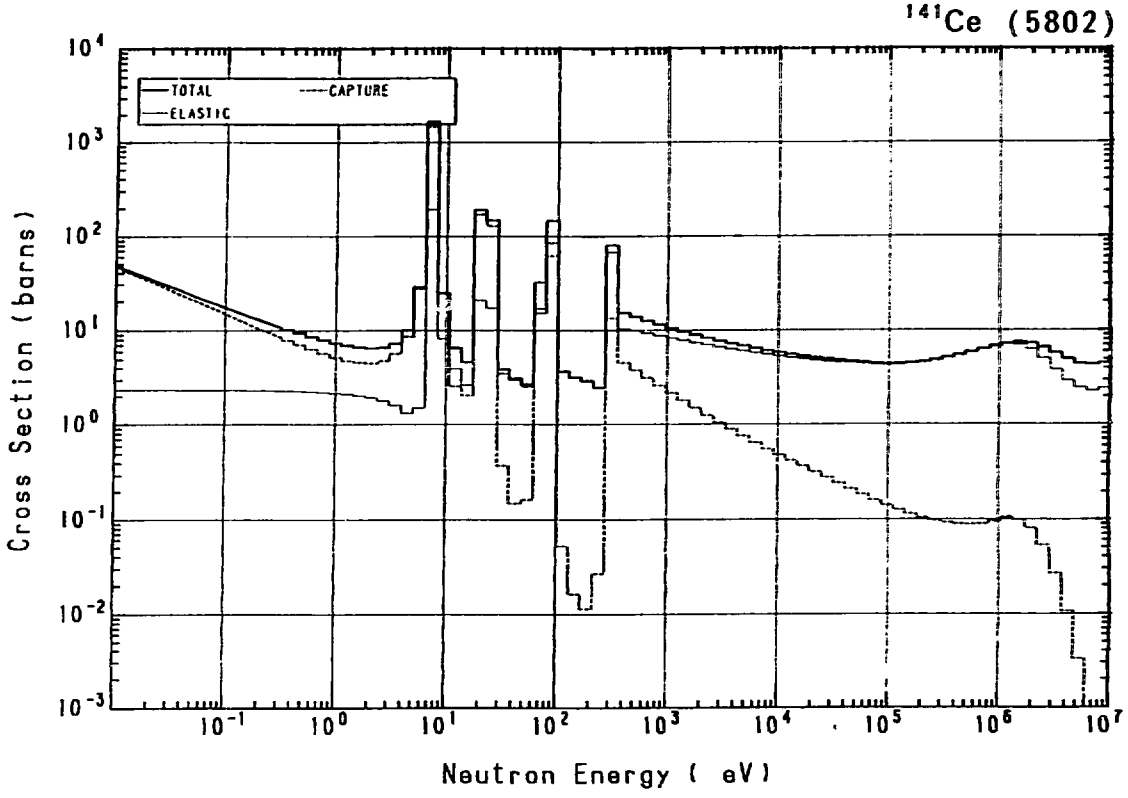

inelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,d)
(n,nα)
(n,t)
(n,nd)
(n,α)
Cross Section (barns)
Neutron Energy (MeV)

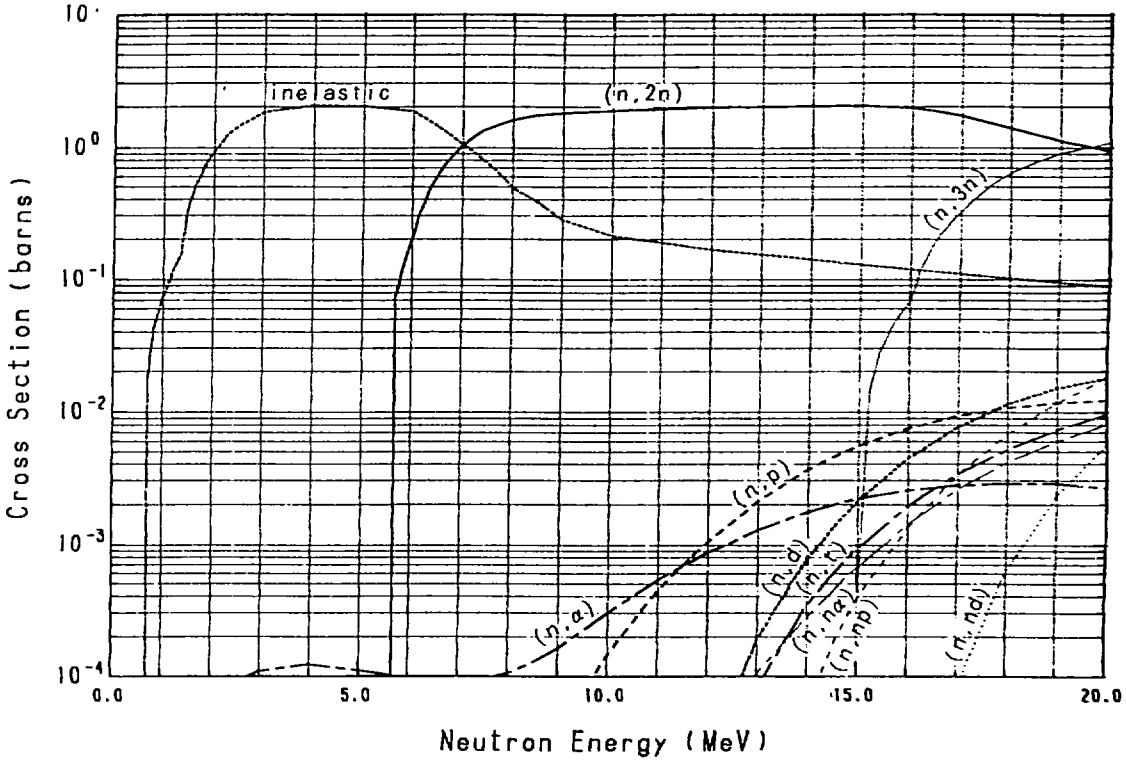

140Ce (5801)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

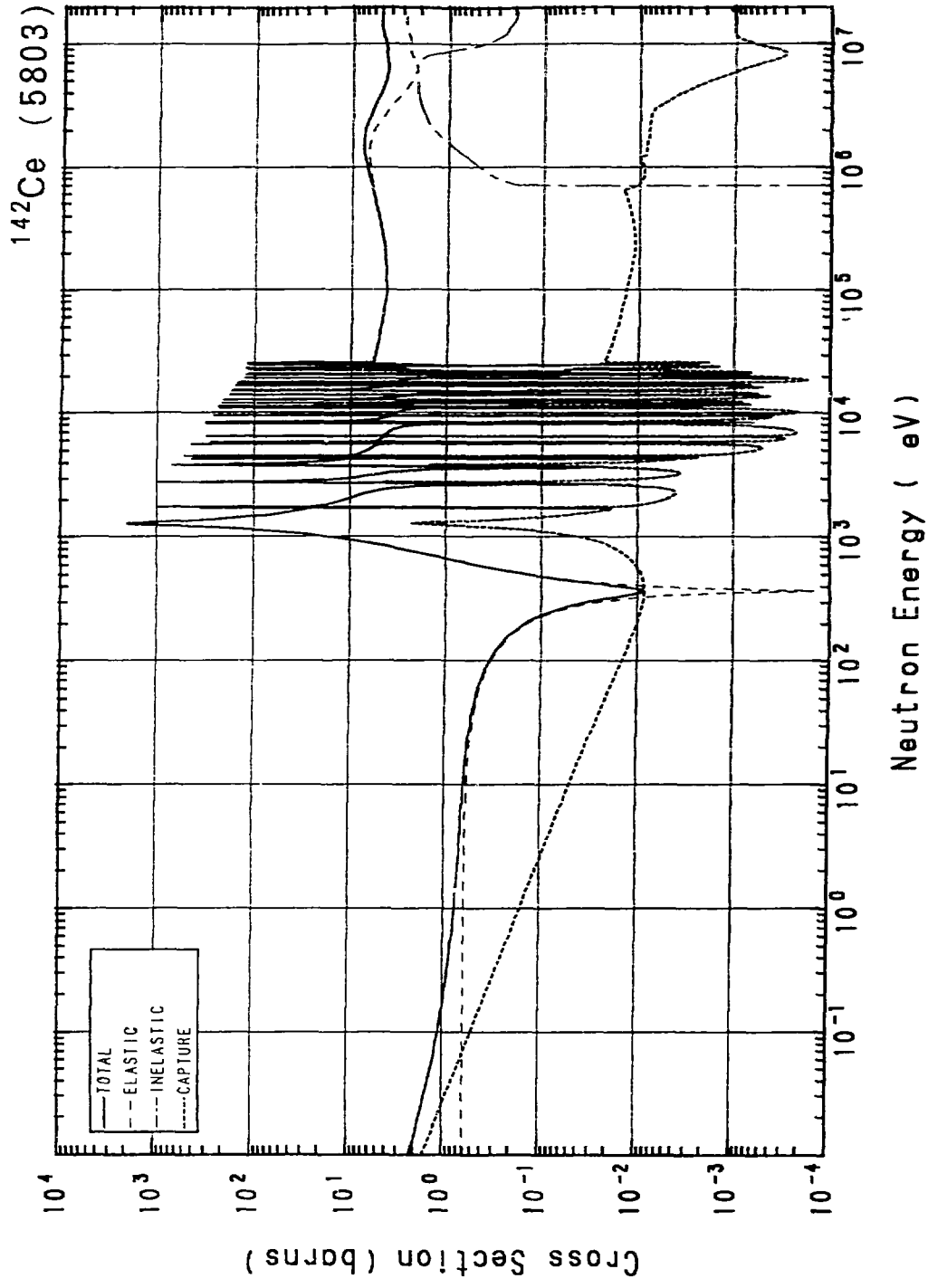

^{140}Ce (5801)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

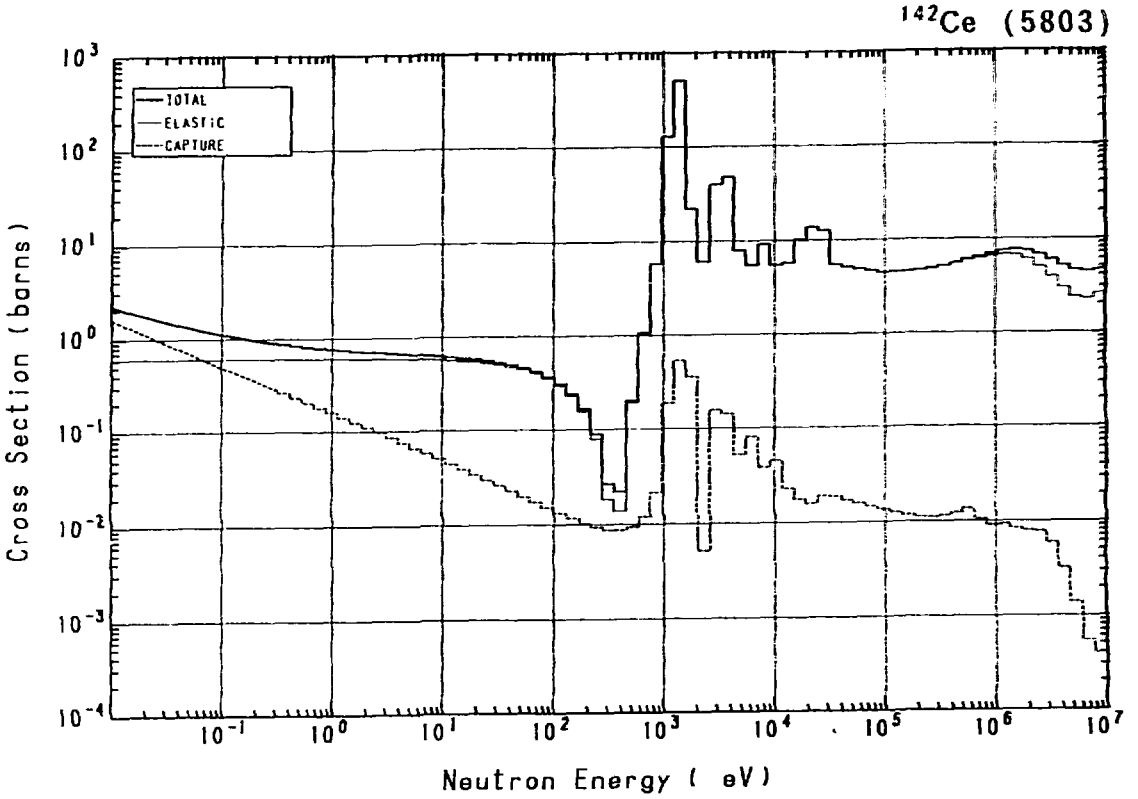

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,t)
(n,nα)
(n,d)
Cross Section (barns)
Neutron Energy (MeV)

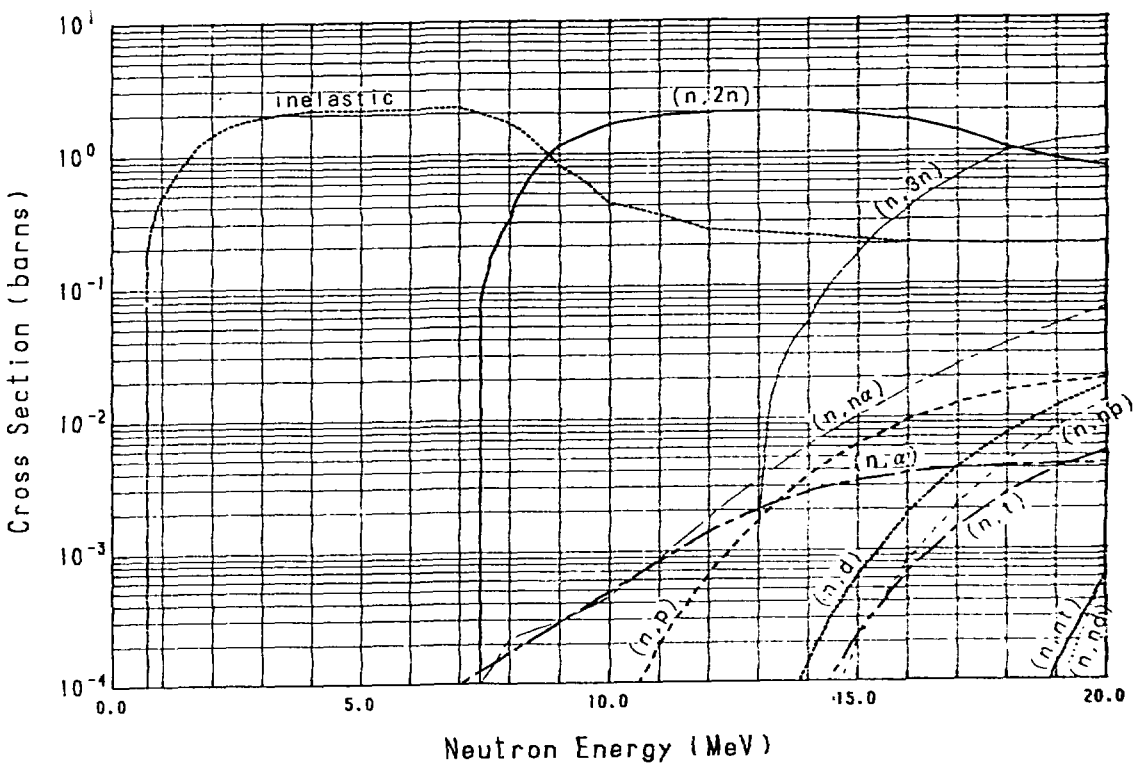

141Ce (5802)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

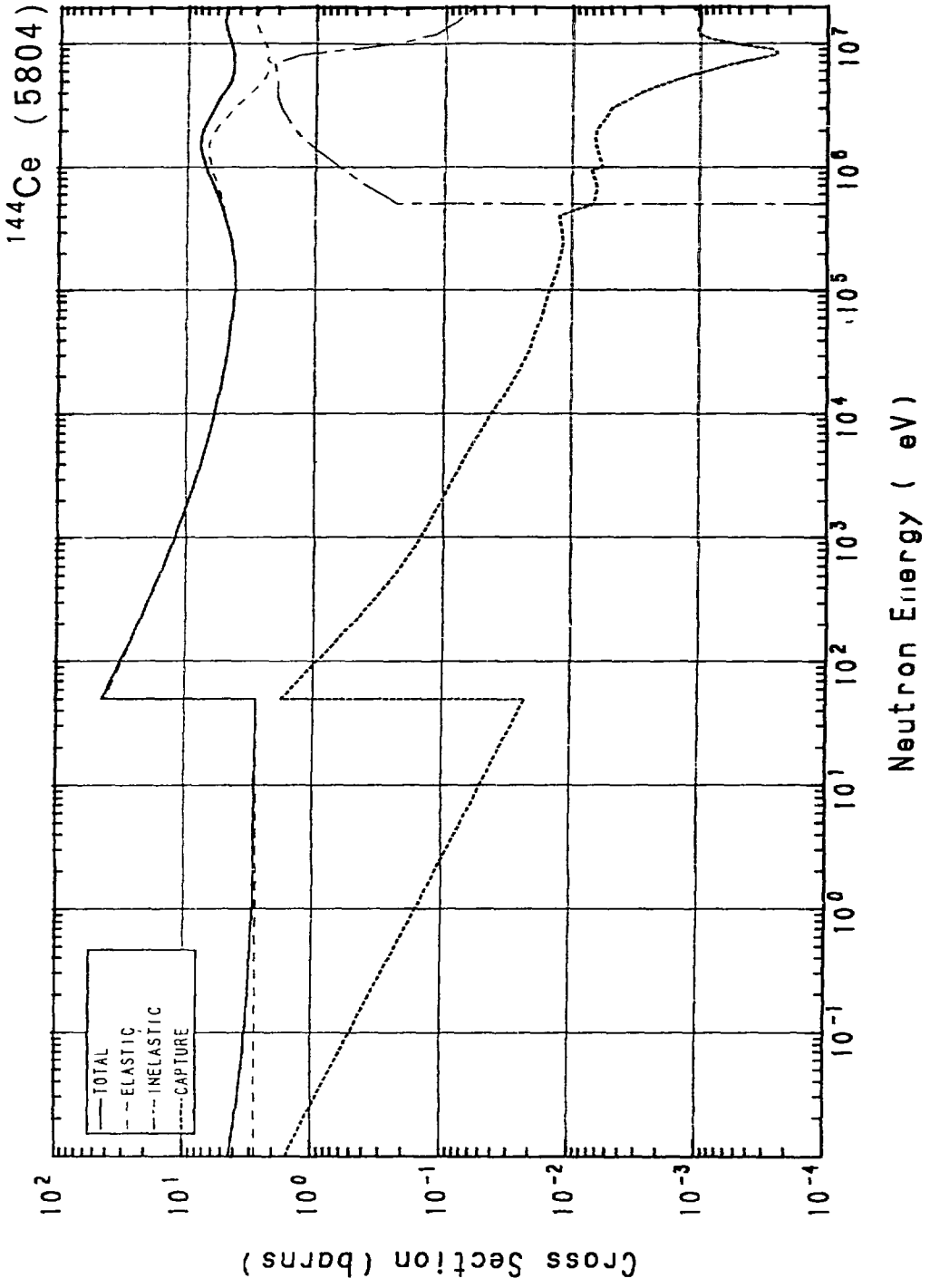

^{141}Ce (5802)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

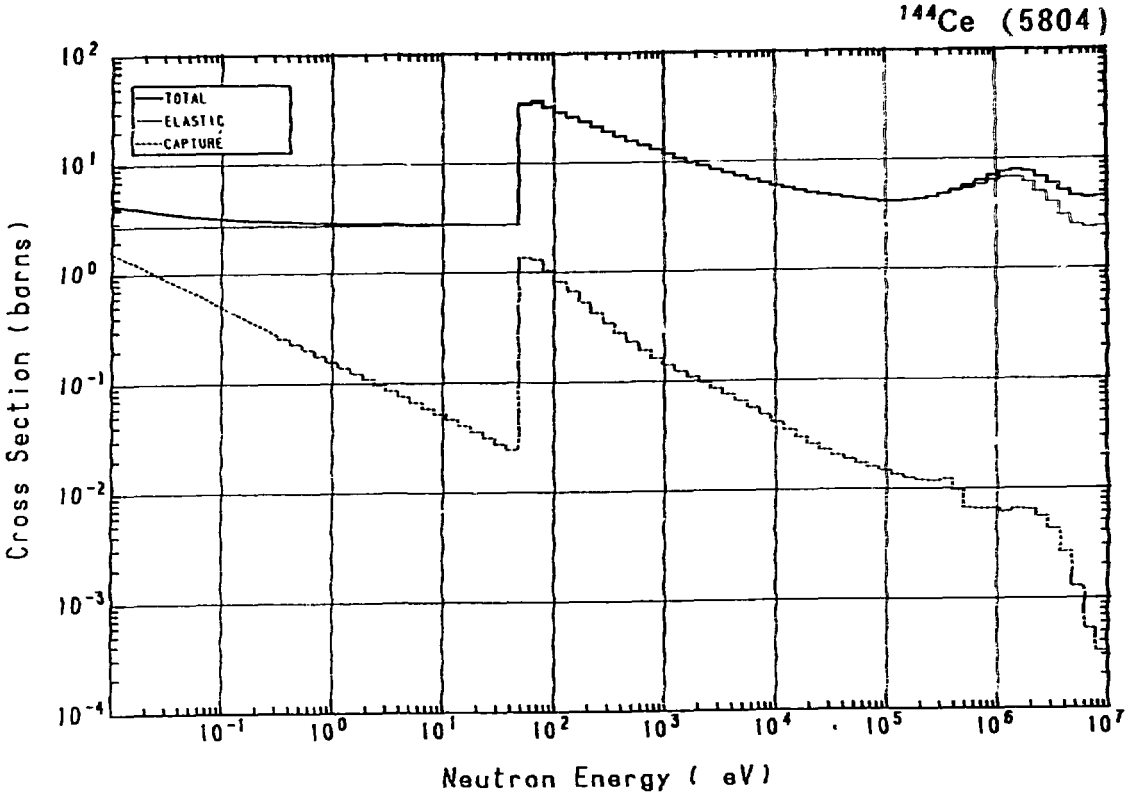

inelastic
(n,2n)
(n,3n)
(n,p)
(n,d)
(n,t)
(n,nα)
(n,np)
(n,nd)
(n,α)
Cross Section (barns)
Neutron Energy (MeV)

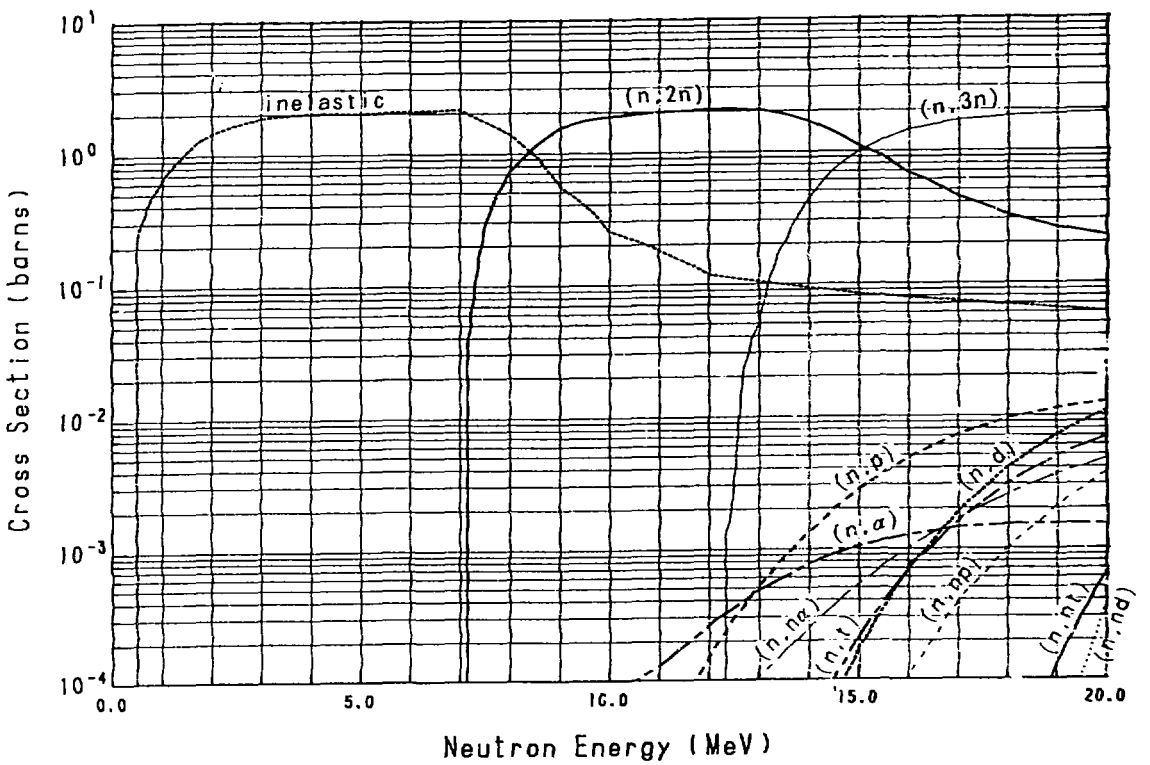

142Ce (5803)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

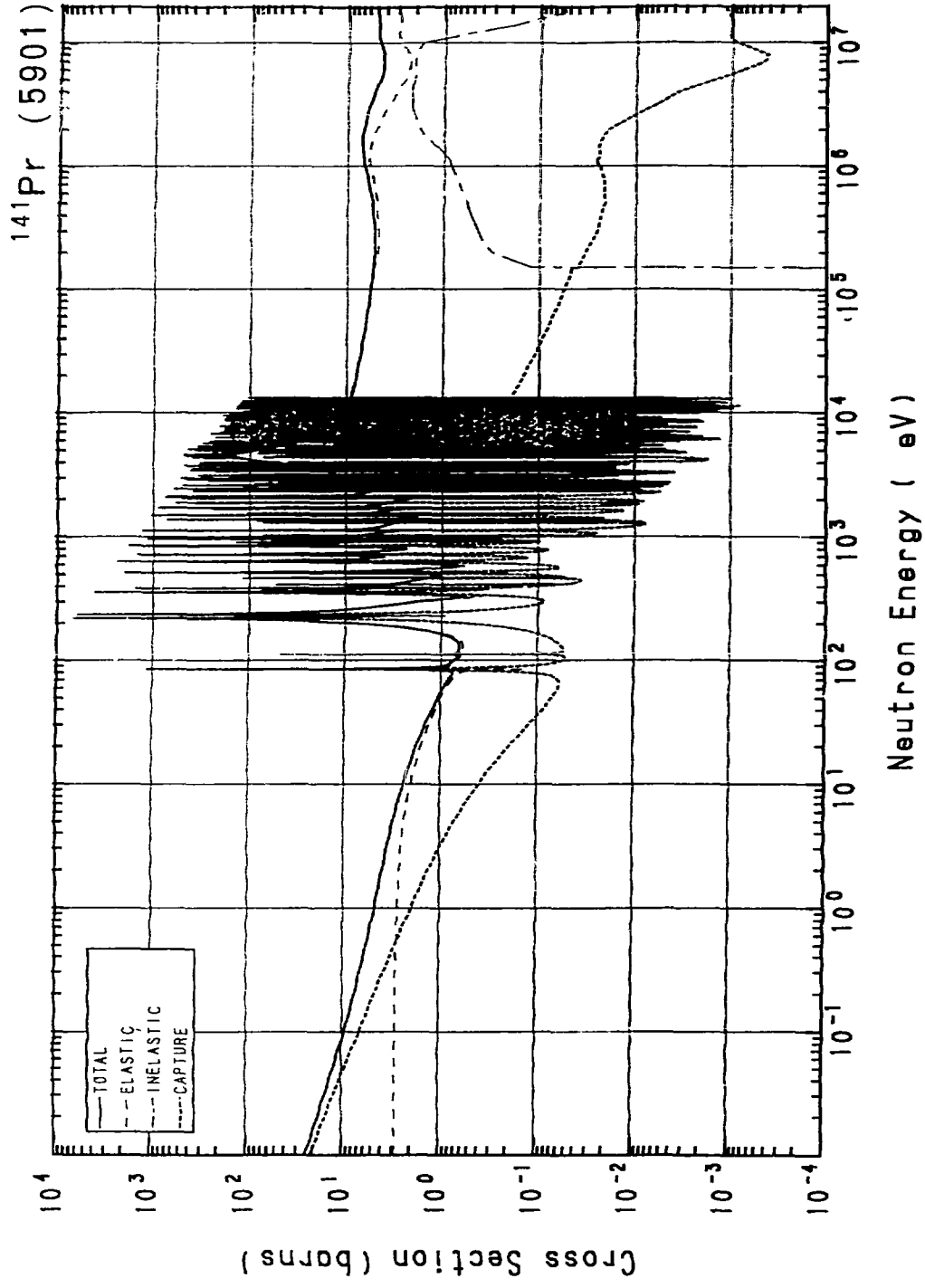

^{142}Ce (5803)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

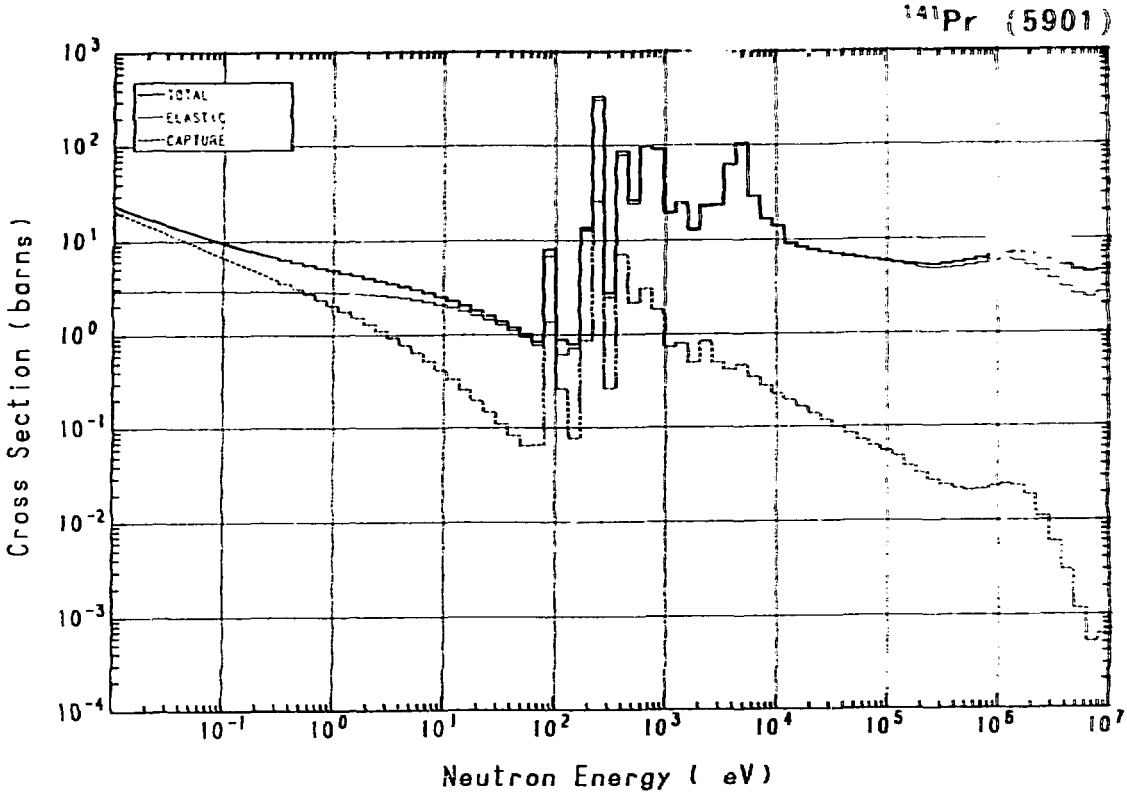

inelastic
(n,2n)
(n,3n)
(n,nα)
(n,α)
(n,np)
(n,t)
(n,d)
(n,p)
(n,nt)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

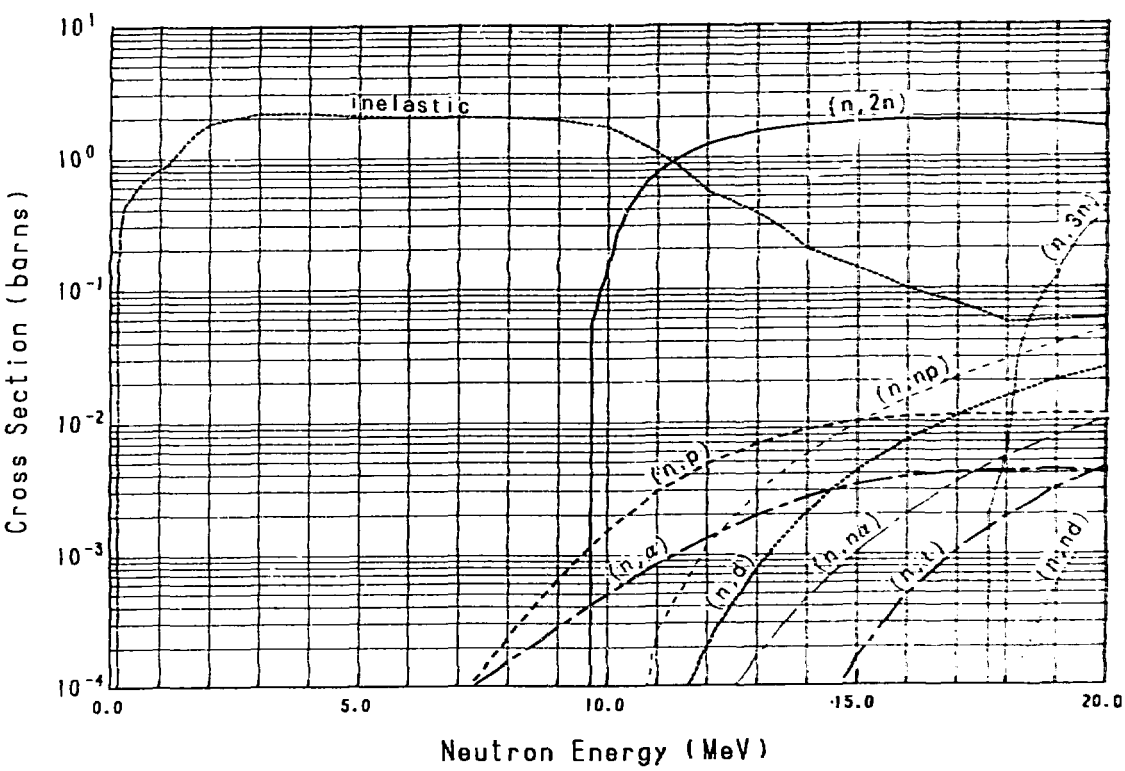

144Ce (5804)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

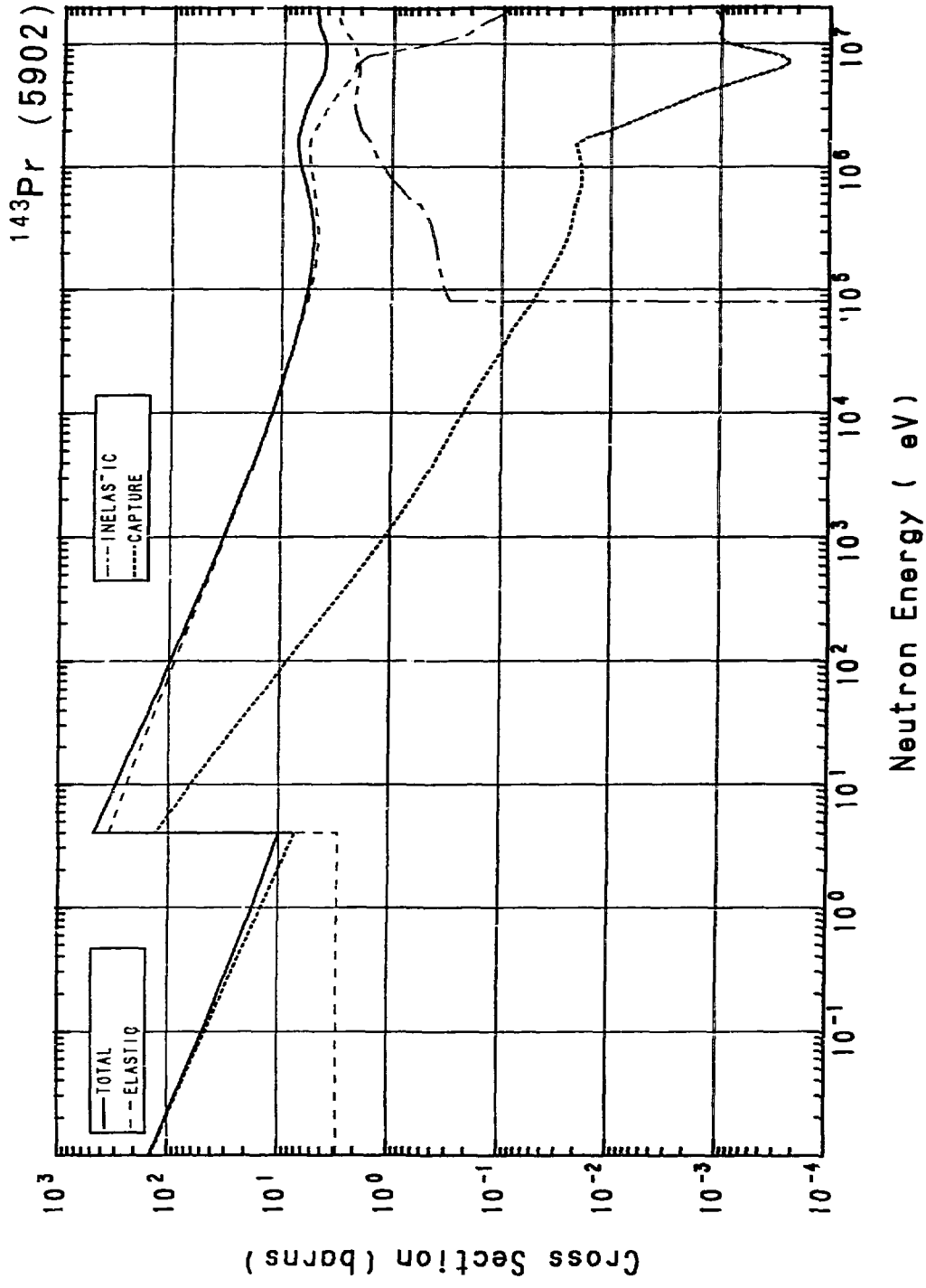

144Ce (5804)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

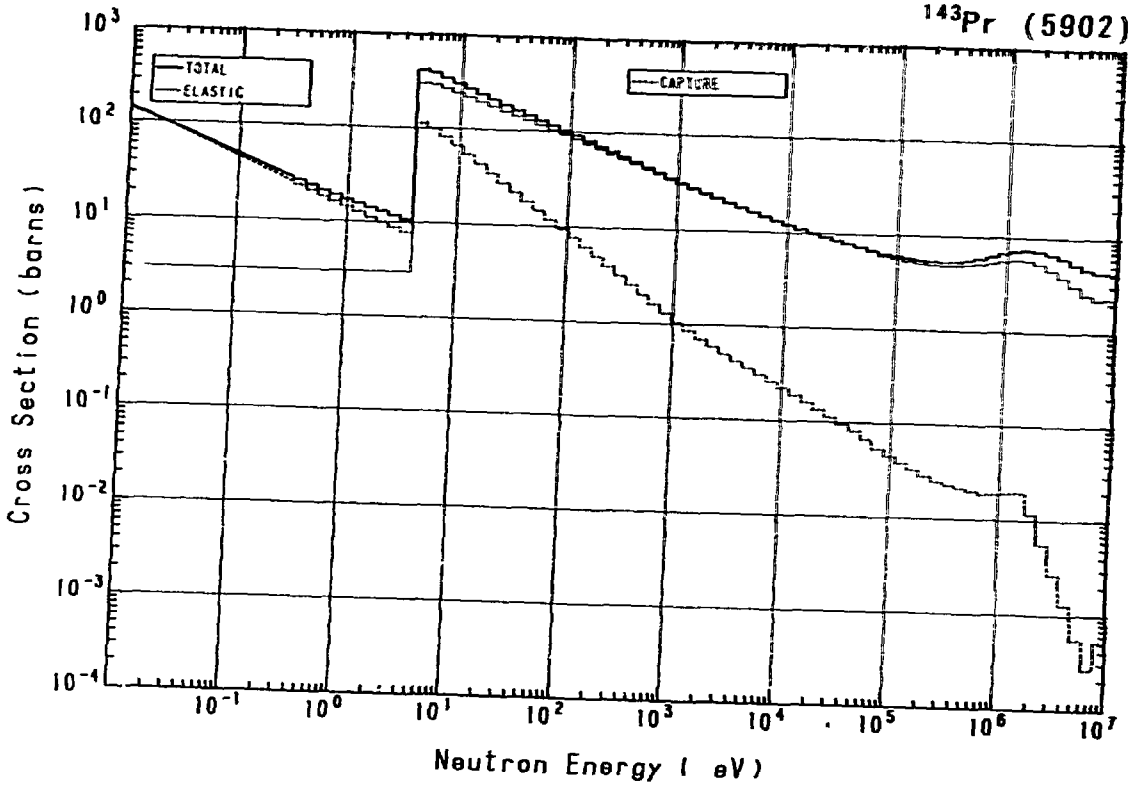

inelastic
(n,2n)
(n,3n)
(n,p)
(n,d)
(n,α)
(n,nα)
(n,t)
(n,np)
(n,nt)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

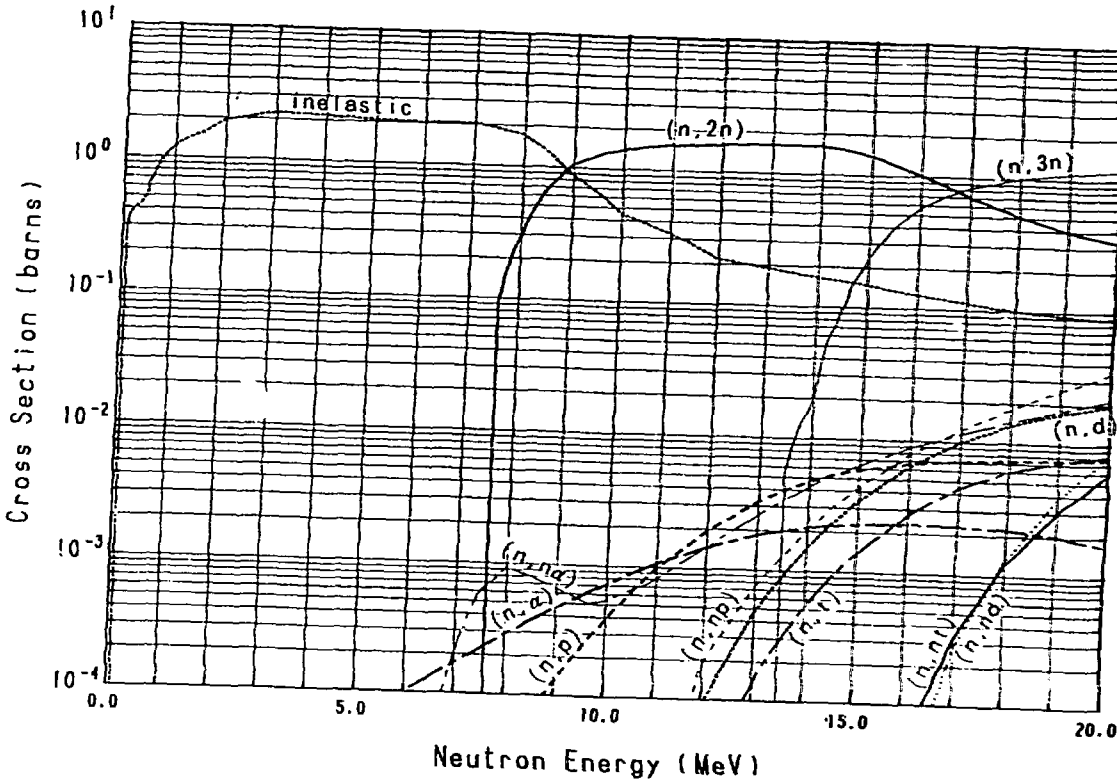

141Pr (5901)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

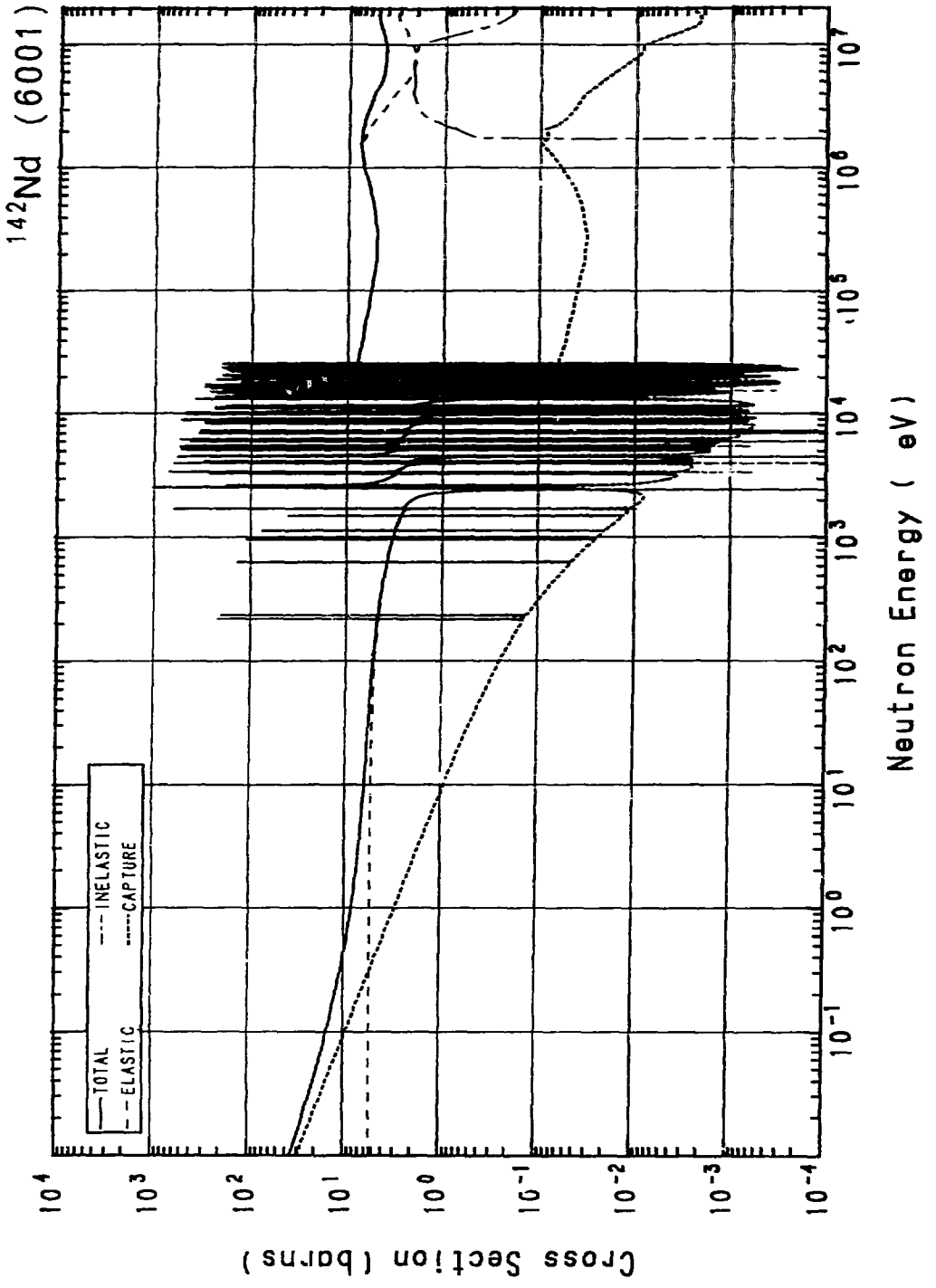

141Pr (5901)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

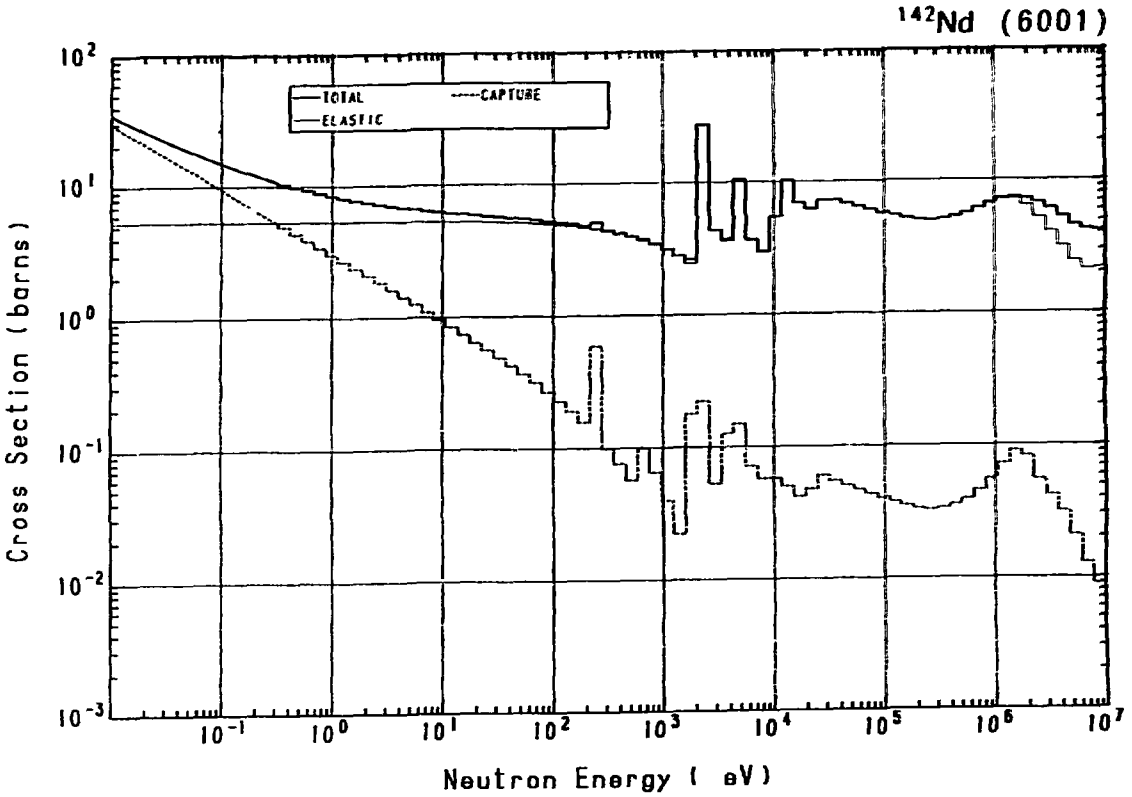

inelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

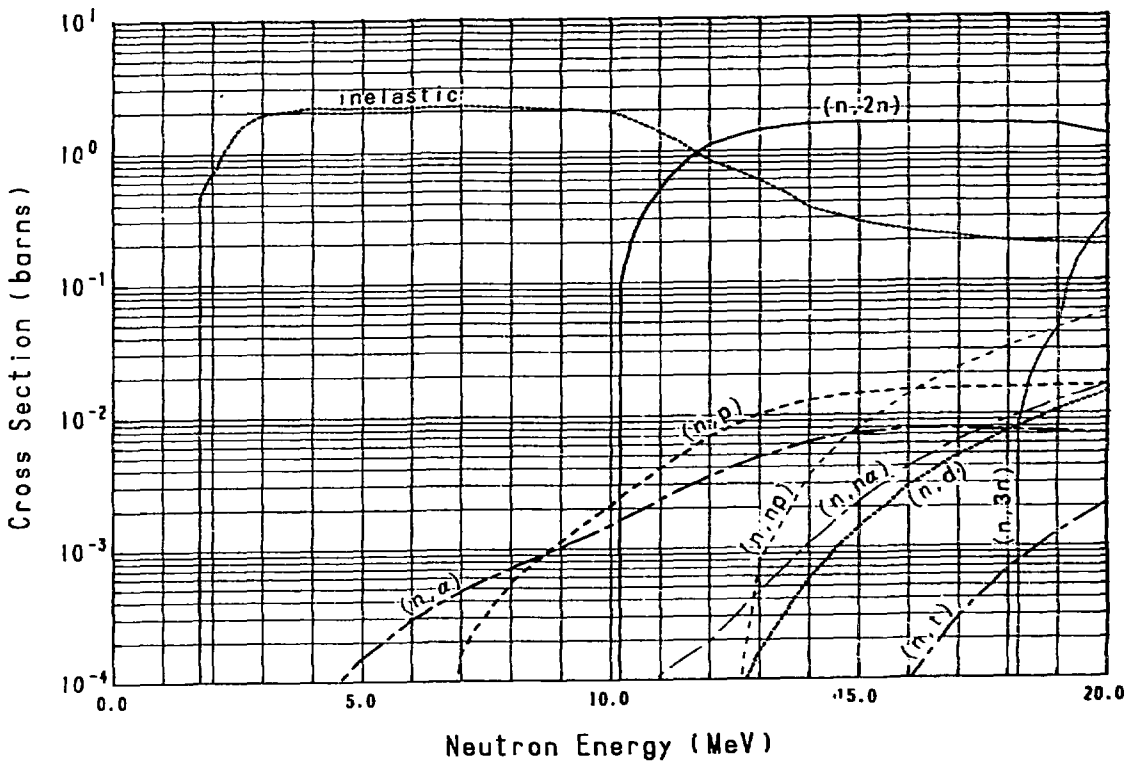

143Pr (5902)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

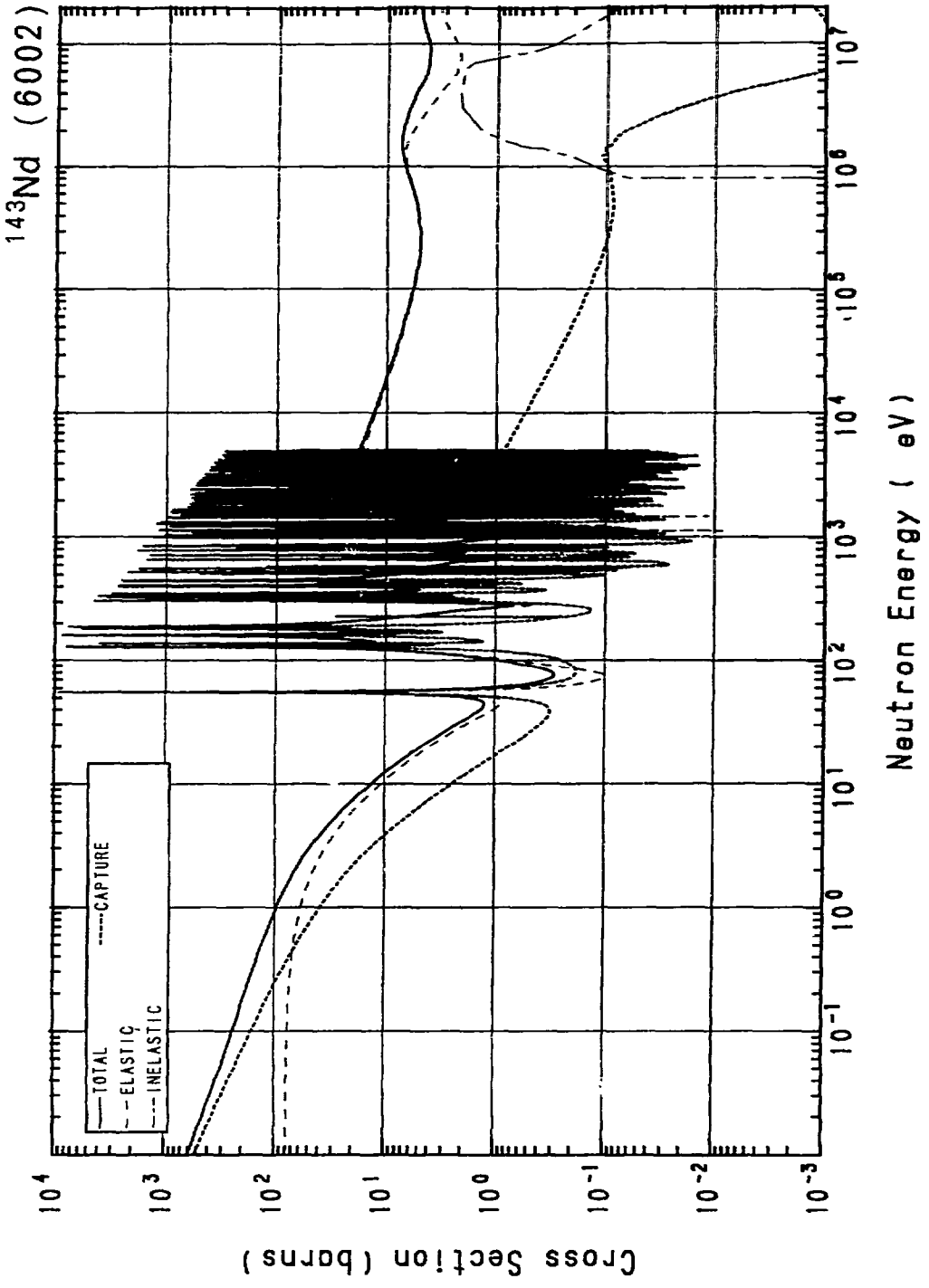

143Pr (5902)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

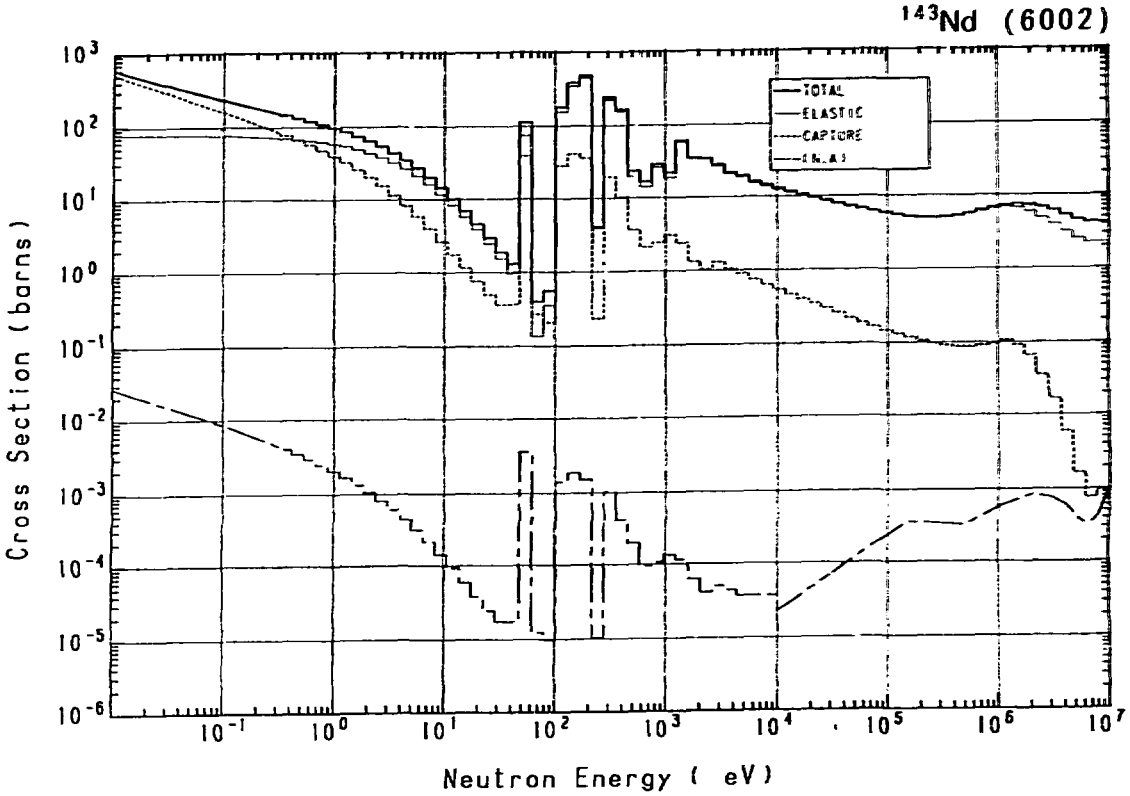

inelastic
(n,2n)
(n,3n)
(n,d)
(n,nα)
(n,α)
(n,np)
(n,p)
(n,n')
(n,nt)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

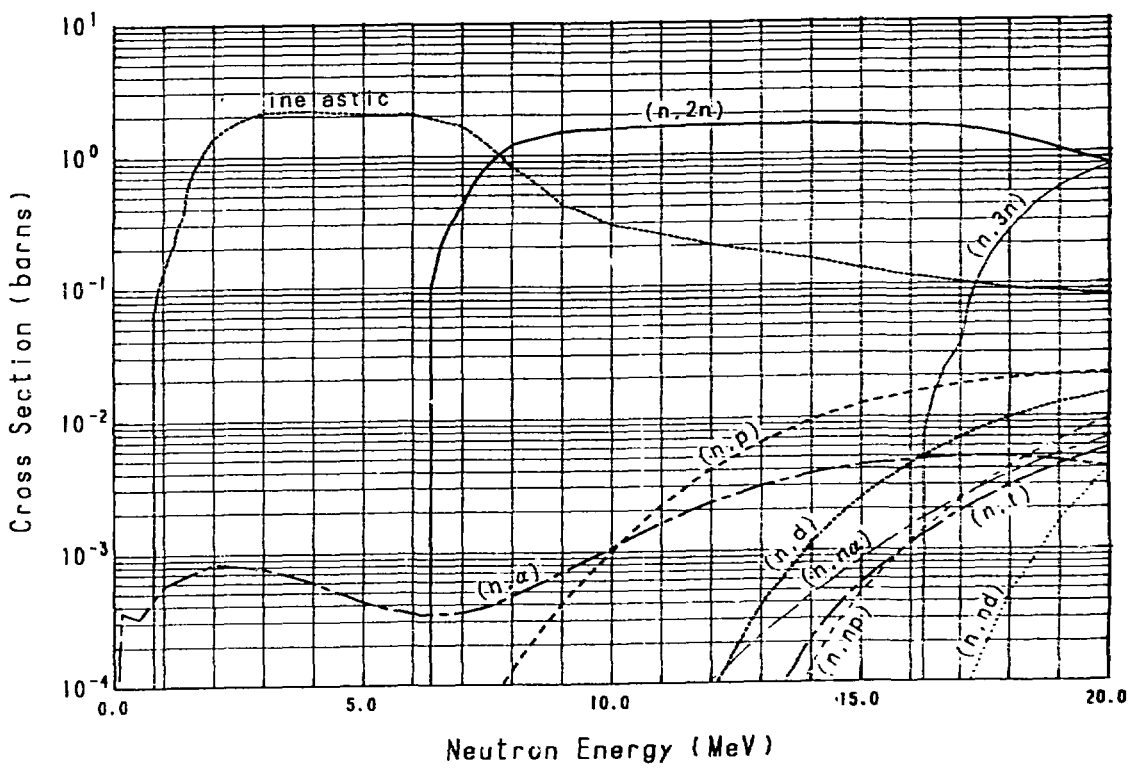

142Nd (6001)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

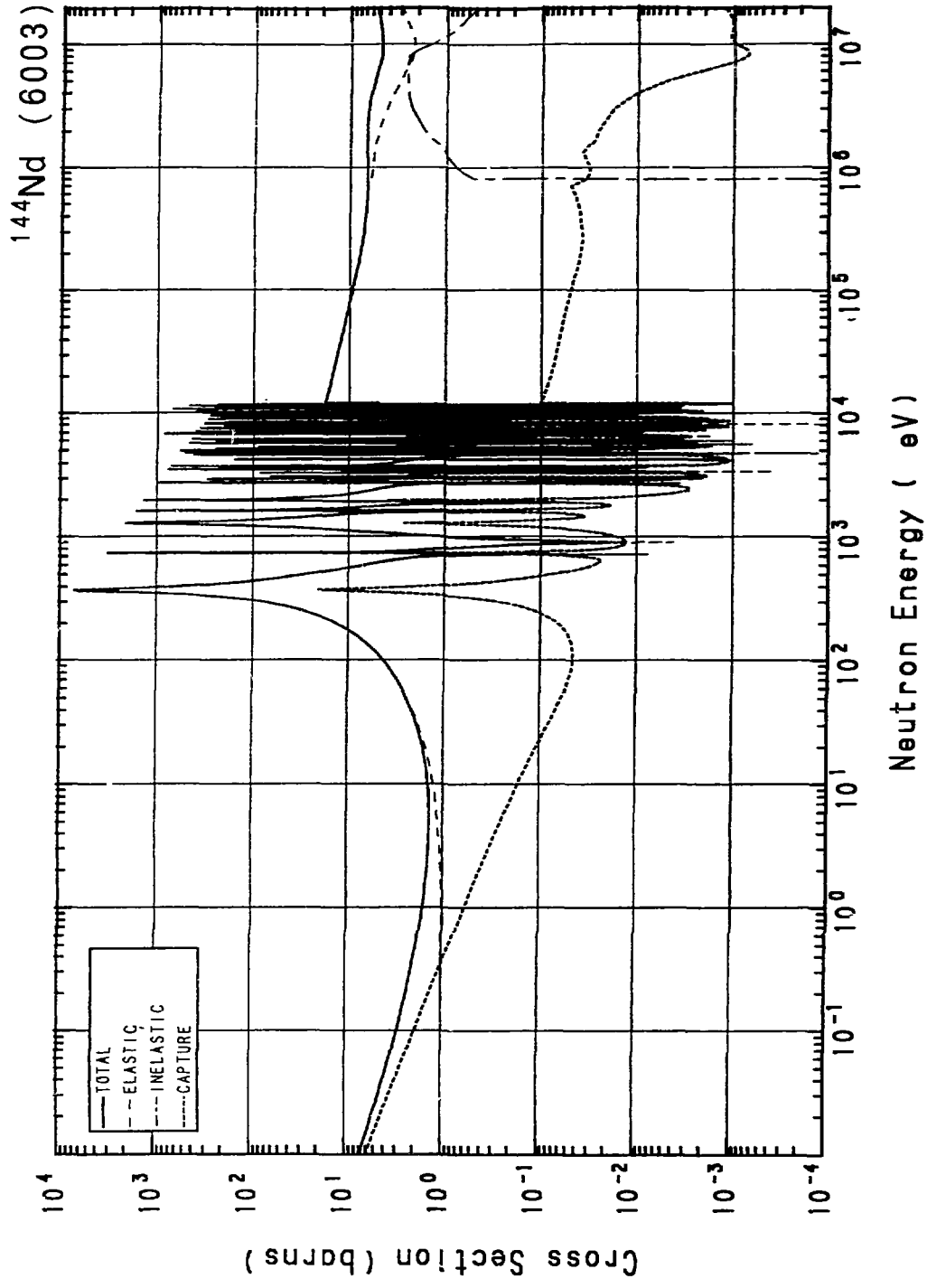

^{142}Nd (6001)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

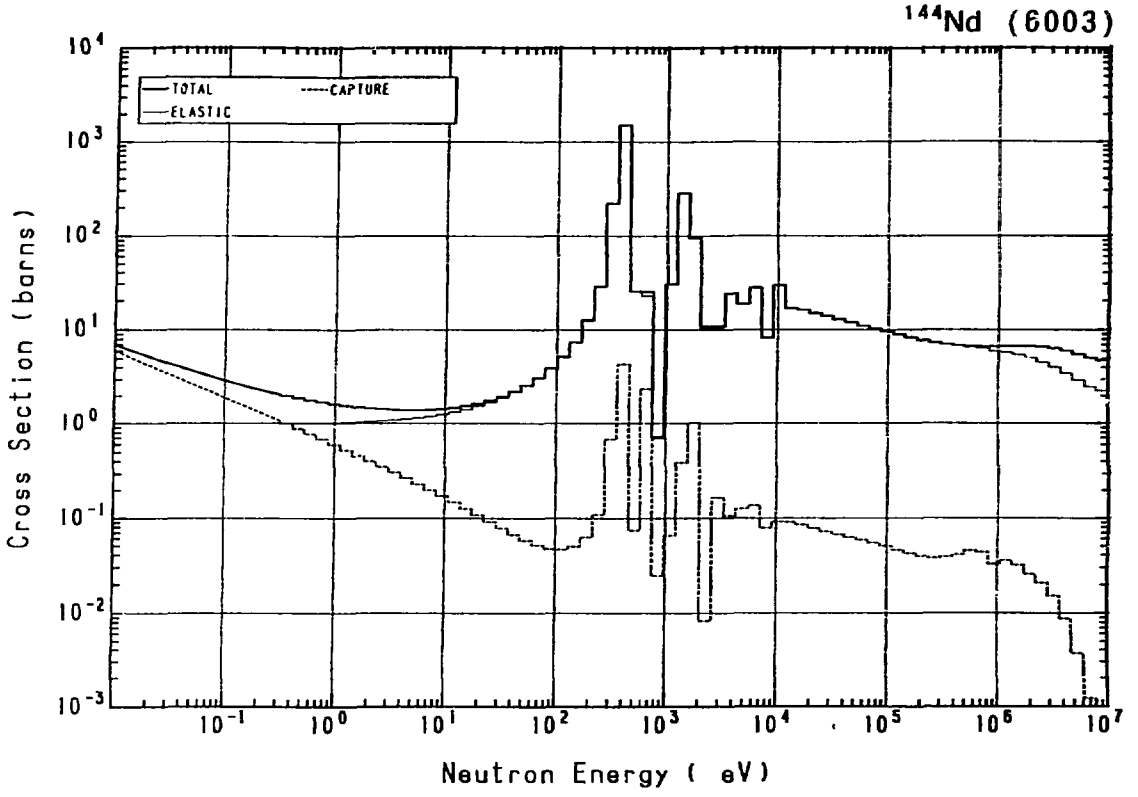

inelastic
(n,2n)
(n,p)
(n,na)
(n,d)
(n,3n)
(n,np)
(n,α)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

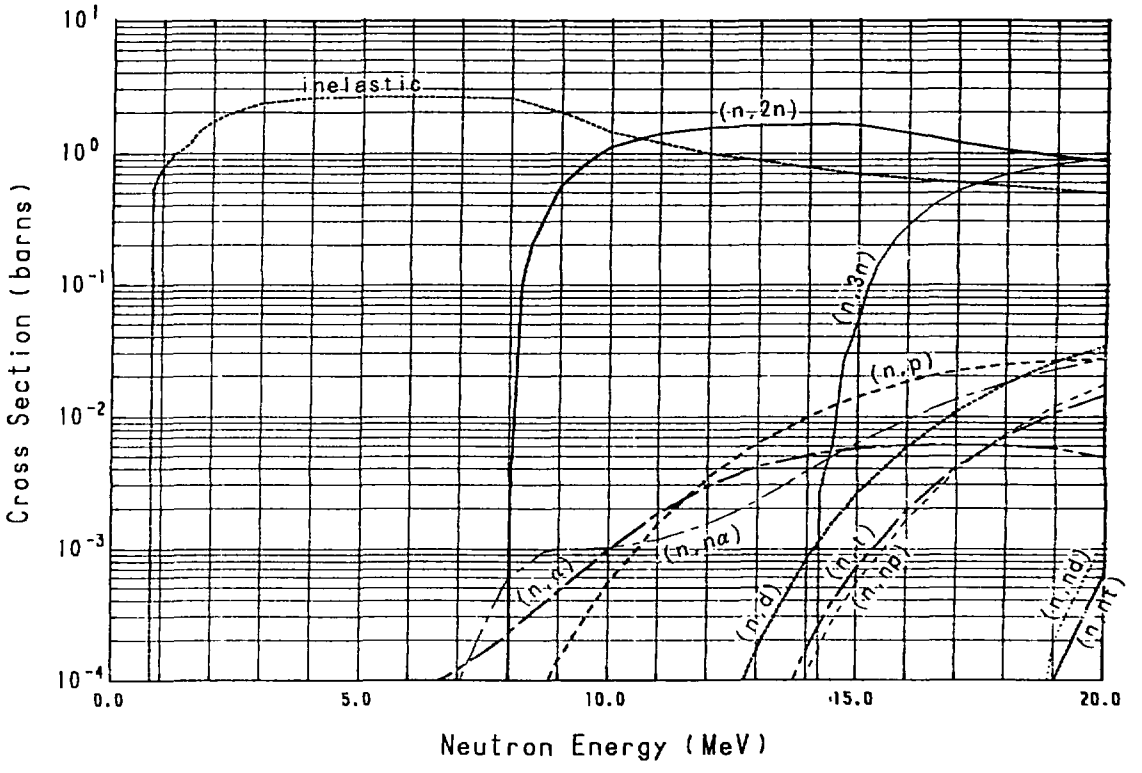

143Nd (6002)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

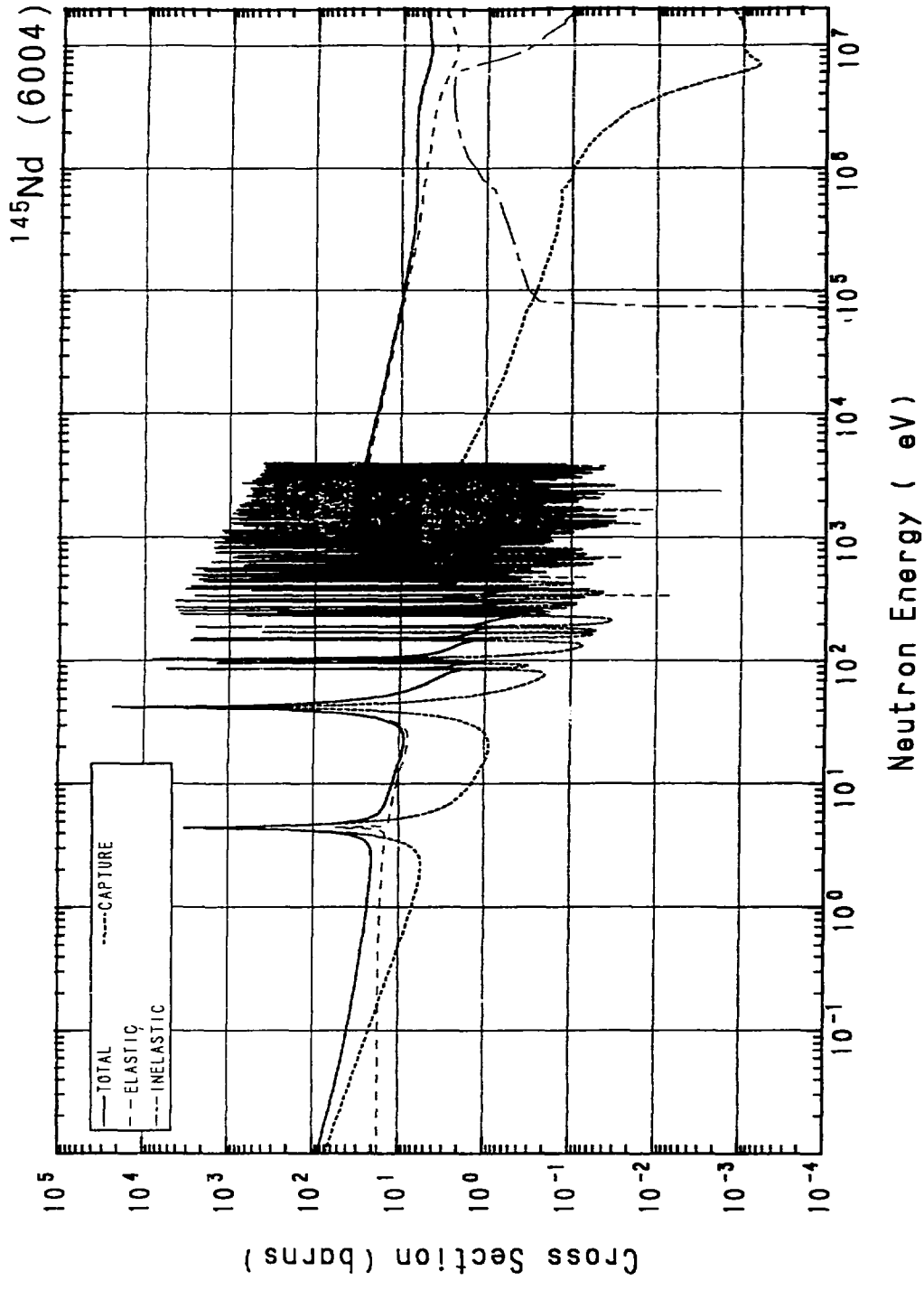

143Nd (6002)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

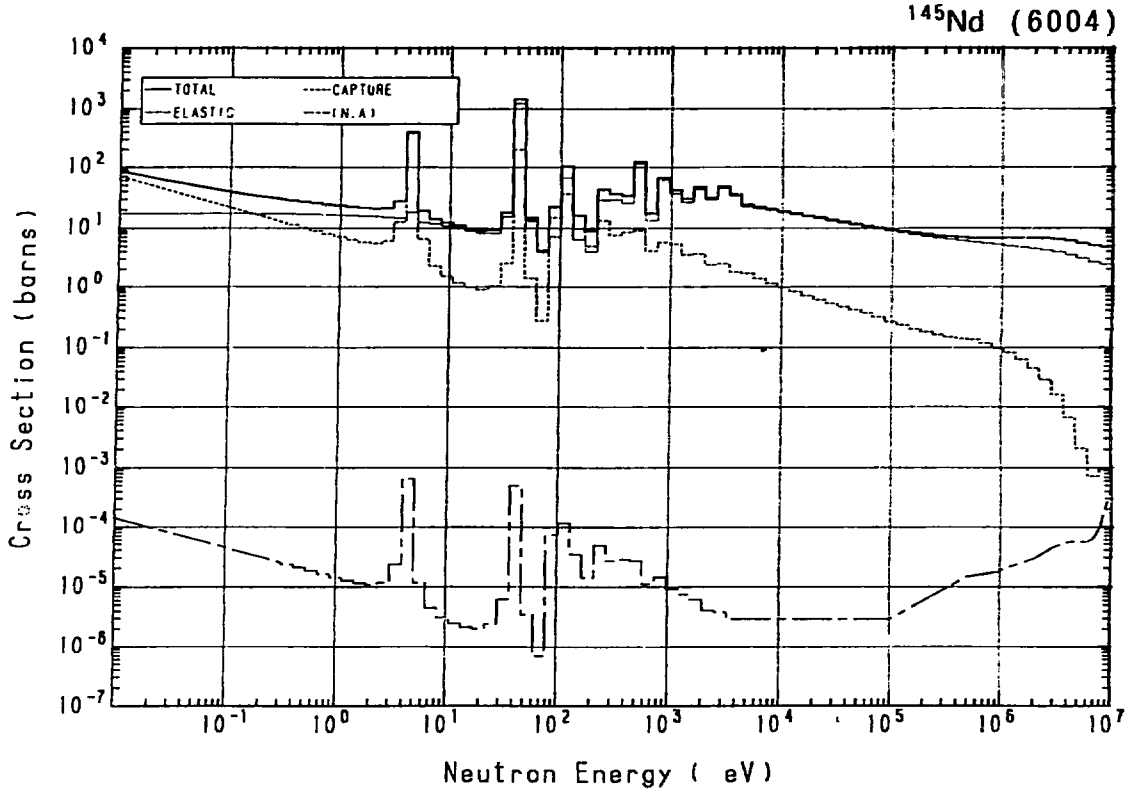

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,np)
(n,t)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

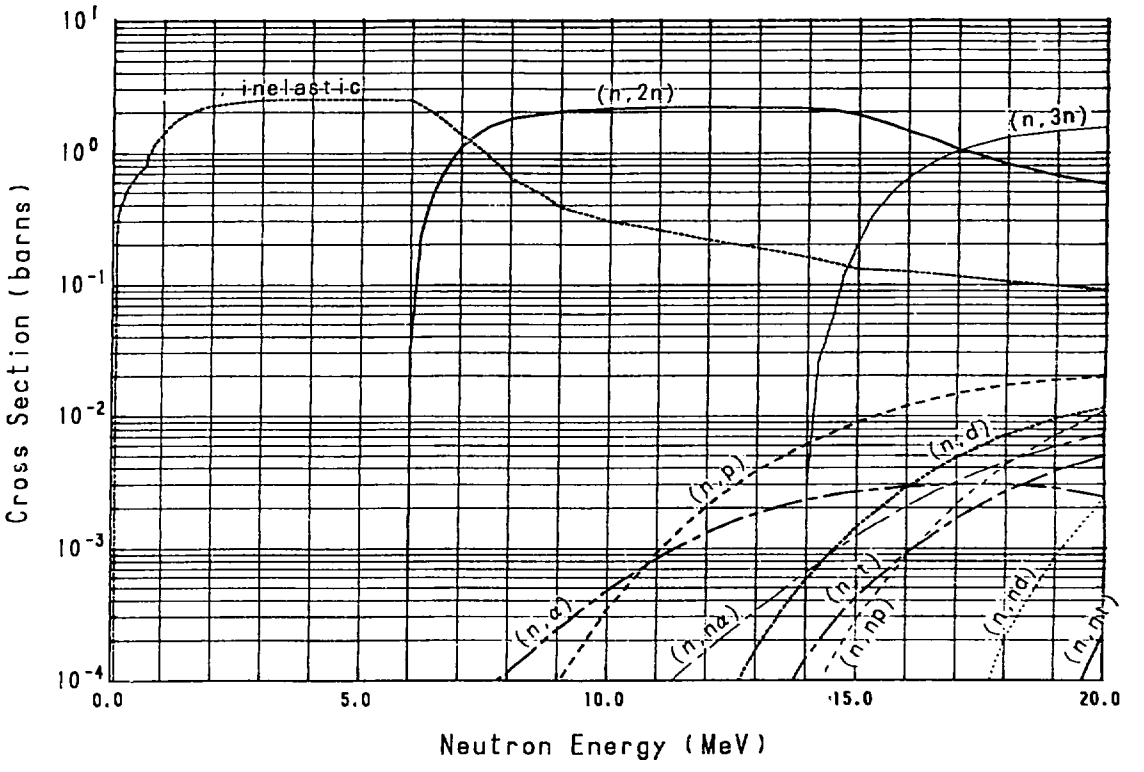

144Nd (6003)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

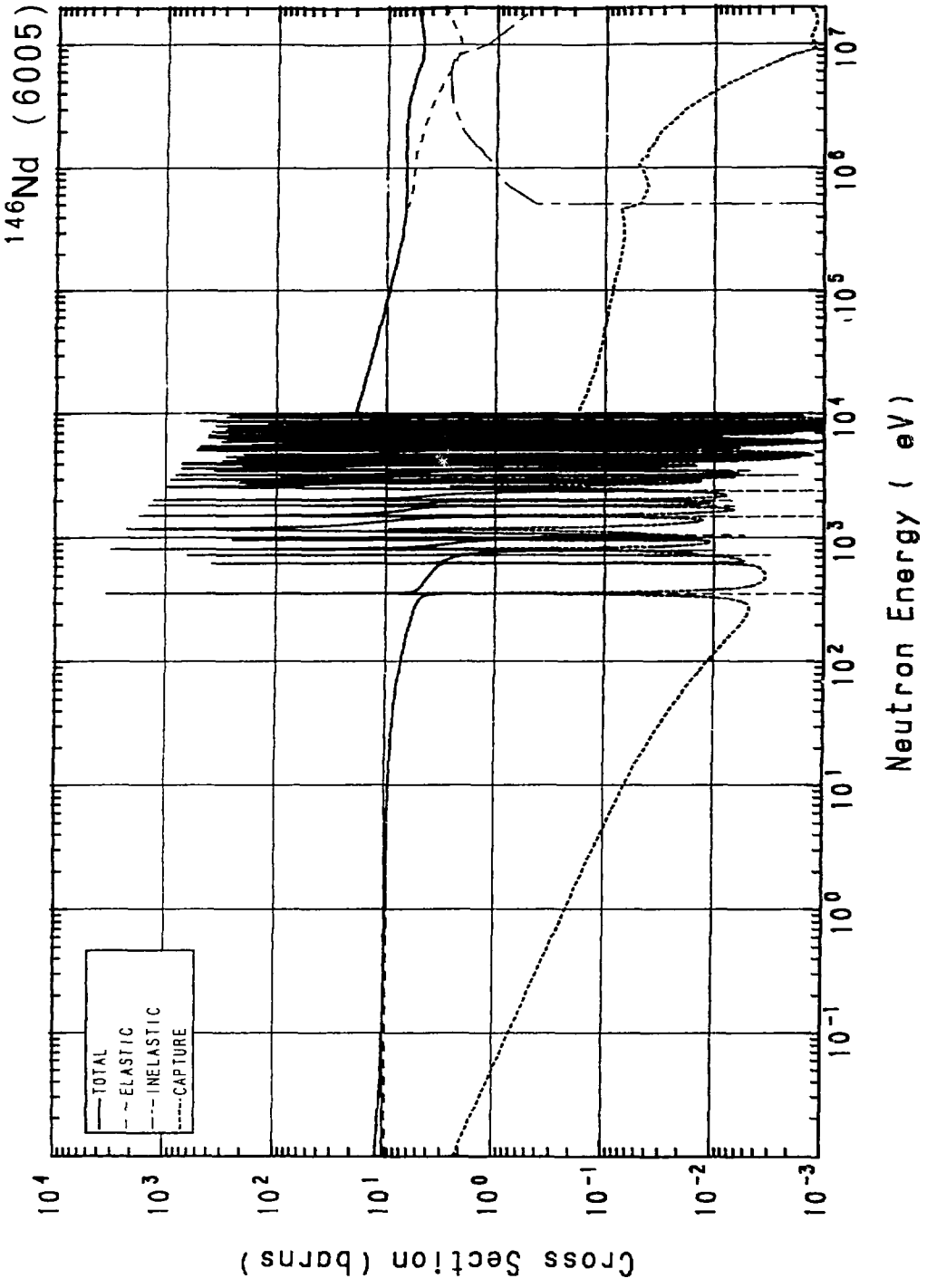

144Nd (6003)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

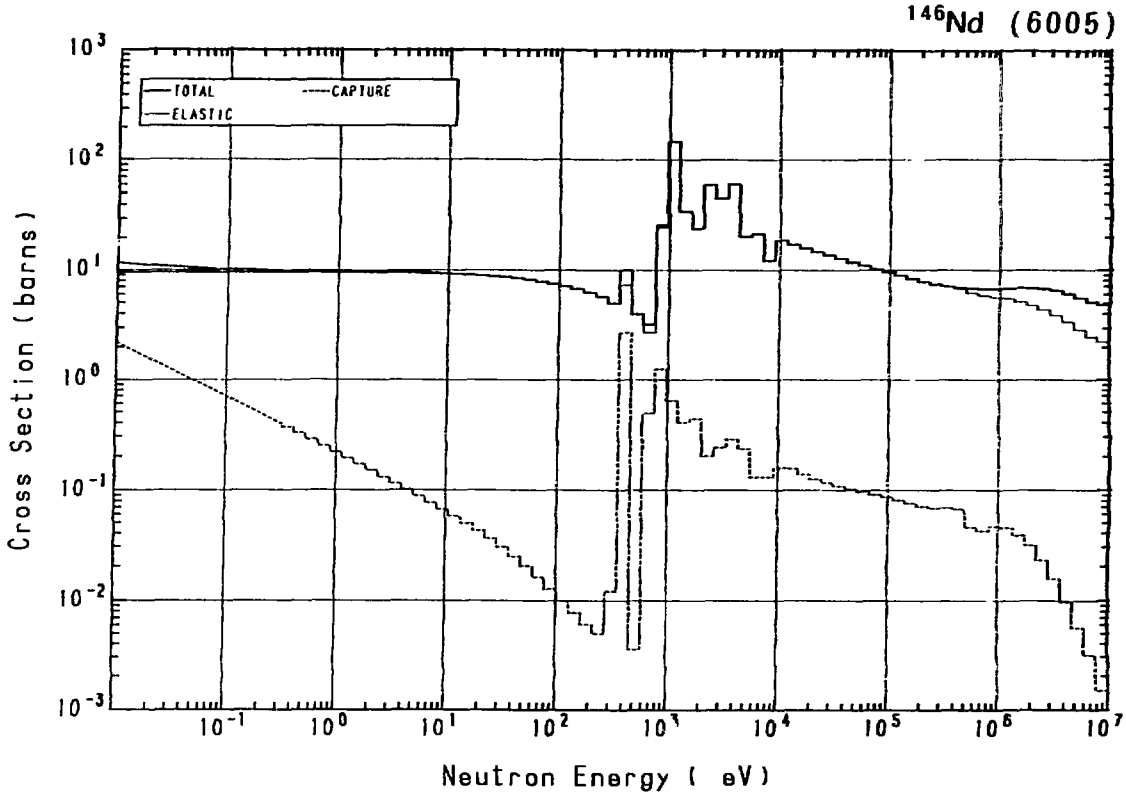

inelastic
(n,2n)
(n,3n)
(n,p)
(n,nα)
(n,α)
(n,d)
(n,t)
(n,np)
(n,nd)
(n,nT)
Cross Section (barns)
Neutron Energy (MeV)

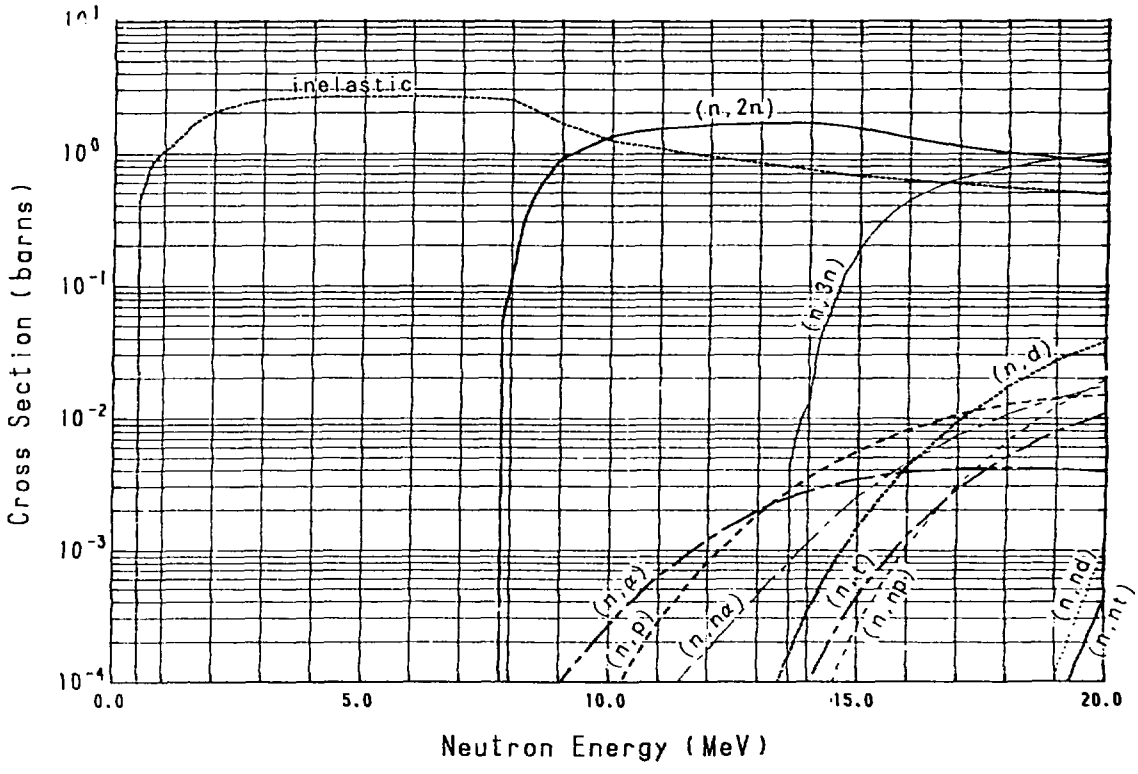

145Nd (6004)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

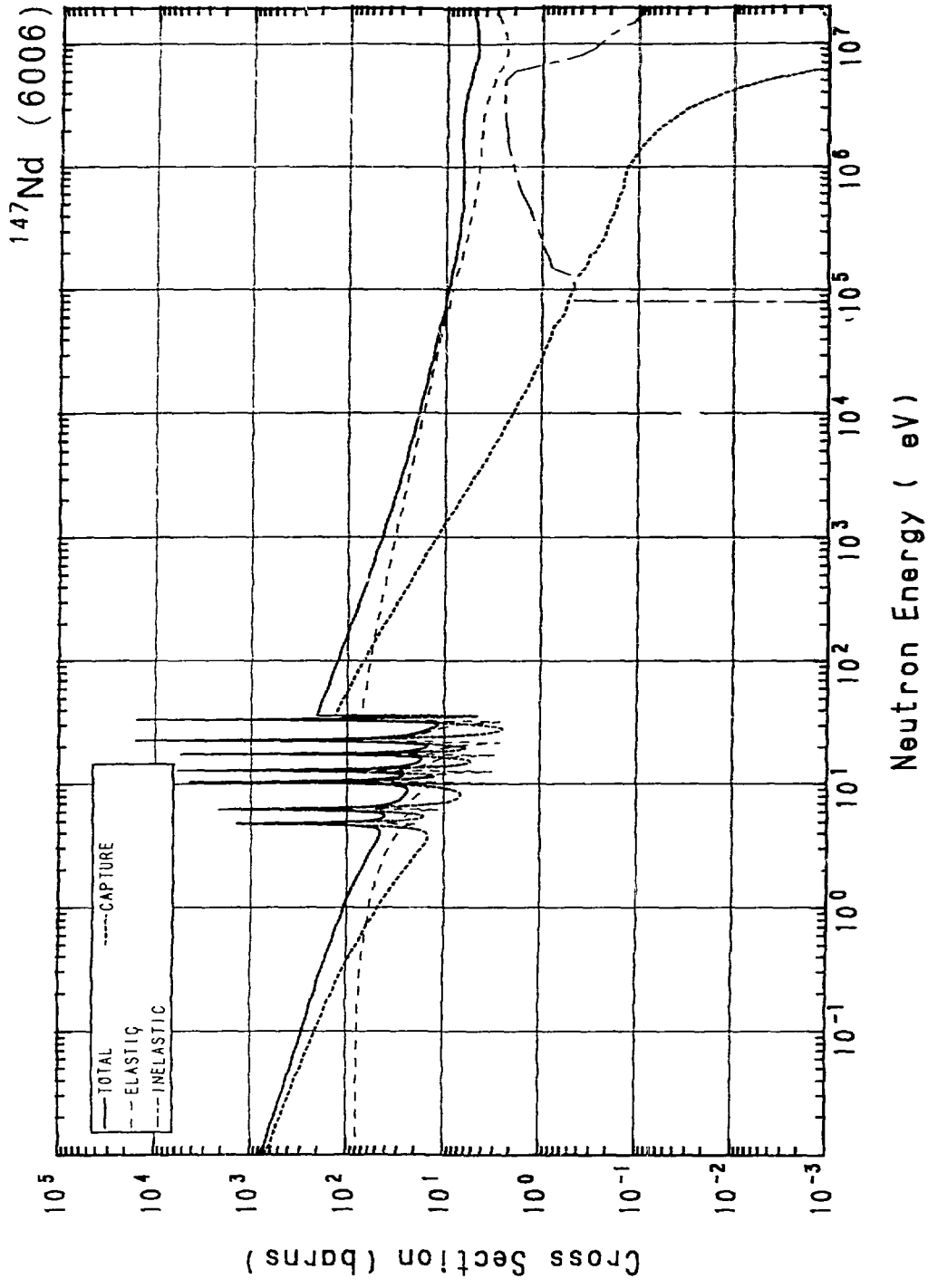

145Nd (6004)
TOTAL
ELASTIC
CAPTURE
(N,A)
Cross Section (barns)
Neutron Energy (eV)

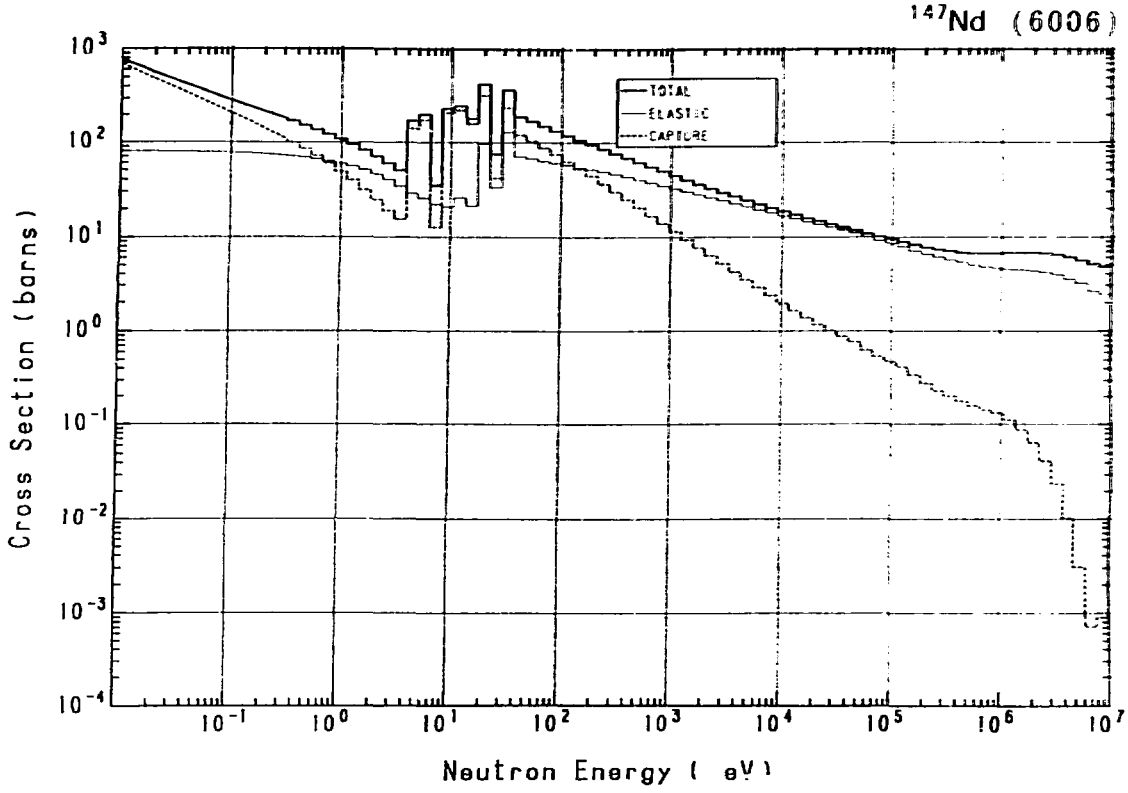

inelastic
(n,2n)
(n,3n)
(n,d)
(n,p)
(n,α)
(n,nα)
(n,γ)
(n,np)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

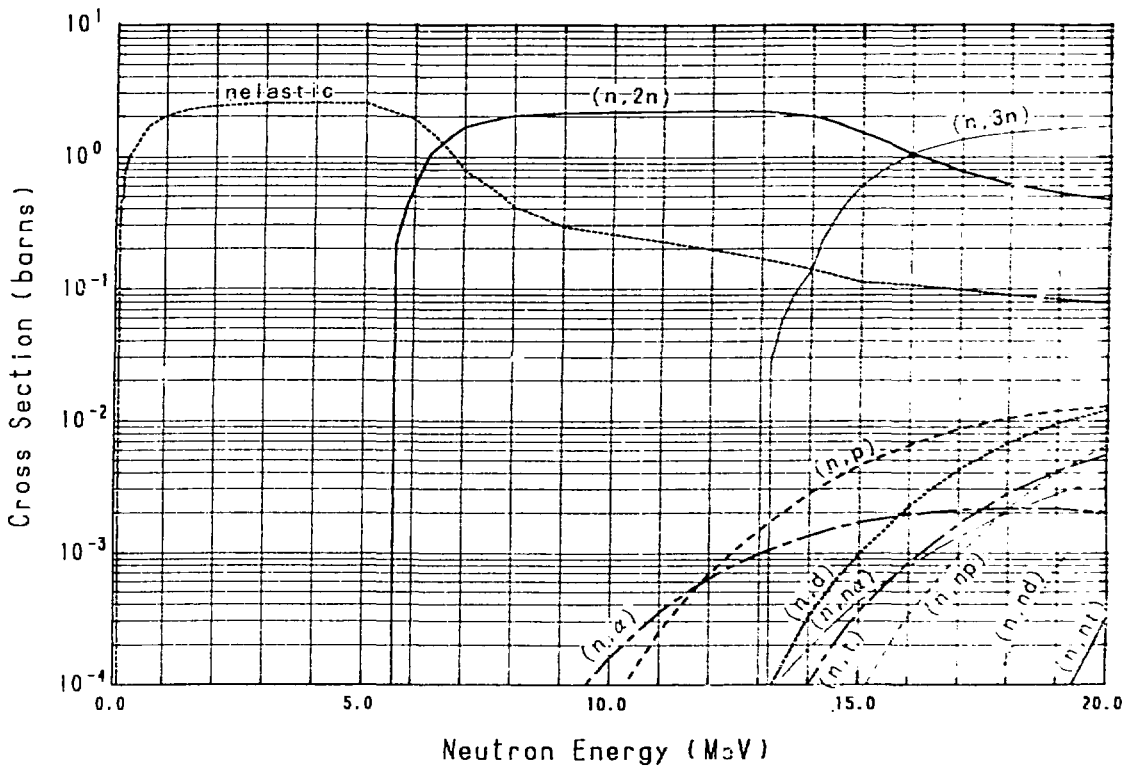

146Nd (6005)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

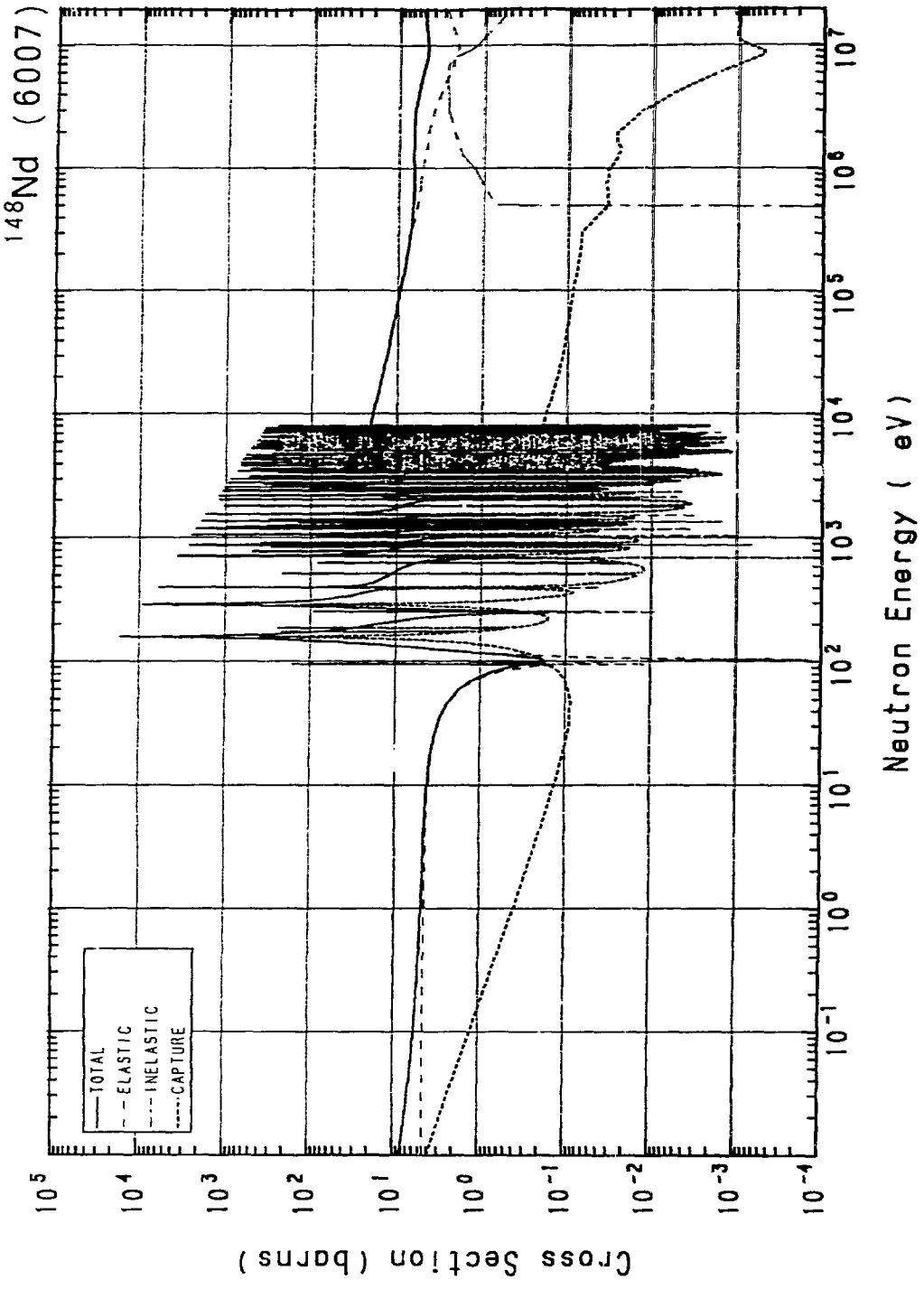

146Nd (6005)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

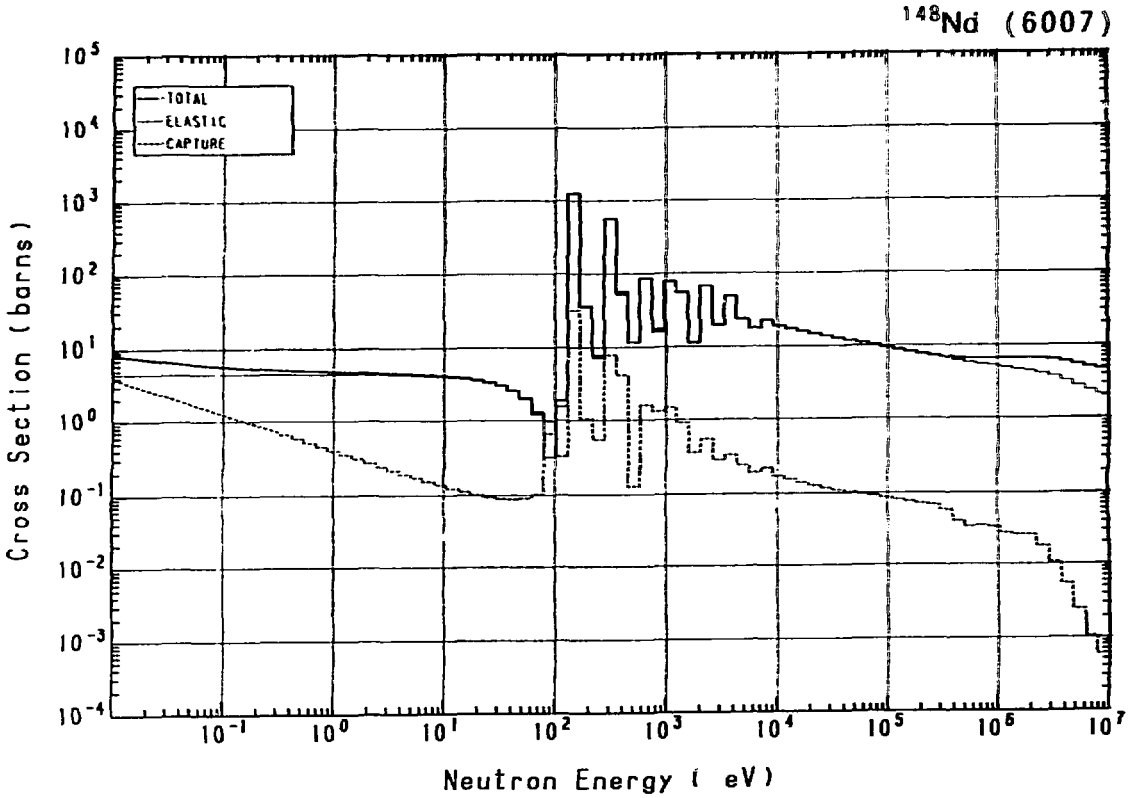

inelastic
(n, 2n)
(n, 3n)
(n, d)
(n, α)
(n, p)
(n, nα)
(n, t)
(n, np)
(n, nd)
(n, nt)
Cross Section (barns)
Neutron Energy (MeV)

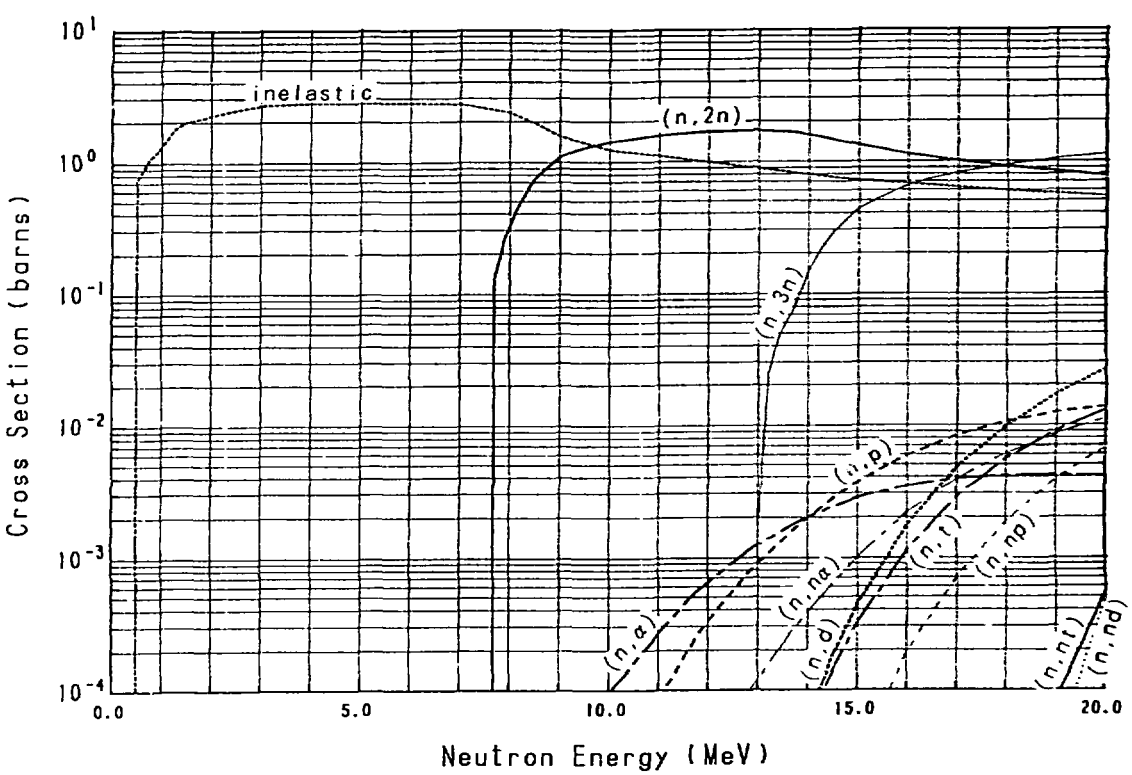

147Nd (6006)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

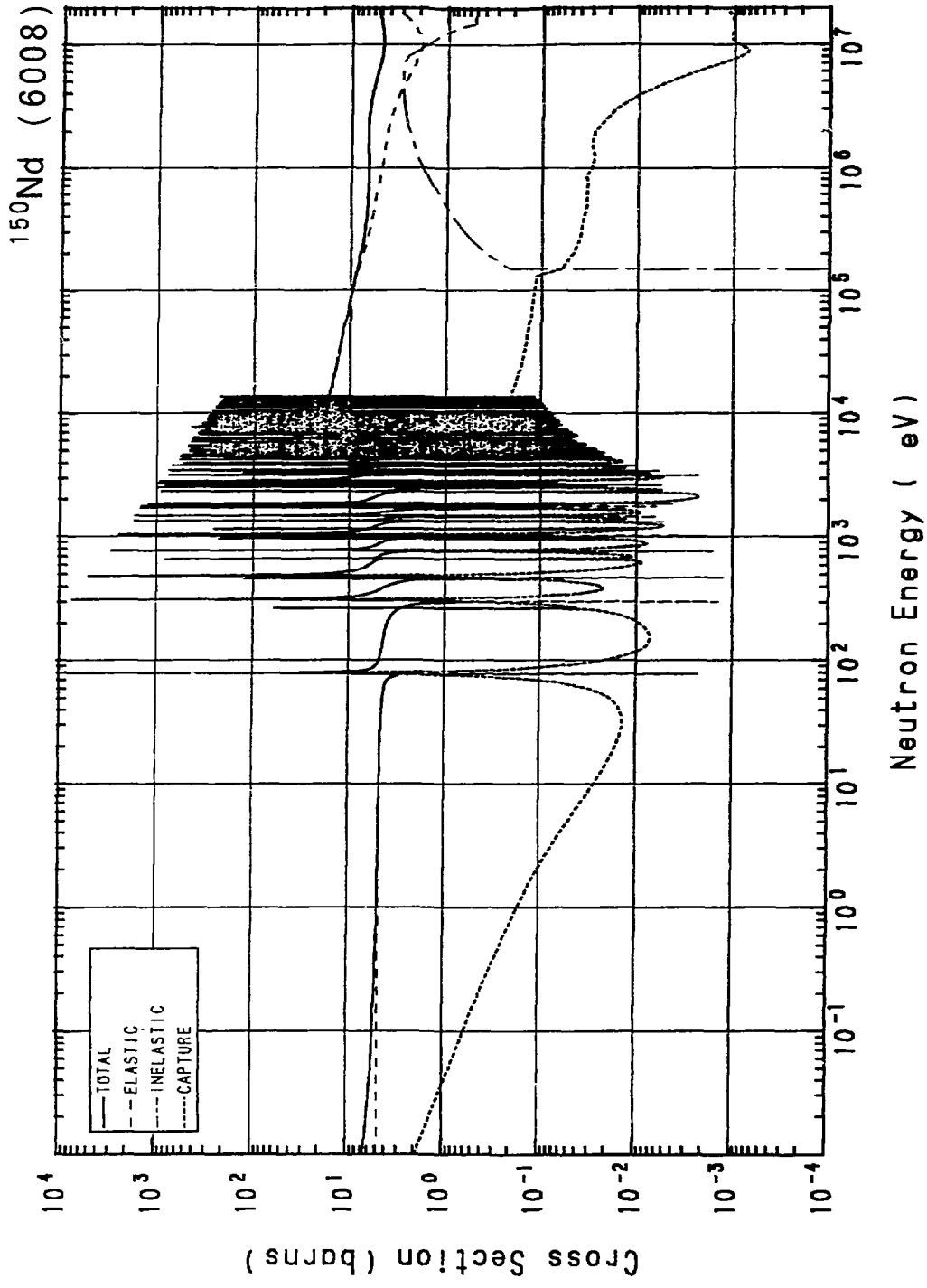

147Nd (6006)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

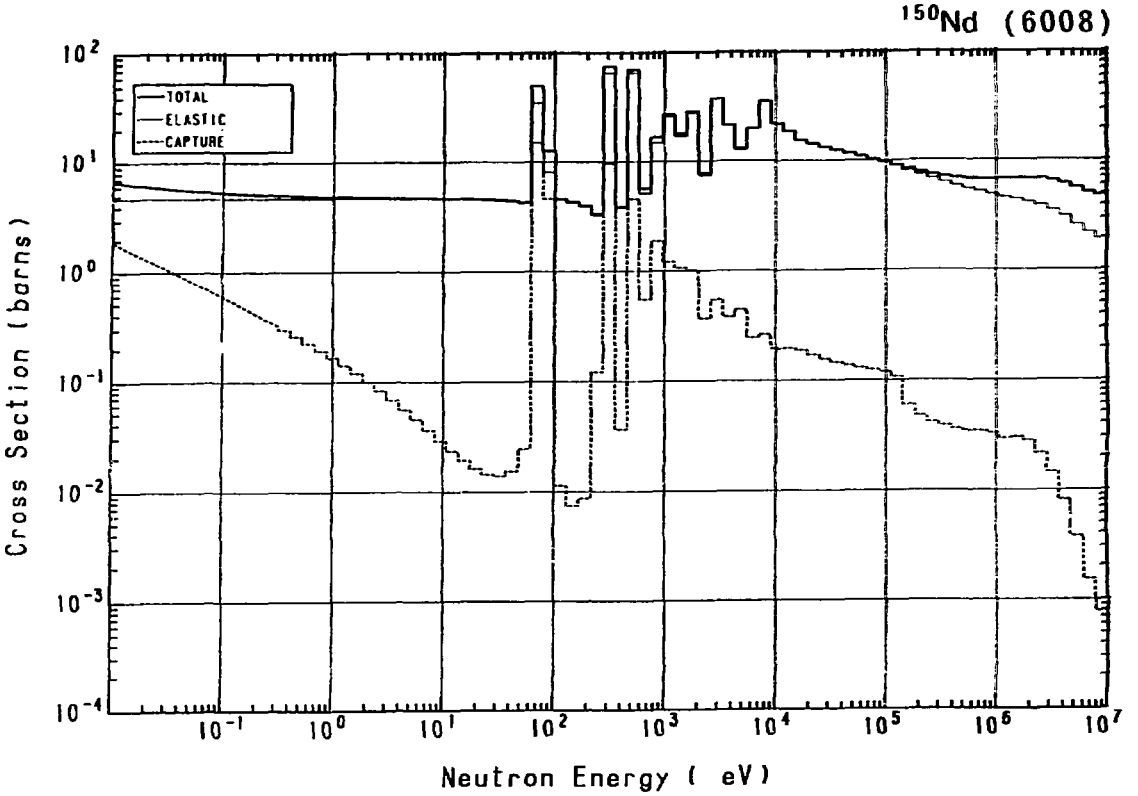

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,np)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

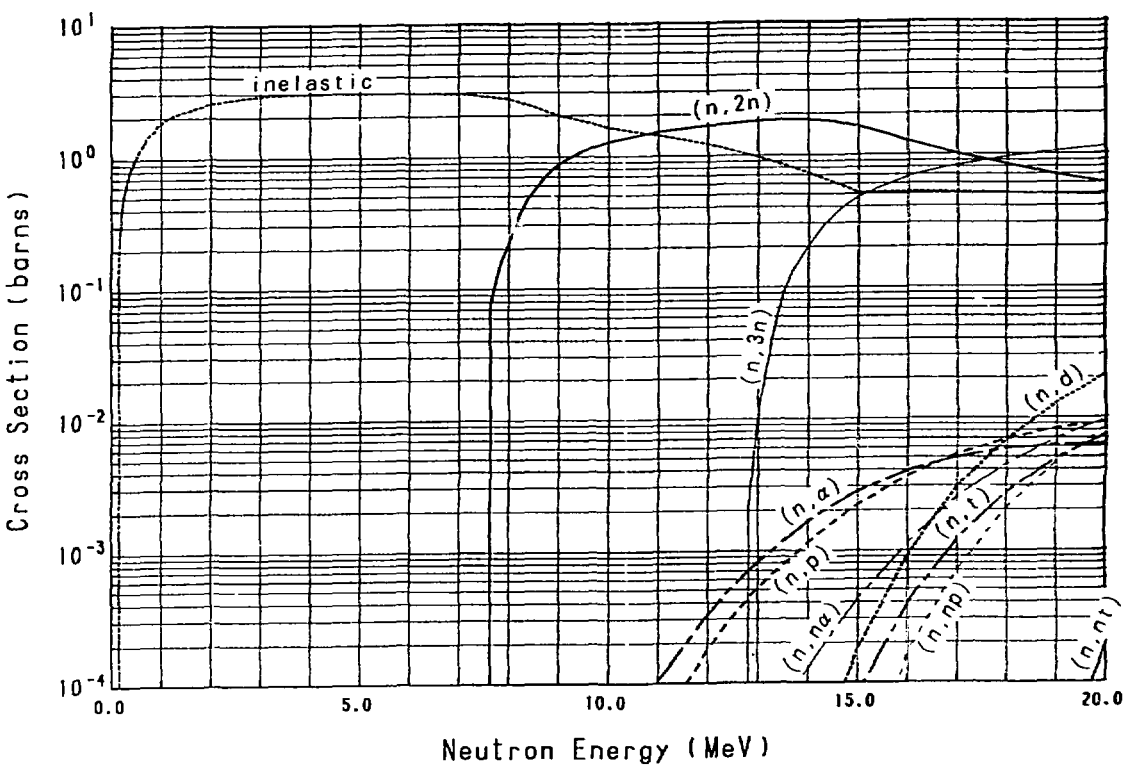

148Nd (6007)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

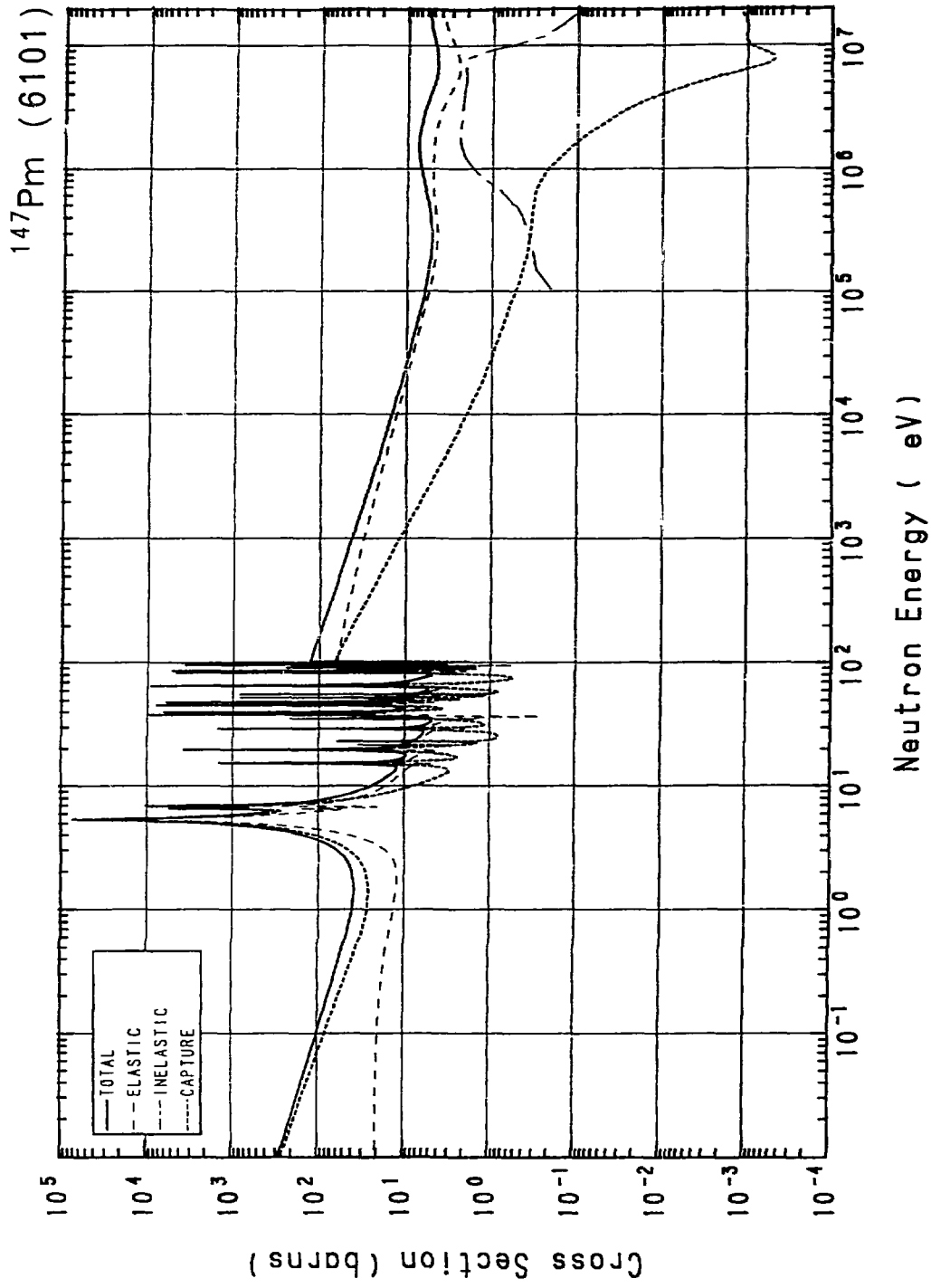

^{148}Nd (6007)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

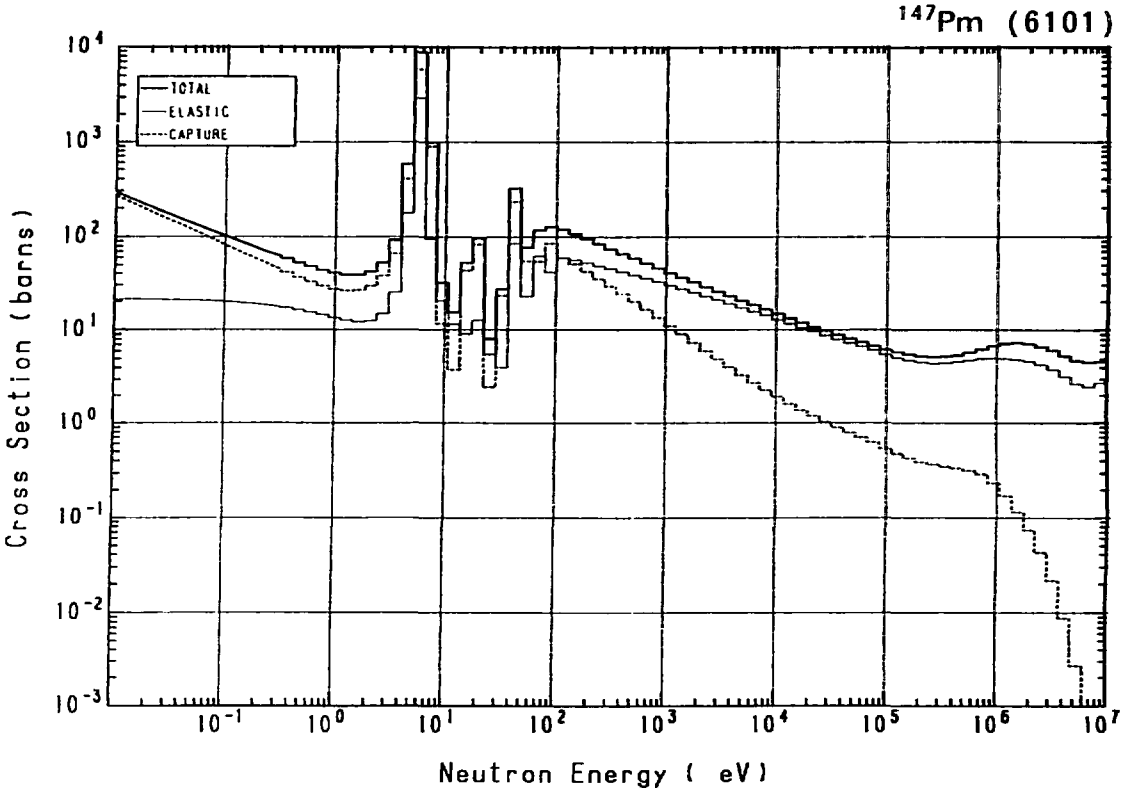

inelastic
(n,2n)
(n,3n)
(n,p)
(n,t)
(n,np)
(n,na)
(n,d)
(n,α)
(n,nt)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

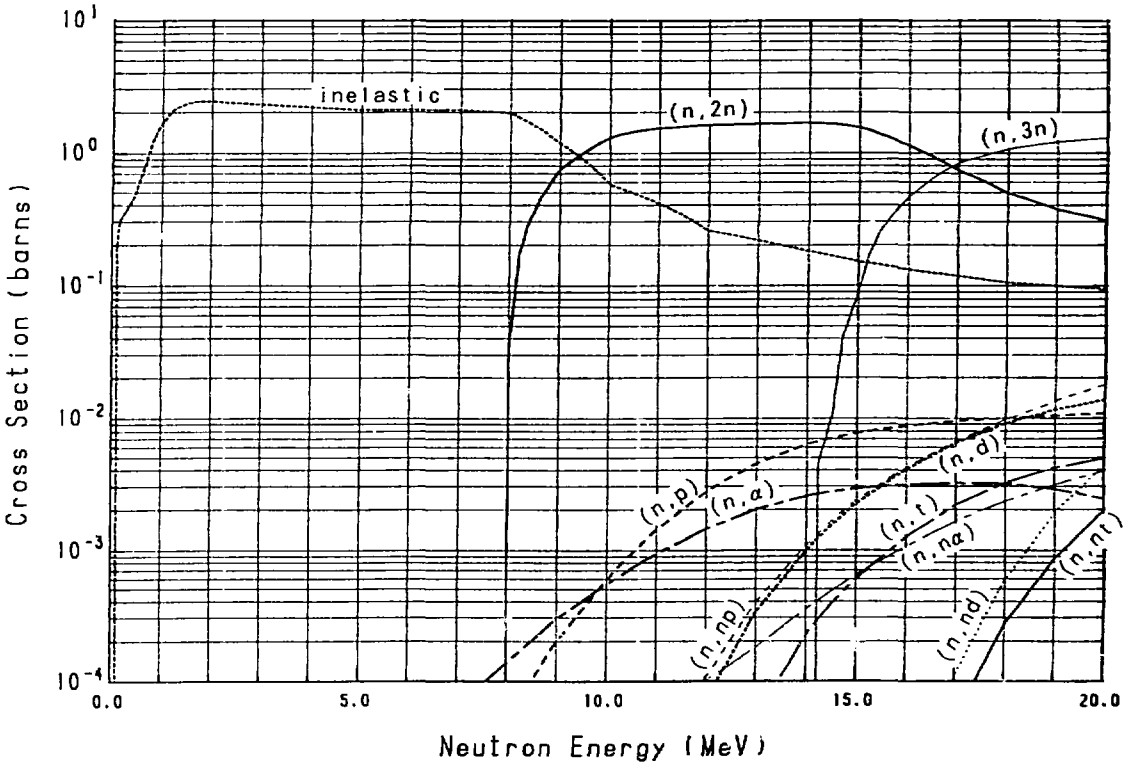

150Nd (6008)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

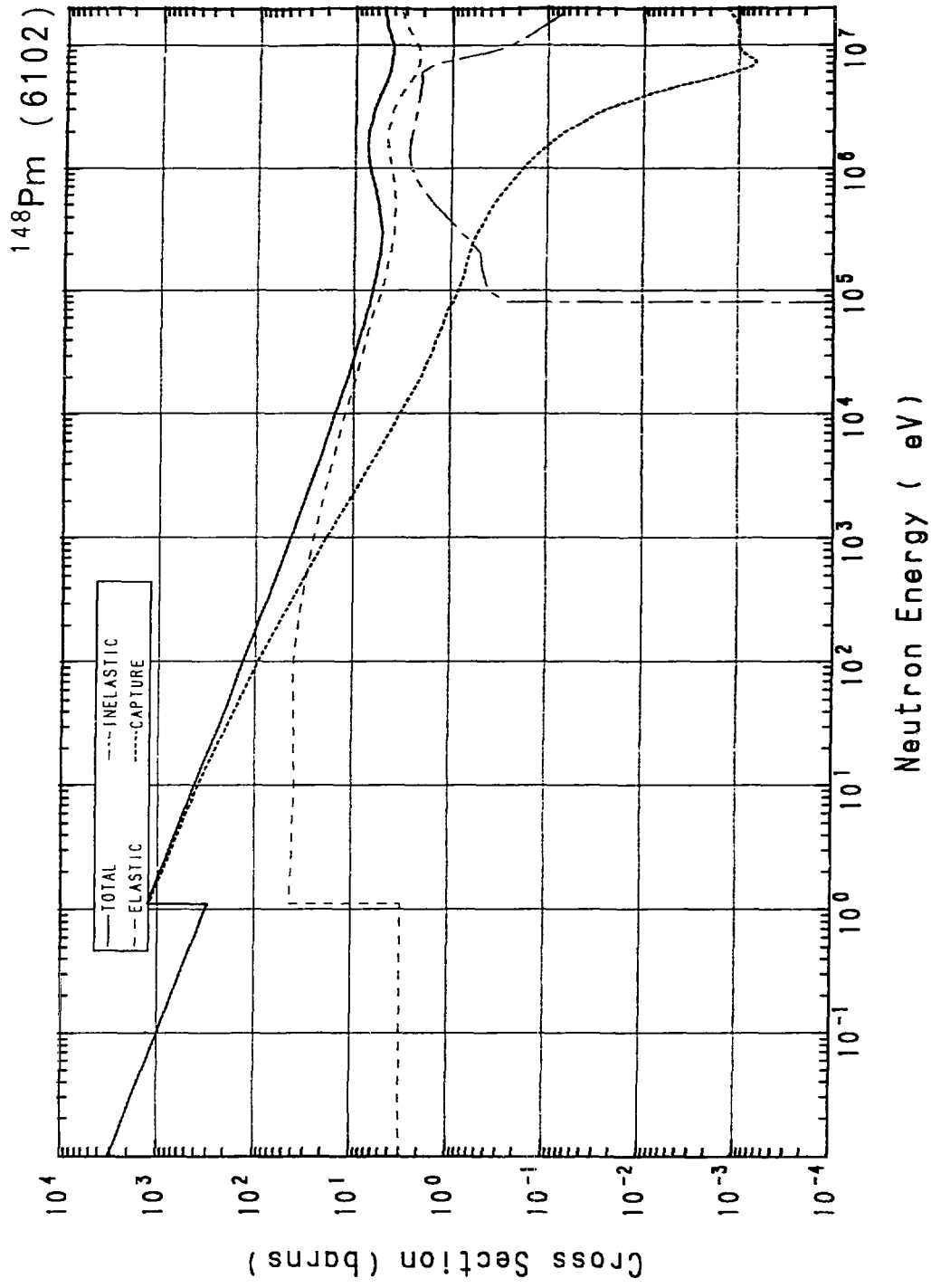

^{150}Nd (6008)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

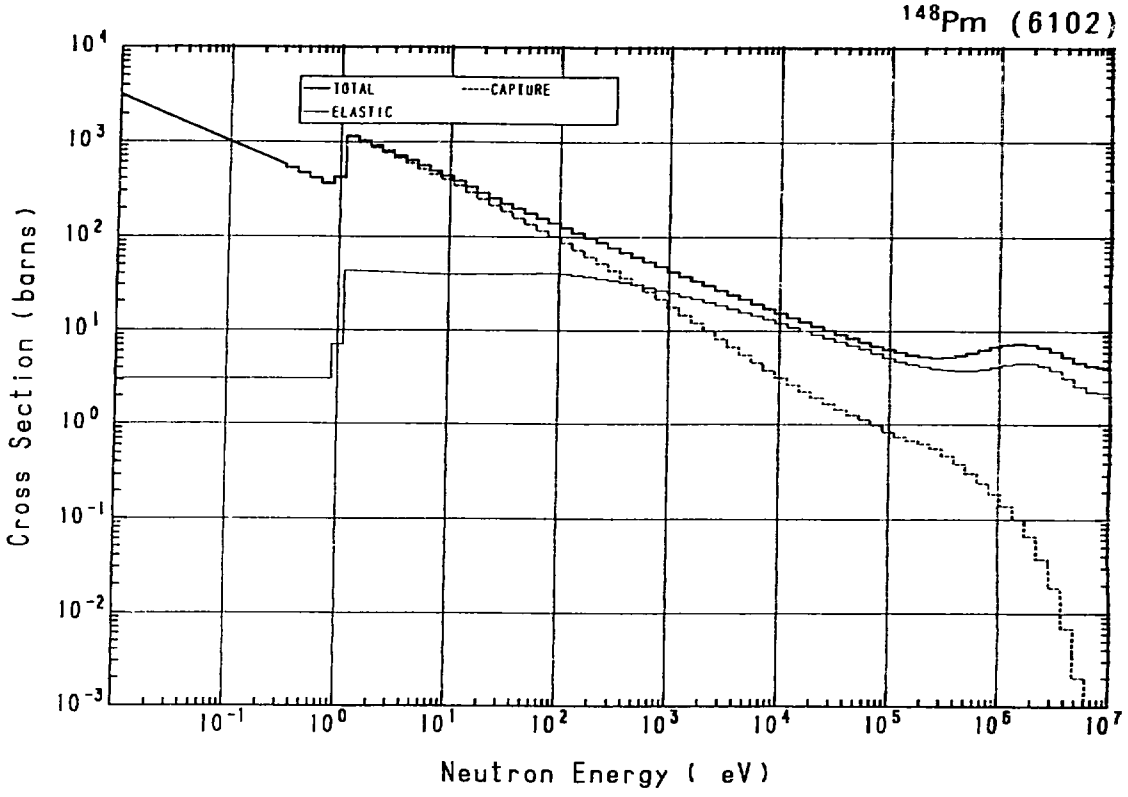

inelastic
(n,2n)
(n,3n)
(n,d)
(n,α)
(n,t)
(n,p)
(n,nα)
(n,np)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

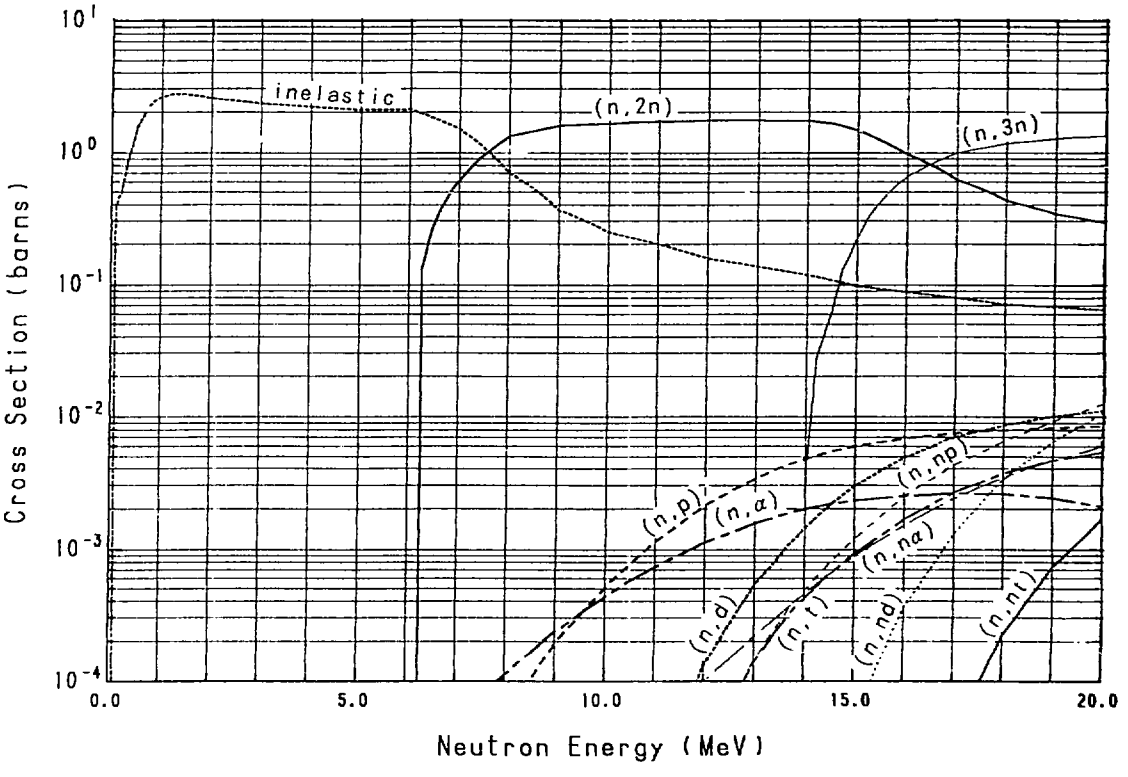

147Pm (6101)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

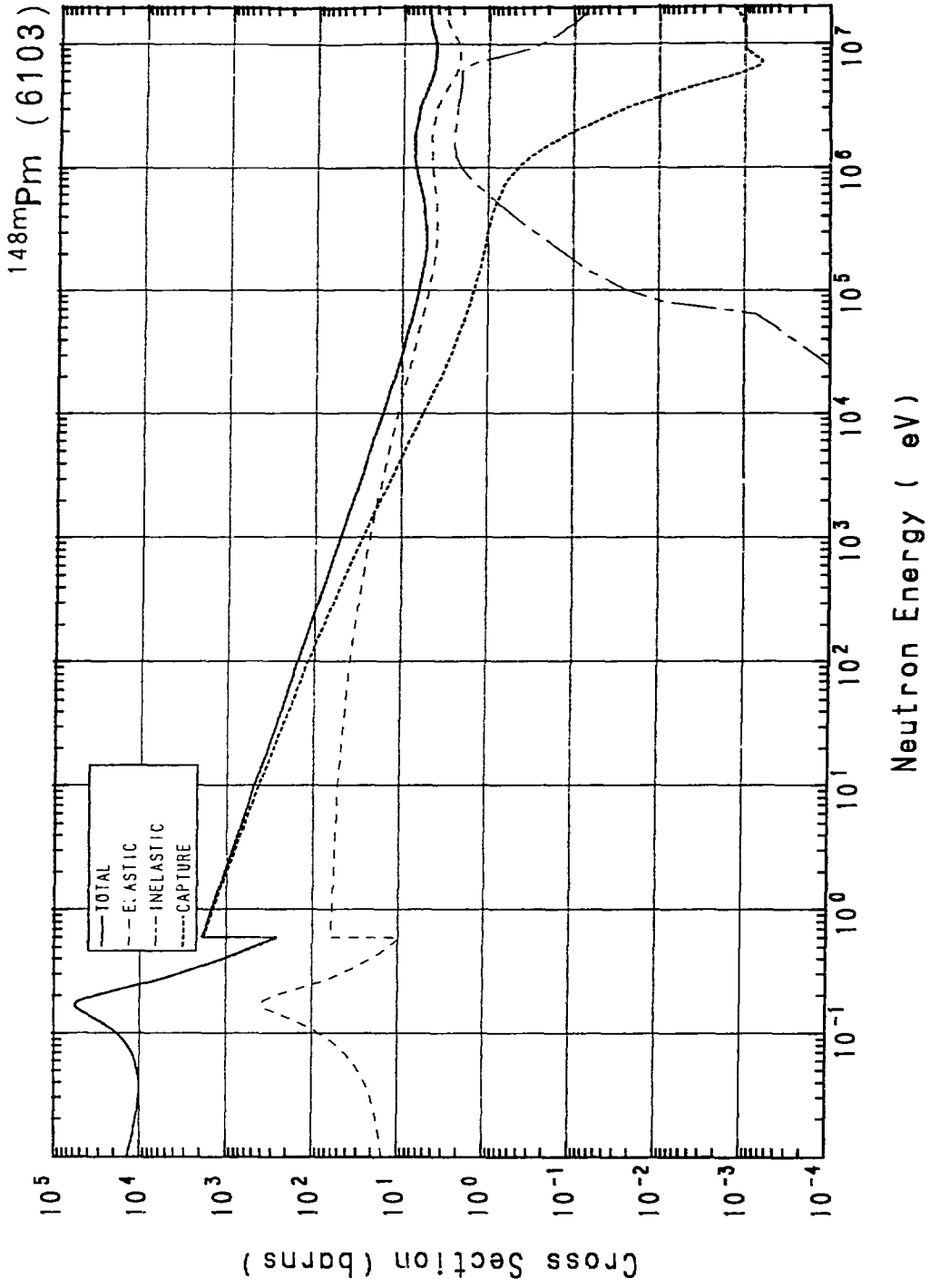

147Pm (6101)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

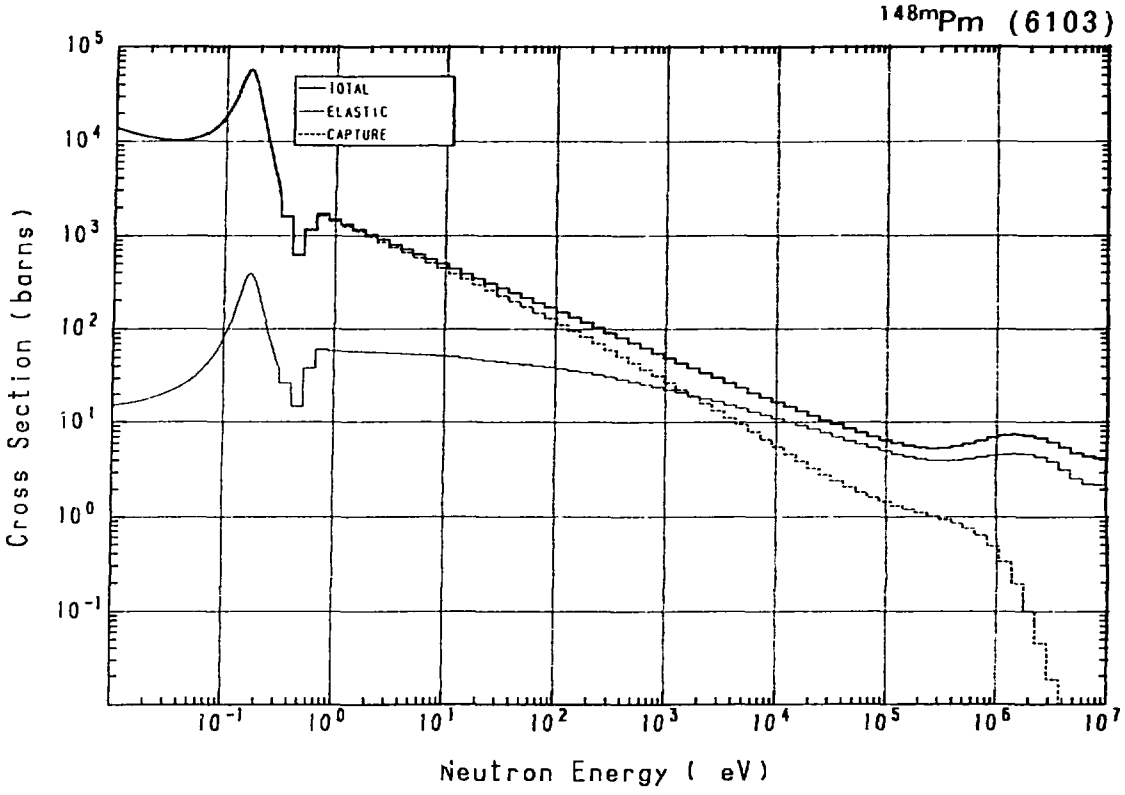

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,t)
(n,nα)
(n,np)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

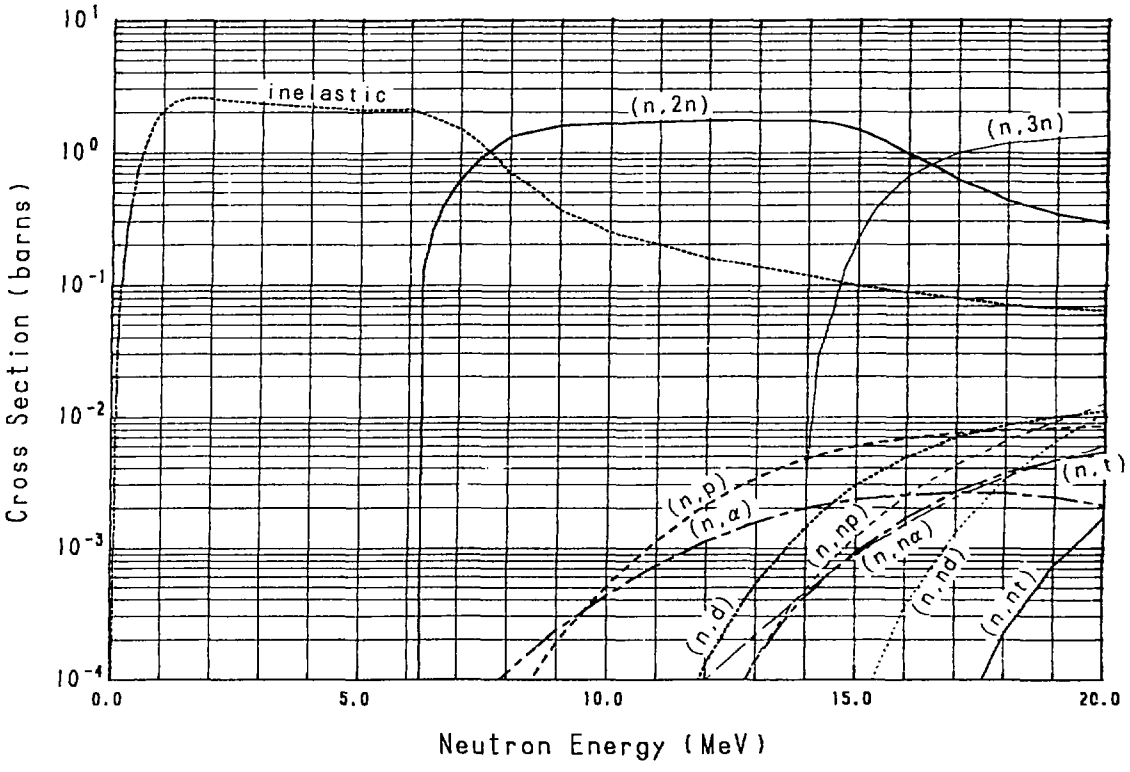

148Pm (6102)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

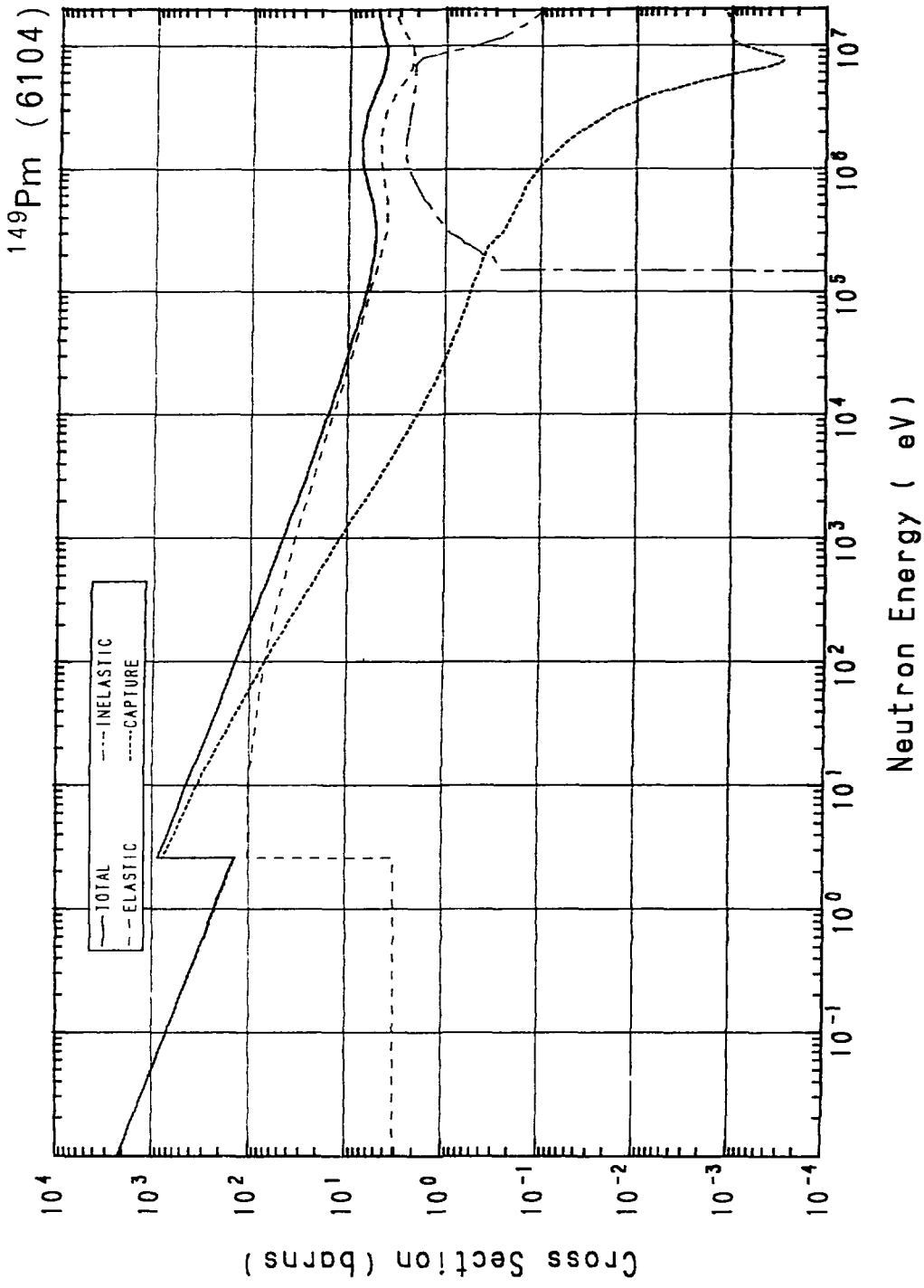

148Pm (6102)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

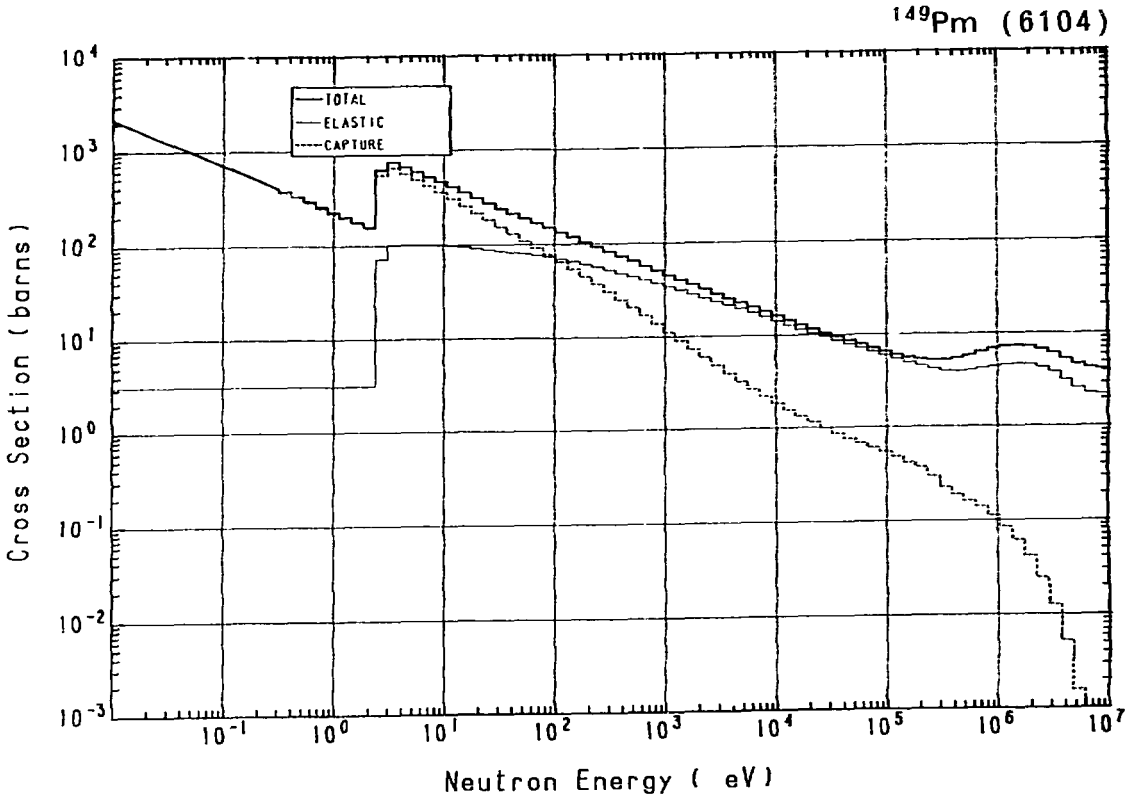

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,nα)
(n,d)
(n,t)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

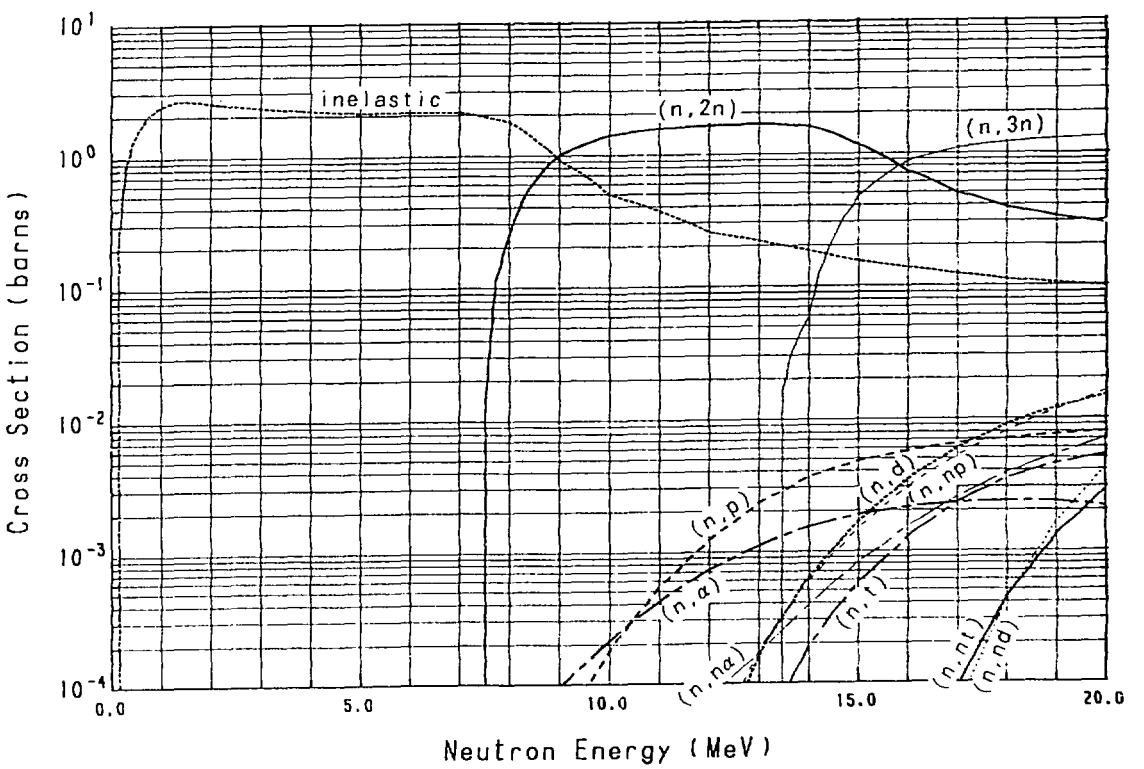

148mPm (6103)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

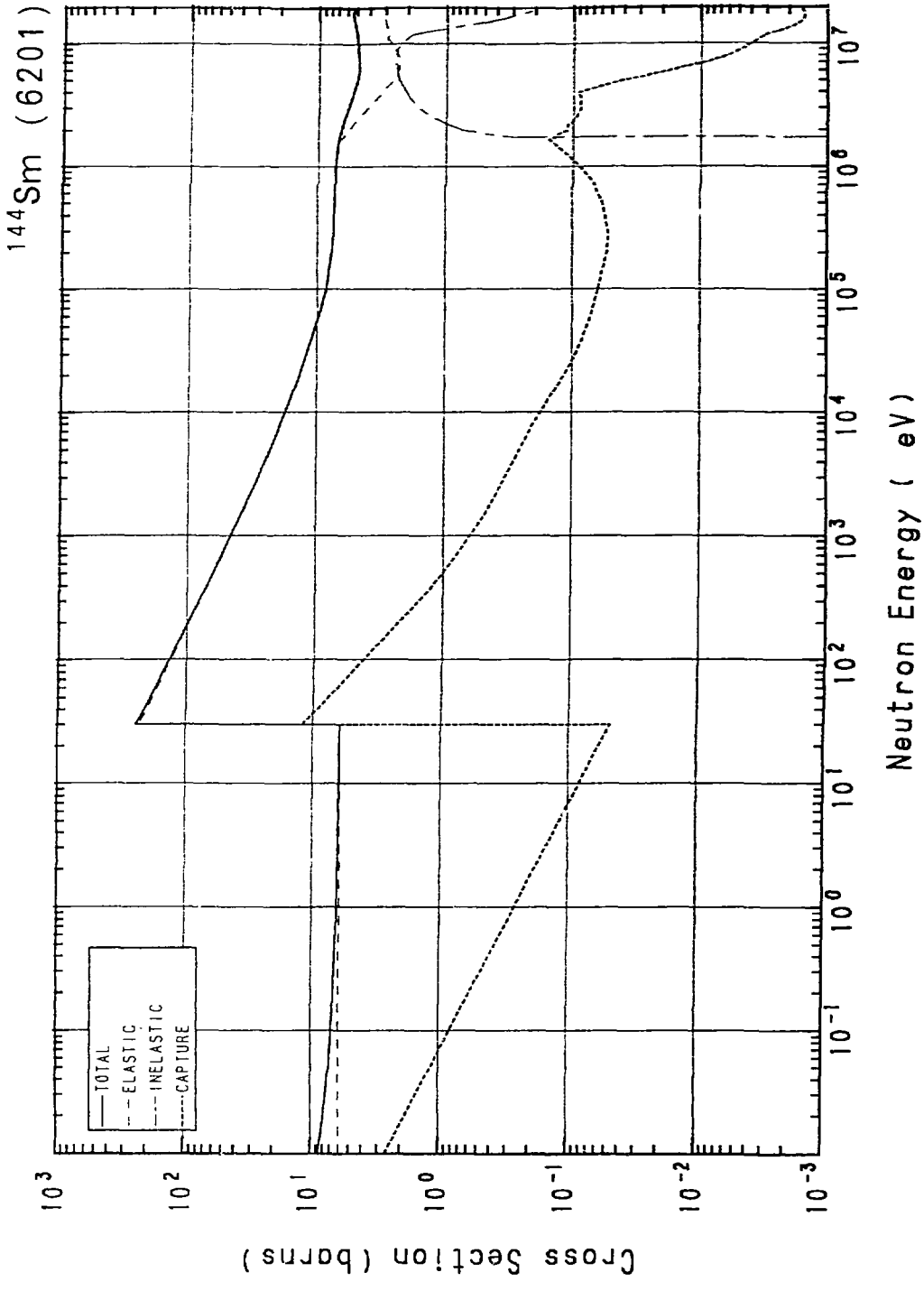

148mPm (6103)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

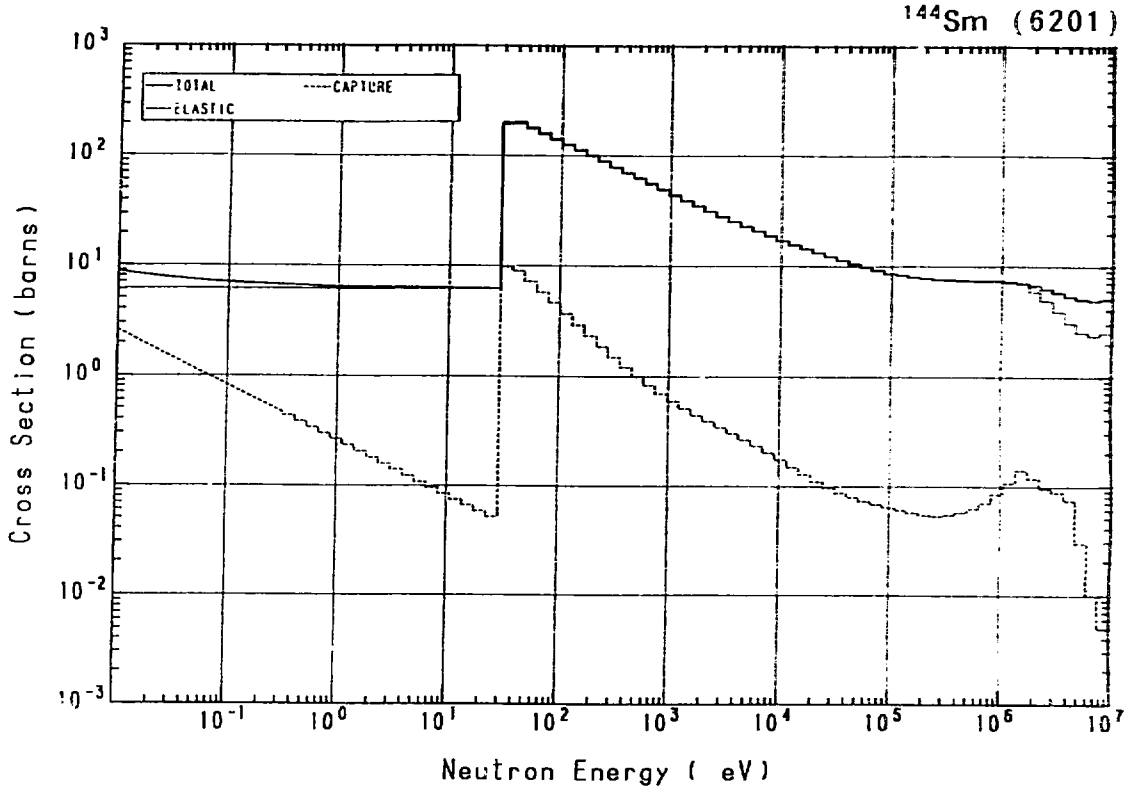

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,nα)
(n,nd)
(n,nt)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

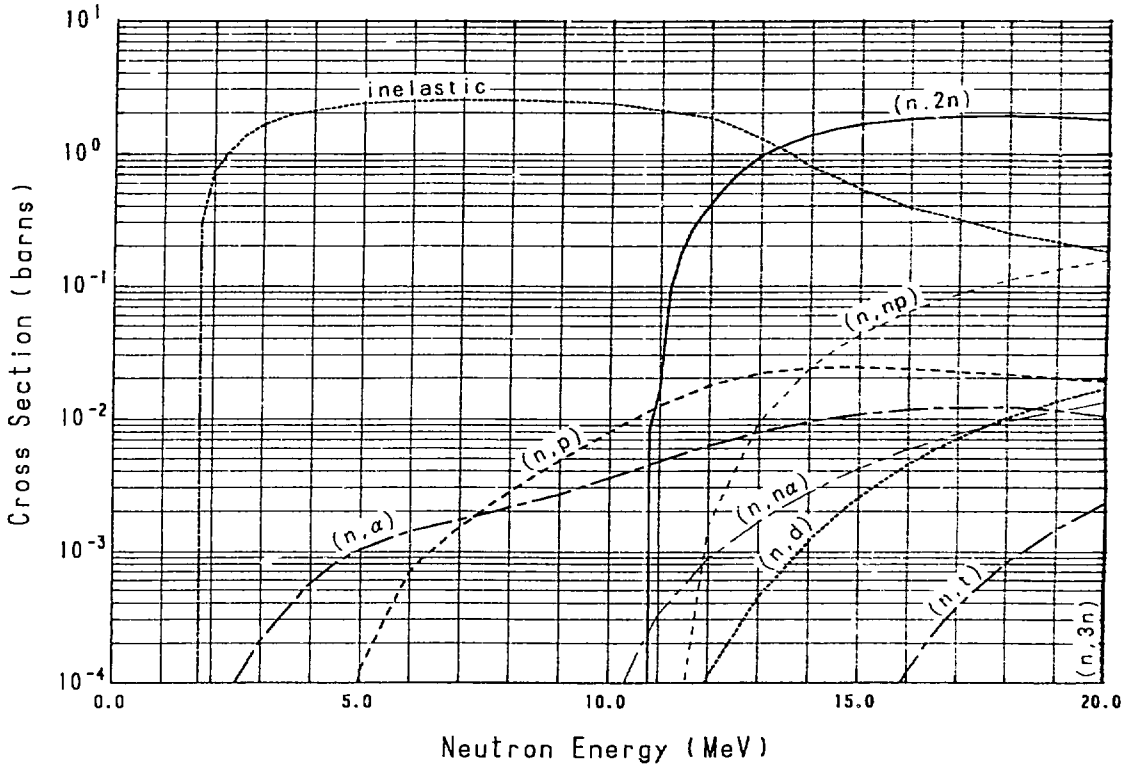

149Pm (6104)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

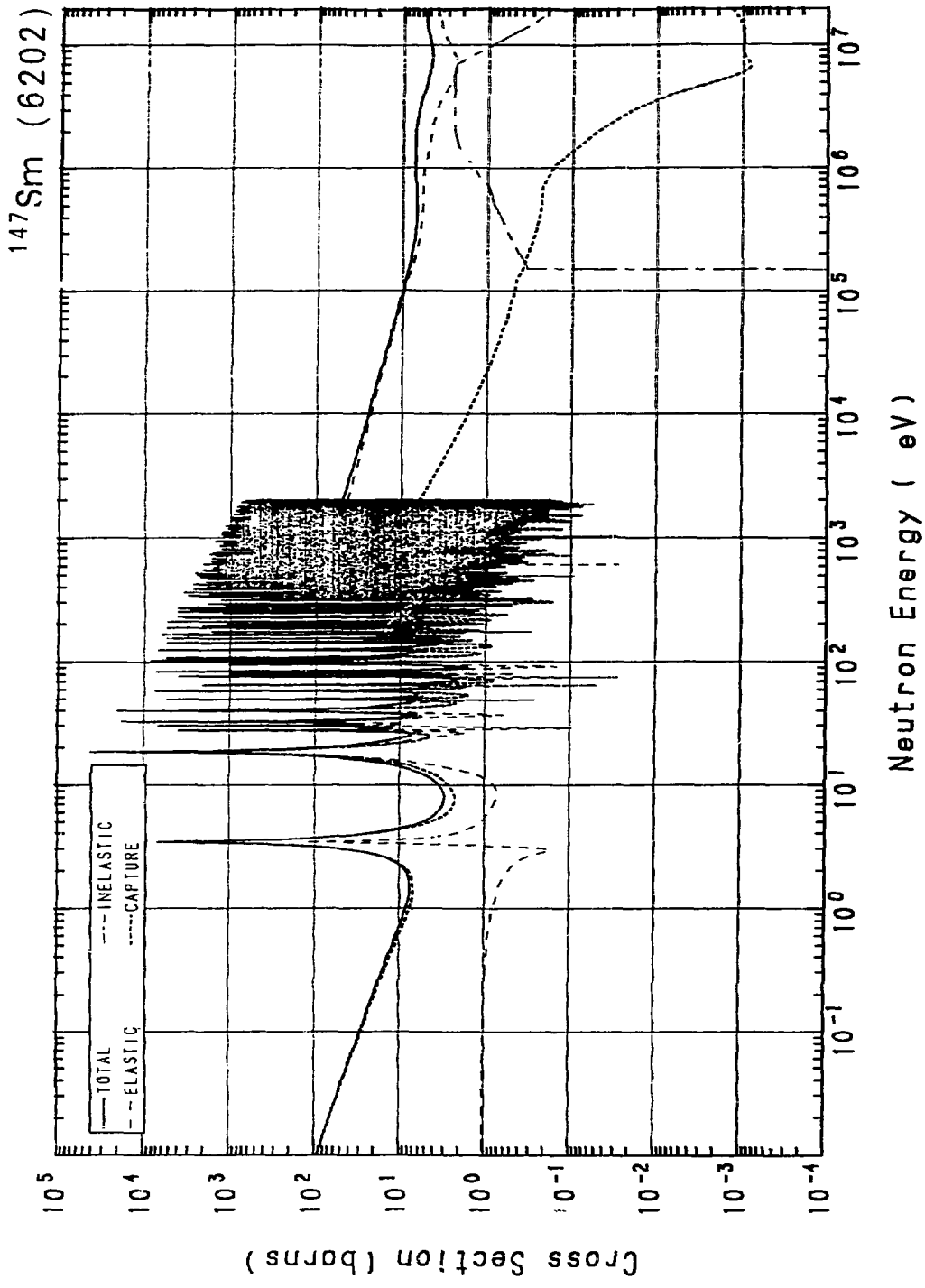

149Pm (6104)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

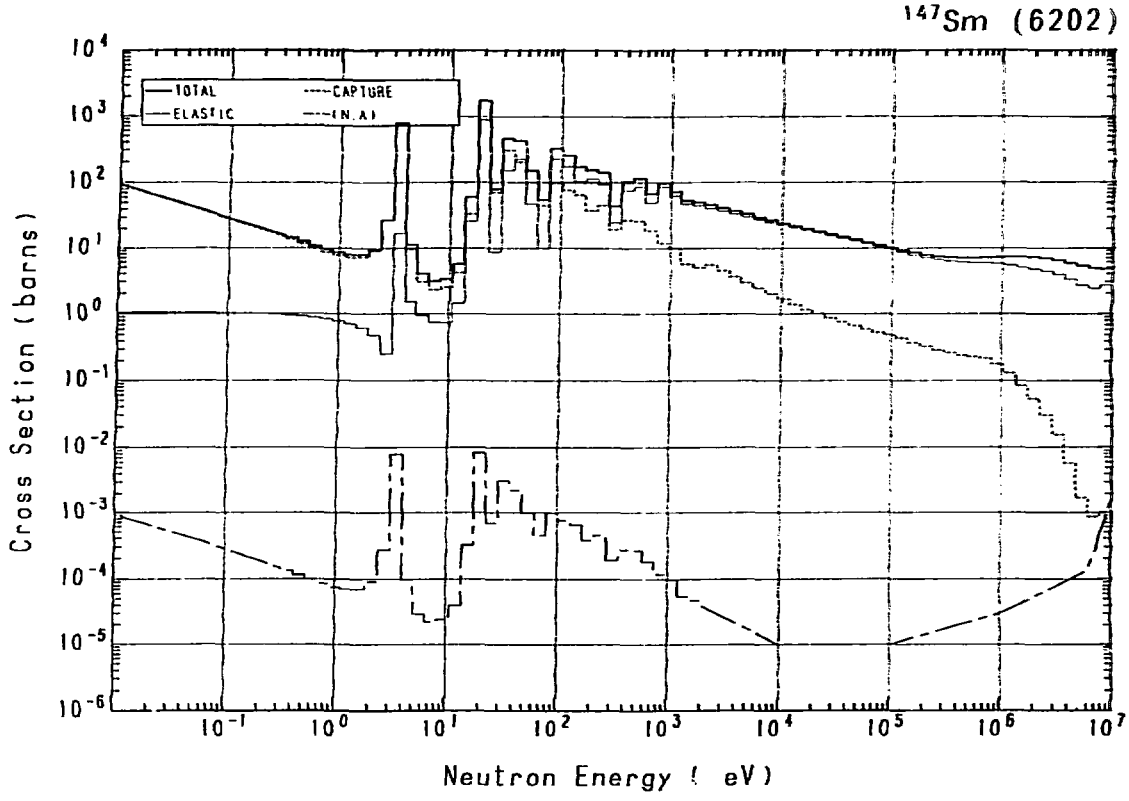

inelastic
(n,2n)
(n,3n)
(n,p)
(n,d)
(n,np)
(n,α)
(n,t)
(n,nα)
(n,nt)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

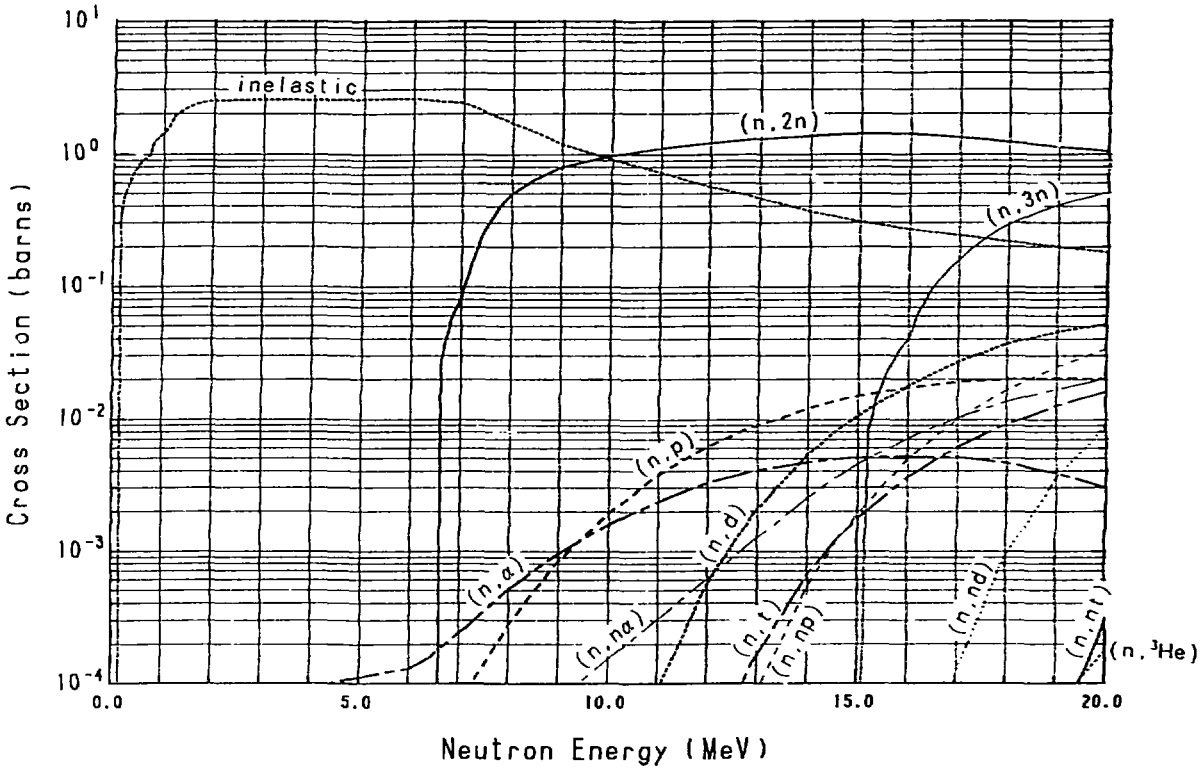

144Sm (6201)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

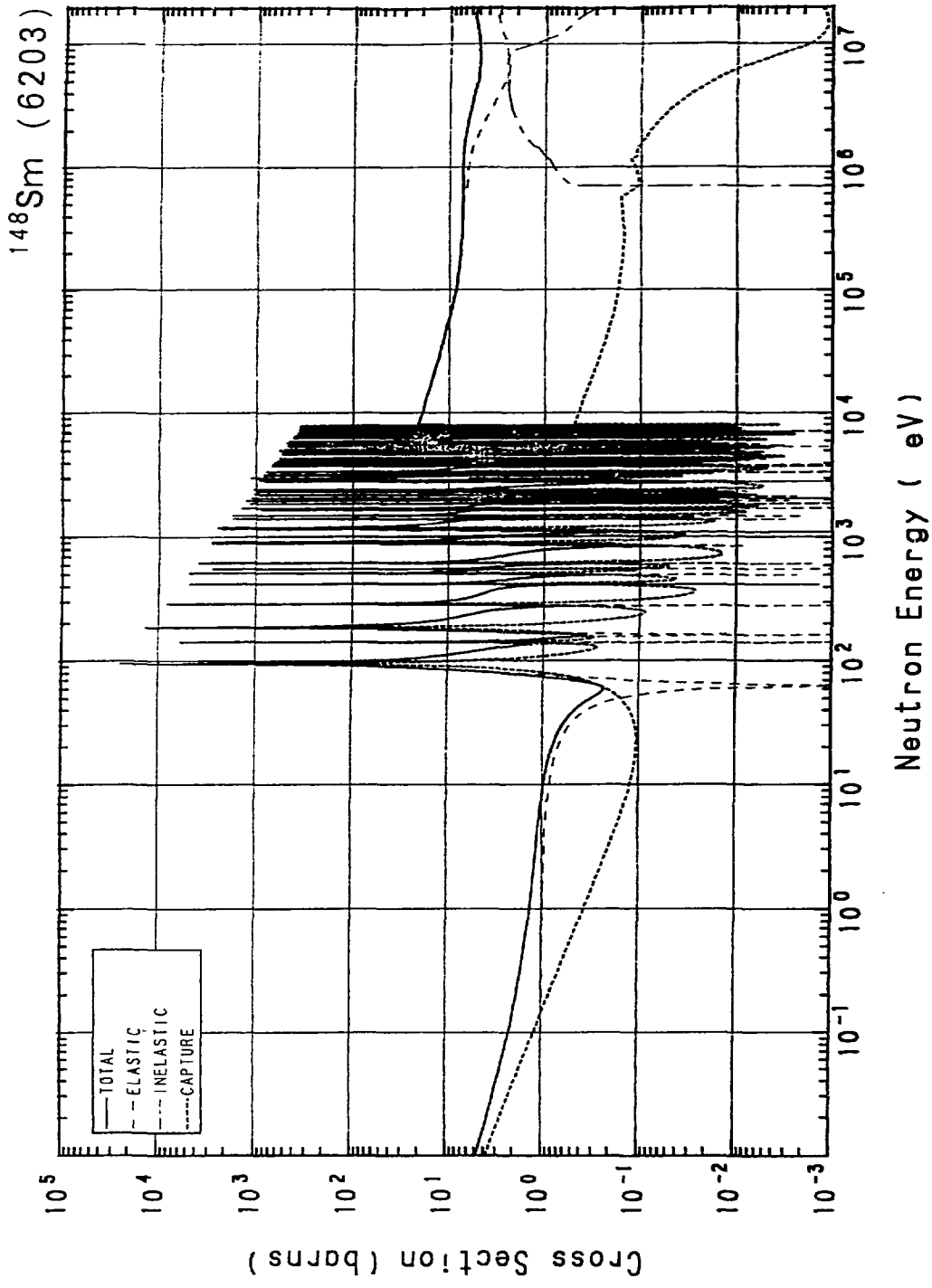

144Sm (6201)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

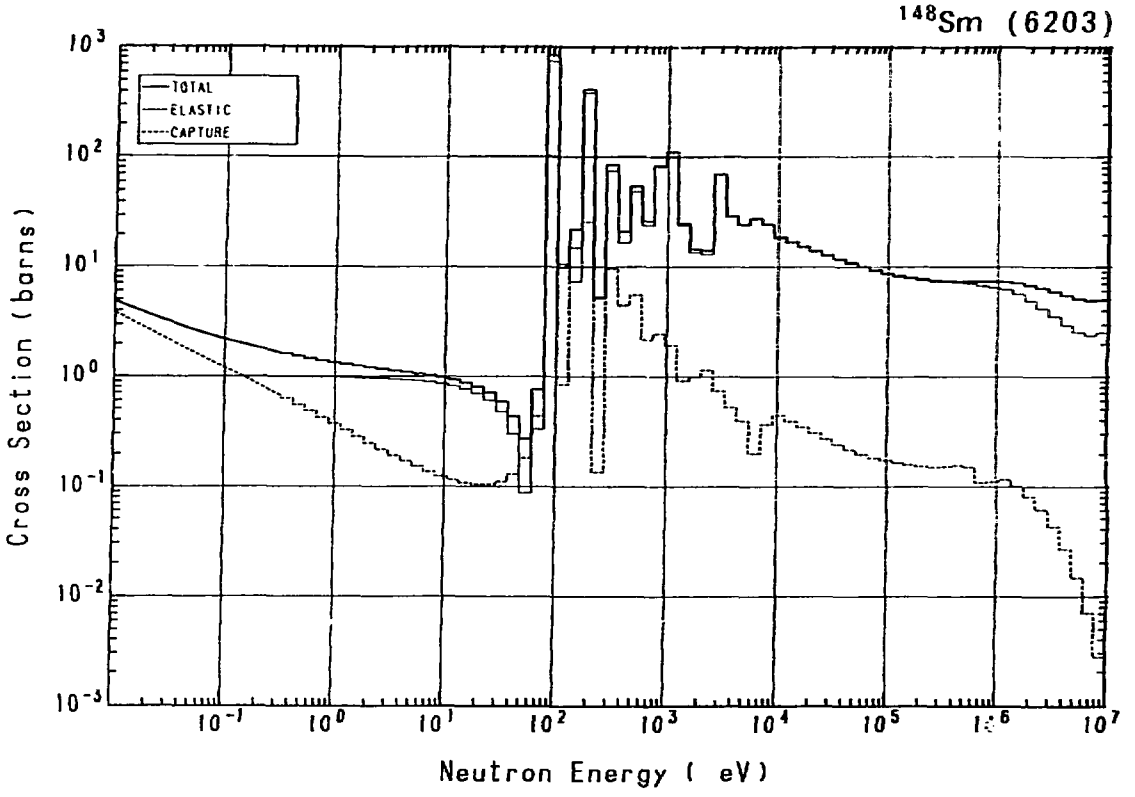

inelastic
(n,2n)
(n,np)
(n,p)
(n,α)
(n,nα)
(n,d)
(n,t)
(n,3n)
Cross Section (barns)
Neutron Energy (MeV)

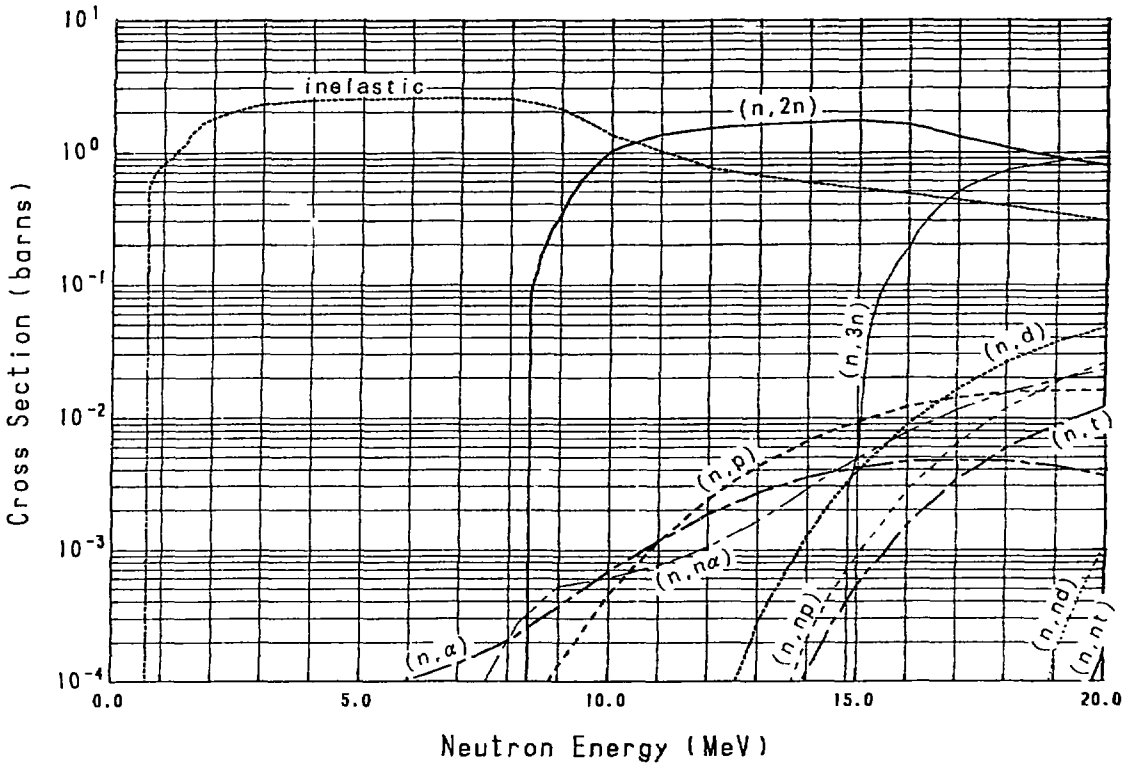

147Sm (6202)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

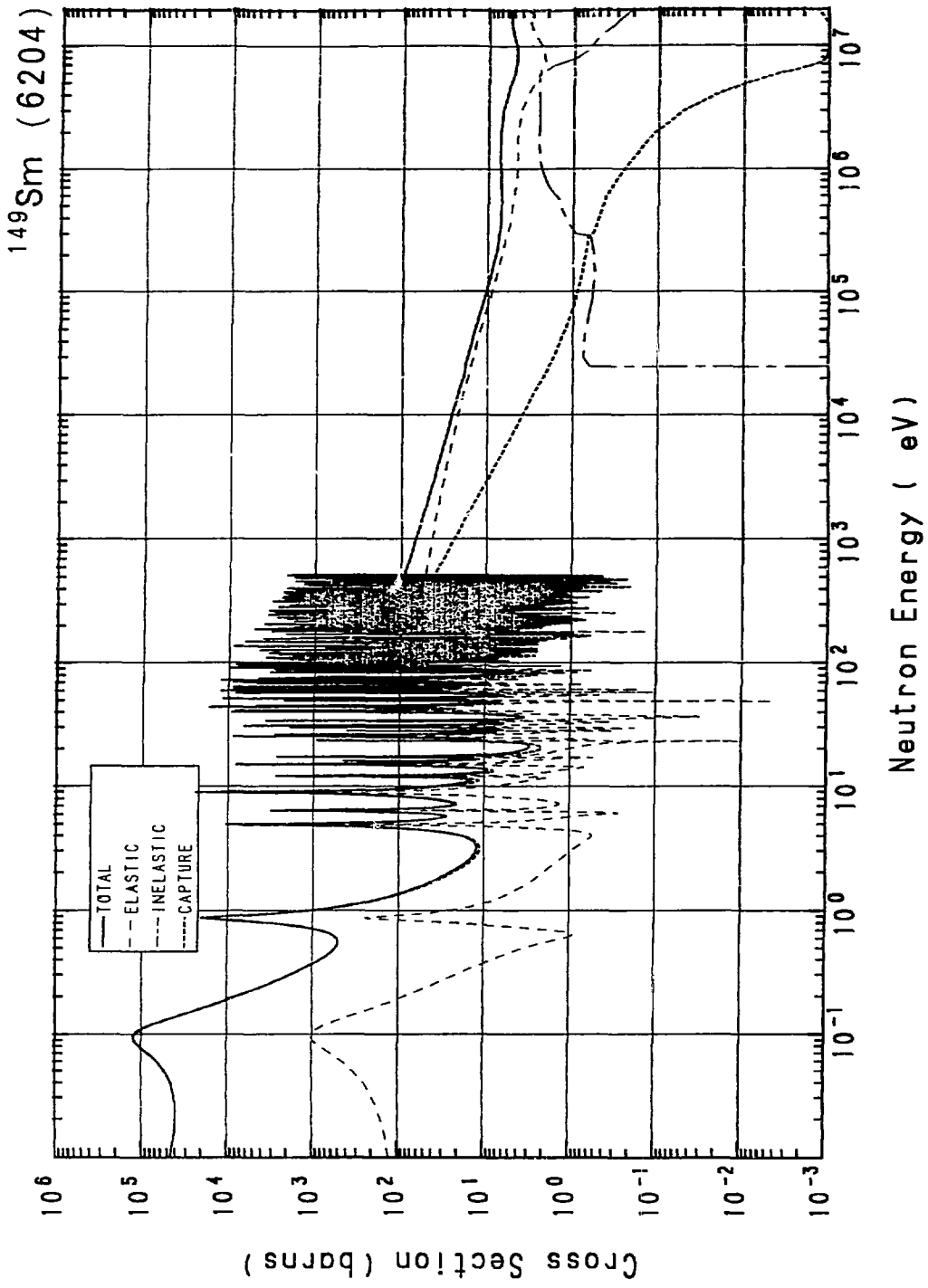

147Sm (6202)
TOTAL
ELASTIC
CAPTURE
(N,A)
Cross Section (barns)
Neutron Energy (eV)

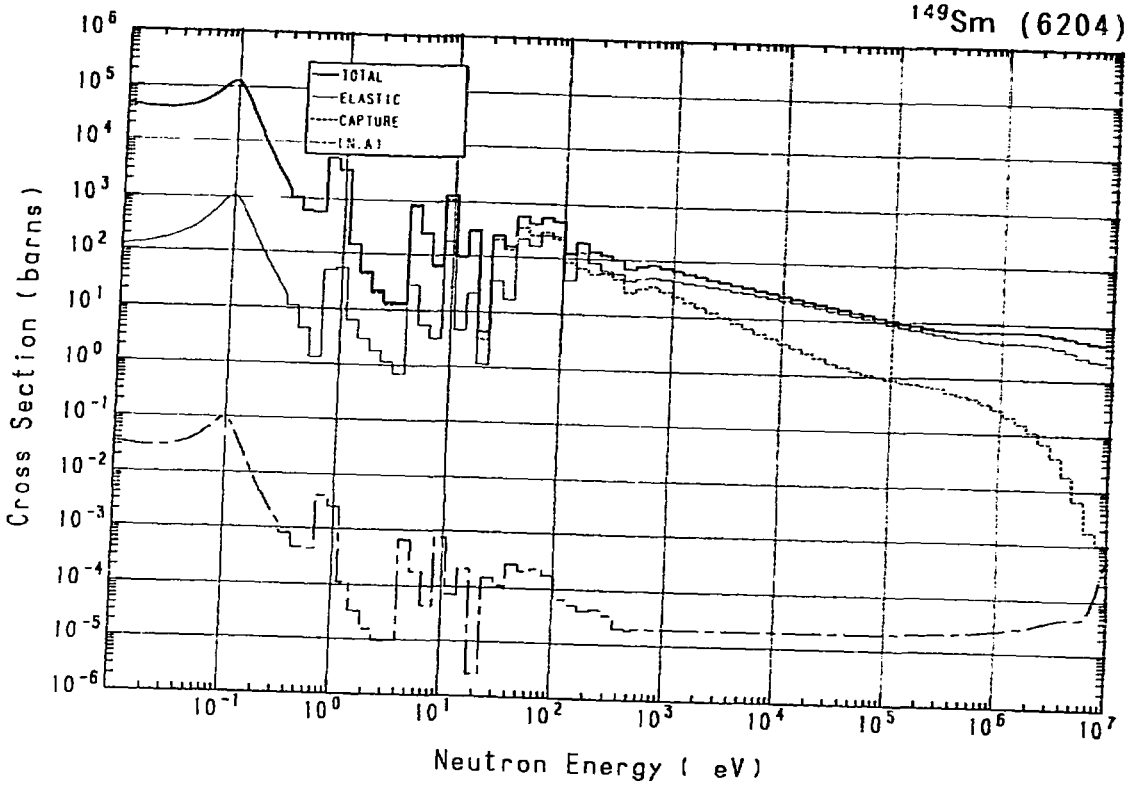

inelastic
(n,2n)
(n,3n)
(n,p)
(n,d)
(n,α)
(n,nα)
(n,t)
(n,np)
(n,nd)
(n,nt)
(n,3He)
Cross Section (barns)
Neutron Energy (MeV)

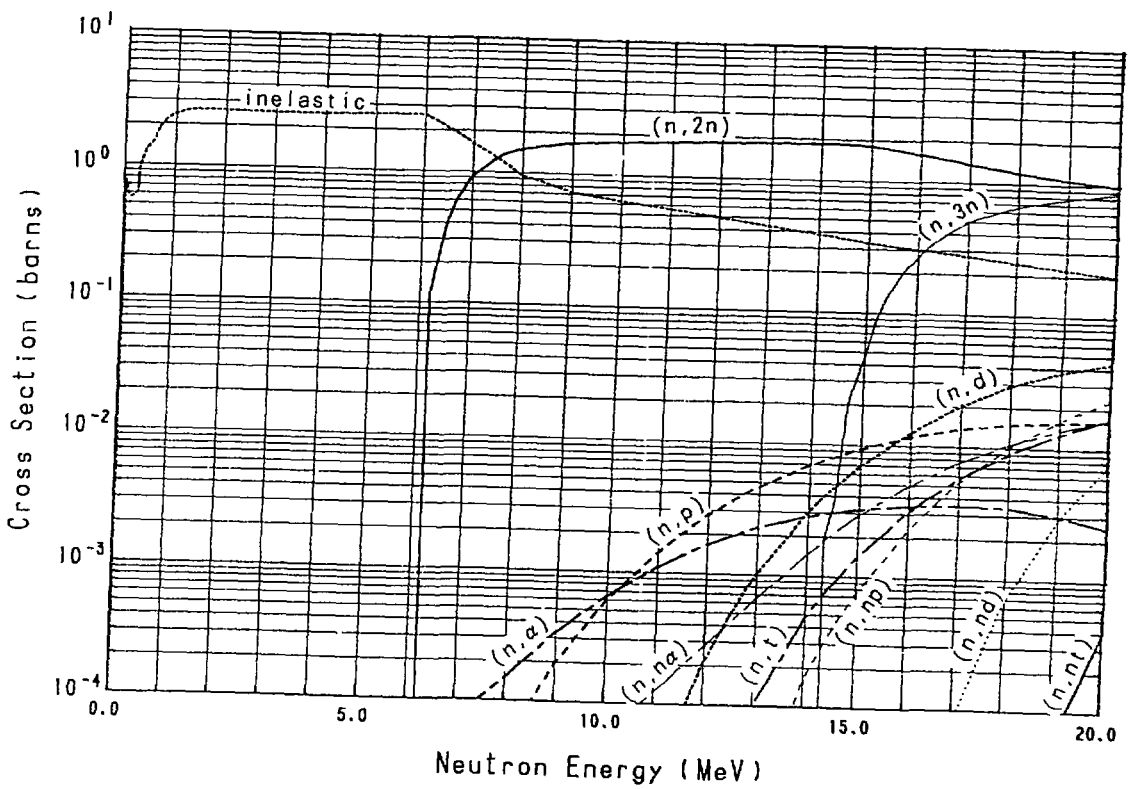

148Sm (6203)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

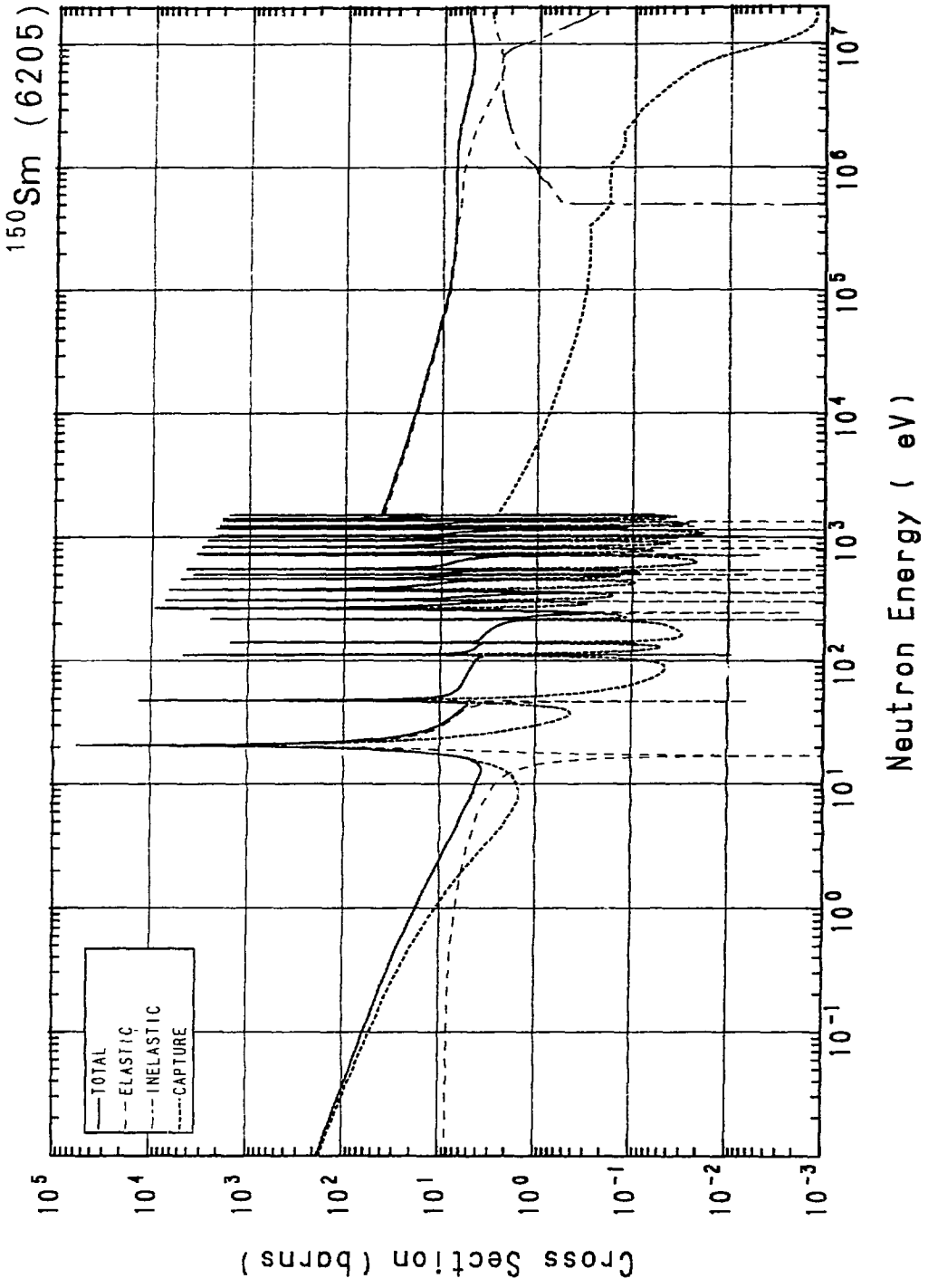

^{148}Sm (6203)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

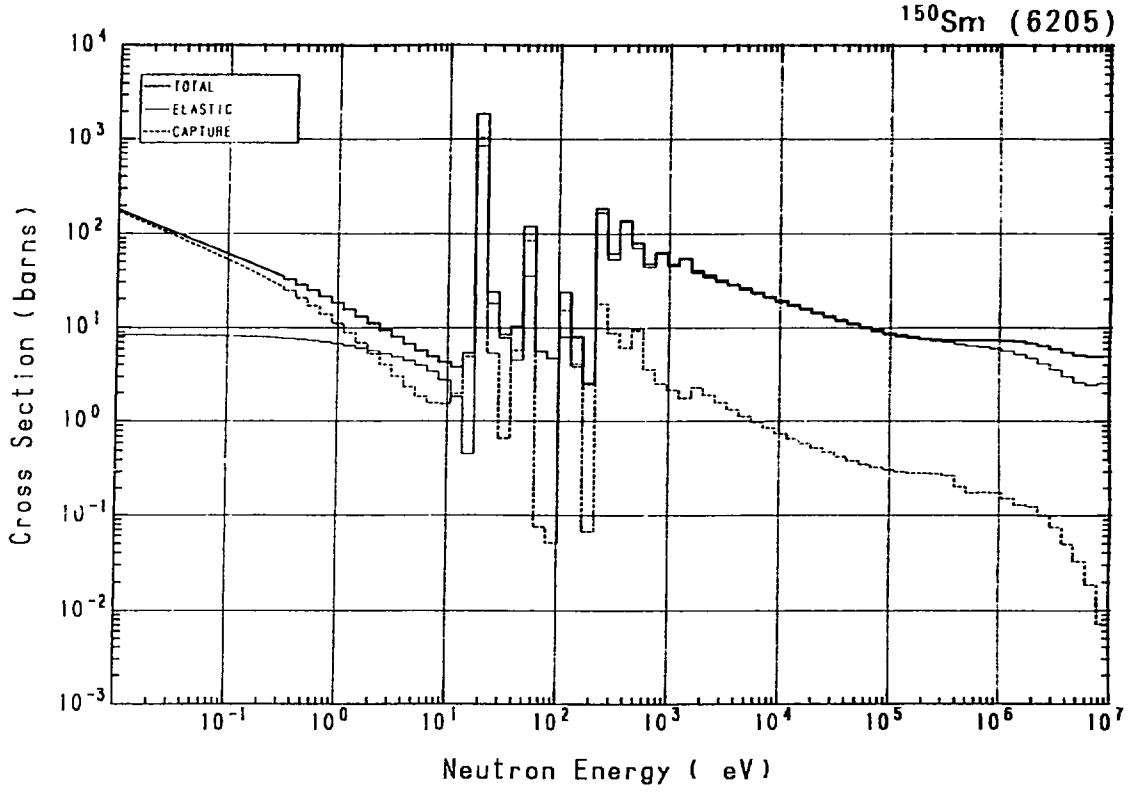

inelastic
(n,2n)
(n,3n)
(n,d)
(n,t)
(n,p)
(n,nα)
(n,α)
(n,np)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

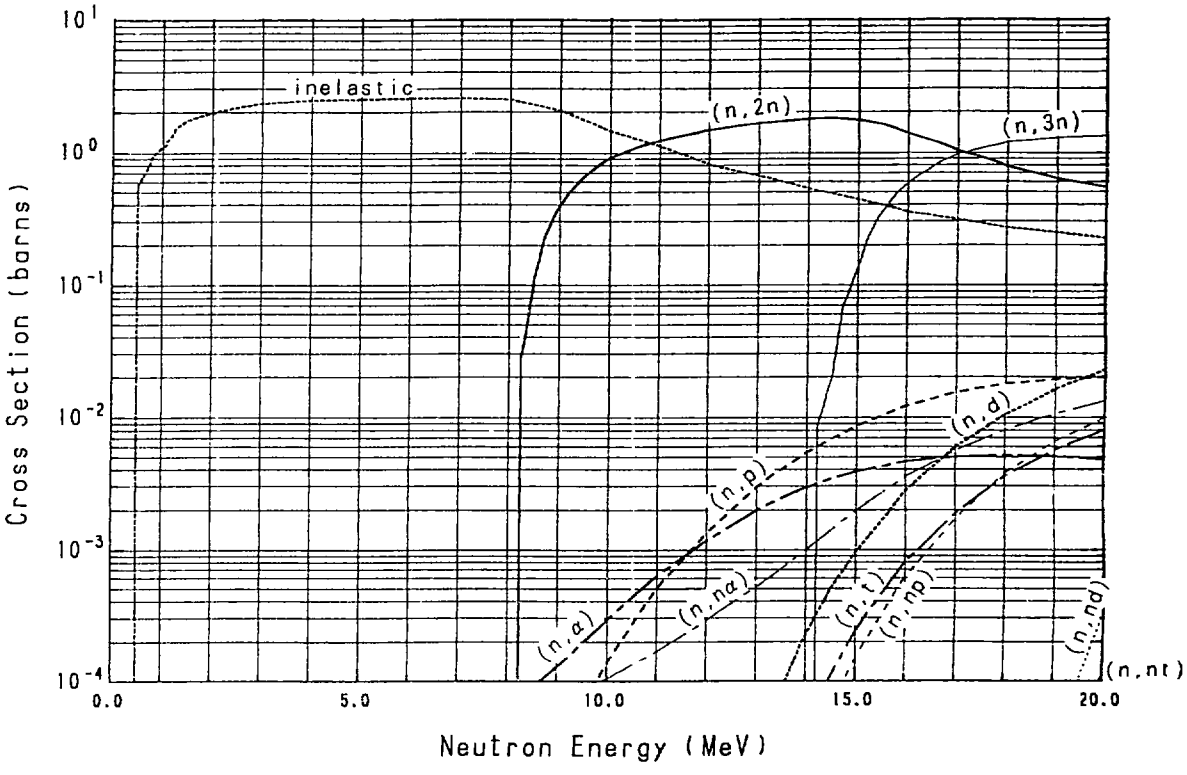

149Sm (6204)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

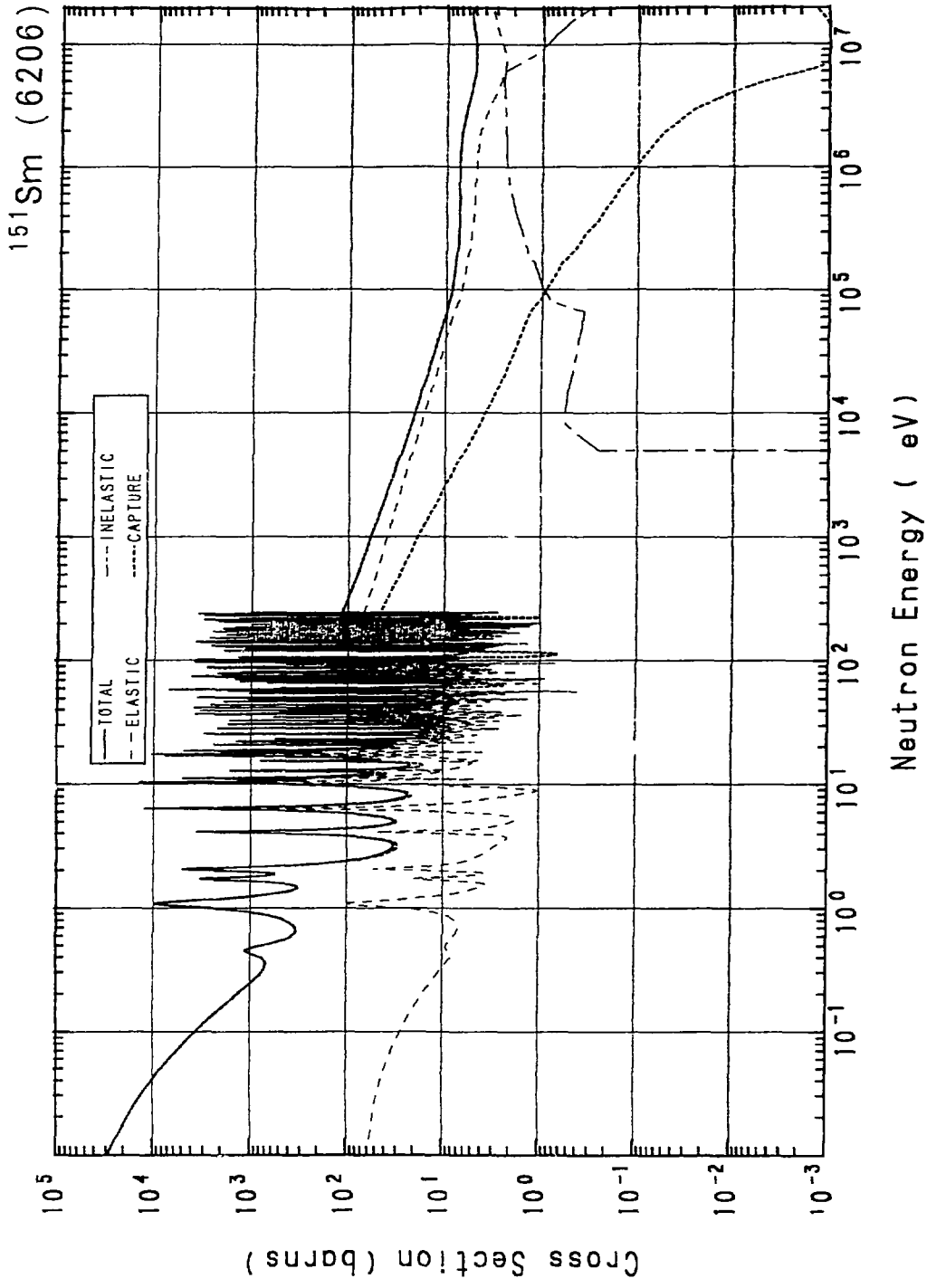

149Sm (6204)
TOTAL
ELASTIC
CAPTURE
(N,A)
Cross Section (barns)
Neutron Energy (eV)

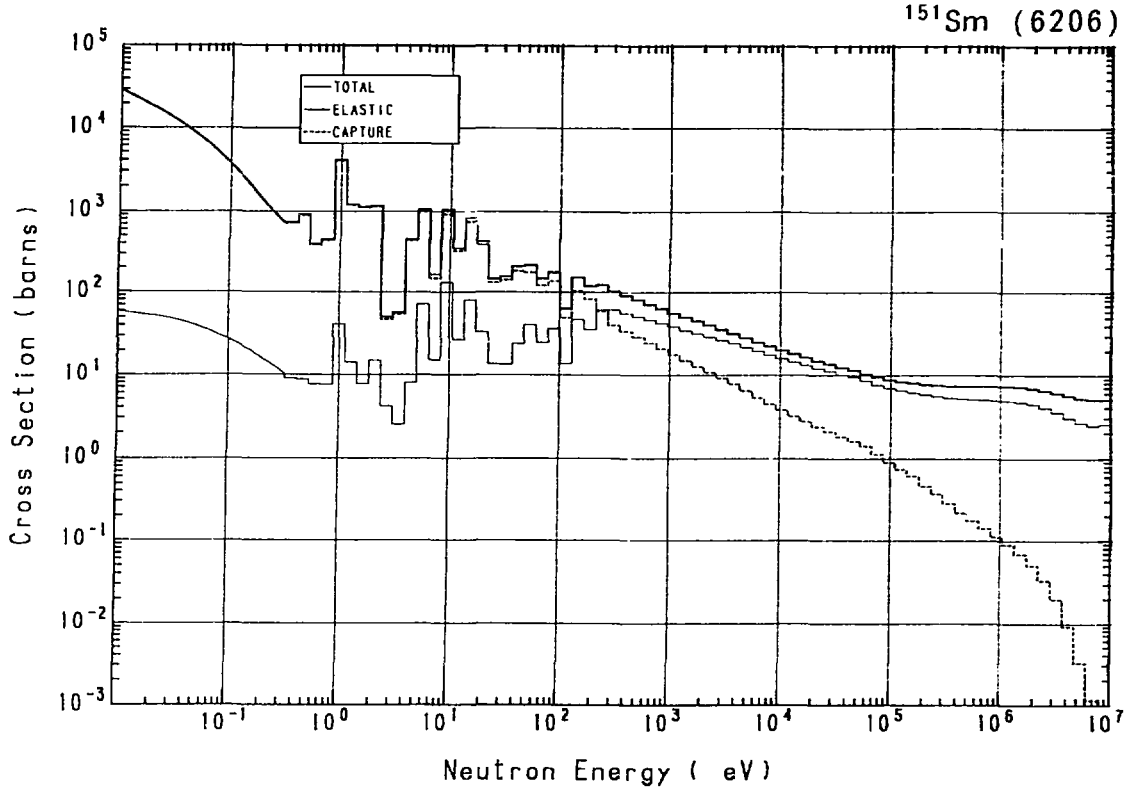

inelastic
(n,2n)
(n,3n)
(n,d)
(n,p)
(n,α)
(n,nα)
(n,t)
(n,np)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

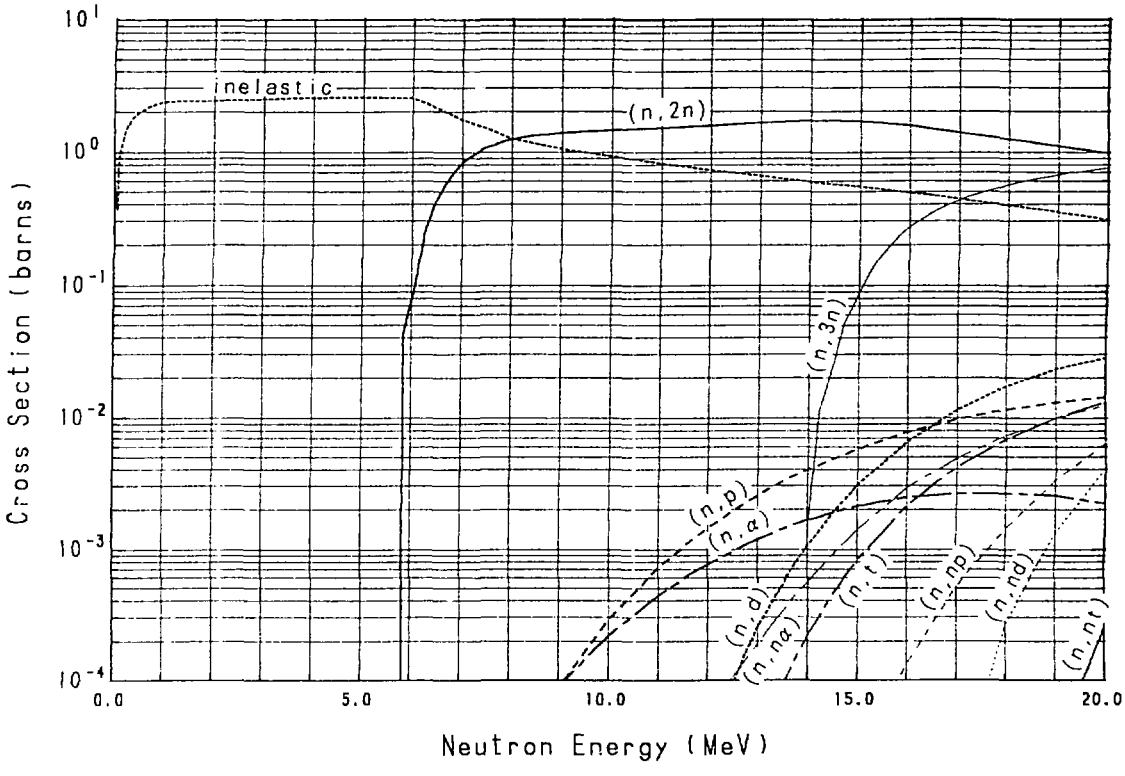

150Sm (6205)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

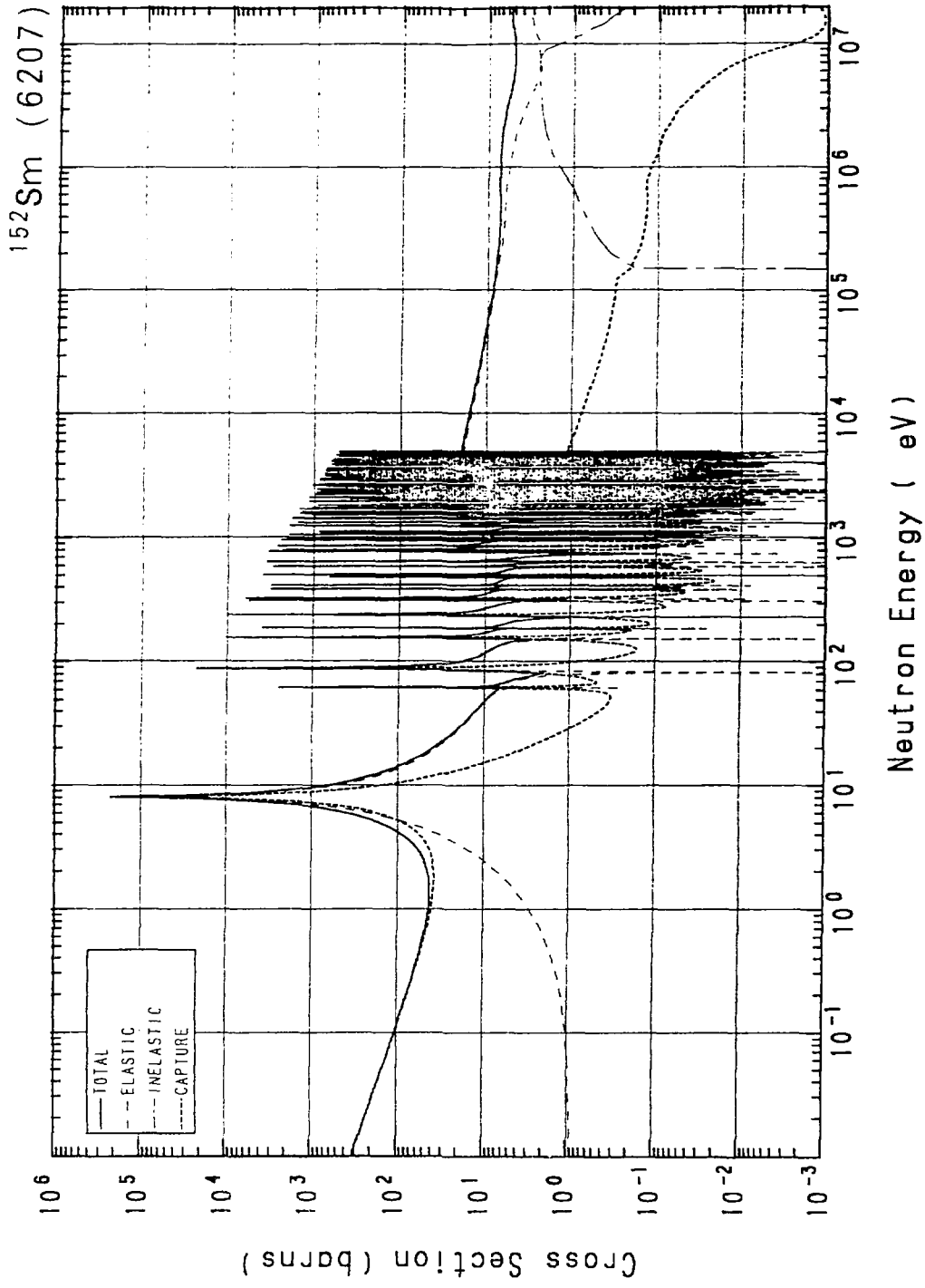

150Sm (6205)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

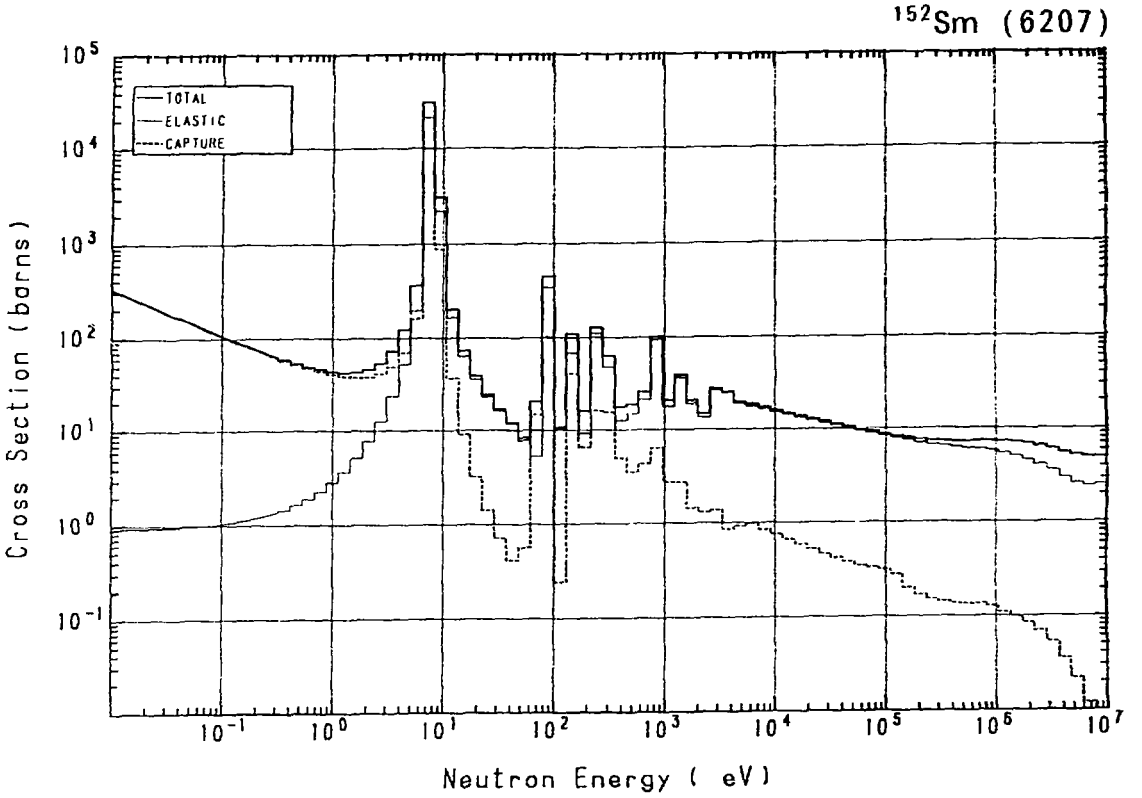

inelastic
(n,2n)
(n,3n)
(n,d)
(n,p)
(n,nα)
(n,α)
(n,t)
(n,np)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

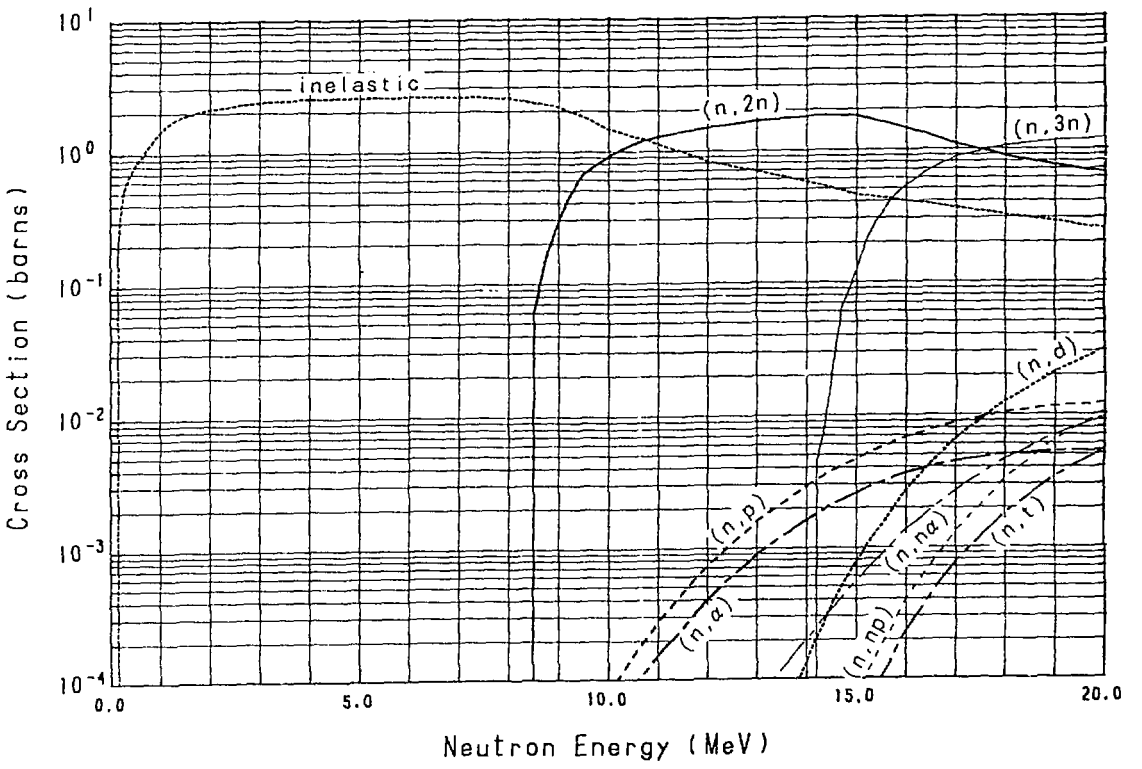

151Sm (6206)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

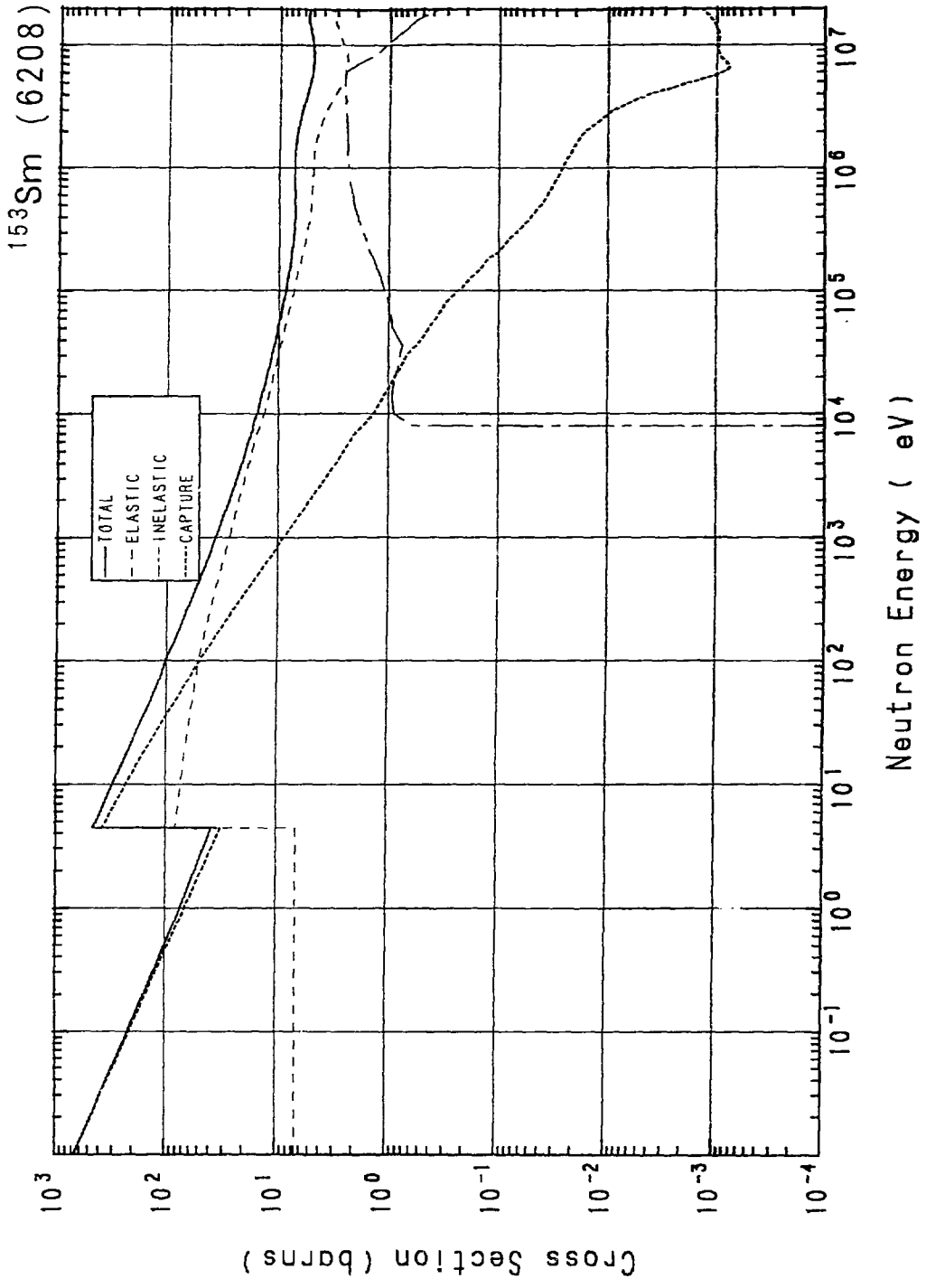

151Sm (6206)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

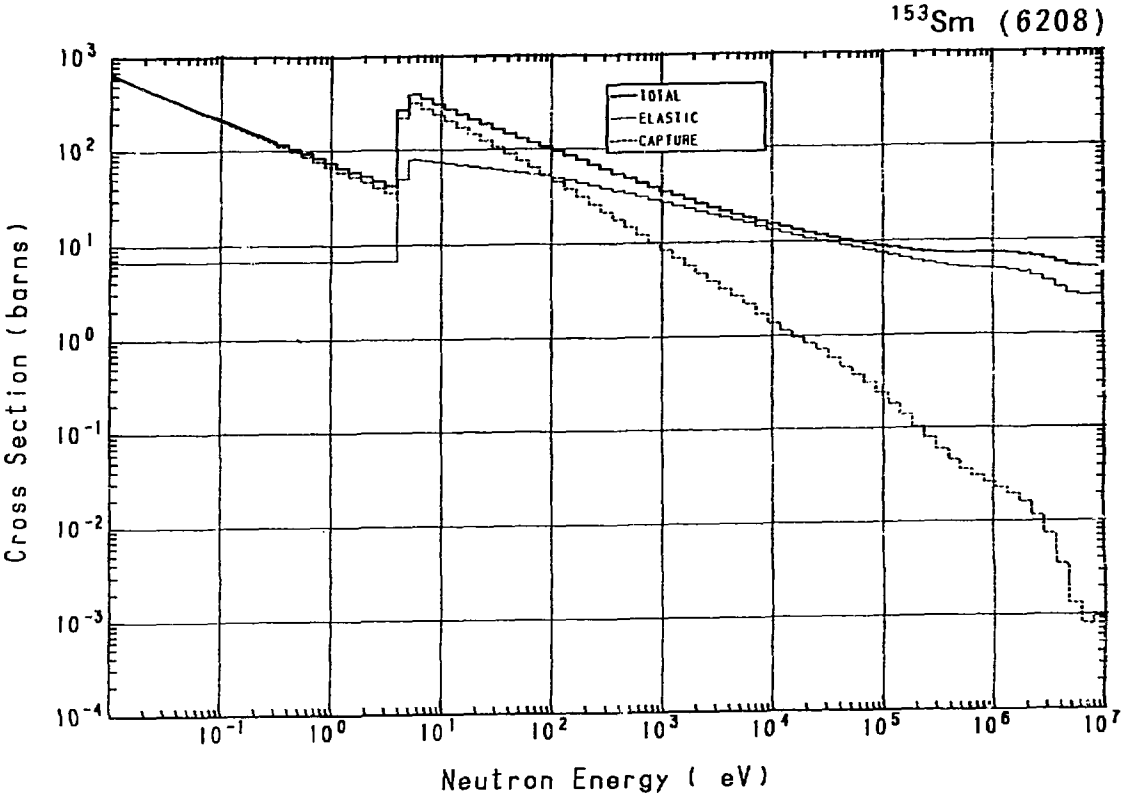

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,na)
(n,t)
(n,np)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

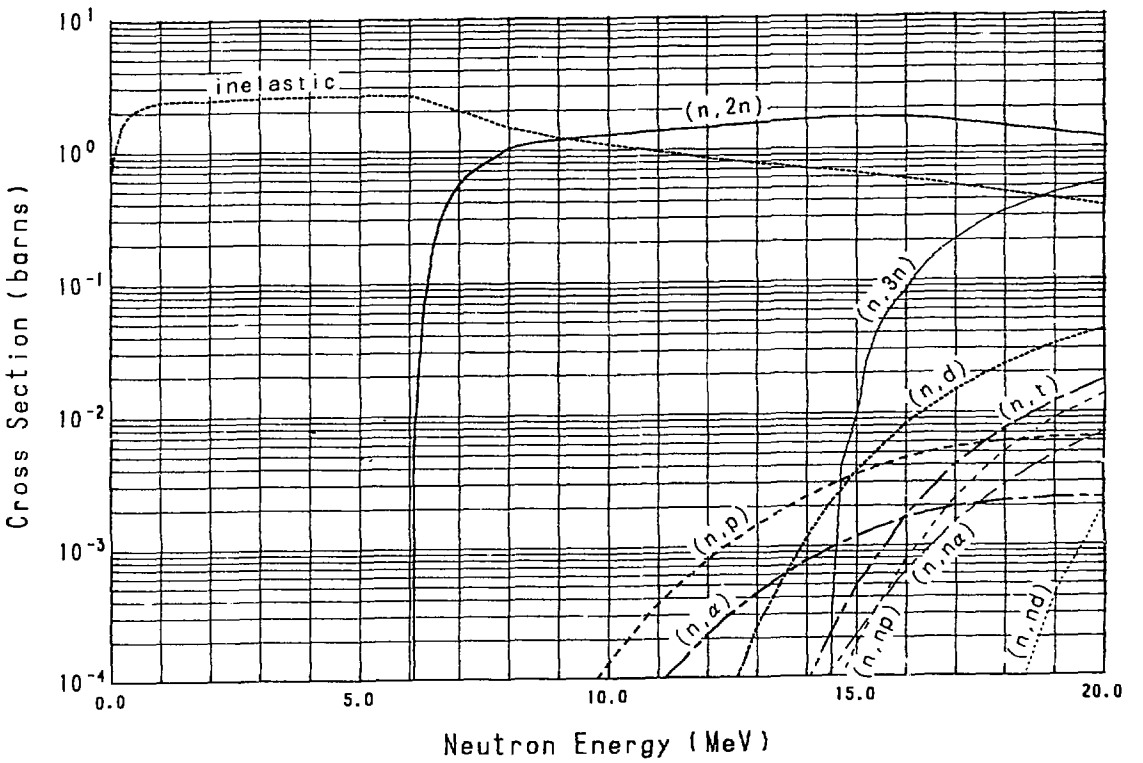

152Sm (6207)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

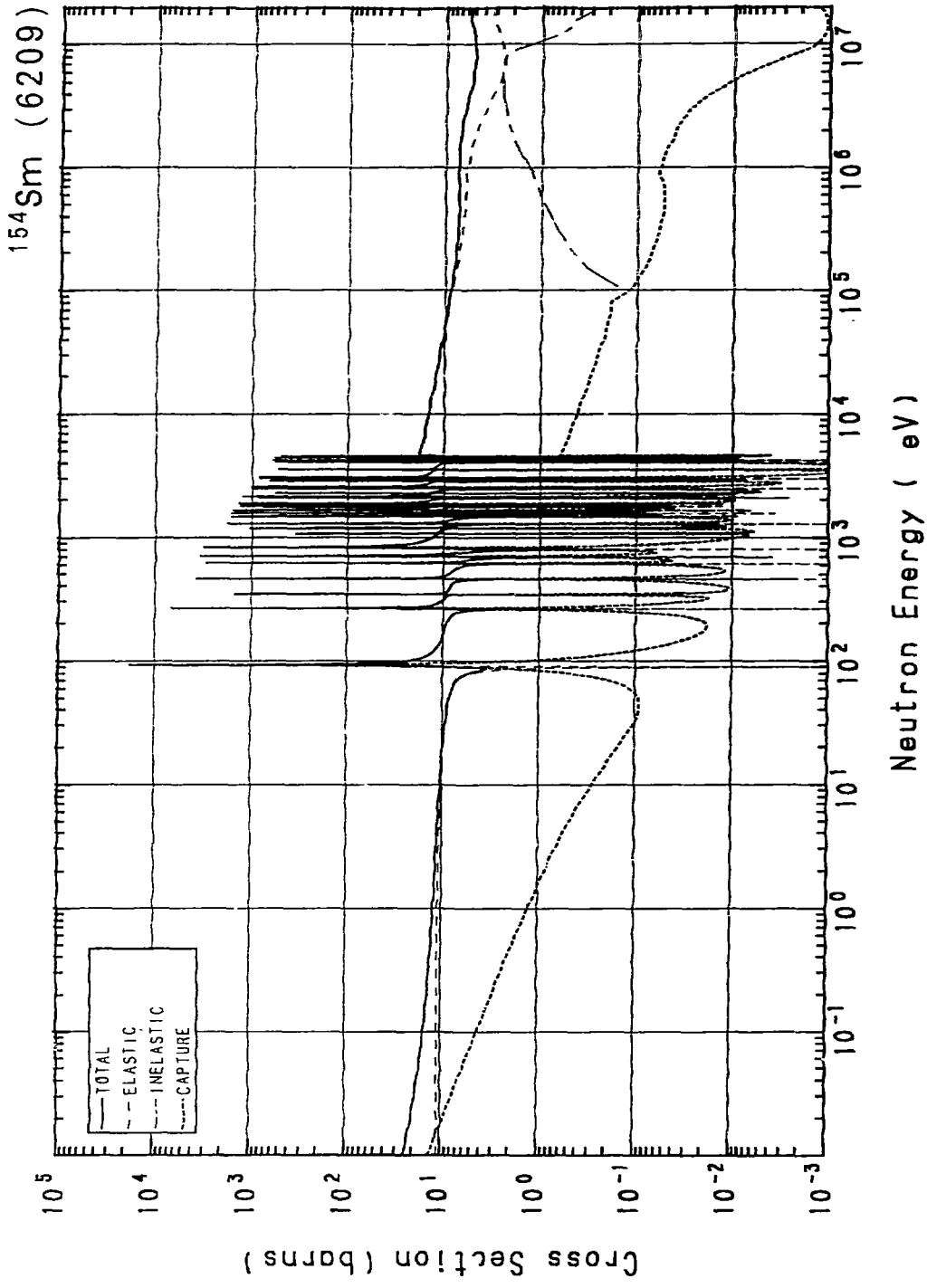

^{152}Sm (6207)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

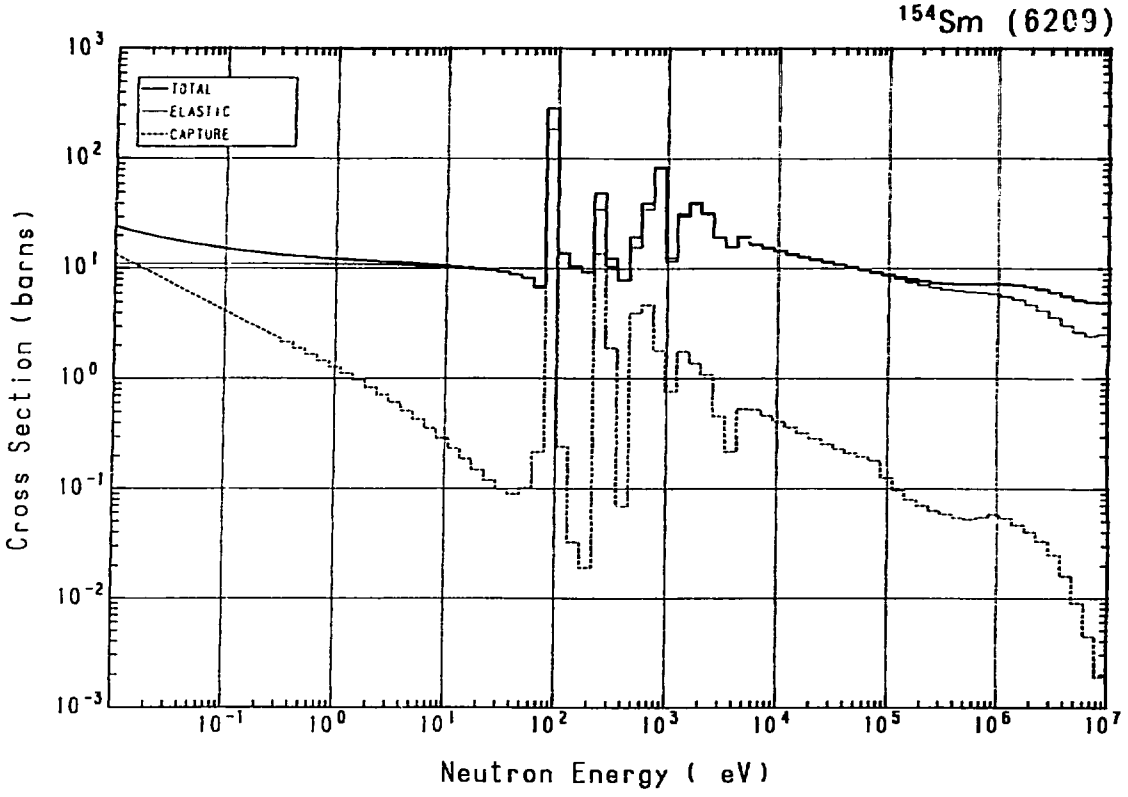

inelastic
(n,2n)
(n,3n)
(n,d)
(n,p)
(n,α)
(n,nα)
(n,t)
(n,np)
Cross Section (barns)
Neutron Energy (MeV)

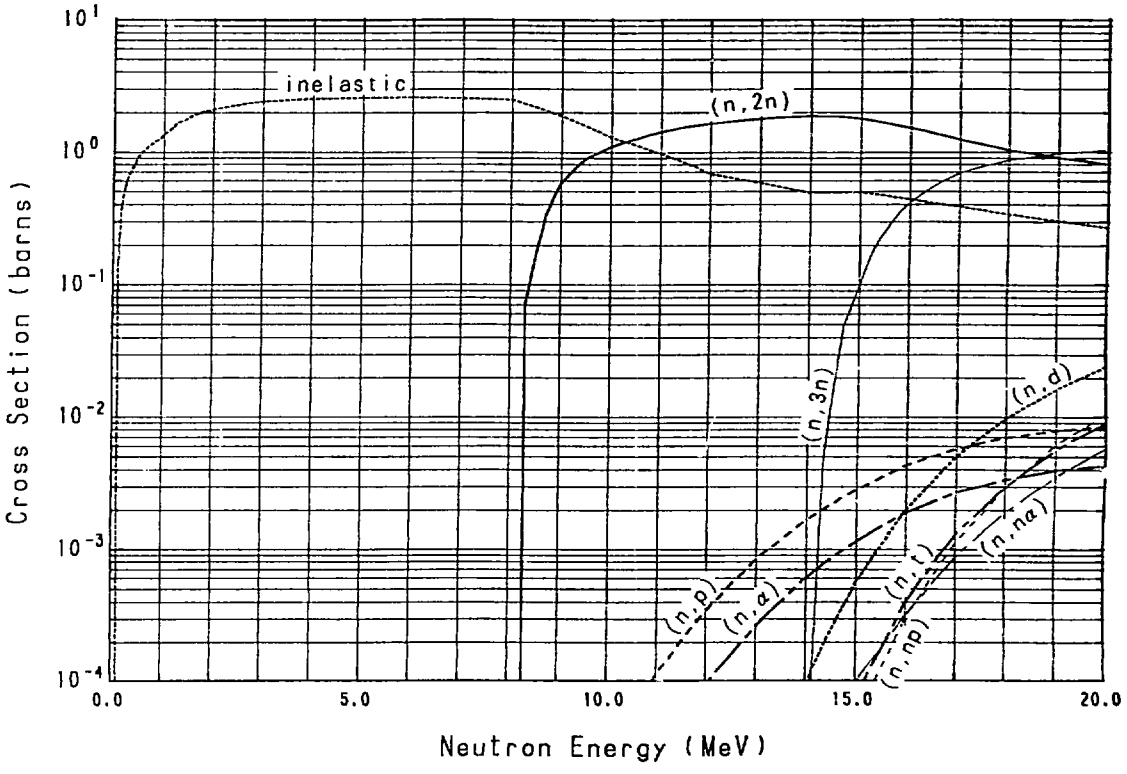

153Sm (6208)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Neutron Energy (eV)
Cross Section (barns)
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4

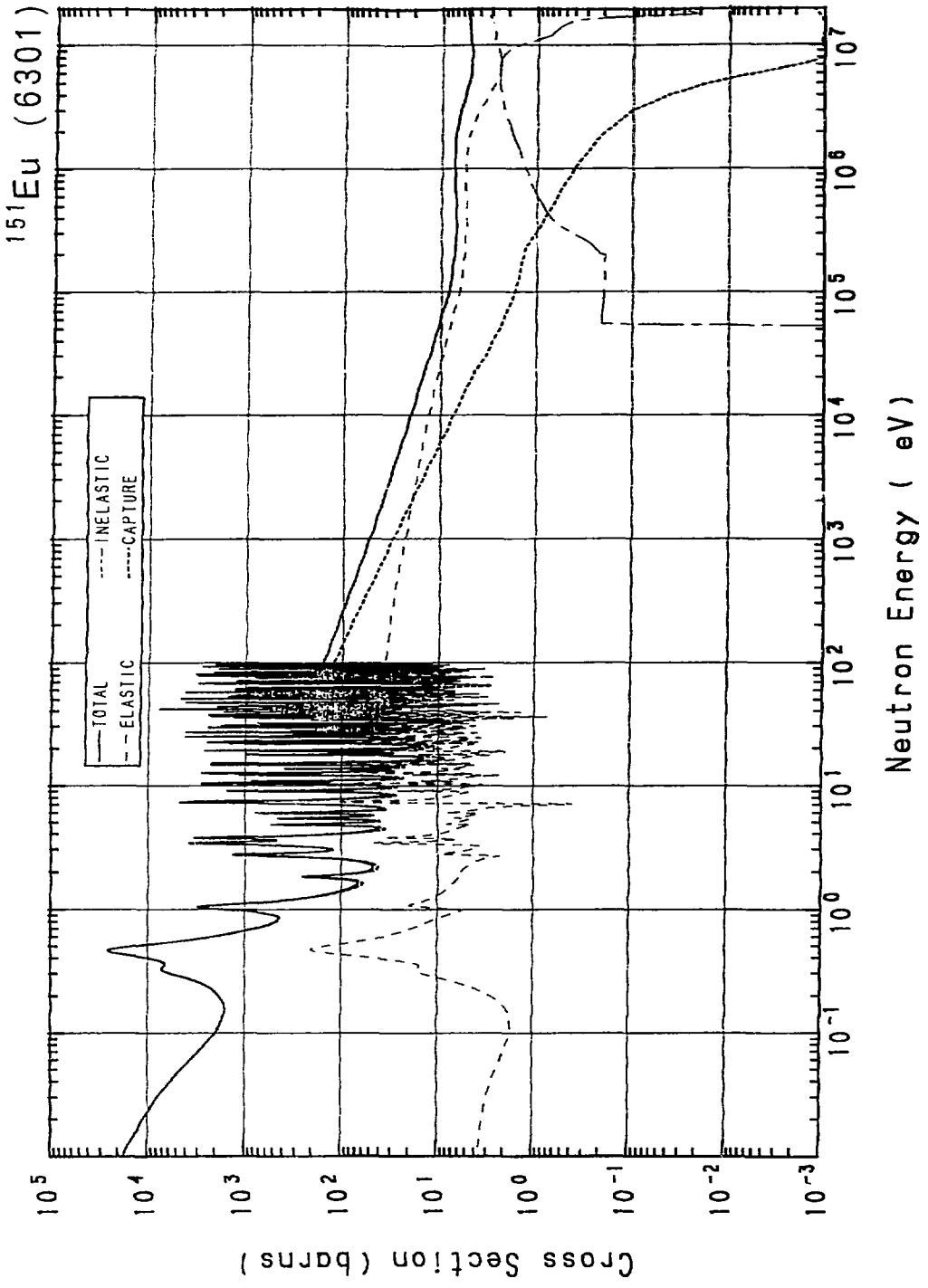

153Sm (6208)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

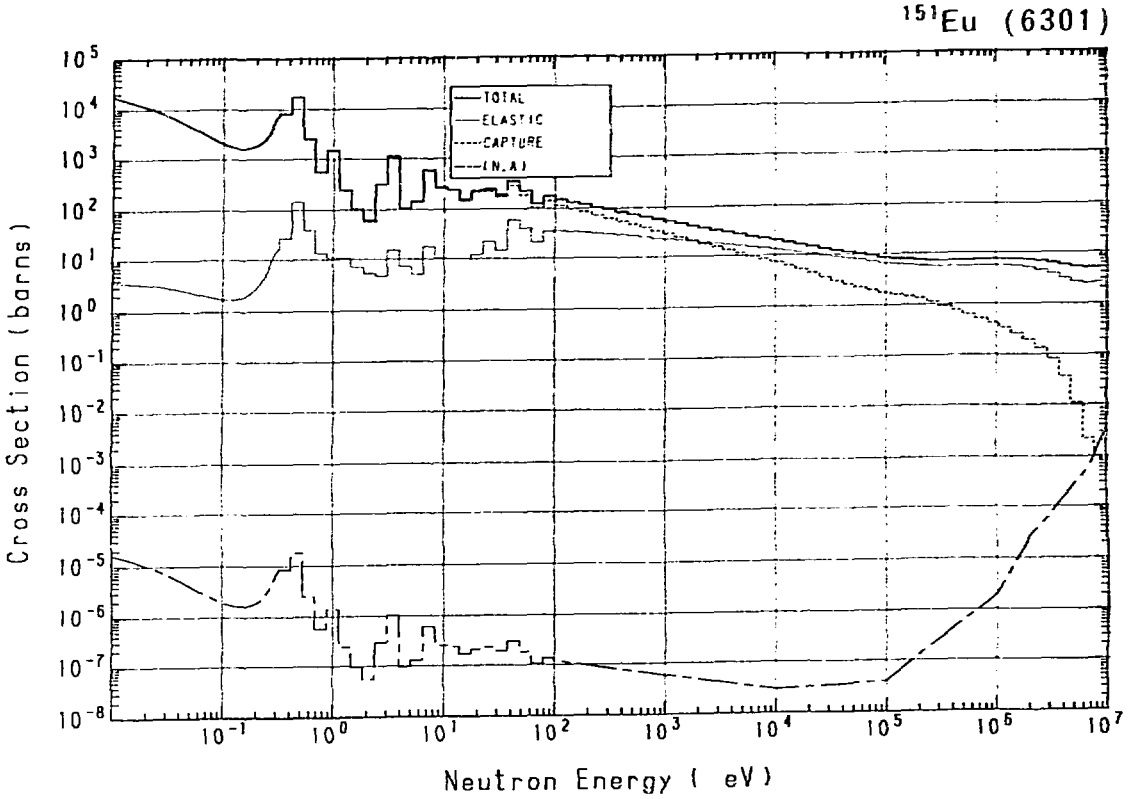

inelastic
(n,2n)
(n,3n)
(n,d)
(n,t)
(n,p)
(n,α)
(n,nα)
(n,np)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

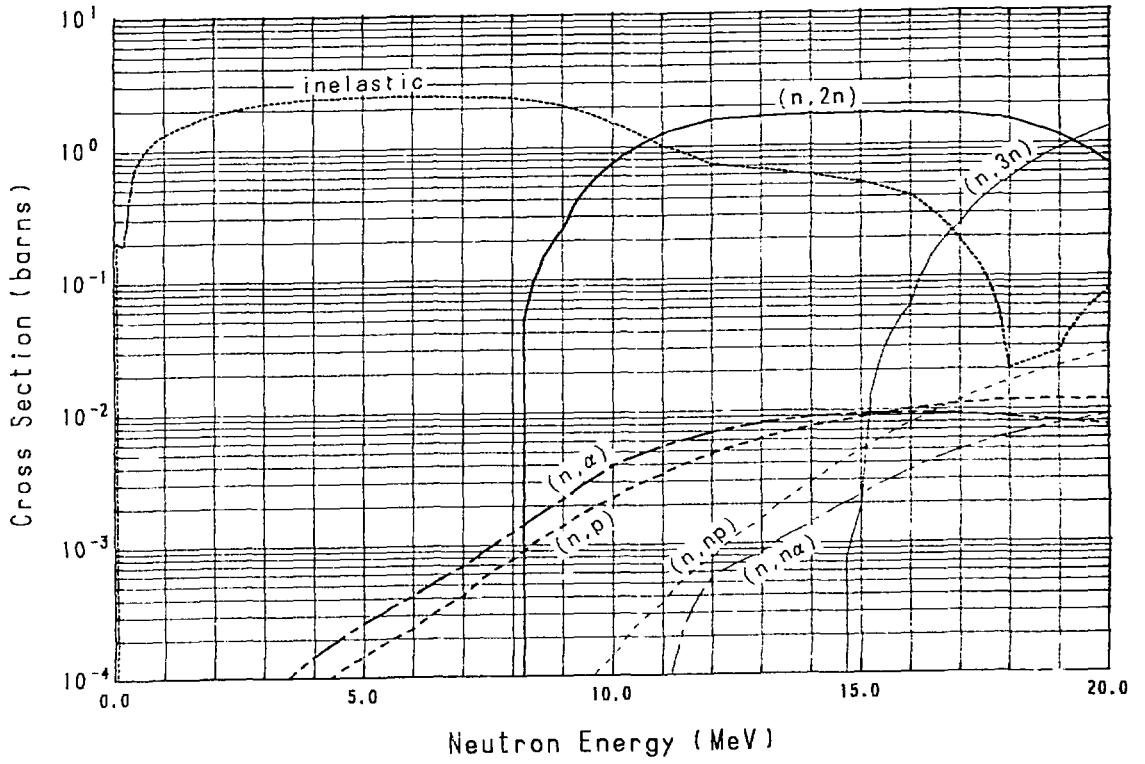

154Sm (6209)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

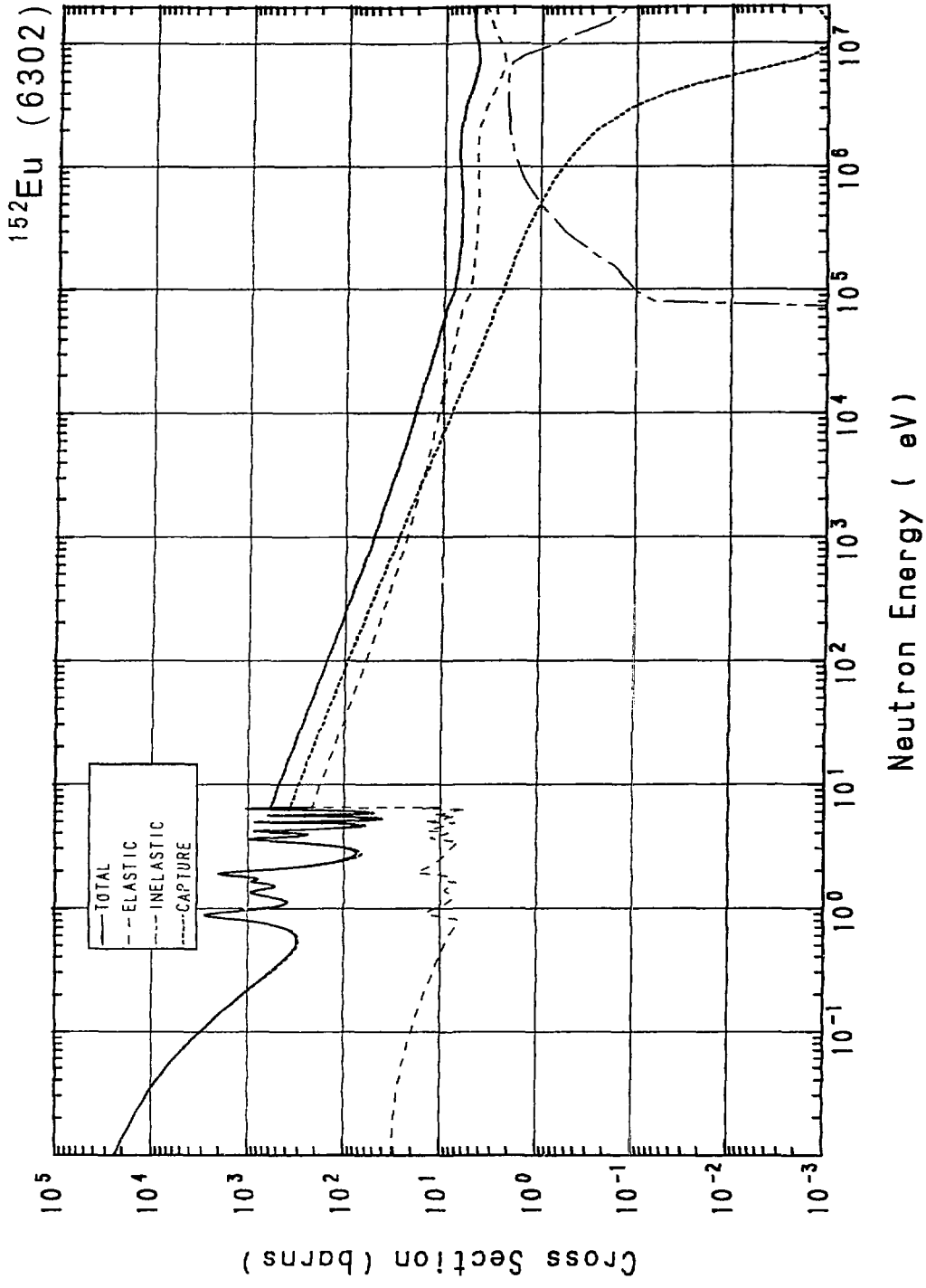

154Sm (6209)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

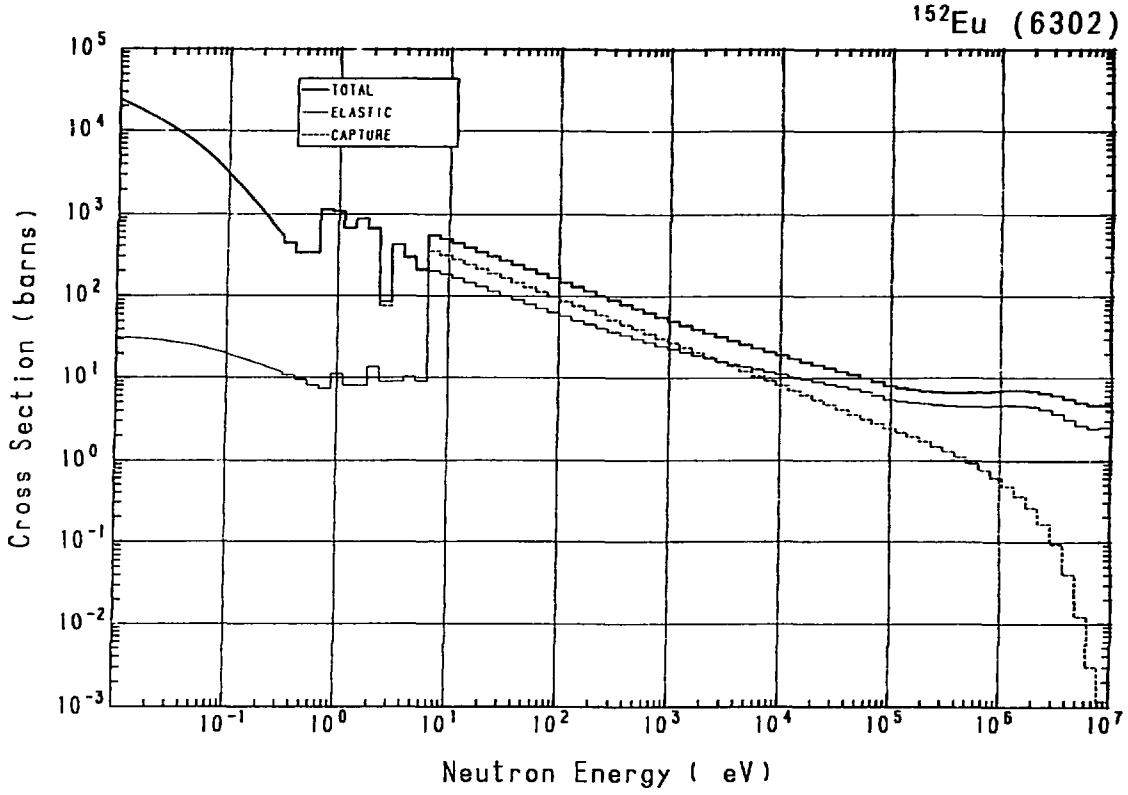

inelastic
(n,2n)
(n,3n)
(n,d)
(n,nα)
(n,t)
(n,p)
(n,α)
(n,np)
Cross Section (barns)
Neutron Energy (MeV)

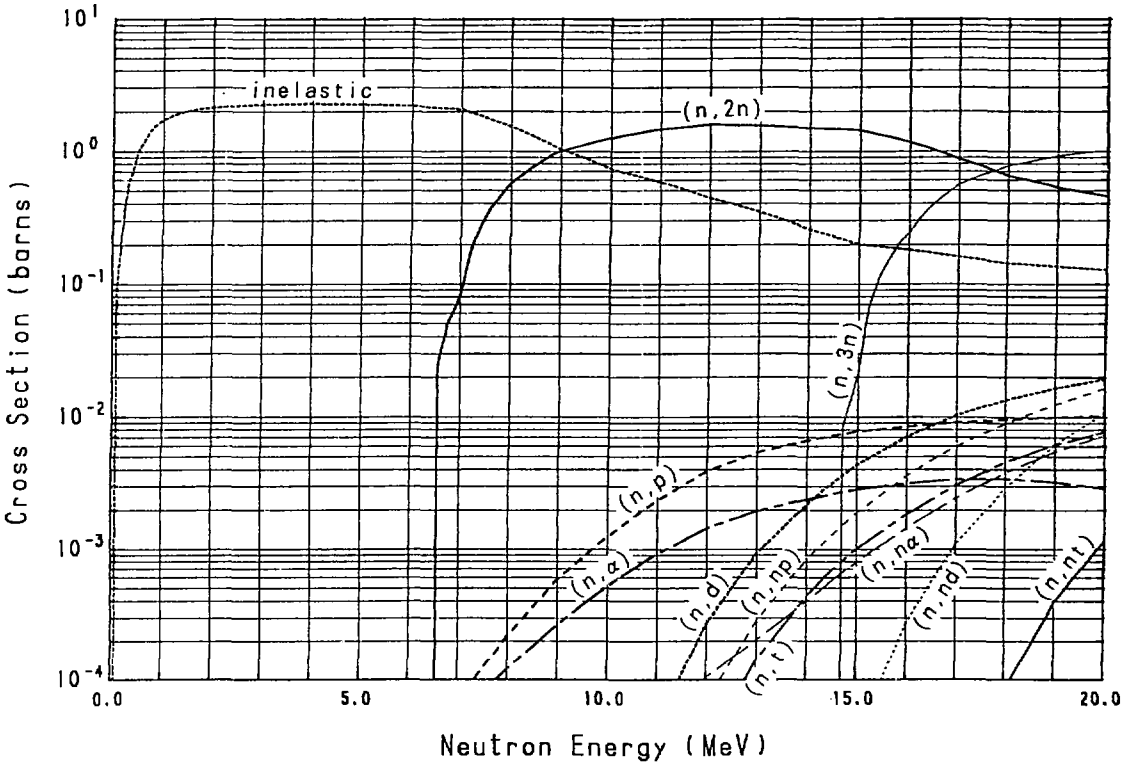

151Eu (6301)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

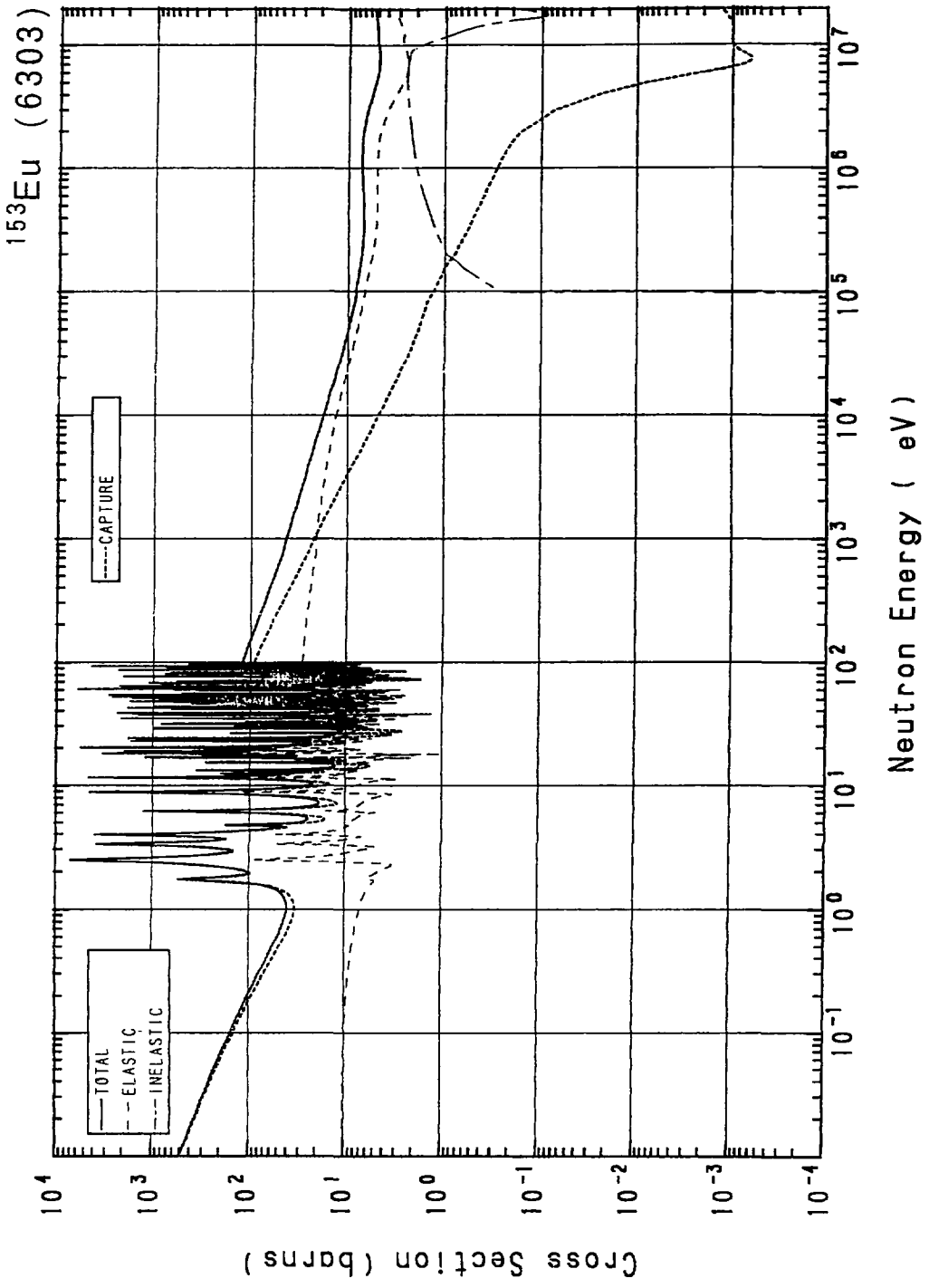

151Eu (6301)
TOTAL
ELASTIC
CAPTURE
(N,A)
Cross Section (barns)
Neutron Energy (eV)

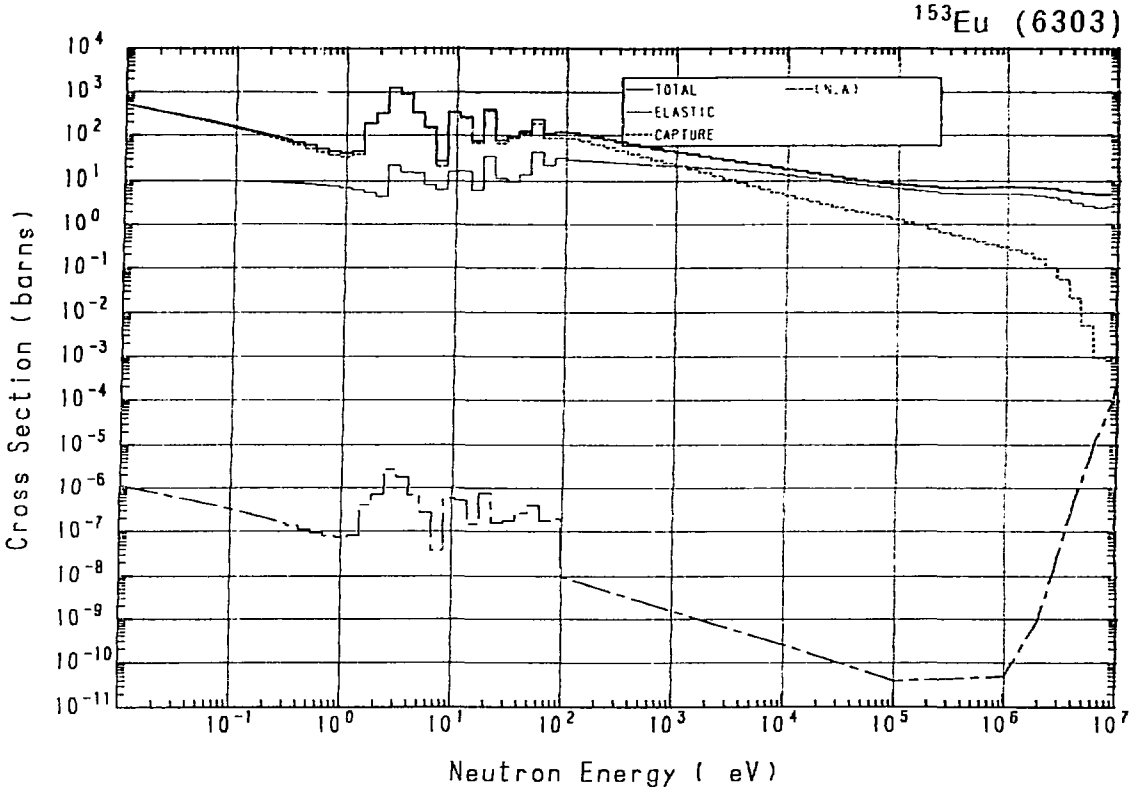

inelastic
(n,2n)
(n,3n)
(n,α)
(n,p)
(n,np)
(n,nα)
Cross Section (barns)
Neutron Energy (MeV)

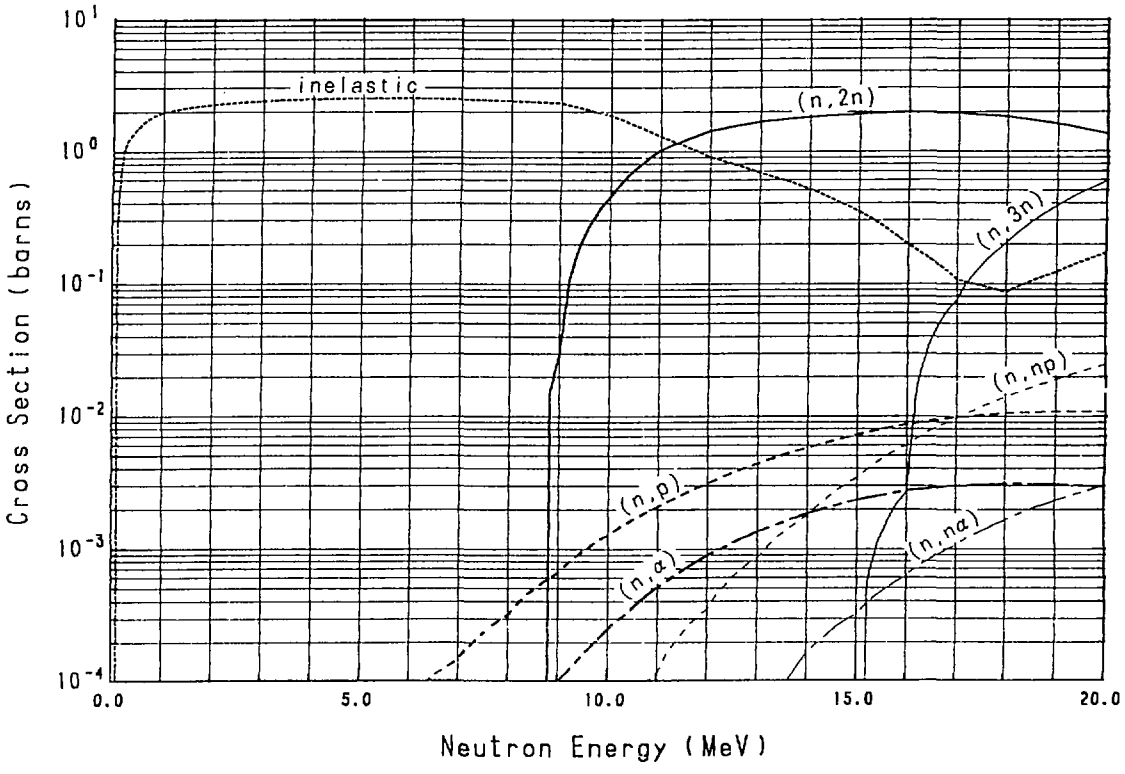

152Eu (6302)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

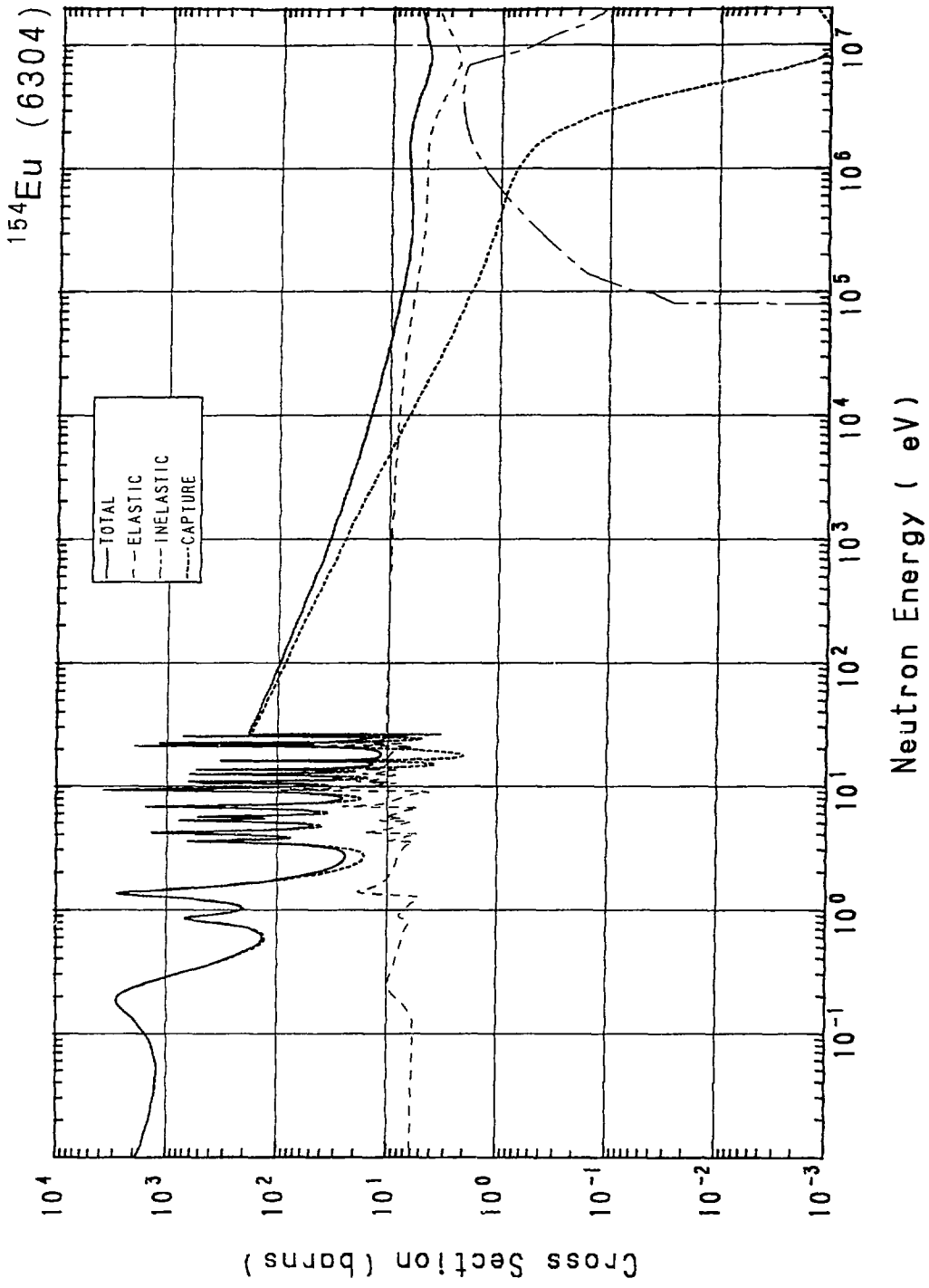

152Eu (6302)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

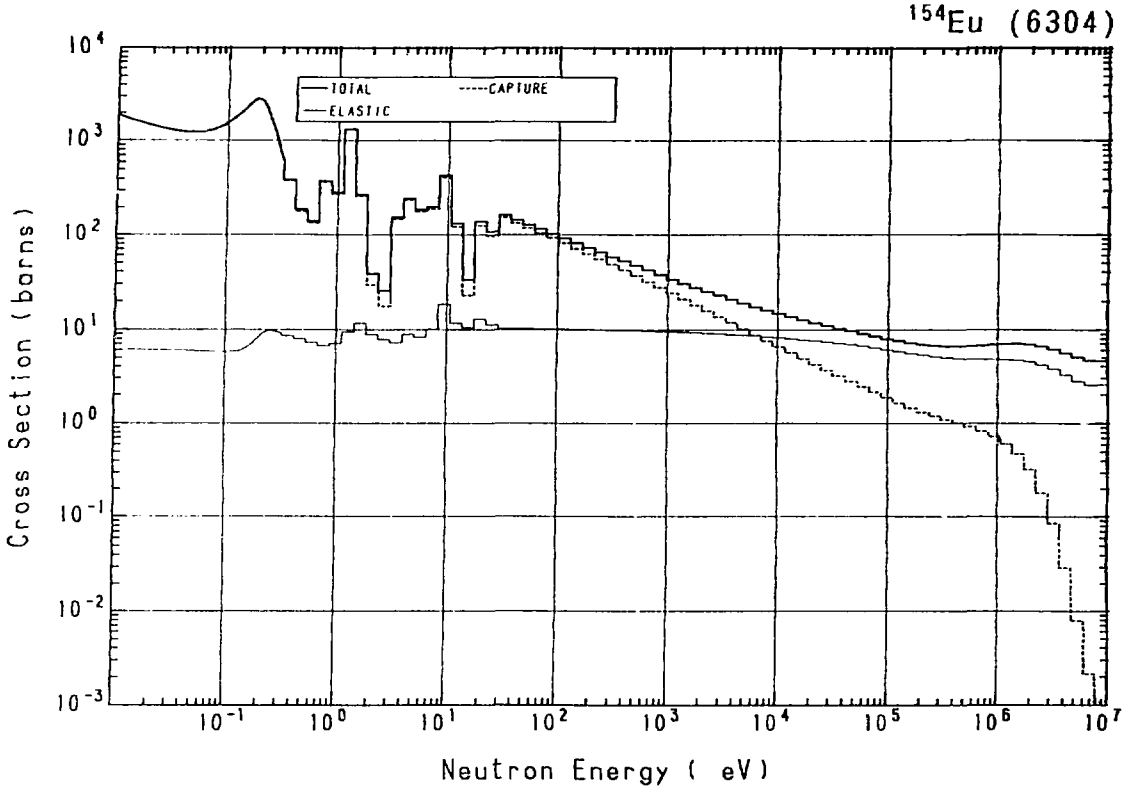

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,t)
(n,nα)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

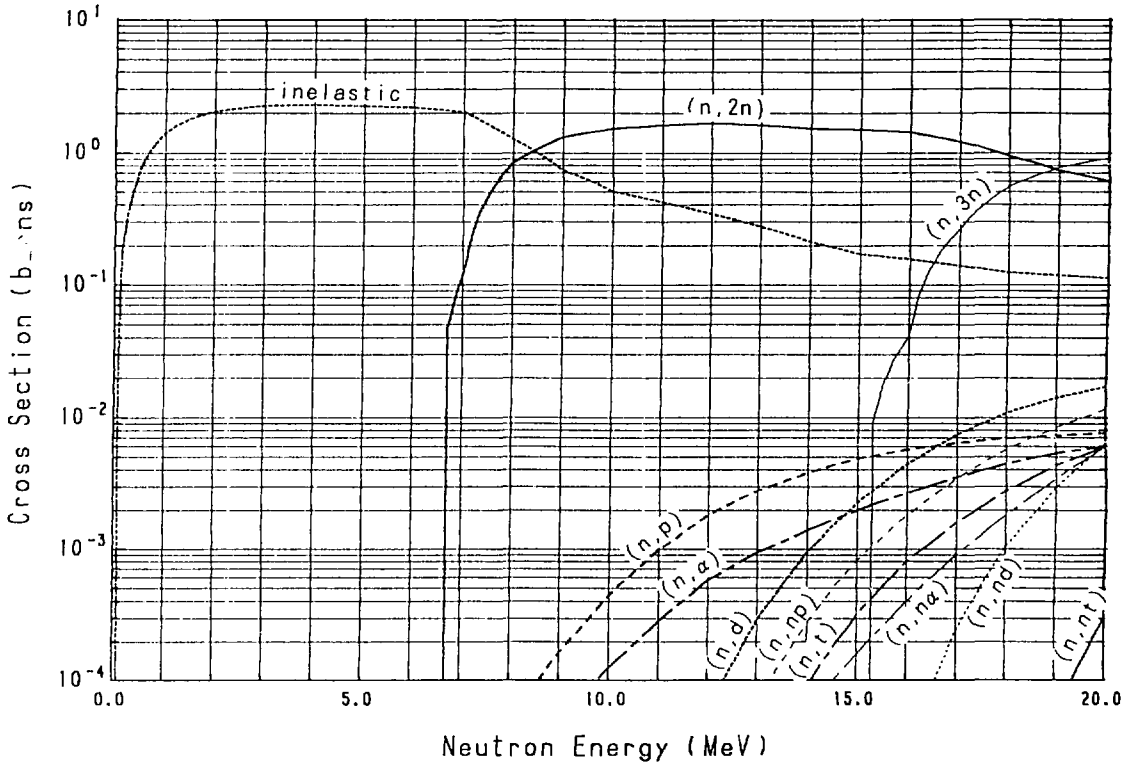

153Eu (6303)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

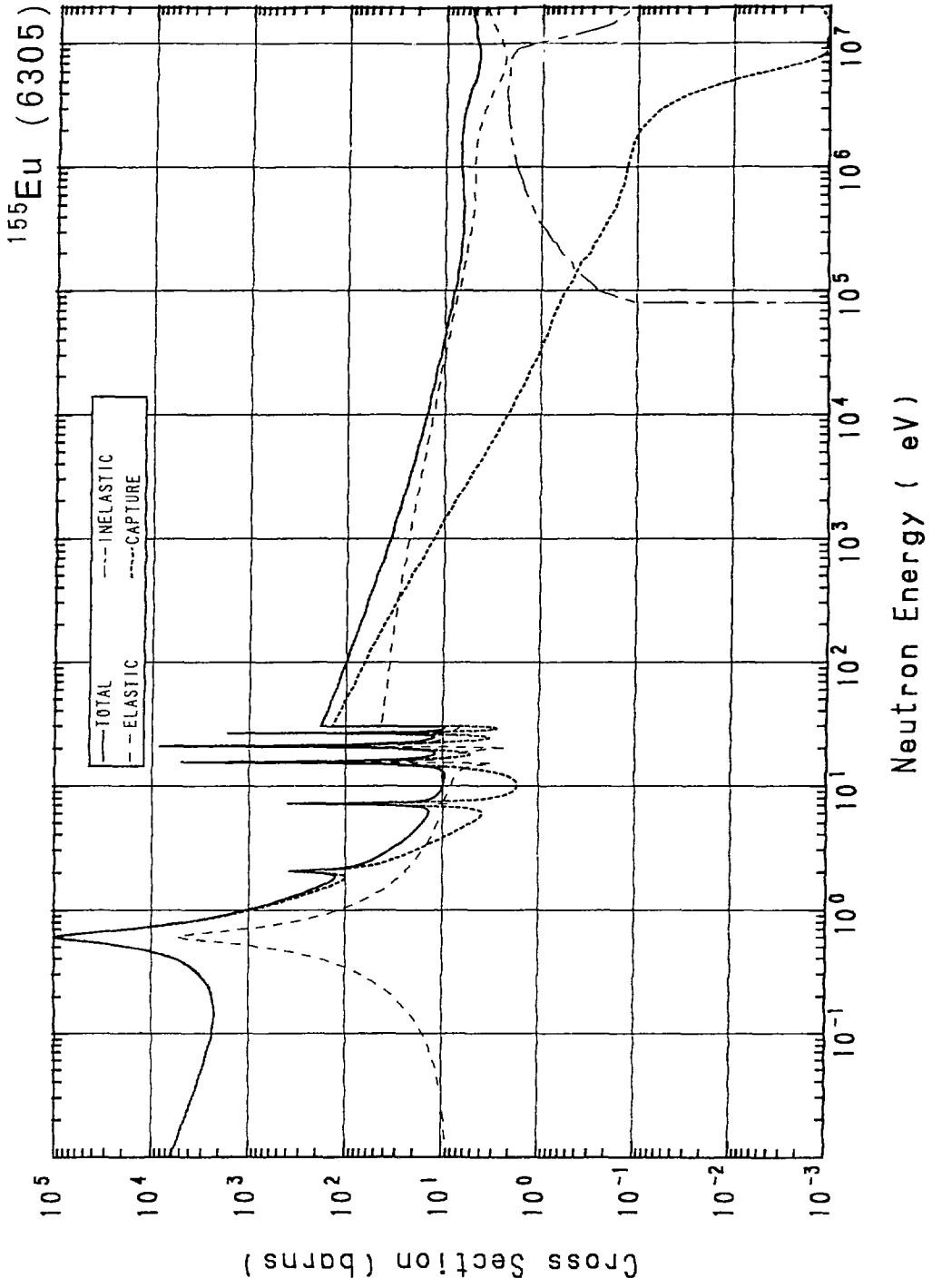

153Eu (6303)
TOTAL
ELASTIC
CAPTURE
(N,A)
Cross Section (barns)
Neutron Energy (eV)

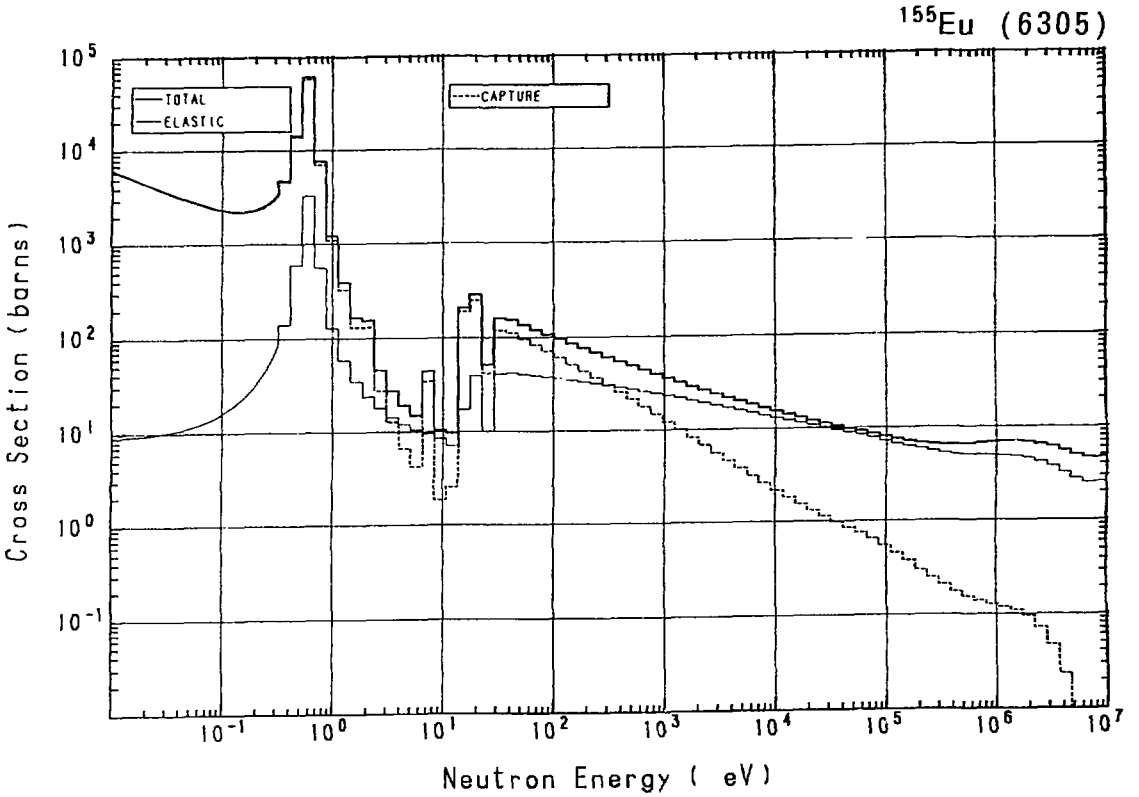

inelastic
(n,2n)
(n,3n)
(n,np)
(n,p)
(n,α)
(n,nα)
Cross Section (barns)
Neutron Energy (MeV)

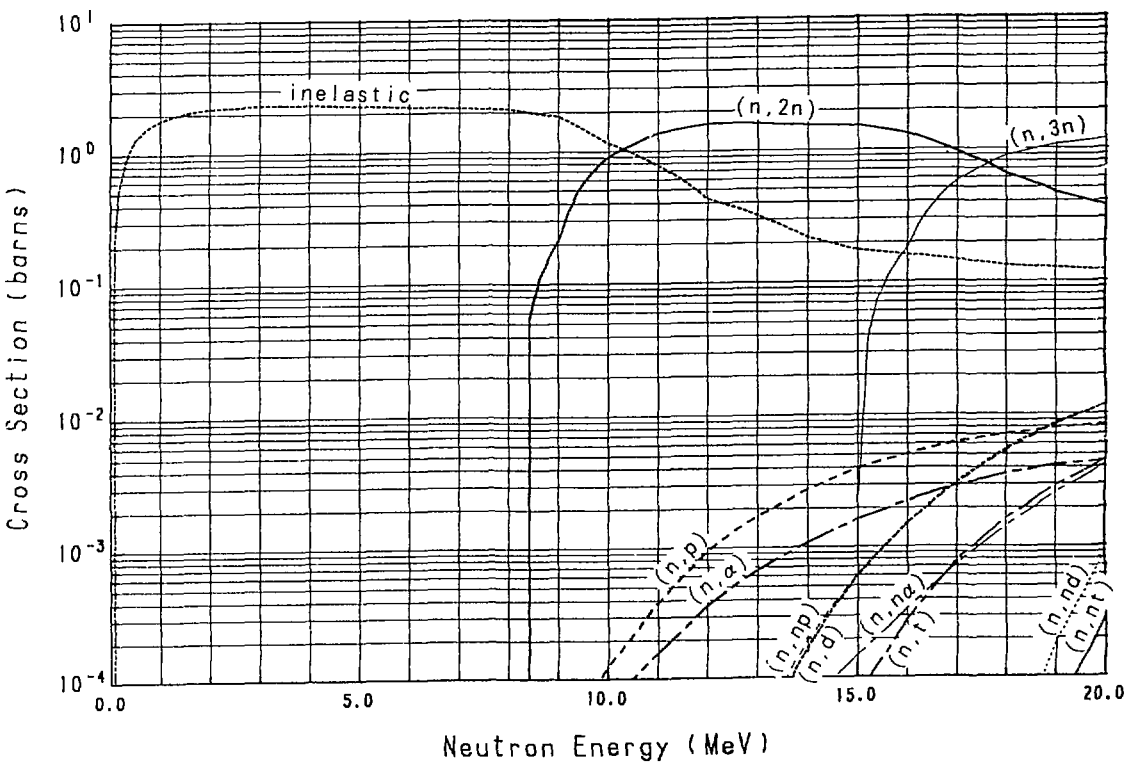

154Eu (6304)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

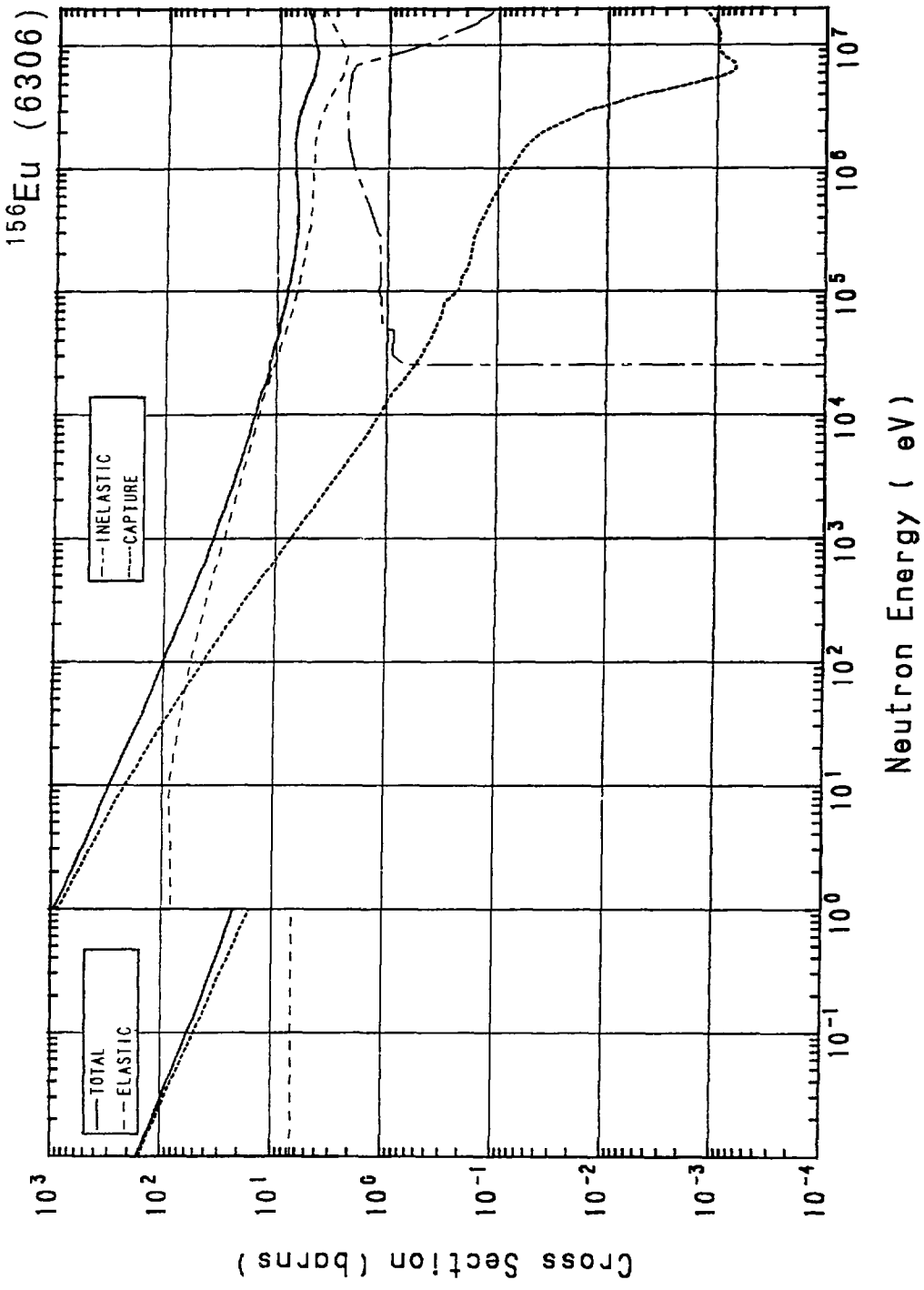

154Eu (6304)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

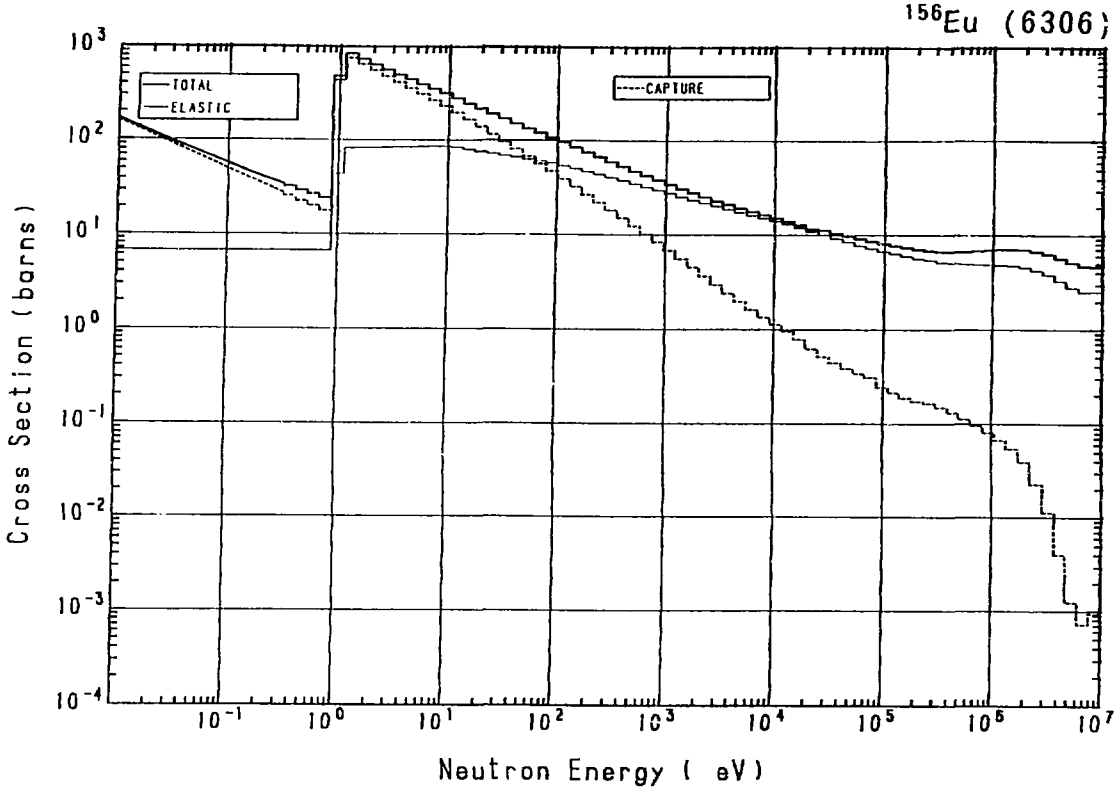

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,t)
(n,nα)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

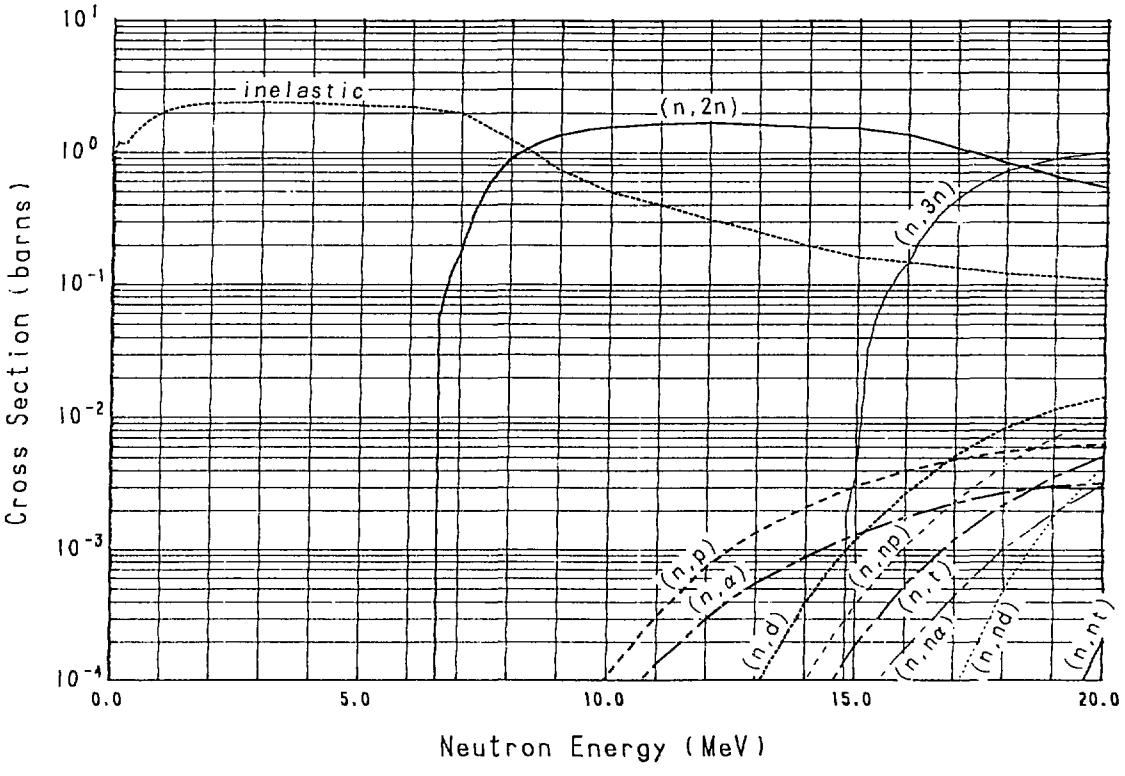

155Eu (6305)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

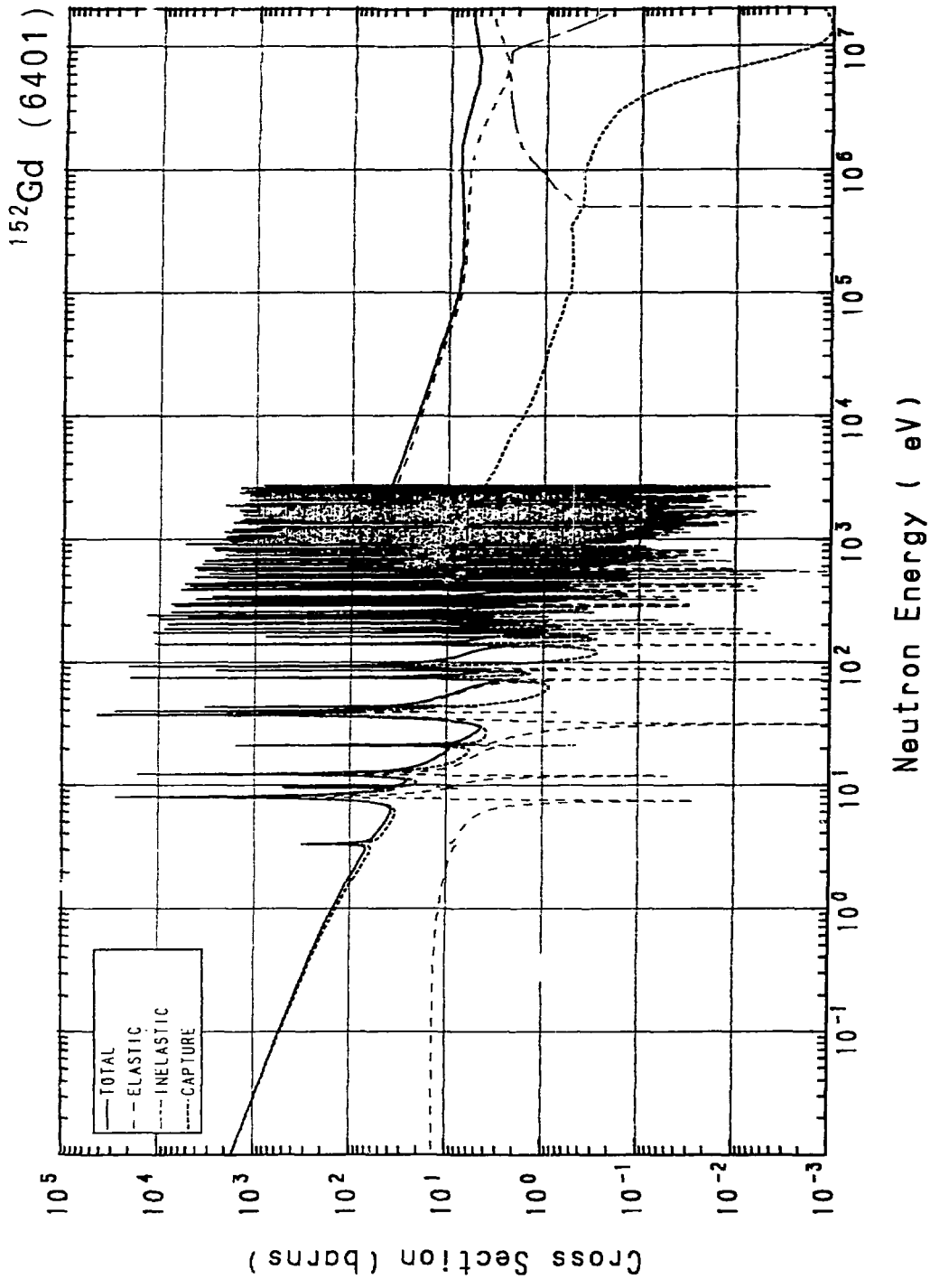

155Eu (6305)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

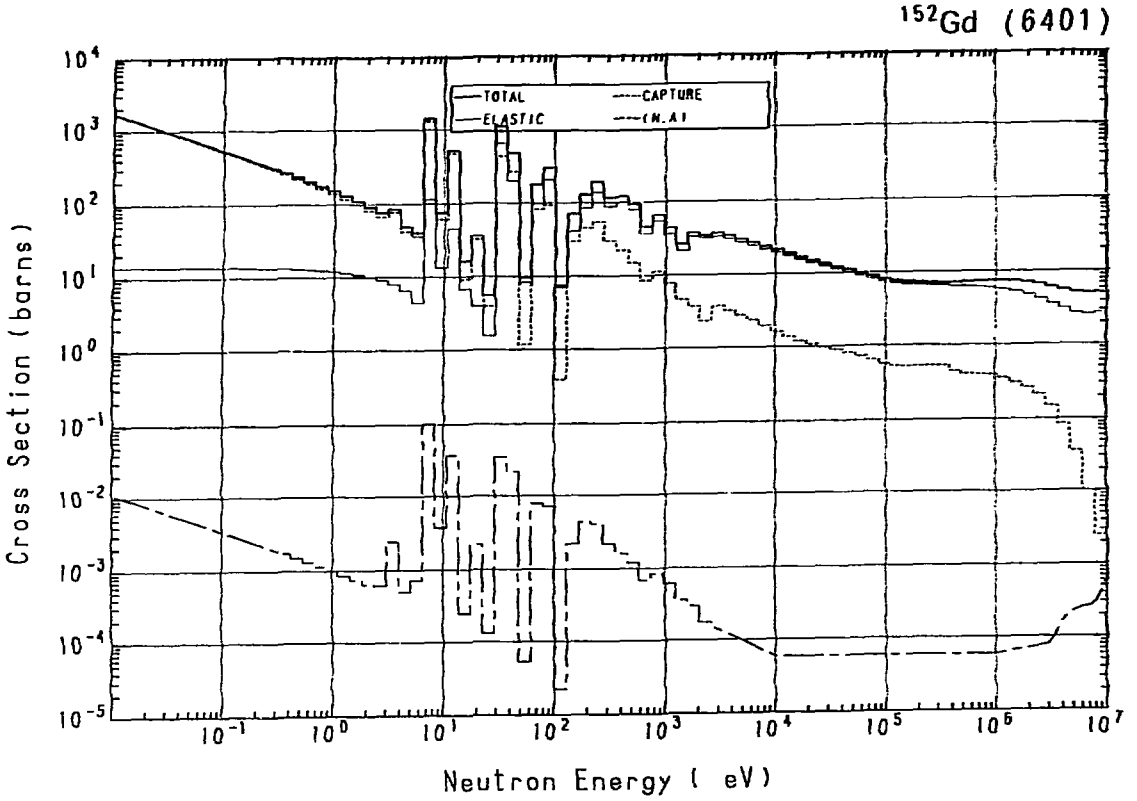

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,np)
(n,d)
(n,nα)
(n,t)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

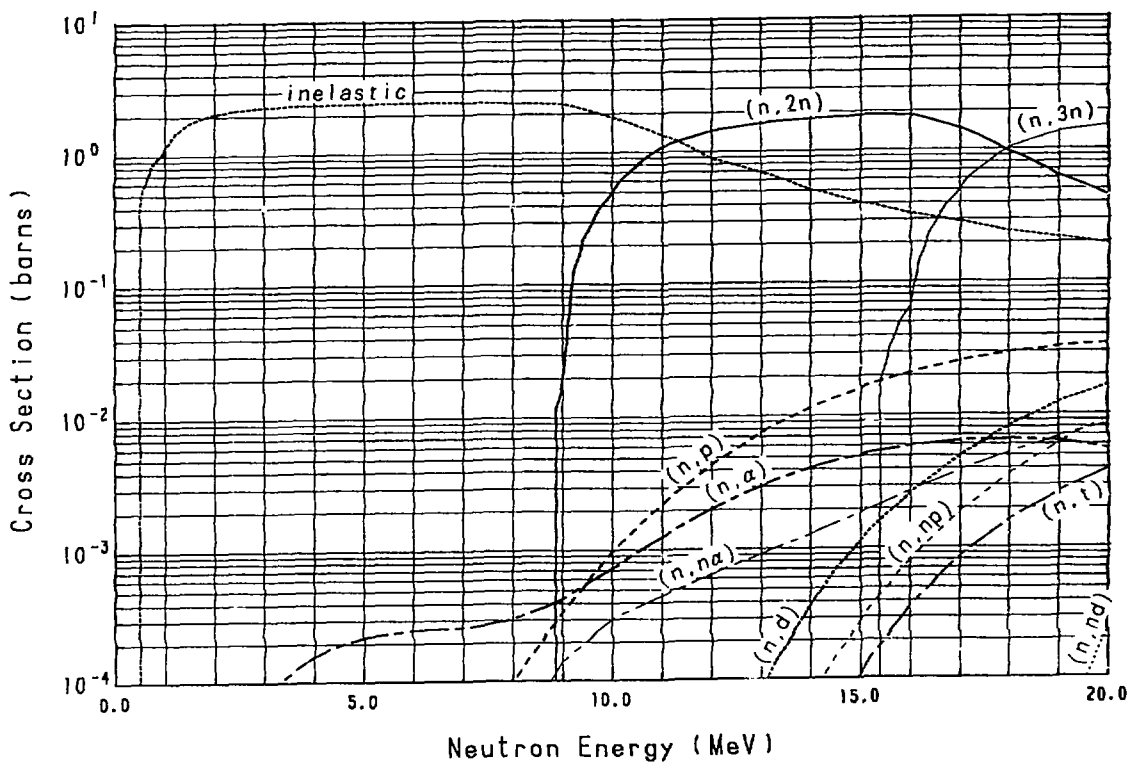

156Eu (6306)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

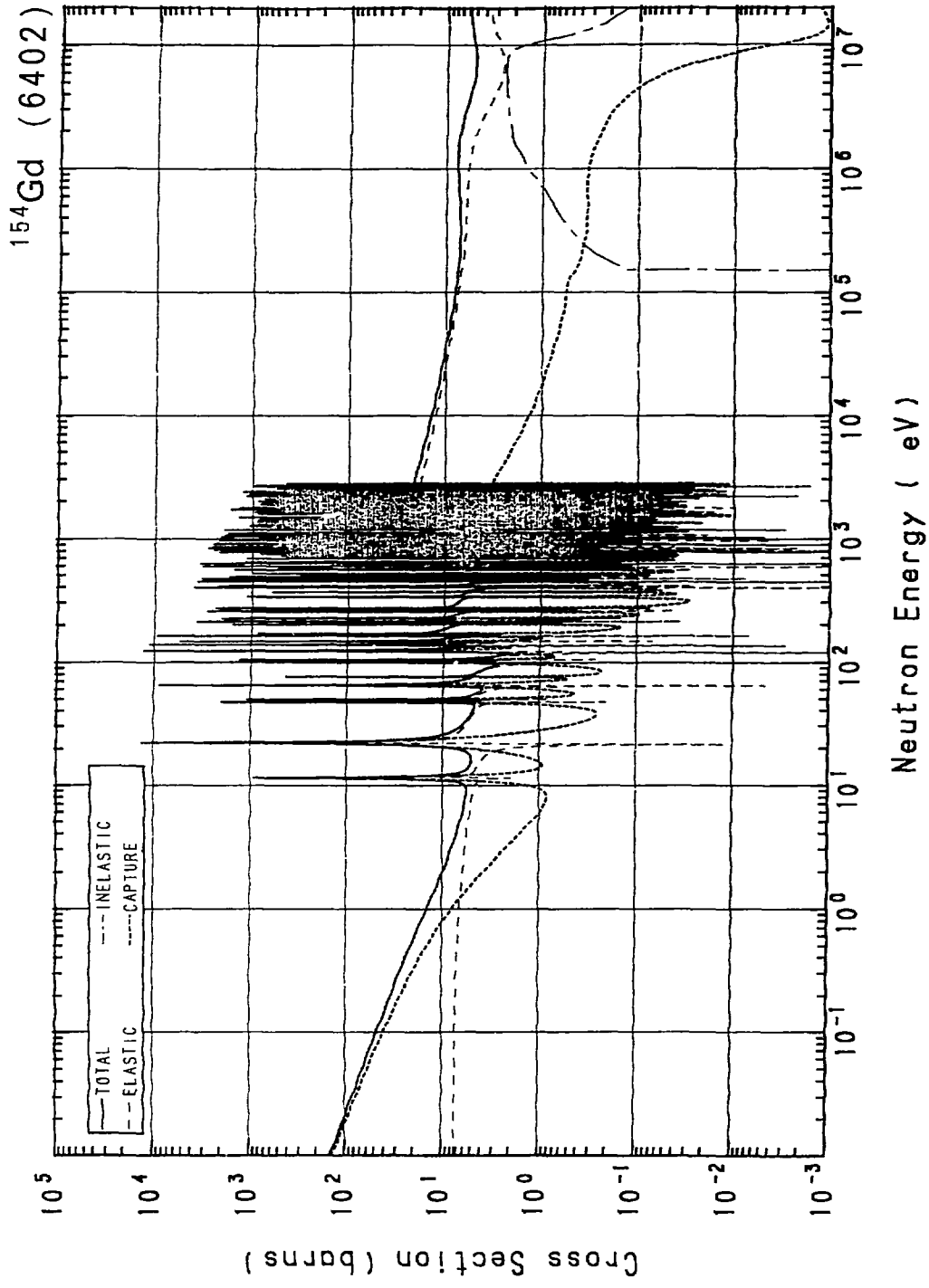

156Eu (6306)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

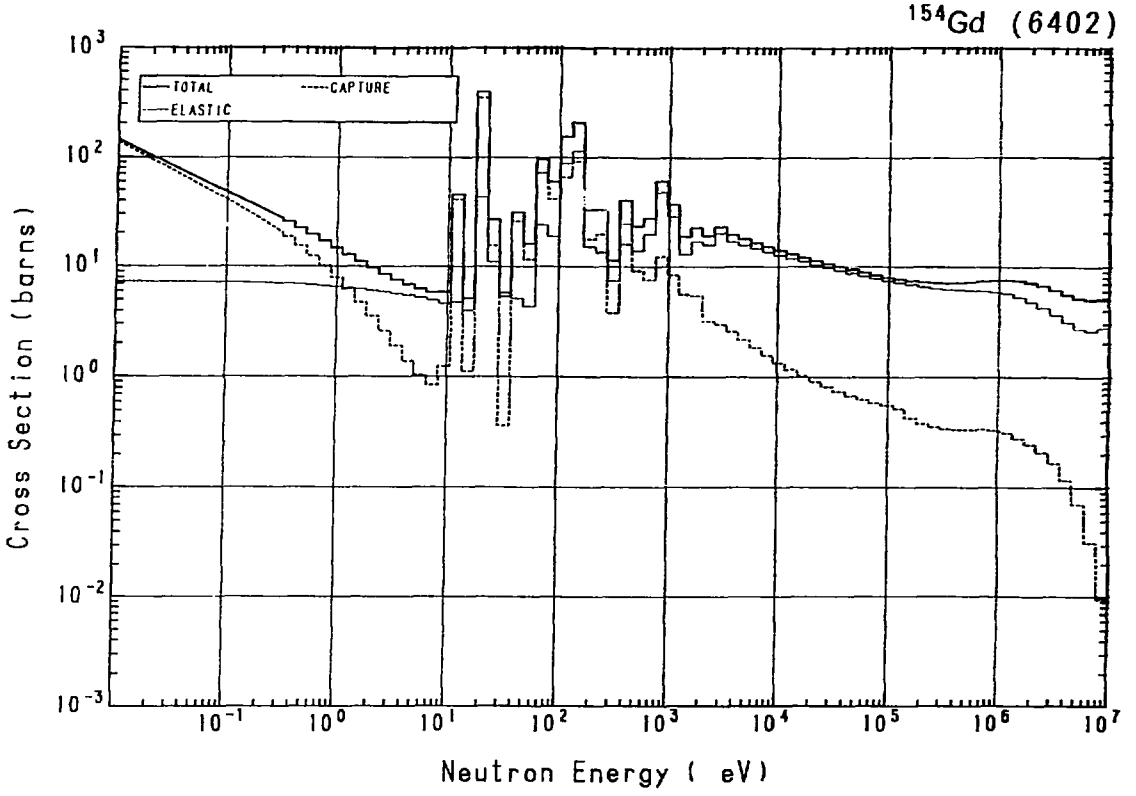

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,t)
(n,nα)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

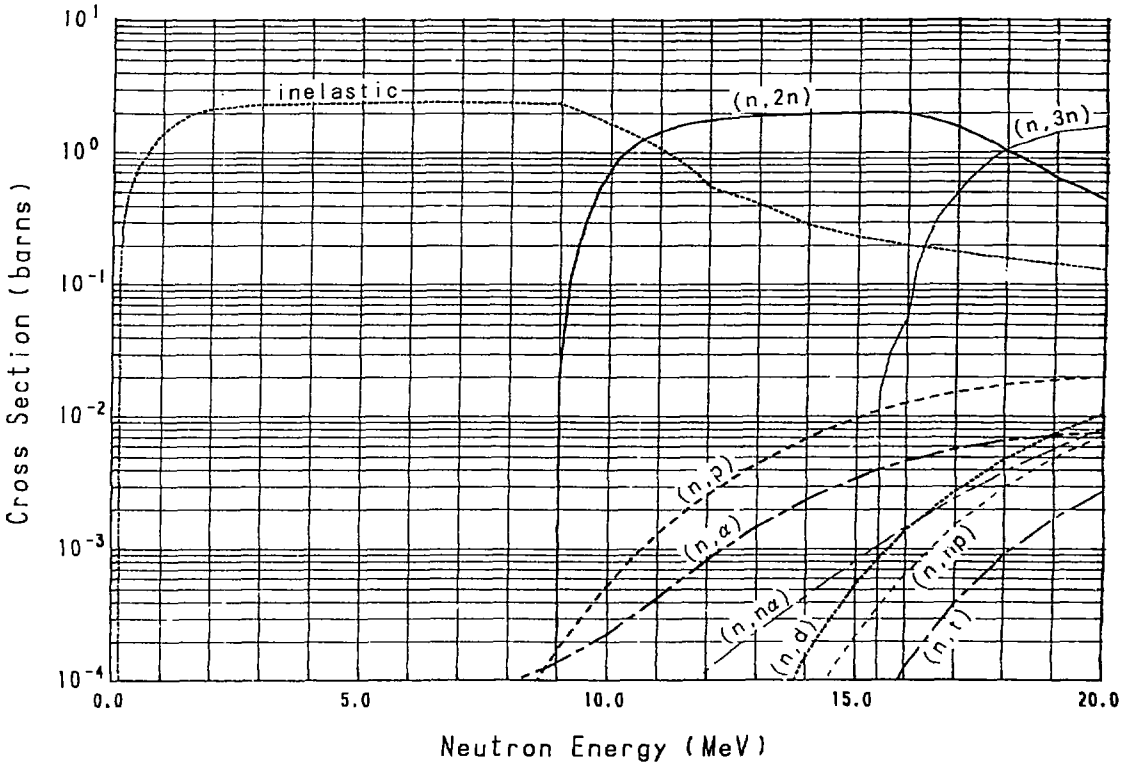

152Gd (6401)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

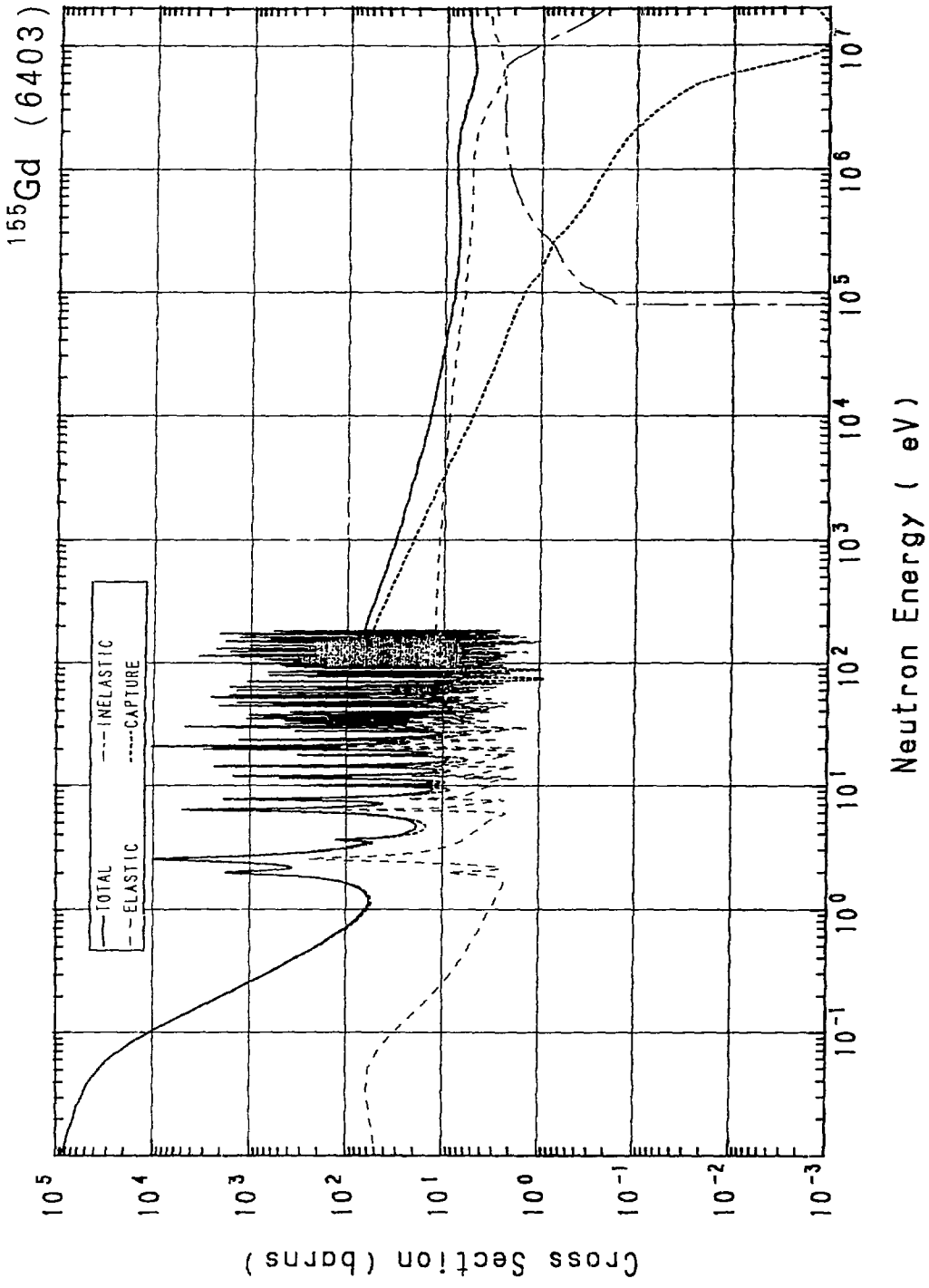

152Gd (6401)
TOTAL
ELASTIC
CAPTURE
(N,A)
Cross Section (barns)
Neutron Energy (eV)

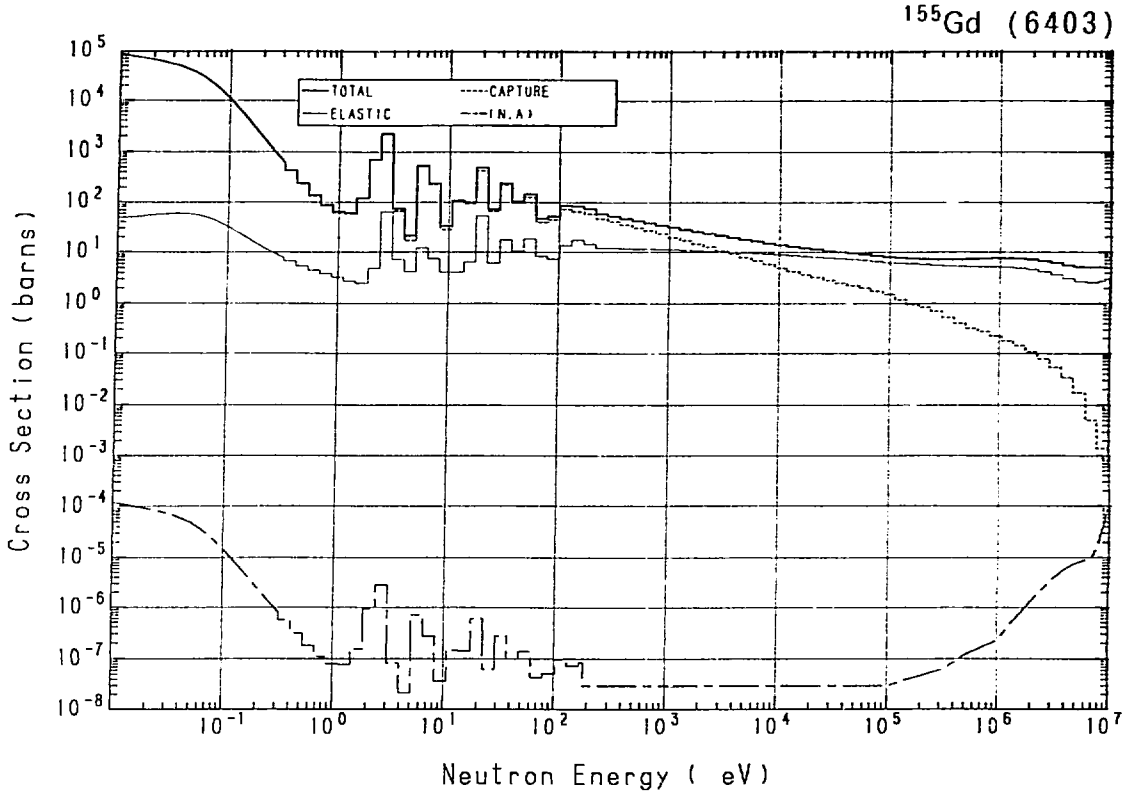

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,t)
(n,nα)
(n,np)
(n,d)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

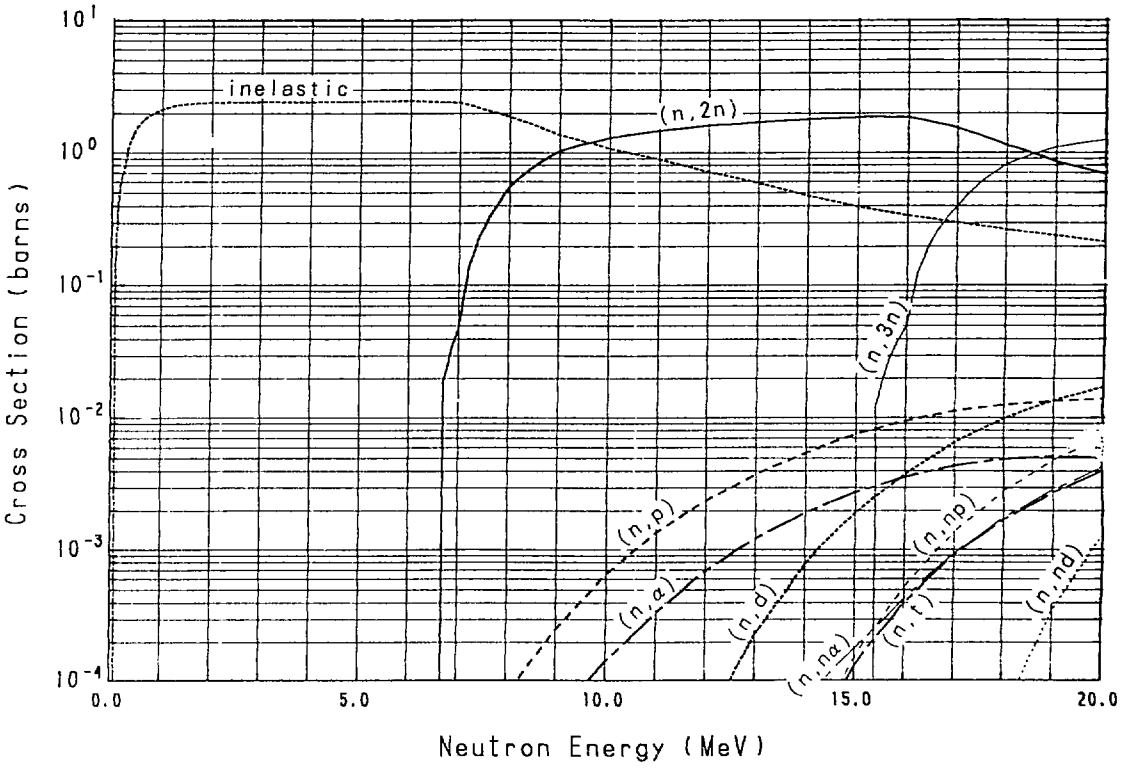

154Gd (6402)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

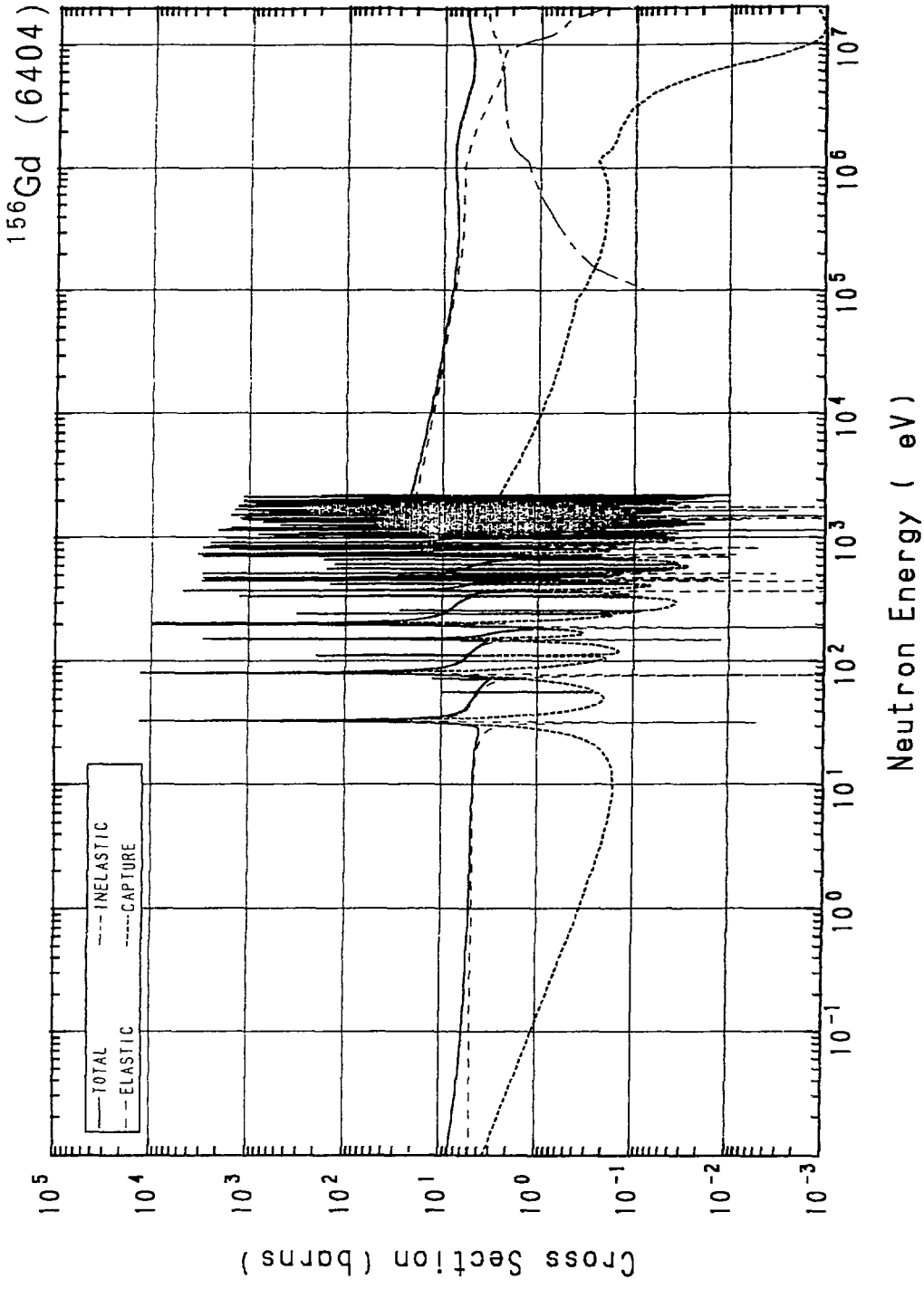

154Gd (6402)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

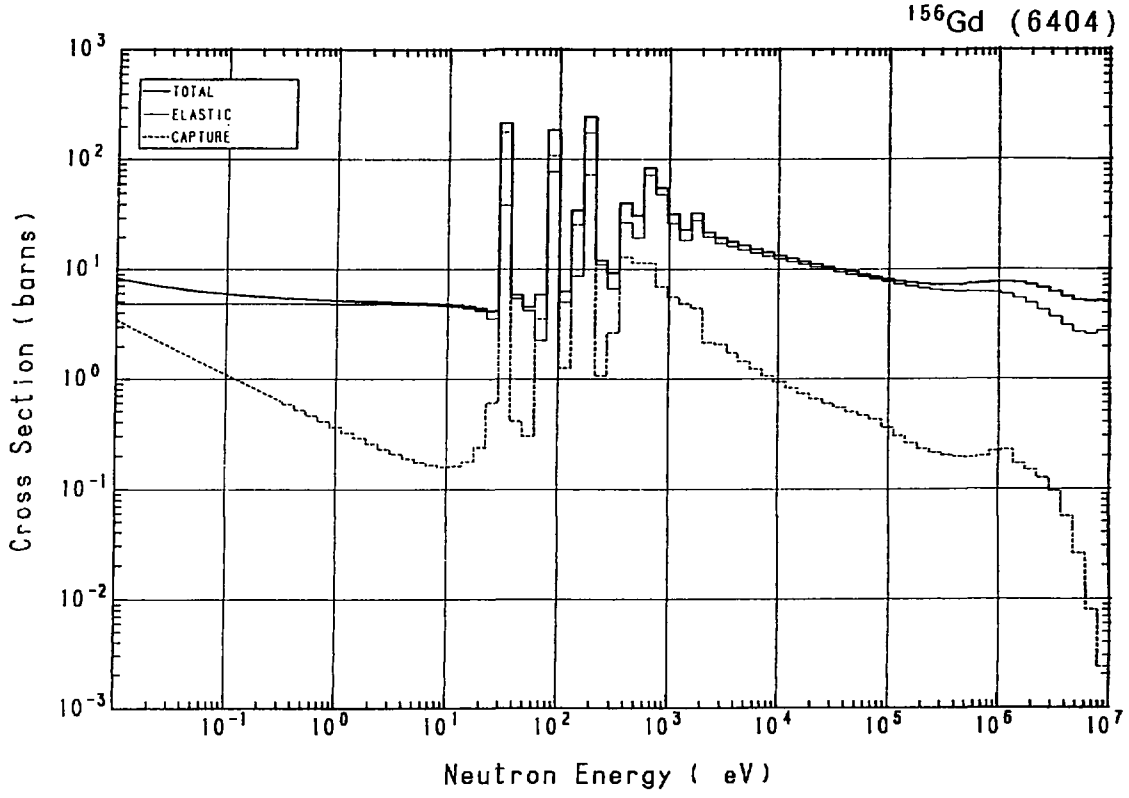

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,nα)
(n,d)
(n,np)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

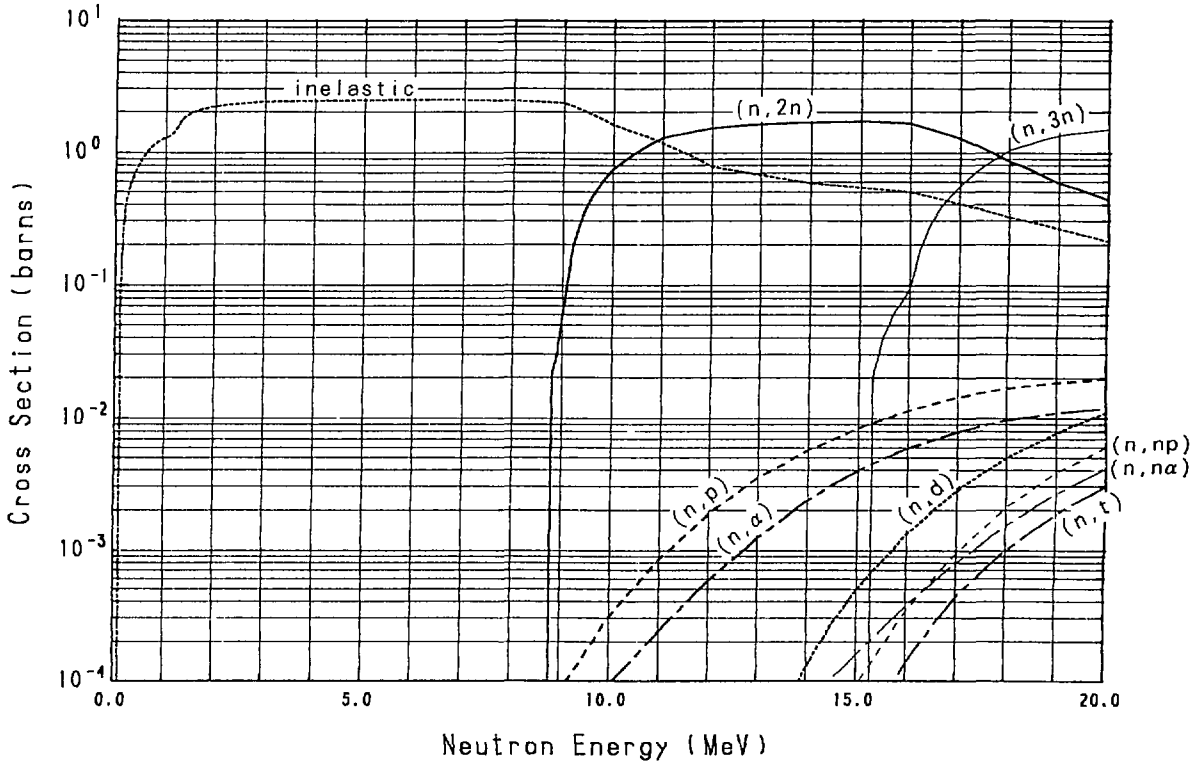

155Gd (6403)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

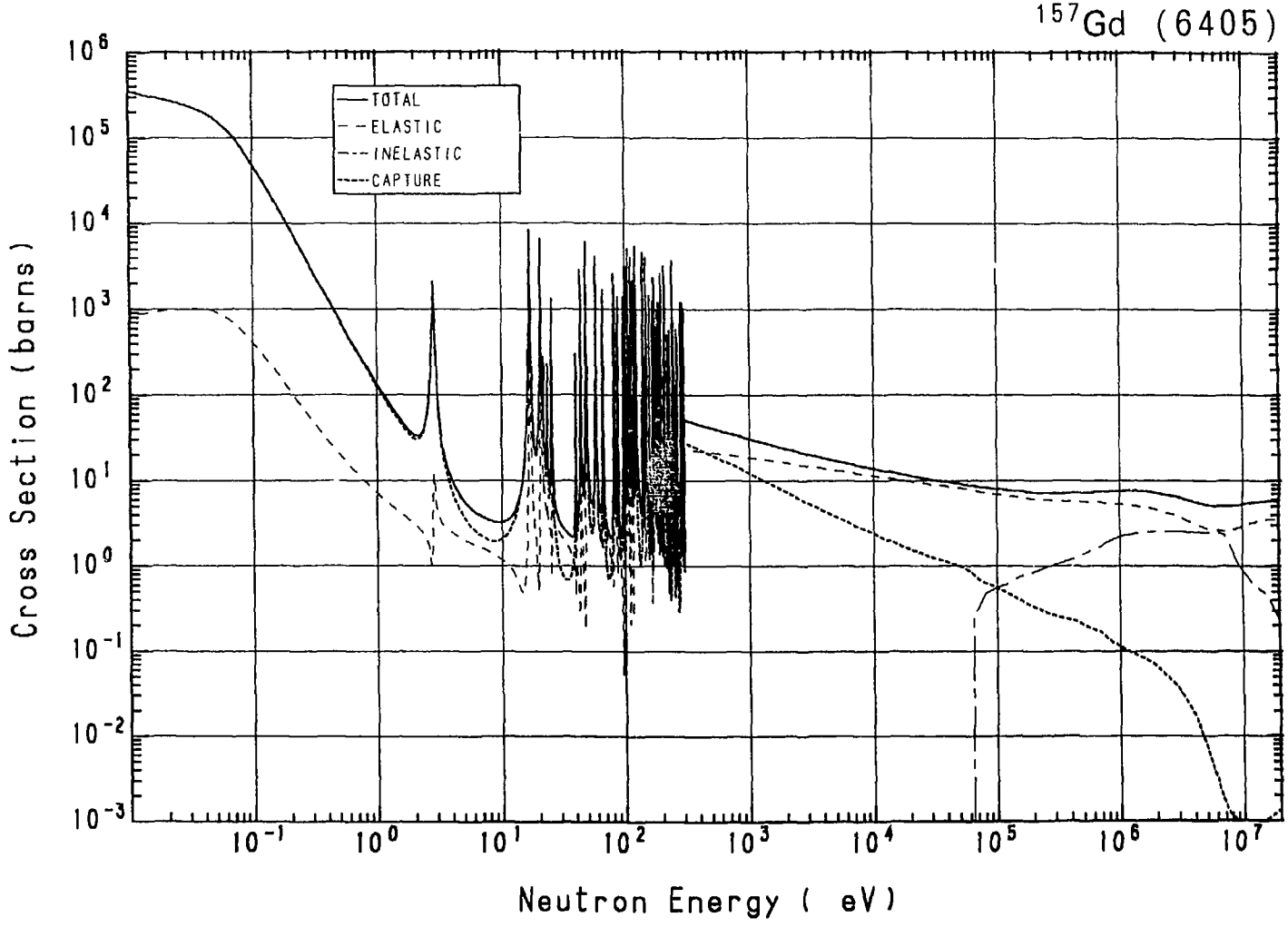

155Gd (6403)
TOTAL
ELASTIC
CAPTURE
(N,A)
Cross Section (barns)
Neutron Energy (eV)


inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,nα)
(n,t)
(n,np)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

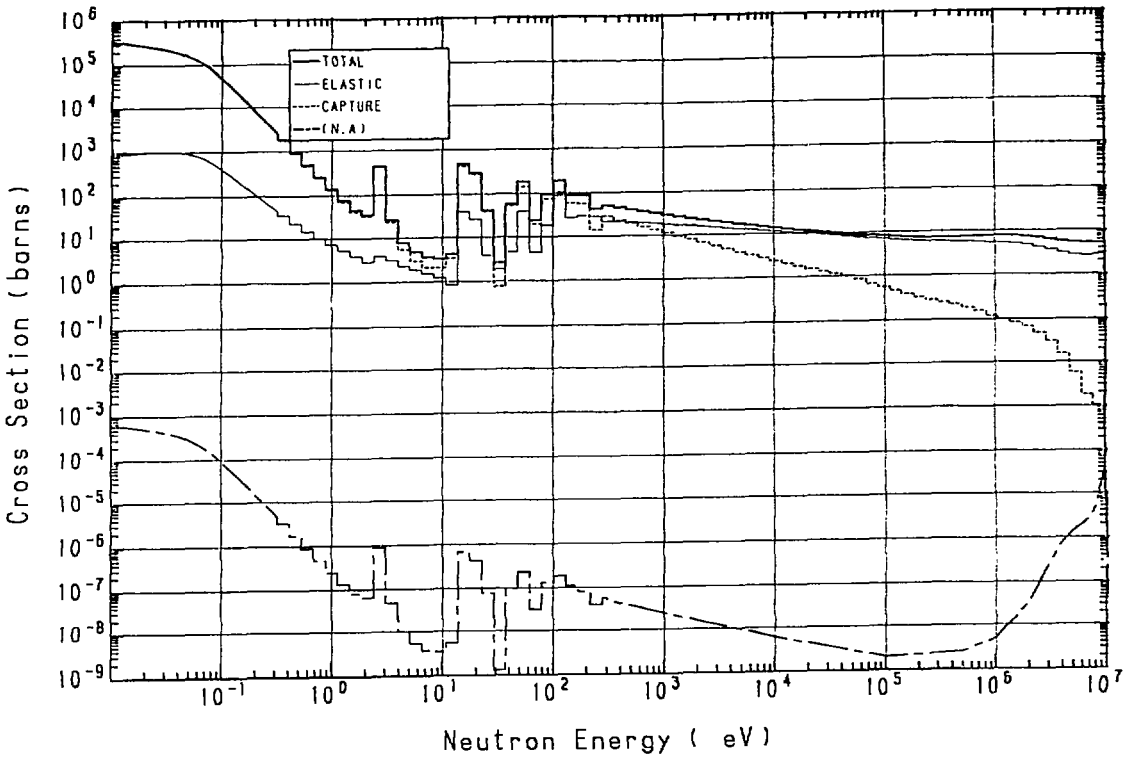

156Gd (6404)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^5
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7

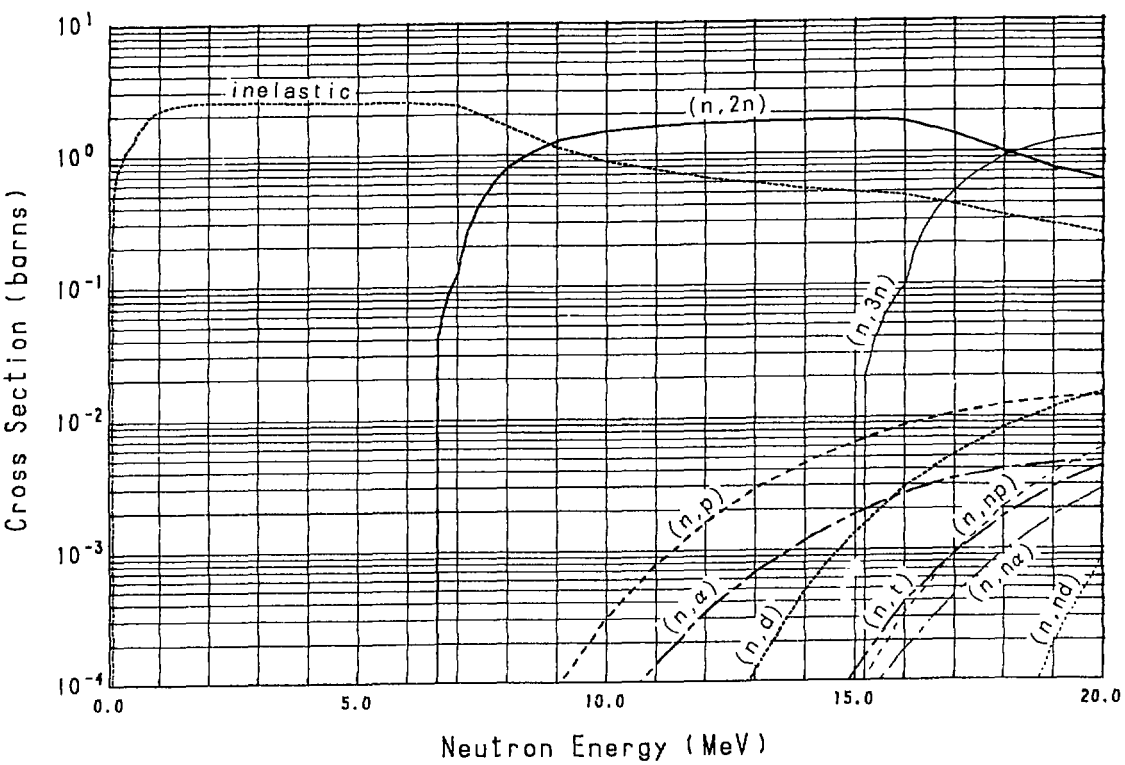

156Gd (6404)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

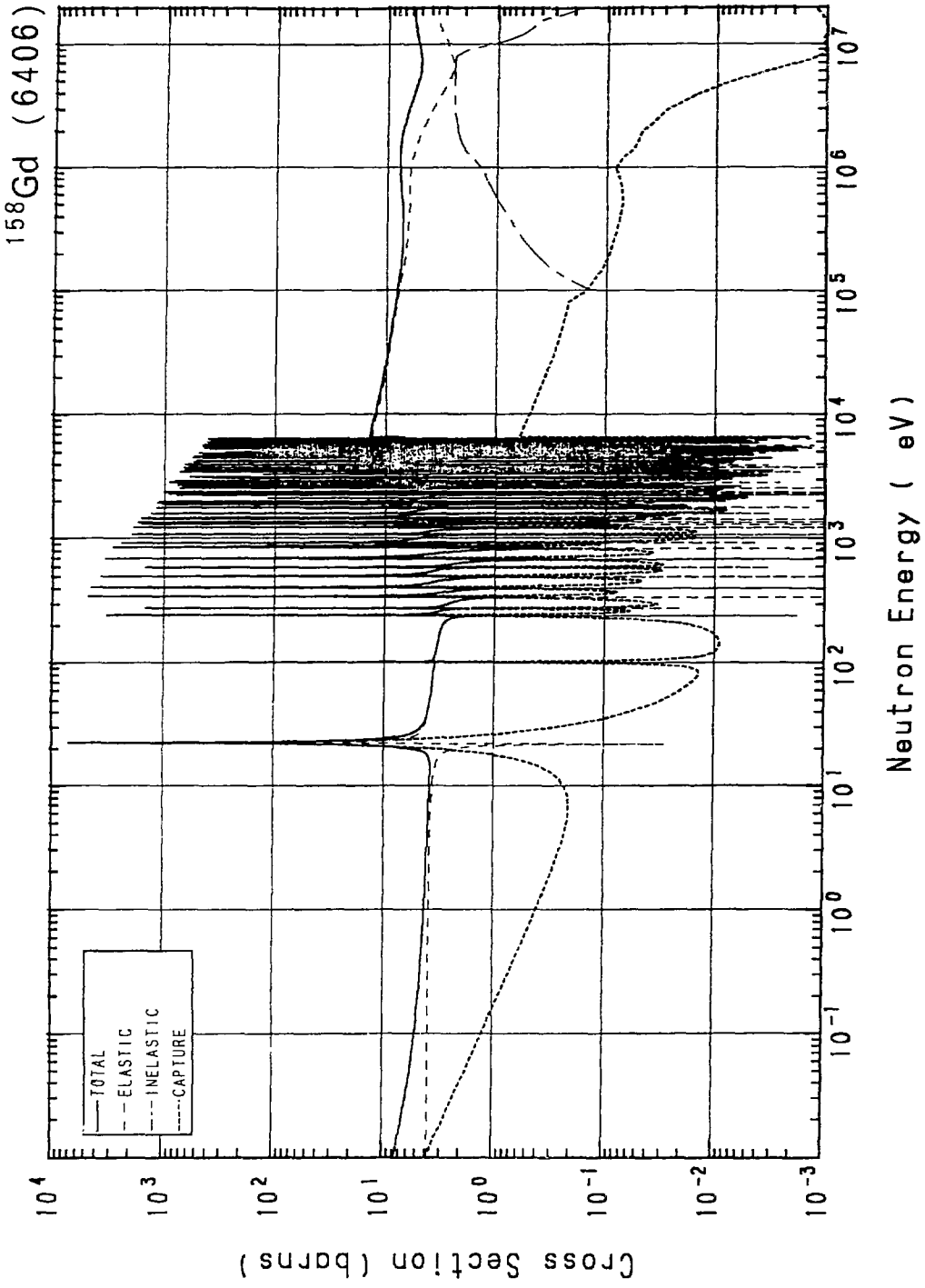

inelastic
(n,2n)
(n,3n)
(n,np)
(n,nα)
(n,p)
(n,α)
(n,d)
(n,t)
Cross Section (barns)
Neutron Energy (MeV)

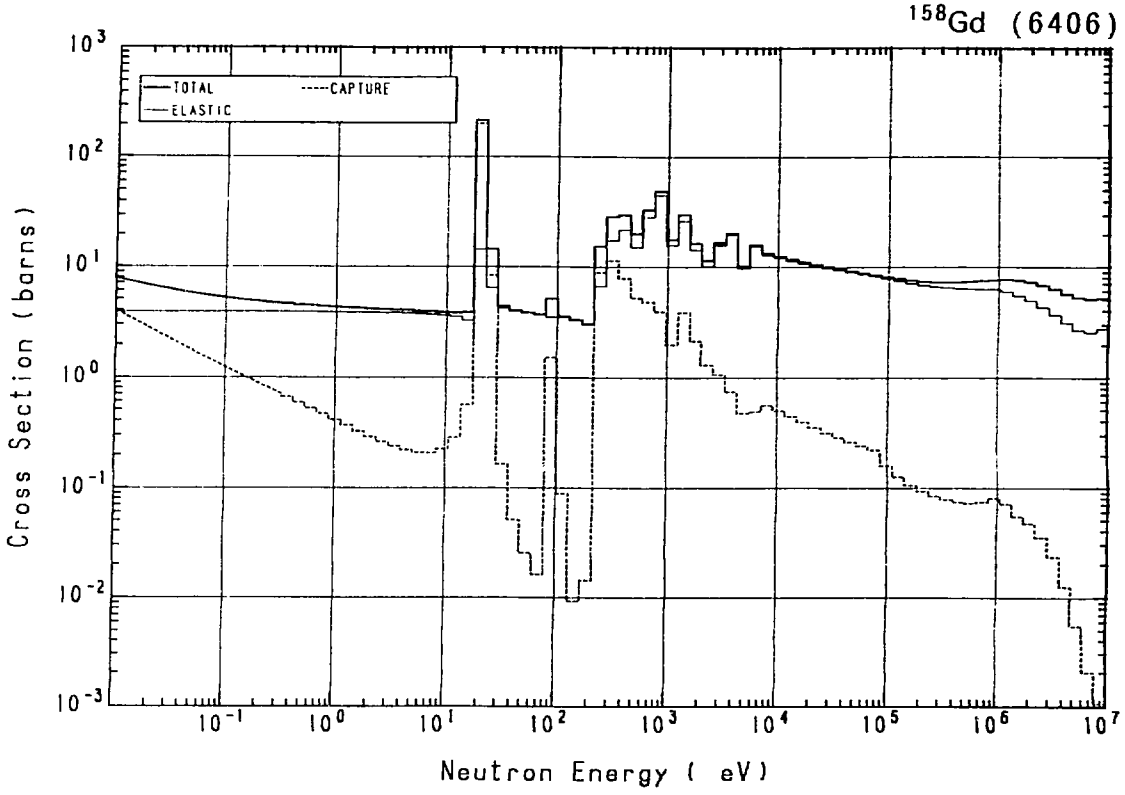

^{157}Gd (6405)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^{6}
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
10^{4}
10^{5}
10^{6}
10^{7}

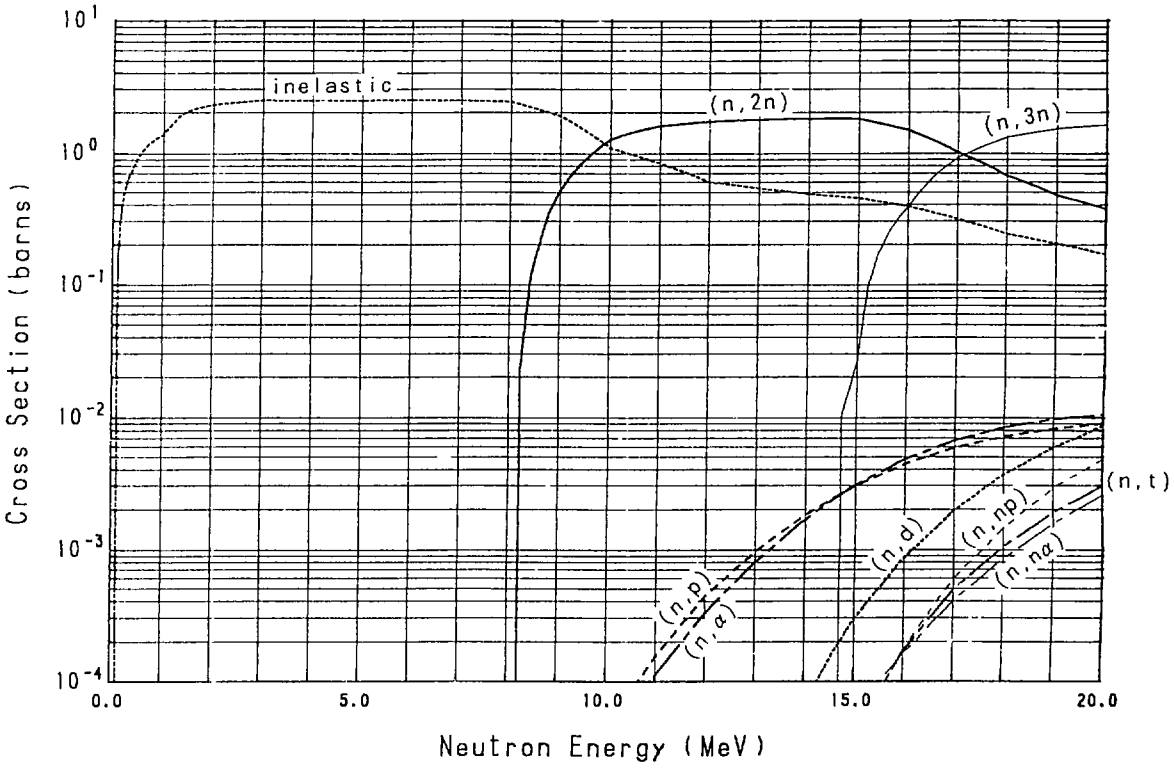
^{157}Gd (6405)

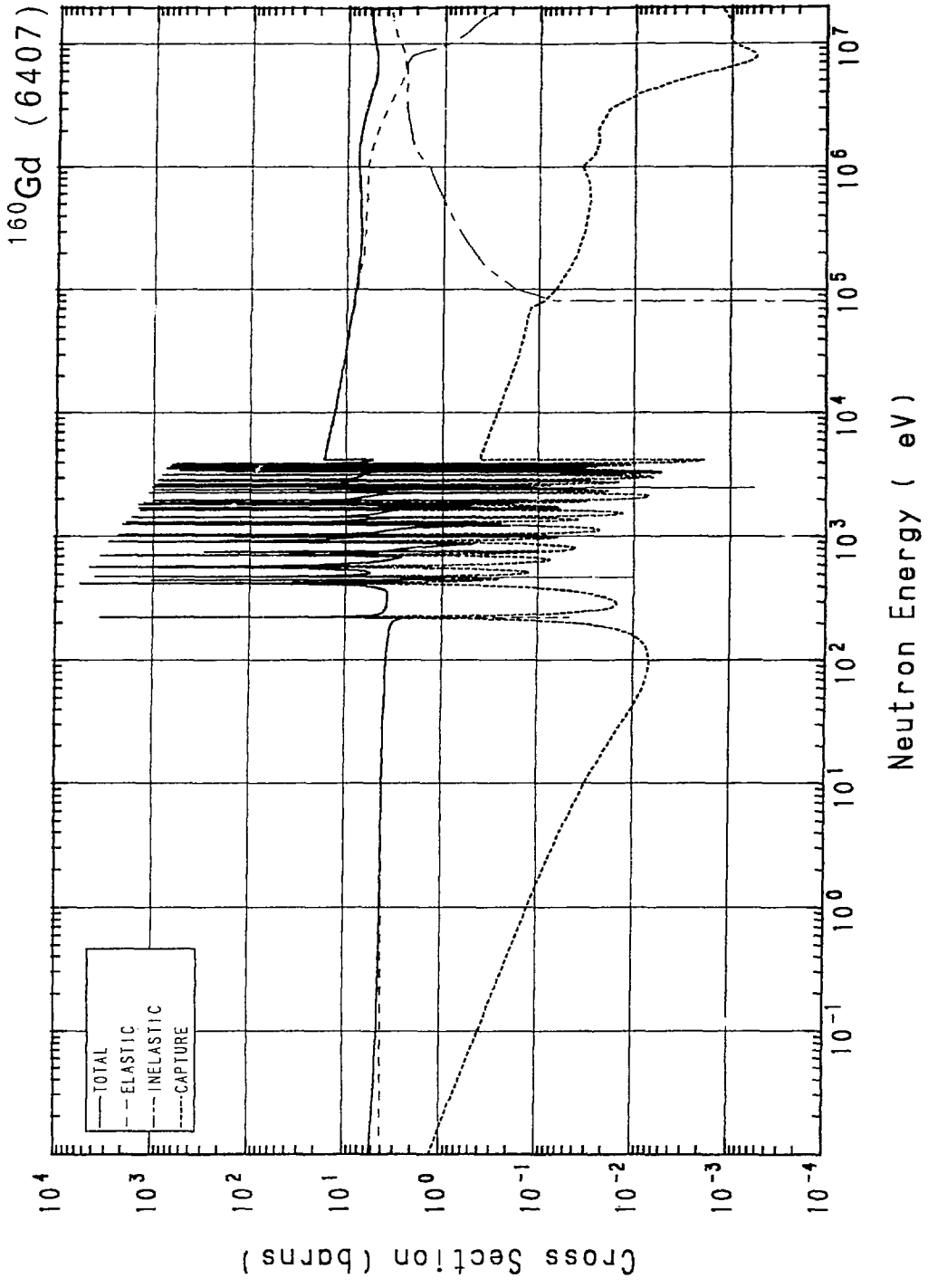

TOTAL
ELASTIC
CAPTURE
(N,A)
Cross Section (barns)
Neutron Energy (eV)

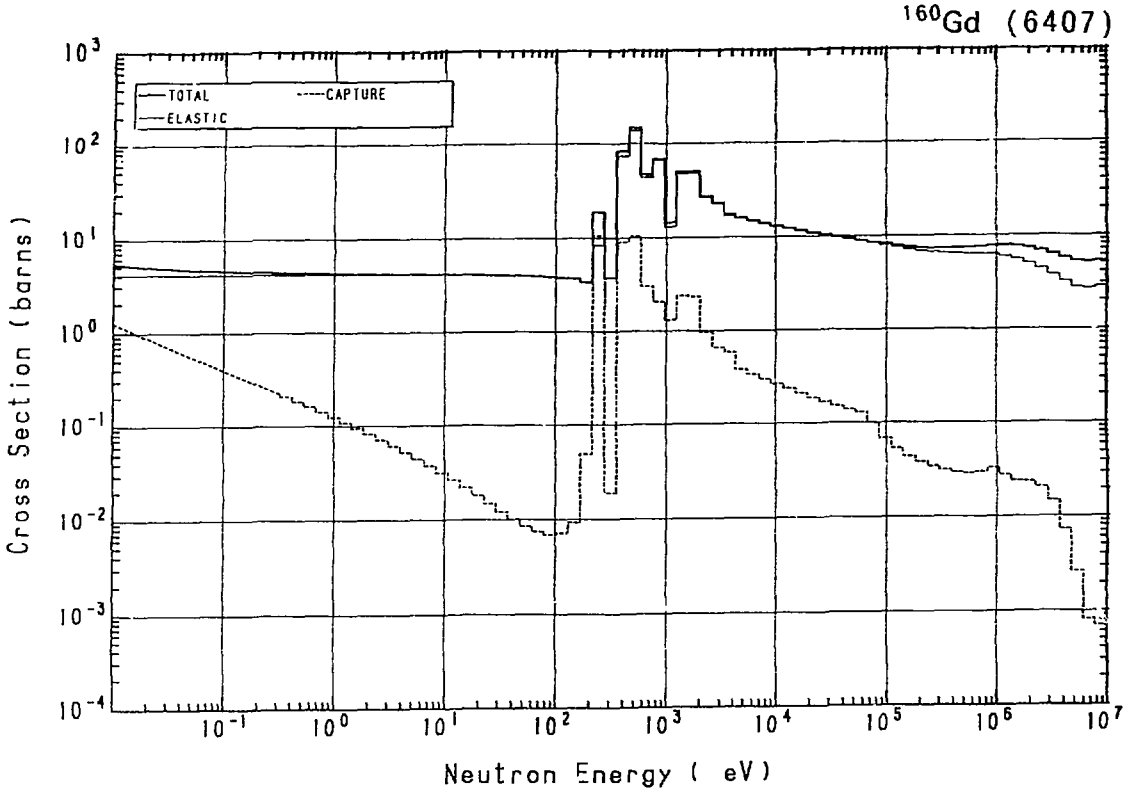

inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,t)
(n,np)
(n,nα)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)

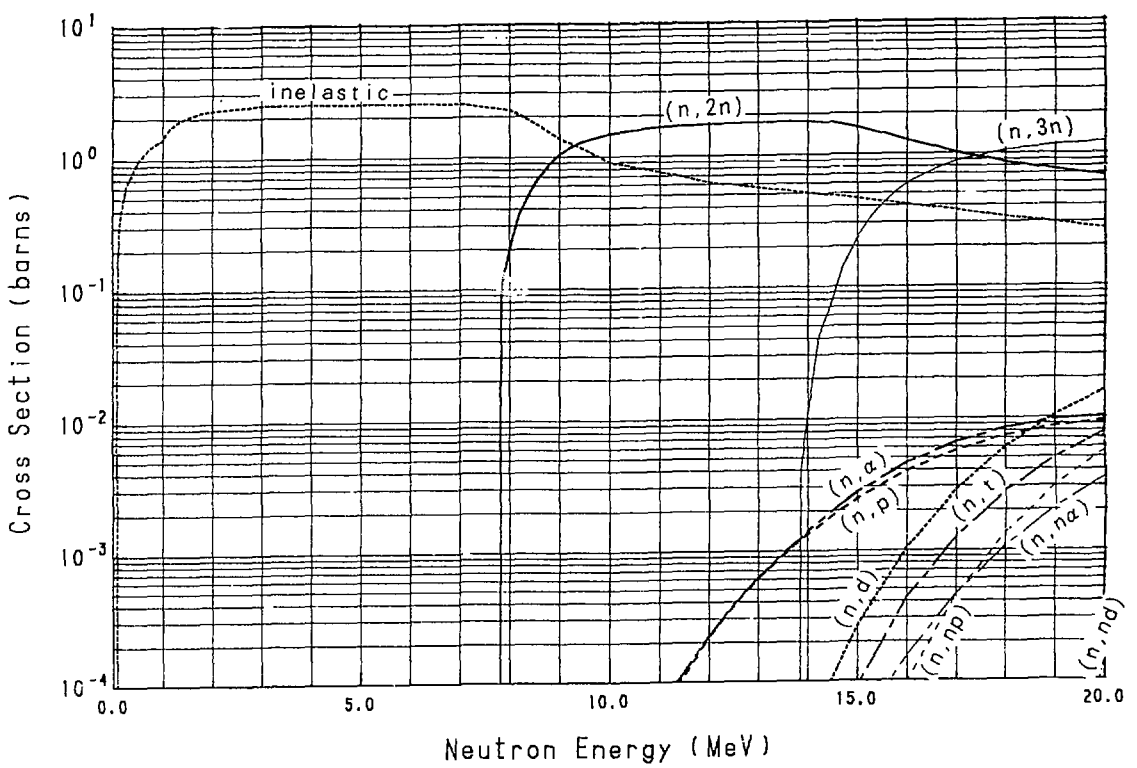

158Gd (6406)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)

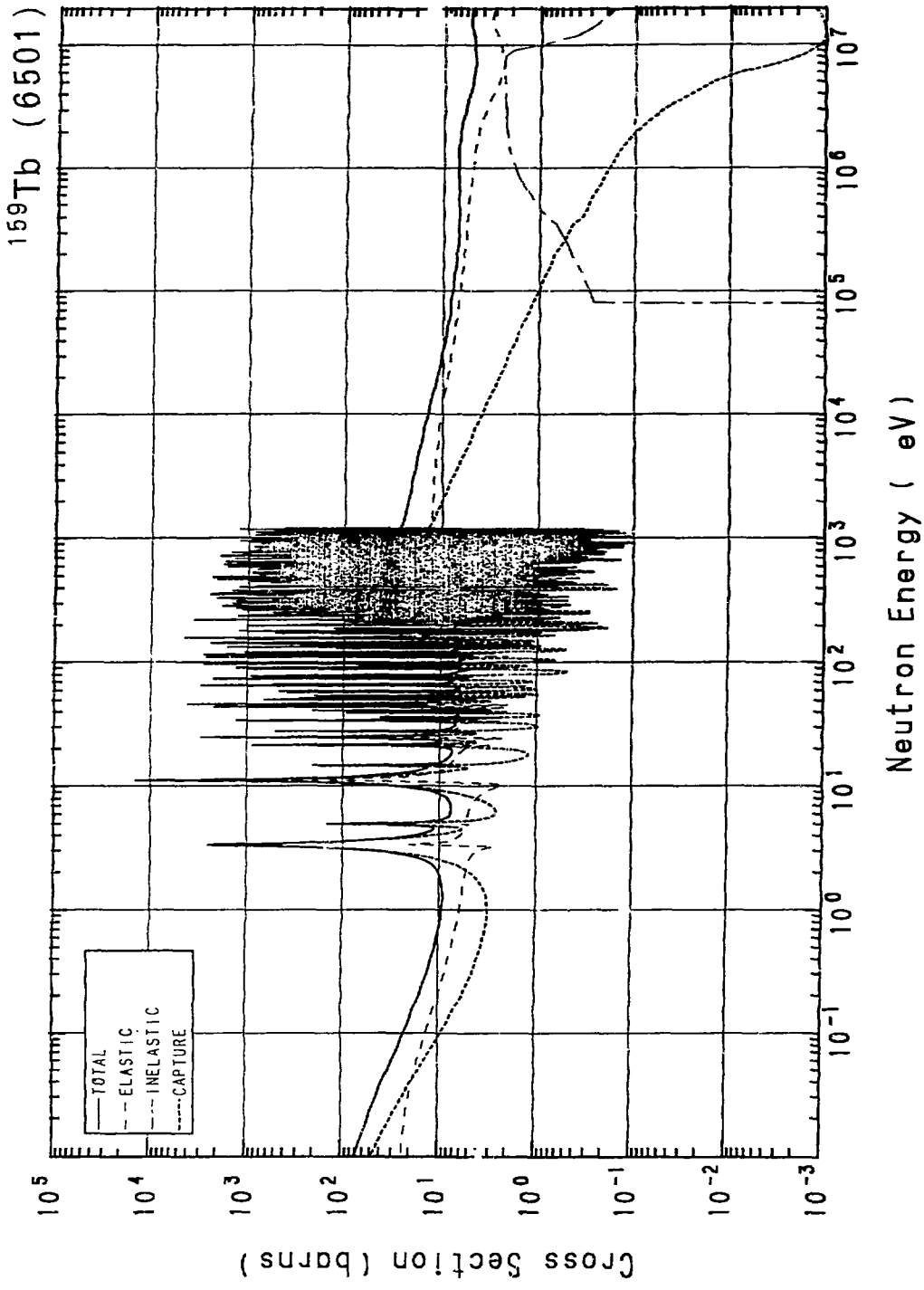

158Gd (6406)
TOTAL
CAPTURE
ELASTIC
Cross Section (barns)
Neutron Energy (eV)

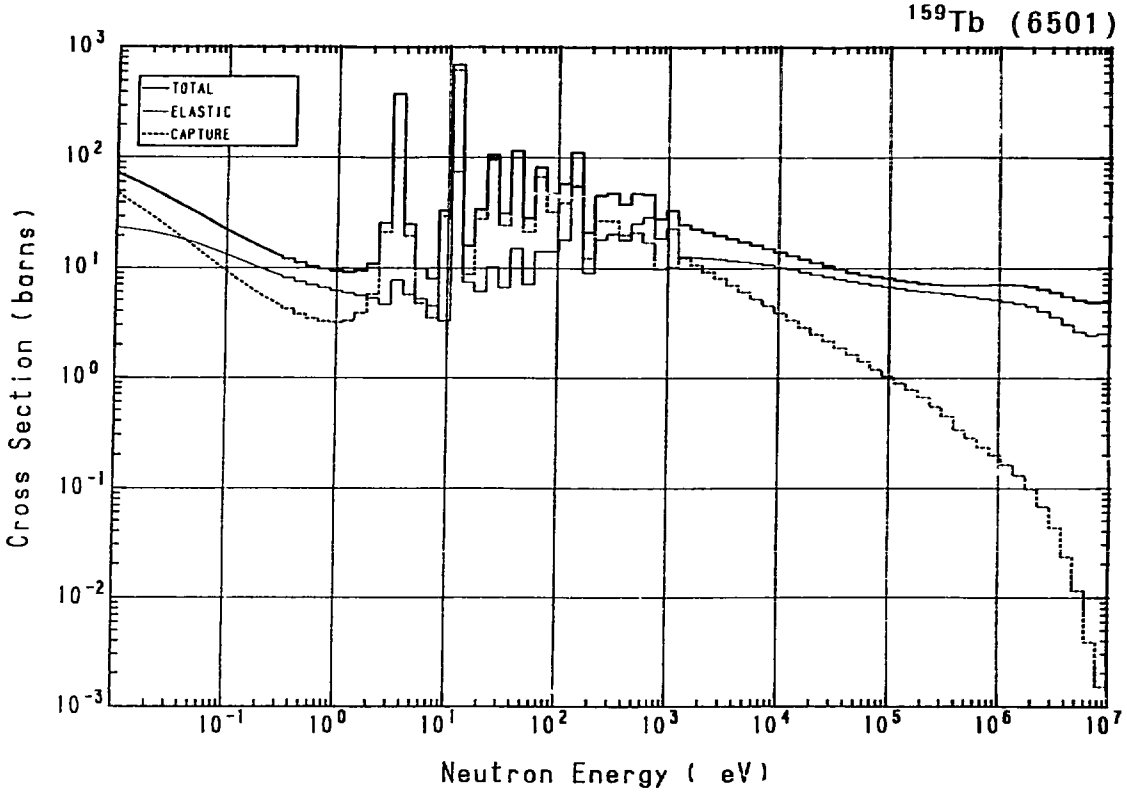

inelastic
(n,2n)
(n,3n)
(n,t)
(n,np)
(n,d)
(n,na)
(n,p)
(n,α)
Cross Section (barns)
Neutron Energy (MeV)

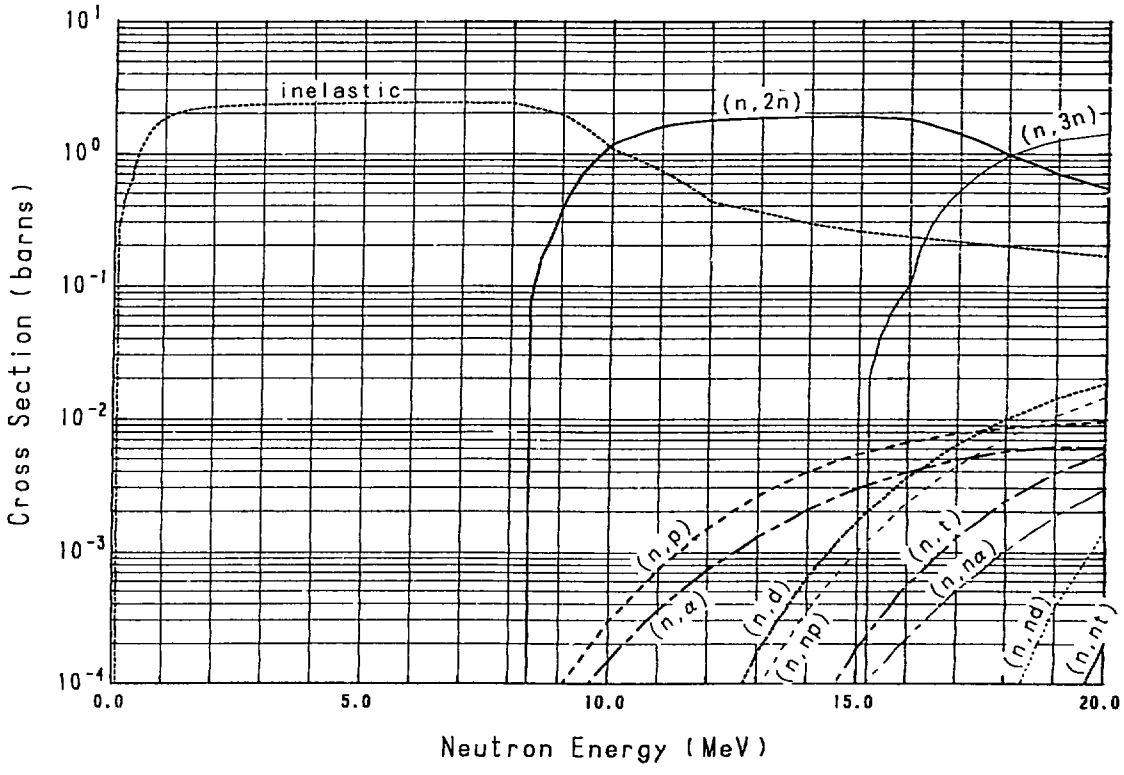

160Gd (6407)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)
10^4
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7


160Gd (6407)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)


inelastic
(n,2n)
(n,3n)
(n,α)
(n,p)
(n,t)
(n,nα)
(n,d)
(n,np)
(n,nd)
Cross Section (barns)
Neutron Energy (MeV)


159Tb (6501)
TOTAL
ELASTIC
INELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)


159Tb (6501)
TOTAL
ELASTIC
CAPTURE
Cross Section (barns)
Neutron Energy (eV)


inelastic
(n,2n)
(n,3n)
(n,p)
(n,α)
(n,d)
(n,np)
(n,t)
(n,nα)
(n,nd)
(n,nt)
Cross Section (barns)
Neutron Energy (MeV)

3. Tables of Cross Sections Averaged over 38 Energy Intervals

MATERIAL =3301 CROSS SECTION

^{75}As (3301)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.9351+ 1	5.4303+ 0		1.3921+ 1					0.0000+ 0				0.9763- 3
1.0000- 2 ~ 2.0000- 2	1.1380+ 1	5.4302+ 0		5.9499+ 0					0.0000+ 0				
2.0000- 2 ~ 4.0000- 2	9.5376+ 0	5.4299+ 0		4.2076+ 0					0.0000+ 0				0.9763- 3
4.0000- 2 ~ 7.0000- 2	8.5225+ 0	5.4296+ 0		3.0930+ 0					0.0000+ 0				0.9763- 3
7.0000- 2 ~ 1.0000- 1	7.9063+ 0	5.4291+ 0		2.4772+ 0					0.0000+ 0				0.9763- 3
1.0000- 1 ~ 2.0000- 1	7.3121+ 0	5.4281+ 0		1.8840+ 0					0.0000+ 0				0.9763- 3
2.0000- 1 ~ 4.0000- 1	6.7611+ 0	5.4260+ 0		1.3352+ 0					0.0000+ 0				0.9763- 3
4.0000- 1 ~ 7.0000- 1	6.4076+ 0	5.4221+ 0		9.8544- 1					0.0000+ 0				0.9763- 3
7.0000- 1 ~ 1.0000+ 0	6.2089+ 0	5.4176+ 0		7.9127- 1					0.0000+ 0				0.9763- 3
1.0000+ 0 ~ 2.0000+ 0	6.0161+ 0	5.4078+ 0		6.0830- 1					0.0000+ 0				0.9763- 3
2.0000+ 0 ~ 4.0000+ 0	5.8266+ 0	5.3848+ 0		4.4074- 1					0.0000+ 0				0.9763- 3
4.0000+ 0 ~ 7.0000+ 0	5.6845+ 0	5.3452+ 0		3.3923- 1					0.0000+ 0				0.9762- 3
7.0000+ 0 ~ 1.0000+ 1	5.5848+ 0	5.2956+ 0		2.8915- 1					0.0000+ 0				0.9751- 3
1.0000+ 1 ~ 2.0000+ 1	5.4394+ 0	5.1742+ 0		2.6523- 1					0.0000+ 0				0.9748- 3
2.0000+ 1 ~ 4.0000+ 1	6.2796+ 0	4.6872+ 0		6.9239- 1					0.0000+ 0				0.9743- 3
4.0000+ 1 ~ 7.0000+ 1	7.0568+ 1	1.3341+ 1		5.7227+ 1					0.0000+ 0				0.9732- 3
7.0000+ 1 ~ 1.0000+ 2	1.7217+ 1	6.0054+ 0		1.1212+ 1					0.0000+ 0				0.9724- 3
1.0000+ 2 ~ 2.0000+ 2	4.5615+ 0	4.4896+ 0		7.1844- 2					0.0000+ 0				0.9696- 3
2.0000+ 2 ~ 4.0000+ 2	3.8321+ 1	2.3634+ 1		1.4687+ 1					0.0000+ 0				0.9647- 3
4.0000+ 2 ~ 7.0000+ 2	5.3377+ 1	4.5792+ 1		7.5850+ 0					0.0000+ 0				0.9566- 3
7.0000+ 2 ~ 1.0000+ 3	4.8085+ 1	4.0548+ 1		7.5197+ 0					0.0000+ 0				0.9500- 3
1.0000+ 3 ~ 2.0000+ 3	2.1943+ 1	1.9763+ 1		2.1796+ 0					0.0000+ 0				0.9434- 3
2.0000+ 3 ~ 4.0000+ 3	1.8225+ 1	1.6627+ 1		1.5985+ 0					0.0000+ 0				0.9805- 3
4.0000+ 3 ~ 7.0000+ 3	1.5075+ 1	1.3719+ 1		1.3696+ 0					0.0000+ 0				0.0777- 3
7.0000+ 3 ~ 1.0000+ 4	1.5589+ 1	1.4574+ 1		1.0150+ 0					0.0000+ 0				9.3097- 3
1.0000+ 4 ~ 2.0000+ 4	1.2295+ 1	1.1600+ 1		6.9609- 1					0.0000+ 0				1.0233- 2
2.0000+ 4 ~ 4.0000+ 4	1.0442+ 1	9.9840+ 0		4.5769- 1					0.0000+ 0				1.3744- 2
4.0000+ 4 ~ 7.0000+ 4	9.1442+ 0	8.8301+ 0		3.1411- 1					0.0000+ 0				2.2230- 2
7.0000+ 4 ~ 1.0000+ 5	8.3464+ 0	8.1042+ 0		2.4121- 1					0.0000+ 0				3.4101- 2
1.0000+ 5 ~ 2.0000+ 5	7.9760+ 0	7.7965+ 0		1.7891- 1					6.4562-17				5.6671- 2
2.0000+ 5 ~ 4.0000+ 5	7.5729+ 0	7.0840+ 0	3.8195- 1	1.0361- 1					2.5833-16				1.4934- 1
4.0000+ 5 ~ 7.0000+ 5	8.7267+ 0	5.5004+ 0	1.1834+ 0	4.1599- 2			9.4962-18		1.1359-15				2.0268- 1
7.0000+ 5 ~ 1.0000+ 6	5.7786+ 0	4.2764+ 0	1.4720+ 0	2.8696- 2			1.8356-17		7.5246-16				3.0006- 1
1.0000+ 6 ~ 2.0000+ 6	4.6608+ 0	2.8487+ 0	1.6914+ 0	1.8024- 2			1.8767- 7		4.0587-12				4.6620- 1
2.0000+ 6 ~ 4.0000+ 6	3.7620+ 0	1.9487+ 0	1.8039+ 0	9.8868- 3			1.2668- 3		4.8862- 7				4.9899- 1
4.0000+ 6 ~ 7.0000+ 6	3.9932+ 0	2.3544+ 0	1.8109+ 0	4.5100- 3			2.2618- 2		4.4167- 4	1.8232-17	4.5305- 9		6.4740- 1
7.0000+ 6 ~ 1.0000+ 7	4.4750+ 0	2.8896+ 0	1.5209+ 0	1.6993- 3			6.3166- 2	1.5574- 3	5.8336- 3	4.0351- 7	2.2003- 6	1.1732-16	7.7776- 1
1.0000+ 7 ~ 2.0000+ 7	3.7613+ 0	2.3319+ 0	3.6569- 1	9.4924- 4	8.6728- 1	2.6650- 3	3.6496- 2	9.6476- 2	6.6917- 3	3.3951- 2	5.2307- 3	7.6406- 4	6.0817- 1

MATERIAL =3401 CROSS SECTION

^{74}Se (3401)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.6797+ 2	7.2792+ 0		1.6009+ 2					0.0000+ 0				9.0966- 3
1.0000- 2 ~ 2.0000- 2	7.6734+ 1	7.2767+ 0		6.8467+ 1					0.0000+ 0				
2.0000- 2 ~ 4.0000- 2	6.5724+ 1	7.2731+ 0		4.8461+ 1					0.0000+ 0				9.0966- 3
4.0000- 2 ~ 7.0000- 2	4.2942+ 1	7.2671+ 0		3.5675+ 1					0.0000+ 0				9.0966- 3
7.0000- 2 ~ 1.0000- 1	3.5864+ 1	7.2598+ 0		2.8604+ 1					0.0000+ 0				9.0966- 3
1.0000- 1 ~ 2.0000- 1	2.9029+ 1	7.2440+ 0		2.1785+ 1					0.0000+ 0				9.0966- 3
2.0000- 1 ~ 4.0000- 1	2.2764+ 1	7.2074+ 0		1.5647+ 1					0.0000+ 0				9.0966- 3
4.0000- 1 ~ 7.0000- 1	1.8728+ 1	7.1458+ 0		1.1502+ 1					0.0000+ 0				9.0966- 3
7.0000- 1 ~ 1.0000+ 0	1.6616+ 1	7.0711+ 0		9.4441+ 0					0.0000+ 0				9.0966- 3
1.0000+ 0 ~ 2.0000+ 0	1.4358+ 1	6.9051+ 0		7.4630+ 0					0.0000+ 0				9.0966- 3
2.0000+ 0 ~ 4.0000+ 0	1.2292+ 1	6.5014+ 0		5.7903+ 0					0.0000+ 0				9.0966- 3
4.0000+ 0 ~ 7.0000+ 0	1.0851+ 1	5.7564+ 0		5.0948+ 0					0.0000+ 0				9.0966- 3
7.0000+ 0 ~ 1.0000+ 1	9.9992+ 0	4.7241+ 0		5.2752+ 0					0.0000+ 0				9.0966- 3
1.0000+ 1 ~ 2.0000+ 1	1.1835+ 1	1.6585+ 0		9.9765+ 0					0.0000+ 0				9.0963- 3
2.0000+ 1 ~ 4.0000+ 1	1.3187+ 3	6.9909+ 2		7.1965+ 2					0.0000+ 0				9.0960- 3
4.0000+ 1 ~ 7.0000+ 1	2.0065+ 1	1.0669+ 1		1.4669+ 0					0.0000+ 0				9.0952- 3
7.0000+ 1 ~ 1.0000+ 2	1.2034+ 1	1.1807+ 1		4.2717- 1					0.0000+ 0				9.0946- 3
1.0000+ 2 ~ 2.0000+ 2	5.8977+ 0	5.2564+ 0		4.3924- 1					0.0000+ 0				9.0924- 3
2.0000+ 2 ~ 4.0000+ 2	3.5563+ 2	3.3419+ 2		2.1439+ 1					0.0000+ 0				9.0881- 3
4.0000+ 2 ~ 7.0000+ 2	1.7024+ 1	1.6964+ 1		6.0048- 2					0.0000+ 0				9.0802- 3
7.0000+ 2 ~ 1.0000+ 3	8.8883+ 0	8.8221+ 0		6.6164- 2					0.0000+ 0				9.0738- 3
1.0000+ 3 ~ 2.0000+ 3	4.7108+ 1	4.4406+ 1		2.7028+ 0					0.0000+ 0				9.0661- 3
2.0000+ 3 ~ 4.0000+ 3	1.8122+ 1	1.6055+ 1		8.0247- 1					0.0000+ 0				9.0770- 3
4.0000+ 3 ~ 7.0000+ 3	1.4400+ 1	1.3891+ 1		5.0930- 1					0.0000+ 0				9.1076- 3
7.0000+ 3 ~ 1.0000+ 4	1.2669+ 1	1.2468+ 1		4.2131- 1					0.0000+ 0				9.3708- 3
1.0000+ 4 ~ 2.0000+ 4	1.1400+ 1	1.1078+ 1		3.2117- 1					0.0000+ 0				1.0277- 2
2.0000+ 4 ~ 4.0000+ 4	9.9646+ 0	9.7481+ 0		2.1648- 1					0.0000+ 0				1.3580- 2
4.0000+ 4 ~ 7.0000+ 4	8.9668+ 0	8.8091+ 0		1.4670- 1					0.0000+ 0				2.1083- 2
7.0000+ 4 ~ 1.0000+ 5	8.3160+ 0	8.2034+ 0		1.1136- 1					0.0000+ 0				3.3621- 2
1.0000+ 5 ~ 2.0000+ 5	7.9746+ 0	7.8860+ 0		8.8476- 2					1.6707- 8				5.6872- 2
2.0000+ 5 ~ 4.0000+ 5	7.5534+ 0	7.4777+ 0		7.5539- 2					6.6827- 8				1.4007- 1
4.0000+ 5 ~ 7.0000+ 5	6.7095+ 0	6.8118+ 0	1.8748- 2	7.6488- 2			8.2568-20		2.3067- 7				2.3420- 1
7.0000+ 5 ~ 1.0000+ 6	5.7767+ 0	5.2465+ 0	4.8132- 1	4.7222- 2			9.0026-19		1.3341- 6				3.1937- 1
1.0000+ 6 ~ 2.0000+ 6	4.5586+ 0	3.4472+ 0	1.0746+ 0	3.4696- 2			3.4546- 8		3.0217- 6				3.8731- 1
2.0000+ 6 ~ 4.0000+ 6	3.7622+ 0	2.1203+ 0	1.6131+ 0	1.6041- 2			7.7509- 3		2.1762- 3				4.6096- 1
4.0000+ 6 ~ 7.0000+ 6	3.9937+ 0	2.2414+ 0	1.0394+ 0	6.9865- 3			1.0831- 1		5.8302- 2	7.1003-13	6.8888-21		6.4300- 1
7.0000+ 6 ~ 1.0000+ 7	4.4766+ 0	2.6676+ 0	1.4364+ 0	1.7588- 3			2.8668- 1	8.2600-10	6.4111- 2	9.3228- 8	3.0622- 6		7.1783- 1
1.0000+ 7 ~ 2.0000+ 7	3.7515+ 0	2.2709+ 0	5.3226- 1	1.0006- 3	3.5201- 1		1.4196- 1	2.6408- 1	3.0026- 2	1.4341- 1	5.2601- 3	2.7091- 4	8.0817- 1

MATERIAL =3402 CROSS SECTION

^{76}Se (3402)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.8147+ 2	1.8401+ 1		2.6306+ 2					0.0000+ 0				8.8674 3
1.0000- 2 ~ 2.0000- 2	1.3081+ 2	1.8401+ 1		1.1241+ 2					0.0000+ 0				8.8674- 3
2.0000- 2 ~ 4.0000 2	9.7869+ 1	1.8400+ 1		7.9469+ 1					0.0000+ 0				8.8674- 3
4.0000- 2 ~ 7.0000- 2	7.6787+ 1	1.8398+ 1		5.8389+ 1					0.0000+ 0				8.8674- 3
7.0000- 2 ~ 1.0000- 1	6.5128+ 1	1.8396+ 1		4.6732+ 1					0.0000+ 0				8.8674 3
1.0000- 1 ~ 2.0000- 1	5.3885+ 1	1.8392+ 1		3.5493+ 1					0.0000+ 0				8.8674- 3
2.0000- 1 ~ 4.0000- 1	4.3460+ 1	1.8383+ 1		2.5077+ 1					0.0000+ 0				8.8674- 3
4.0000- 1 ~ 7.0000- 1	3.6774+ 1	1.8367+ 1		1.8407+ 1					0.0000+ 0				8.8674- 3
7.0000- 1 ~ 1.0000+ 0	3.3033+ 1	1.8348+ 1		1.4686+ 1					0.0000+ 0				8.8674- 3
1.0000+ 0 ~ 2.0000+ 0	2.9441+ 1	1.8308+ 1		1.1133+ 1					0.0000+ 0				8.8674 3
2.0000+ 0 ~ 4.0000+ 0	2.6013+ 1	1.8216+ 1		7.7974+ 0					0.0000+ 0				8.8674- 3
4.0000+ 0 ~ 7.0000+ 0	2.3706+ 1	1.8065+ 1		5.6415+ 0					0.0000+ 0				8.8573- 3
7.0000+ 0 ~ 1.0000+ 1	2.2307+ 1	1.7807+ 1		4.4189+ 0					0.0000+ 0				8.8573- 3
1.0000+ 1 ~ 2.0000+ 1	2.0752+ 1	1.7517+ 1		3.2349+ 0					0.0000+ 0				8.8571- 3
2.0000+ 1 ~ 4.0000+ 1	1.8821+ 1	1.6731+ 1		2.0900+ 0					0.0000+ 0				8.8669 3
4.0000+ 1 ~ 7.0000+ 1	1.6919+ 1	1.5588+ 1		1.3303+ 0					0.0000+ 0				8.8662 3
7.0000+ 1 ~ 1.0000+ 2	1.5393+ 1	1.4429+ 1		9.0383- 1					0.0000+ 0				8.8556- 3
1.0000+ 2 ~ 2.0000+ 2	1.3040+ 1	1.2521+ 1		5.1858- 1					0.0000+ 0				8.8534 3
2.0000+ 2 ~ 4.0000+ 2	2.6158+ 1	1.8565+ 1		7.5924+ 0					0.0000+ 0				8.8461 3
4.0000+ 2 ~ 7.0000+ 2	8.0431+ 0	7.8395+ 0		1.0356- 1					0.0000+ 0				8.8407 3
7.0000+ 2 ~ 1.0000+ 3	6.4875+ 1	6.0982+ 1		3.8929+ 0					0.0000+ 0				8.8330 3
1.0000+ 3 ~ 2.0000+ 3	7.4448+ 0	7.2173+ 0		2.2749- 1					0.0000+ 0				8.8230 3
2.0000+ 3 ~ 4.0000+ 3	2.6588+ 1	2.6088+ 1		5.0052- 1					0.0000+ 0				8.8255 3
4.0000+ 3 ~ 7.0000+ 3	1.9495+ 1	1.9276+ 1		2.1999- 1					0.0000+ 0				8.9133 3
7.0000+ 3 ~ 1.0000+ 4	1.6185+ 1	1.6036+ 1		1.4862- 1					0.0000+ 0				9.1104 3
1.0000+ 4 ~ 2.0000+ 4	1.2262+ 1	1.2094+ 1		1.6868- 1					0.0000+ 0				9.9567 3
2.0000+ 4 ~ 4.0000+ 4	1.0432+ 1	1.0333+ 1		9.9434- 2					0.0000+ 0				1.3300 2
4.0000+ 4 ~ 7.0000+ 4	9.1637+ 0	9.0980+ 0		6.5669- 2					0.0000+ 0				2.1666- 2
7.0000+ 4 ~ 1.0000+ 5	6.3692+ 0	6.3184+ 0		6.0636- 2					0.0000+ 0				3.3306- 2
1.0000+ 5 ~ 2.0000+ 5	7.9793+ 0	7.9377+ 0		4.1686- 2					4.8149-16				6.6366 2
2.0000+ 5 ~ 4.0000+ 5	7.3603+ 0	7.5215+ 0		9.8685- 2					1.9259-14				1.3982 1
4.0000+ 5 ~ 7.0000+ 5	8.7178+ 0	8.5875+ 0	9.1006- 2	3.5804- 2					7.0984-14				2.3641- 1
7.0000+ 5 ~ 1.0000+ 6	6.7823+ 0	6.1868+ 0	6.7364- 1	1.8760- 2					6.5666-13				3.7300 1
1.0000+ 6 ~ 2.0000+ 6	4.5628+ 0	3.4863+ 0	1.0600+ 0	1.6196- 2					3.7697-10				3.8416 1
2.0000+ 6 ~ 4.0000+ 6	3.7481+ 0	2.1233+ 0	1.6164+ 0	8.3340- 3			2.1864- 7		6.4021- 6				4.5271- 1
4.0000+ 6 ~ 7.0000+ 6	3.9926+ 0	2.3832+ 0	1.6000+ 0	3.9490- 3			4.1606- 3		1.7164- 3	1.1374-16			6.4201 1
7.0000+ 6 ~ 1.0000+ 7	4.4744+ 0	2.9000+ 0	1.5247+ 0	1.1515- 3			3.3926- 2		1.4336- 2	8.7462- 7	3.0602 0		7.7761- 1
1.0000+ 7 ~ 2.0000+ 7	3.7616+ 0	2.4186+ 0	4.8480- 1	9.3292- 4	7.0800- 1	6.7658- 6	6.6940- 2	3.4622- 2	1.3190- 2	3.1443- 2	1.7038 3	1.5004 4	8.0010 1

MATERIAL =3403 CROSS SECTION

^{77}Se (3403)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.3656+ 2	8.4320+ 0		1.3019+ 2			0.0000+ 0		0.0000+ 0				8.7421- 3
1.0000- 2 ~ 2.0000- 2	6.4004+ 1	8.4311+ 0		5.5673+ 1			0.0000+ 0		0.0000+ 0				8.7421- 3
2.0000- 2 ~ 4.0000- 2	4.2701+ 1	8.4298+ 0		3.9271+ 1			0.0000+ 0		0.0000+ 0				8.7421- 3
4.0000- 2 ~ 7.0000- 2	3.7265+ 1	8.4270+ 0		2.8838+ 1			0.0000+ 0		0.0000+ 0				8.7421- 3
7.0000- 2 ~ 1.0000- 1	3.1462+ 1	8.4241+ 0		2.3038+ 1			0.0000+ 0		0.0000+ 0				8.7421- 3
1.0000- 1 ~ 2.0000- 1	2.5841+ 1	8.4176+ 0		1.7423+ 1			0.0000+ 0		0.0000+ 0				8.7421 3
2.0000- 1 ~ 4.0000- 1	2.0831+ 1	8.4029+ 0		1.2228+ 1			0.0000+ 0		0.0000+ 0				8.7421- 3
4.0000- 1 ~ 7.0000- 1	1.7239+ 1	8.3785+ 0		8.8802+ 0			0.0000+ 0		0.0000+ 0				8.7421- 3
7.0000- 1 ~ 1.0000+ 0	1.6331+ 1	8.3499+ 0		6.9814+ 0			0.0000+ 0		0.0000+ 0				8.7421- 3
1.0000+ 0 ~ 2.0000+ 0	1.3419+ 1	8.2897+ 0		5.1298+ 0			0.0000+ 0		0.0000+ 0				8.7421- 3
2.0000+ 0 ~ 4.0000+ 0	1.1618+ 1	8.1697+ 0		3.3689+ 0			0.0000+ 0		0.0000+ 0				8.7421- 3
4.0000+ 0 ~ 7.0000+ 0	1.0143+ 1	7.9858+ 0		2.1769+ 0			0.0000+ 0		0.0000+ 0				8.7420- 3
7.0000+ 0 ~ 1.0000+ 1	9.2815+ 0	7.7642+ 0		1.5173+ 0			0.0000+ 0		0.0000+ 0				8.7419- 3
1.0000+ 1 ~ 2.0000+ 1	8.3207+ 0	7.4208+ 0		9.0008- 1			0.0000+ 0		0.0000+ 0				8.7417 3
2.0000+ 1 ~ 4.0000+ 1	7.2906+ 0	6.8862+ 0		4.0439- 1			0.0000+ 0		0.0000+ 0				8.7412- 3
4.0000+ 1 ~ 7.0000+ 1	6.5366+ 0	6.3640+ 0		1.0264- 1			0.0000+ 0		0.0000+ 0				8.7402- 3
7.0000+ 1 ~ 1.0000+ 2	6.0452+ 0	5.9232+ 0		1.2206- 1			0.0000+ 0		0.0000+ 0				8.7384- 3
1.0000+ 2 ~ 2.0000+ 2	8.4797+ 0	5.5065+ 0		9.6723- 1			0.0000+ 0		0.0000+ 0				8.7368- 3
2.0000+ 2 ~ 4.0000+ 2	5.0010+ 1	3.8002+ 1		1.1920+ 1			0.0000+ 0		0.0000+ 0				8.7319- 3
4.0000+ 2 ~ 7.0000+ 2	1.7167+ 1	1.6207+ 1		1.0486+ 0			0.0000+ 0		0.0000+ 0				8.7237- 3
7.0000+ 2 ~ 1.0000+ 3	3.1018+ 1	2.6034+ 1		4.9838+ 0			0.0000+ 0		0.0000+ 0				8.7171- 3
1.0000+ 3 ~ 2.0000+ 3	1.6955+ 1	1.3573+ 1		2.2814+ 0			0.0000+ 0		0.0000+ 0				8.7101 3
2.0000+ 3 ~ 4.0000+ 3	2.0177+ 1	1.8492+ 1		1.6842+ 0			0.0000+ 0		0.0000+ 0				8.7262- 3
4.0000+ 3 ~ 7.0000+ 3	1.4476+ 1	1.3486+ 1		9.9088- 1			0.0000+ 0		0.0000+ 0				8.8380 3
7.0000+ 3 ~ 1.0000+ 4	1.2987+ 1	1.2148+ 1		8.1927- 1			0.0000+ 0		0.0000+ 0				9.0648 3
1.0000+ 4 ~ 2.0000+ 4	1.1486+ 1	1.0036+ 1		6.6043- 1			0.0000+ 0		0.0000+ 0				9.0784- 3
2.0000+ 4 ~ 4.0000+ 4	1.0023+ 1	9.5545+ 0		4.6900- 1			0.0000+ 0		0.0000+ 0				1.3486- 2
4.0000+ 4 ~ 7.0000+ 4	8.9900+ 0	8.6660+ 0		3.3404- 1			0.0000+ 0		0.0000+ 0				2.1991- 2
7.0000+ 4 ~ 1.0000+ 5	8.3268+ 0	8.0711+ 0		2.5668- 1			0.0000+ 0		0.0000+ 0				3.3989- 2
1.0000+ 5 ~ 2.0000+ 5	7.9823+ 0	7.7941+ 0	2.2883- 3	1.8541- 1			3.3223-18		2.1044- 8				6.8277- 2
2.0000+ 5 ~ 4.0000+ 5	7.5728+ 0	7.0935+ 0	3.7907- 1	9.3108- 2			1.3289-17		6.4176- 8				1.4973- 1
4.0000+ 5 ~ 7.0000+ 5	6.7310+ 0	5.8414+ 0	1.1524+ 0	3.5037- 2			5.8813-18		1.7824- 6				2.8139- 1
7.0000+ 5 ~ 1.0000+ 6	6.7842+ 0	4.2898+ 0	1.4734+ 0	2.0398- 2			1.1807-12		2.7402- 6				3.8084- 1
1.0000+ 6 ~ 2.0000+ 6	4.6642+ 0	2.7989+ 0	1.7618+ 0	1.2266- 2			2.6660- 6		9.7013- 6				4.7630 1
2.0000+ 6 ~ 4.0000+ 6	3.7618+ 0	1.9224+ 0	1.8308+ 0	6.8840- 3			8.3884- 4		9.8252- 4				6.0499 1
4.0000+ 6 ~ 7.0000+ 6	3.9922+ 0	2.3577+ 0	1.8215+ 0	2.2360- 3			0.3857- 3		4.2239- 3	6.0913-10			6.4836 1
7.0000+ 6 ~ 1.0000+ 7	4.4738+ 0	2.9140+ 0	1.1182+ 0	1.2414- 3	4.2336- 1		1.0941- 2		6.0370- 3	2.4160-10	8.1671- 8	2.8638-10	7.7778 1
1.0000+ 7 ~ 2.0000+ 7	3.7613+ 0	2.3698+ 0	1.6105- 1	1.0668- 3	1.1617+ 0	1.3147- 3	3.3066- 2	1.0618- 2	9.4300- 3	7.1674- 3	4.0062- 3	3.0319- 4	8.0817- 1

^{78}Se (3404)

MATERIAL =3404

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	9.7306+ 0	8.4000+ 0		1.3306+ 0					0.0000+ 0				8.6302- 3
1.0000- 2 ~ 2.0000- 2	8.9686+ 0	8.4000+ 0		5.6861- 1					0.0000+ 0				8.6302- 3
2.0000- 2 ~ 4.0000- 2	8.8020+ 0	8.4000+ 0		4.0203- 1					0.0000+ 0				8.6302- 3
4.0000- 2 ~ 7.0000- 2	8.6954+ 0	8.4000+ 0		2.9547- 1					0.0000+ 0				8.6302- 3
7.0000- 2 ~ 1.0000- 1	8.6364+ 0	8.3999+ 0		2.3661- 1					0.0000+ 0				8.6302- 3
1.0000- 1 ~ 2.0000- 1	8.5795+ 0	8.3998+ 0		1.7971- 1					0.0000+ 0				8.6302- 3
2.0000- 1 ~ 4.0000- 1	8.5255+ 0	8.3995+ 0		1.2711- 1					0.0000+ 0				8.6302- 3
4.0000- 1 ~ 7.0000- 1	8.4925+ 0	8.3991+ 0		9.3459- 2					0.0000+ 0				8.6302- 3
7.0000- 1 ~ 1.0000+ 0	8.4793+ 0	8.3986+ 0		7.4740- 2					0.0000+ 0				8.6302- 3
1.0000+ 0 ~ 2.0000+ 0	8.4543+ 0	8.3974+ 0		5.6910- 2					0.0000+ 0				8.6302- 3
2.0000+ 0 ~ 4.0000+ 0	8.4349+ 0	8.3947+ 0		4.0281- 2					0.0000+ 0				8.6302- 3
4.0000+ 0 ~ 7.0000+ 0	8.4198+ 0	8.3902+ 0		2.9865- 2					0.0000+ 0				8.6302- 3
7.0000+ 0 ~ 1.0000+ 1	8.4085+ 0	8.3847+ 0		2.3746- 2					0.0000+ 0				8.6301- 3
1.0000+ 1 ~ 2.0000+ 1	8.3911+ 0	8.3729+ 0		1.8183- 2					0.0000+ 0				8.6300- 3
2.0000+ 1 ~ 4.0000+ 1	8.3583+ 0	8.3453+ 0		1.3007- 2					0.0000+ 0				8.6297- 3
4.0000+ 1 ~ 7.0000+ 1	8.3078+ 0	8.2979+ 0		9.8317- 3					0.0000+ 0				8.6290- 3
7.0000+ 1 ~ 1.0000+ 2	8.2464+ 0	8.2382+ 0		8.2549- 3					0.0000+ 0				8.6284- 3
1.0000+ 2 ~ 2.0000+ 2	8.0939+ 0	8.0863+ 0		7.5682- 3					0.0000+ 0				8.6283- 3
2.0000+ 2 ~ 4.0000+ 2	2.5018+ 1	1.8058+ 1		6.9602- 3					0.0000+ 0				8.6220- 3
4.0000+ 2 ~ 7.0000+ 2	8.8321+ 0	8.8095+ 0		2.2570- 2					0.0000+ 0				8.6116- 3
7.0000+ 2 ~ 1.0000+ 3	8.2922+ 0	7.9606+ 0		3.3160- 1					0.0000+ 0				8.6067- 3
1.0000+ 3 ~ 2.0000+ 3	7.3640+ 0	7.2900+ 0		7.3962- 2					0.0000+ 0				8.5969- 3
2.0000+ 3 ~ 4.0000+ 3	1.4954+ 1	1.4549+ 1		4.0503- 1					0.0000+ 0				8.5990- 3
4.0000+ 3 ~ 7.0000+ 3	2.0883+ 1	2.0697+ 1		1.8601- 1					0.0000+ 0				8.6882- 3
7.0000+ 3 ~ 1.0000+ 4	1.3044+ 1	1.3010+ 1		3.4432- 2					0.0000+ 0				8.8872- 3
1.0000+ 4 ~ 2.0000+ 4	1.3366+ 1	1.3232+ 1		1.3341- 1					0.0000+ 0				9.7307- 3
2.0000+ 4 ~ 4.0000+ 4	9.7075+ 0	9.6045+ 0		1.0305- 1					0.0000+ 0				1.3102- 2
4.0000+ 4 ~ 7.0000+ 4	8.8481+ 0	8.7806+ 0		6.7636- 2					0.0000+ 0				2.1401- 2
7.0000+ 4 ~ 1.0000+ 5	8.3208+ 0	8.2682+ 0		5.2688- 2					0.0000+ 0				3.3207- 2
1.0000+ 6 ~ 2.0000+ 5	7.9837+ 0	7.9410+ 0		4.2680- 2					3.6986-20				6.6301- 2
2.0000+ 5 ~ 4.0000+ 5	7.5666+ 0	7.5269+ 0		3.9578- 2					1.4794-19				1.3988- 1
4.0000+ 5 ~ 7.0000+ 5	6.7241+ 0	6.6882+ 0	3.5278- 2	0.9742- 2					5.5617-19				2.3439- 1
7.0000+ 5 ~ 1.0000+ 6	6.7877+ 0	6.2644+ 0	6.0085- 1	2.0952- 2					6.4309-18				3.1931- 1
1.0000+ 6 ~ 2.0000+ 6	4.6664+ 0	3.5899+ 0	9.6689- 1	1.8417- 2					3.8536-16				3.7296- 1
2.0000+ 6 ~ 4.0000+ 6	3.7485+ 0	2.1364+ 0	1.6025+ 0	9.4456- 3					5.2474- 0				4.6000- 1
4.0000+ 6 ~ 7.0000+ 6	3.9917+ 0	2.9813+ 0	1.6061+ 0	3.9146- 3			2.8178- 5		4.5706- 5	1.8197-20			6.4279- 1
7.0000+ 6 ~ 1.0000+ 7	4.4733+ 0	2.8148+ 0	1.5547+ 0	9.6356- 4			1.5434- 3		1.3266- 3	2.3060-10	6.6106-12		7.7763- 1
1.0000+ 7 ~ 2.0000+ 7	3.7517+ 0	2.4408+ 0	4.0393- 1	8.8070- 4	0.6558- 1	8.3683- 3	1.7457- 2	3.3866- 3	4.7960- 3	4.1003- 3	1.6180- 3	1.6444- 4	8.0820- 1

^{79}Se (3405)

MATERIAL =3405

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.6108+ 2	6.3000+ 0		1.5418+ 2					0.0000+ 0				8.6207- 3
1.0000- 2 ~ 2.0000- 2	7.2663+ 1	6.3000+ 0		6.5886+ 1					0.0000+ 0				8.6207- 3
2.0000- 2 ~ 4.0000- 2	5.2686+ 1	6.3000+ 0		4.6687+ 1					0.0000+ 0				8.6207- 3
4.0000- 2 ~ 7.0000- 2	4.0610+ 1	6.3000+ 0		3.4237+ 1					0.0000+ 0				8.6207- 3
7.0000- 2 ~ 1.0000- 1	3.3799+ 1	6.3000+ 0		2.7986+ 1					0.0000+ 0				8.6207- 3
1.0000- 1 ~ 2.0000- 1	2.7204+ 1	6.3000+ 0		2.0854+ 1					0.0000+ 0				8.6207- 3
2.0000- 1 ~ 4.0000- 1	2.1110+ 1	6.3000+ 0		1.4732+ 1					0.0000+ 0				8.6207- 3
4.0000- 1 ~ 7.0000- 1	1.7209+ 1	6.3000+ 0		1.0826+ 1					0.0000+ 0				8.6207- 3
7.0000- 1 ~ 1.0000+ 0	1.6007+ 1	6.3000+ 0		8.6696+ 0					0.0000+ 0				8.6207- 3
1.0000+ 0 ~ 2.0000+ 0	1.2955+ 1	6.3000+ 0		6.5881+ 0					0.0000+ 0				8.6207- 3
2.0000+ 0 ~ 4.0000+ 0	1.1002+ 1	6.3000+ 0		4.6684+ 0					0.0000+ 0				8.6207- 3
4.0000+ 0 ~ 7.0000+ 0	9.7538+ 0	6.3000+ 0		3.4235+ 0					0.0000+ 0				8.6206- 3
7.0000+ 0 ~ 1.0000+ 1	9.0807+ 0	6.3000+ 0		2.7384+ 0					0.0000+ 0				8.6206- 3
1.0000+ 1 ~ 2.0000+ 1	8.4081+ 0	6.3000+ 0		2.0833+ 0					0.0000+ 0				8.6202- 3
2.0000+ 1 ~ 4.0000+ 1	1.1656+ 1	7.6621+ 0		3.9732+ 0					0.0000+ 0				8.6187- 3
4.0000+ 1 ~ 7.0000+ 1	4.0319+ 1	1.8845+ 1		2.1474+ 1					0.0000+ 0				8.6187- 3
7.0000+ 1 ~ 1.0000+ 2	3.9698+ 1	1.7514+ 1		1.6182+ 1					0.0000+ 0				8.6170- 3
1.0000+ 2 ~ 2.0000+ 2	2.7382+ 1	1.6100+ 1		1.1262+ 1					0.0000+ 0				8.6150- 3
2.0000+ 2 ~ 4.0000+ 2	2.1486+ 1	1.4511+ 1		6.9740+ 0					0.0000+ 0				8.6100- 3
4.0000+ 2 ~ 7.0000+ 2	1.7720+ 1	1.3203+ 1		4.5156+ 0					0.0000+ 0				8.6010- 3
7.0000+ 2 ~ 1.0000+ 3	1.5631+ 1	1.2338+ 1		3.2959+ 0					0.0000+ 0				8.4980- 3
1.0000+ 3 ~ 2.0000+ 3	1.3637+ 1	1.1362+ 1		2.2761+ 0					0.0000+ 0				8.4082- 3
2.0000+ 3 ~ 4.0000+ 3	1.1795+ 1	1.0312+ 1		1.4822+ 0					0.0000+ 0				8.6081- 3
4.0000+ 3 ~ 7.0000+ 3	1.0630+ 1	9.6676+ 0		1.0621+ 0					0.0000+ 0				8.6228- 3
7.0000+ 3 ~ 1.0000+ 4	9.8890+ 0	9.1350+ 0		8.5407- 1					0.0000+ 0				8.6663- 3
1.0000+ 4 ~ 2.0000+ 4	9.3726+ 0	8.7236+ 0		6.4802- 1					0.0000+ 0				9.7867- 3
2.0000+ 4 ~ 4.0000+ 4	8.8078+ 0	8.3652+ 0		4.4260- 1					0.0000+ 0				1.3317- 2
4.0000+ 4 ~ 7.0000+ 4	8.4246+ 0	8.1245+ 0		3.0003- 1					0.0000+ 0				2.1861- 2
7.0000+ 4 ~ 1.0000+ 5	8.1767+ 0	7.9544+ 0	7.7348- 6	2.2232- 1					0.0000+ 0				3.3622- 2
1.0000+ 5 ~ 2.0000+ 5	7.9853+ 0	7.7410+ 0	9.9713- 2	1.4432- 1					8.7636-11				6.8933- 2
2.0000+ 5 ~ 4.0000+ 5	7.6864+ 0	7.0179+ 0	4.9118- 1	7.6821- 2					2.7054-10				1.6023- 1
4.0000+ 5 ~ 7.0000+ 5	6.7354+ 0	5.8018+ 0	7.8378- 1	4.8778- 2					8.3795-10				2.8429- 1
7.0000+ 5 ~ 1.0000+ 6	5.7900+ 0	4.7232+ 0	1.0207+ 0	3.5631- 2					4.6402- 9				3.6876- 1
1.0000+ 6 ~ 2.0000+ 6	4.6670+ 0	3.0707+ 0	1.4747+ 0	2.1072- 2			3.0069-20		2.1130- 7				4.3669- 1
2.0000+ 6 ~ 4.0000+ 6	3.7818+ 0	1.9995+ 0	1.7808+ 0	7.2040- 3			1.1104- 6		2.7081- 6				4.8731- 1
4.0000+ 6 ~ 7.0000+ 6	3.9912+ 0	2.3835+ 0	1.6252+ 0	1.3818- 3			2.0860- 4		8.9471- 4	1.6076-13	1.6237-11	6.0272-20	6.4742- 1
7.0000+ 6 ~ 1.0000+ 7	4.4727+ 0	2.8117+ 0	8.8482- 1	9.3703- 4	6.6076- 1		3.4816- 4		1.8460- 3				7.7776- 1
1.0000+ 7 ~ 2.0000+ 7	3.7513+ 0	2.3716+ 0	1.1113- 1	1.0470- 3	1.2269+ 0	1.3704- 2	1.0642- 2	2.4463- 3	1.0480- 2	1.6347- 3	2.3061- 3	4.1810- 4	8.0810- 1

MATERIAL =3406

CROSS SECTION

^{80}Se (3406)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	8.8376+ 0	6.9601+ 0		1.8876+ 0									8.4143- 3
1.0000- 2 ~ 2.0000- 2	7.7567+ 0	6.9600+ 0		8.0684- 1									8.4143- 3
2.0000- 2 ~ 4.0000- 2	7.6203+ 0	6.9600+ 0		6.7031- 1									8.4143- 3
4.0000- 2 ~ 7.0000- 2	7.3689+ 0	6.9499+ 0		4.1901- 1									8.4143- 3
7.0000- 2 ~ 1.0000- 1	7.2863+ 0	6.9498+ 0		3.3562- 1									8.4143- 3
1.0000- 1 ~ 2.0000- 1	7.2045+ 0	6.9498+ 0		2.5492- 1									8.4143- 3
2.0000- 1 ~ 4.0000- 1	7.1295+ 0	6.9492+ 0		1.8028- 1									8.4143- 3
4.0000- 1 ~ 7.0000- 1	7.0910+ 0	6.9485+ 0		1.3259- 1									8.4143- 3
7.0000- 1 ~ 1.0000+ 0	7.0536+ 0	6.9476+ 0		1.0596- 1									8.4143- 3
1.0000+ 0 ~ 2.0000+ 0	7.0263+ 0	6.9458+ 0		8.0895- 2									8.4143- 3
2.0000+ 0 ~ 4.0000+ 0	6.9983+ 0	6.9412+ 0		5.7089- 2									8.4143- 3
4.0000+ 0 ~ 7.0000+ 0	6.9758+ 0	6.9338+ 0		4.2007- 2									8.4143- 3
7.0000+ 0 ~ 1.0000+ 1	6.9588+ 0	6.9249+ 0		3.3805- 2									8.4142- 3
1.0000+ 1 ~ 2.0000+ 1	6.9313+ 0	6.9057+ 0		2.5524- 2									8.4141- 3
2.0000+ 1 ~ 4.0000+ 1	6.8795+ 0	6.8613+ 0		1.8202- 2									8.4139- 3
4.0000+ 1 ~ 7.0000+ 1	6.8007+ 0	6.7873+ 0		1.3479- 2									8.4132- 3
7.0000+ 1 ~ 1.0000+ 2	6.7091+ 0	6.6982+ 0		1.0913- 2									8.4126- 3
1.0000+ 2 ~ 2.0000+ 2	6.5125+ 0	6.5040+ 0		8.5938- 3									8.4104- 3
2.0000+ 2 ~ 4.0000+ 2	6.0531+ 0	6.0466+ 0		6.4719- 3									8.4056- 3
4.0000+ 2 ~ 7.0000+ 2	5.2403+ 0	5.2346+ 0		5.5746- 3									8.3969- 3
7.0000+ 2 ~ 1.0000+ 3	4.1208+ 0	4.1145+ 0		6.2851- 3									8.3860- 3
1.0000+ 3 ~ 2.0000+ 3	7.3046+ 1	7.2666+ 1		4.8057- 1									8.3744- 3
2.0000+ 3 ~ 4.0000+ 3	2.3386+ 1	2.3312+ 1		5.4158- 2									8.3732- 3
4.0000+ 3 ~ 7.0000+ 3	5.1969+ 1	5.1676+ 1		3.9212- 1									8.4592- 3
7.0000+ 3 ~ 1.0000+ 4	1.1288+ 1	1.1235+ 1		5.1195- 2									8.6568- 3
1.0000+ 4 ~ 2.0000+ 4	1.0520+ 1	1.0608+ 1		1.2453- 2									9.6060- 3
2.0000+ 4 ~ 4.0000+ 4	1.0355+ 1	1.0342+ 1		1.3150- 2									1.2869- 2
4.0000+ 4 ~ 7.0000+ 4	8.9808+ 0	8.9669+ 0		2.3872- 2									2.1177- 2
7.0000+ 4 ~ 1.0000+ 5	8.3106+ 0	8.2911+ 0		1.8492- 2									3.3000- 2
1.0000+ 5 ~ 2.0000+ 5	7.9880+ 0	7.3710+ 0		1.6938- 2									6.5209- 2
2.0000+ 5 ~ 4.0000+ 5	7.5726+ 0	7.5507+ 0		1.6127- 2									1.3963- 1
4.0000+ 5 ~ 7.0000+ 5	8.7259+ 0	6.7042+ 0	4.8401- 3	1.8239- 2									2.3230- 1
7.0000+ 5 ~ 1.0000+ 6	5.7530+ 0	5.3632+ 0	4.2000- 1	7.8671- 3									3.1441- 1
1.0000+ 6 ~ 2.0000+ 6	4.5702+ 0	3.6678+ 0	8.9306- 1	7.1529- 3					4.4862-19				3.8609- 1
2.0000+ 6 ~ 4.0000+ 6	3.7405+ 0	2.1828+ 0	1.5534+ 0	4.1270- 3					4.2080-13				4.3773- 1
4.0000+ 6 ~ 7.0000+ 6	3.9908+ 0	2.3890+ 0	1.5998+ 0	1.3788- 3			2.0279- 8		9.5702- 6				5.4025- 1
7.0000+ 6 ~ 1.0000+ 7	4.4722+ 0	2.9148+ 0	1.5663+ 0	9.6896- 4			1.8881- 4		6.8210- 4	3.7518-14	2.6174-20		7.7747- 1
1.0000+ 7 ~ 2.0000+ 7	3.7518+ 0	2.3427+ 0	3.3448- 1	8.3071- 4	9.8927- 1	3.8166- 2	2.0394- 2	9.2940- 4	2.2363- 2	6.9956- 4	7.7093- 4	1.0846- 4	8.0821- 1

MATERIAL =3407

CROSS SECTION

^{82}Se (3407)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.1368+ 0	6.0000+ 0		1.3678- 1									8.2089- 3
1.0000- 2 ~ 2.0000- 2	6.0686+ 0	6.0000+ 0		6.8449- 2									8.2089- 3
2.0000- 2 ~ 4.0000- 2	6.0414+ 0	6.0000+ 0		4.1395- 2									8.2089- 3
4.0000- 2 ~ 7.0000- 2	6.0303+ 0	6.0000+ 0		3.0344- 2									8.2089- 3
7.0000- 2 ~ 1.0000- 1	6.0242+ 0	6.0000+ 0		2.4277- 2									8.2089- 3
1.0000- 1 ~ 2.0000- 1	6.0184+ 0	6.0000+ 0		1.8493- 2									8.2089- 3
2.0000- 1 ~ 4.0000- 1	6.0128+ 0	6.0000+ 0		1.3064- 2									8.2089- 3
4.0000- 1 ~ 7.0000- 1	6.0092+ 0	4.9995+ 0		9.5974- 3									8.2089- 3
7.0000- 1 ~ 1.0000+ 0	6.0070+ 0	4.9993+ 0		7.6673- 3									8.2089- 3
1.0000+ 0 ~ 2.0000+ 0	6.0046+ 0	4.9988+ 0		5.8303- 3									8.2089- 3
2.0000+ 0 ~ 4.0000+ 0	6.0017+ 0	4.9976+ 0		4.1129- 3									8.2089- 3
4.0000+ 0 ~ 7.0000+ 0	4.9965+ 0	4.9965+ 0		3.0098- 3									8.2088- 3
7.0000+ 0 ~ 1.0000+ 1	4.9956+ 0	4.9950+ 0		2.4029- 3									8.2088- 3
1.0000+ 1 ~ 2.0000+ 1	4.9896+ 0	4.9878+ 0		1.8157- 3									8.2087- 3
2.0000+ 1 ~ 4.0000+ 1	4.9789+ 0	4.9766+ 0		1.2792- 3									8.2084- 3
4.0000+ 1 ~ 7.0000+ 1	4.9563+ 0	4.9553+ 0		9.5510- 4									8.2077- 3
7.0000+ 1 ~ 1.0000+ 2	4.9311+ 0	4.9303+ 0		7.9881- 4									8.2072- 3
1.0000+ 2 ~ 2.0000+ 2	4.8702+ 0	4.8695+ 0		7.1116- 4									8.2049- 3
2.0000+ 2 ~ 4.0000+ 2	4.6540+ 0	4.6530+ 0		1.0308- 3									8.2004- 3
4.0000+ 2 ~ 7.0000+ 2	2.4060+ 1	2.2997+ 1		1.0633+ 0									8.1906- 3
7.0000+ 2 ~ 1.0000+ 3	5.3943+ 0	5.3934+ 0		8.8818- 4									8.1830- 3
1.0000+ 3 ~ 2.0000+ 3	6.0343+ 0	4.9270+ 0		1.0733- 1									8.1700- 3
2.0000+ 3 ~ 4.0000+ 3	1.5765+ 1	1.5798+ 1		2.8797- 2									8.1897- 3
4.0000+ 3 ~ 7.0000+ 3	6.0398+ 0	6.0376+ 0		2.3576- 3									8.2573- 3
7.0000+ 3 ~ 1.0000+ 4	4.8319+ 1	4.8300+ 1		1.5589- 2									8.4567- 3
1.0000+ 4 ~ 2.0000+ 4	9.7226+ 0	9.7087+ 0		1.3741- 2									9.3120- 3
2.0000+ 4 ~ 4.0000+ 4	9.4907+ 0	9.4500+ 0		4.0870- 2									1.2693- 2
4.0000+ 4 ~ 7.0000+ 4	8.7090+ 0	8.6817+ 0		2.7284- 2									2.1036- 2
7.0000+ 4 ~ 1.0000+ 5	8.2428+ 0	8.2206+ 0		2.2161- 2									3.2904- 2
1.0000+ 5 ~ 2.0000+ 5	7.9906+ 0	7.9715+ 0		1.9033- 2									6.5212- 2
2.0000+ 5 ~ 4.0000+ 5	7.5787+ 0	7.5585+ 0		1.8204- 2									1.3881- 1
4.0000+ 5 ~ 7.0000+ 5	8.7305+ 0	6.7025+ 0	9.4578- 3	1.8408- 2									2.3289- 1
7.0000+ 5 ~ 1.0000+ 6	5.7962+ 0	5.3443+ 0	4.4108- 1	8.9603- 3									3.1684- 1
1.0000+ 6 ~ 2.0000+ 6	4.6728+ 0	3.7131+ 0	8.4789- 1	9.4131- 3									3.8020- 1
2.0000+ 6 ~ 4.0000+ 6	3.7498+ 0	2.3711+ 0	1.3890+ 0	5.7739- 3					6.0079-20				4.0827- 1
4.0000+ 6 ~ 7.0000+ 6	3.9900+ 0	2.4180+ 0	1.5685+ 0	9.2892- 3			1.7804- 6		8.4474-11				5.3276- 1
7.0000+ 6 ~ 1.0000+ 7	4.4712+ 0	2.9321+ 0	1.6170+ 0	6.4981- 4	2.1007- 2				6.0376- 7	3.6246-20			7.7730- 1
1.0000+ 7 ~ 2.0000+ 7	3.7516+ 0	2.4580+ 0	2.5607- 1	7.8649- 4	9.3848- 1	9.2893- 2	4.6448- 9	4.7170- 4	7.0920- 4	1.8965- 4	4.2938- 4	7.0868- 6	8.0820- 1

MATERIAL =3501

CROSS SECTION

^{79}Br (3501)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	3.7313+ 1	3.2693+ 0		3.4044+ 1			0.0000+ 0		0.0000+ 0				4.7918- 3
1.0000- 2 ~ 2.0000- 2	1.7816+ 1	3.2690+ 0		1.4547+ 1			0.0000+ 0		0.0000+ 0				
2.0000- 2 ~ 4.0000- 2	1.3570+ 1	3.2687+ 0		1.0301+ 1			0.0000+ 0		0.0000+ 0				6.7106- 3
4.0000- 2 ~ 7.0000- 2	1.0819+ 1	3.2680+ 0		7.5508+ 0			0.0000+ 0		0.0000+ 0				6.1723- 3
7.0000- 2 ~ 1.0000- 1	9.3072+ 0	3.2672+ 0		6.0400+ 0			0.0000+ 0		0.0000+ 0				6.5803- 3
1.0000- 1 ~ 2.0000- 1	7.8650+ 0	3.2655+ 0		4.5995+ 0			0.0000+ 0		0.0000+ 0				6.8763- 3
2.0000- 1 ~ 4.0000- 1	6.6069+ 0	3.2615+ 0		3.2454+ 0			0.0000+ 0		0.0000+ 0				7.2443- 3
4.0000- 1 ~ 7.0000- 1	5.6392+ 0	3.2550+ 0		2.3842+ 0			0.0000+ 0		0.0000+ 0				7.7060- 3
7.0000- 1 ~ 1.0000+ 0	6.1613+ 0	3.2471+ 0		1.9042+ 0			0.0000+ 0		0.0000+ 0				8.1141- 3
1.0000+ 0 ~ 2.0000+ 0	4.6787+ 0	3.2303+ 0		1.4485+ 0			0.0000+ 0		0.0000+ 0				8.4090- 3
2.0000+ 0 ~ 4.0000+ 0	4.2221+ 0	3.1916+ 0		1.0305+ 0			0.0000+ 0		0.0000+ 0				
4.0000+ 0 ~ 7.0000+ 0	3.9091+ 0	3.1272+ 0		7.8195- 1			0.0000+ 0		0.0000+ 0				8.6207- 3
7.0000+ 0 ~ 1.0000+ 1	5.7247+ 0	3.0475+ 0		6.7714- 1			0.0000+ 0		0.0000+ 0				8.6207- 3
1.0000+ 1 ~ 2.0000+ 1	3.5662+ 0	2.8425+ 0		7.2369- 1			0.0000+ 0		0.0000+ 0				8.6206- 3
2.0000+ 1 ~ 4.0000+ 1	1.5196+ 2	2.1638+ 1		1.3033+ 2			0.0000+ 0		0.0000+ 0				8.5204- 3
4.0000+ 1 ~ 7.0000+ 1	3.6848+ 1	6.7764+ 0		2.9072+ 1			0.0000+ 0		0.0000+ 0				8.5201- 3
7.0000+ 1 ~ 1.0000+ 2	9.6825+ 0	9.5167+ 0		1.4574- 1			0.0000+ 0		0.0000+ 0				8.6196- 3
1.0000+ 2 ~ 2.0000+ 2	1.0148+ 1	4.2902+ 0		5.8578+ 0			0.0000+ 0		0.0000+ 0				8.5193- 3
2.0000+ 2 ~ 4.0000+ 2	6.1257+ 1	3.8414+ 1		2.2643+ 1			0.0000+ 0		0.0000+ 0				8.5173- 3
4.0000+ 2 ~ 7.0000+ 2	2.3273+ 1	1.3971+ 1		9.3021+ 0			0.0000+ 0		0.0000+ 0				8.5143- 3
7.0000+ 2 ~ 1.0000+ 3	1.7803+ 1	1.1700+ 1		6.1029+ 0			0.0000+ 0		0.0000+ 0				8.5009- 3
1.0000+ 3 ~ 2.0000+ 3	2.6538+ 1	2.1958+ 1		4.5796+ 0			0.0000+ 0		0.0000+ 0				8.6001- 3
2.0000+ 3 ~ 4.0000+ 3	1.6192+ 1	1.3424+ 1		2.7683+ 0			0.0000+ 0		0.0000+ 0				8.4932- 3
4.0000+ 3 ~ 7.0000+ 3	1.2289+ 1	1.0632+ 1		1.5668+ 0			0.0000+ 0		0.0000+ 0				8.4865- 3
7.0000+ 3 ~ 1.0000+ 4	9.9891+ 0	8.8919+ 0		1.0971+ 0			0.0000+ 0		0.0000+ 0				8.6048- 3
1.0000+ 4 ~ 2.0000+ 4	9.3781+ 0	8.5133+ 0		8.6479- 1			0.0000+ 0		0.0000+ 0				8.6269- 3
2.0000+ 4 ~ 4.0000+ 4	8.8123+ 0	8.1632+ 0		6.2919- 1			0.0000+ 0		0.0000+ 0				8.6675- 3
4.0000+ 4 ~ 7.0000+ 4	8.4246+ 0	7.9728+ 0		4.6173- 1			0.0000+ 0		0.0000+ 0				9.8204- 3
7.0000+ 4 ~ 1.0000+ 5	8.1767+ 0	7.8296+ 0		3.4719- 1			0.0000+ 0		0.0000+ 0				1.3425- 2
1.0000+ 5 ~ 2.0000+ 5	7.9845+ 0	7.7324+ 0		2.5136- 1			2.6202-11		8.7129-15				2.2094- 2
2.0000+ 5 ~ 4.0000+ 5	7.5886+ 0	7.0393+ 0	4.1407- 1	1.3308- 1			1.0461-10		3.4851-14				3.4269- 2
4.0000+ 5 ~ 7.0000+ 5	6.7373+ 0	5.4190+ 0	1.2598+ 0	5.6089- 2			2.2462- 9		1.0788-13				8.7087- 2
7.0000+ 5 ~ 1.0000+ 6	5.7900+ 0	4.2087+ 0	1.5437+ 0	3.7396- 2			1.2063- 6		6.9190-13				1.5072- 1
1.0000+ 6 ~ 2.0000+ 6	4.6672+ 0	2.8155+ 0	1.7261+ 0	2.6000- 2			1.5466- 4		1.8249-10				2.6841- 1
2.0000+ 6 ~ 4.0000+ 6	3.7617+ 0	1.9492+ 0	1.7948+ 0	1.4736- 2			5.7696- 3		1.1266- 6				3.9808- 1
4.0000+ 6 ~ 7.0000+ 6	3.9912+ 0	2.3511+ 0	1.6047+ 0	5.6671- 3			2.9180- 2	2.8497-19	9.2209- 4	1.2243-18	5.8990- 8		4.7375- 1
7.0000+ 6 ~ 1.0000+ 7	4.4727+ 0	2.8911+ 0	1.5191+ 0	1.6680- 3			5.0735- 2	4.7467- 3	3.1303- 3	7.6381- 8	2.0546- 6	3.4842-14	4.0866- 1
1.0000+ 7 ~ 2.0000+ 7	3.7513+ 0	2.3468+ 0	4.1662- 1	1.0116- 3	7.7682- 1	3.6614- 4	3.3841- 2	1.4925- 1	9.9734- 3	8.3686- 3	6.0080- 3	7.2494- 4	6.4715- 1
													7.7771- 1
													8.0818- 1

MATERIAL =3502

CROSS SECTION

^{81}Br (3502)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.1940+ 1	3.6166+ 0		8.3231+ 0					0.0000+ 0				8.3104- 3
1.0000- 2 ~ 2.0000- 2	7.1735+ 0	3.6166+ 0		3.5571+ 0					0.0000+ 0				8.3104- 3
2.0000- 2 ~ 4.0000- 2	6.1317+ 0	3.6163+ 0		2.5154+ 0					0.0000+ 0				8.3104- 3
4.0000- 2 ~ 7.0000- 2	5.4656+ 0	3.6161+ 0		1.8495+ 0					0.0000+ 0				8.3104- 3
7.0000- 2 ~ 1.0000- 1	6.0965+ 0	3.6169+ 0		1.4806+ 0					0.0000+ 0				8.3104- 3
1.0000- 1 ~ 2.0000- 1	4.7404+ 0	3.6154+ 0		1.1250+ 0					0.0000+ 0				8.3104- 3
2.0000- 1 ~ 4.0000- 1	4.4112+ 0	3.6143+ 0		7.9687- 1					0.0000+ 0				8.3104- 3
4.0000- 1 ~ 7.0000- 1	4.1989+ 0	3.6124+ 0		6.8642- 1					0.0000+ 0				8.3104- 3
7.0000- 1 ~ 1.0000+ 0	4.0808+ 0	3.6102+ 0		4.7062- 1					0.0000+ 0				8.3104- 3
1.0000+ 0 ~ 2.0000+ 0	3.9649+ 0	3.6053+ 0		3.5963- 1					0.0000+ 0				8.3104- 3
2.0000+ 0 ~ 4.0000+ 0	3.8613+ 0	3.5939+ 0		2.5737- 1					0.0000+ 0				8.3104- 3
4.0000+ 0 ~ 7.0000+ 0	3.7680+ 0	3.5748+ 0		1.9340- 1					0.0000+ 0				8.3103- 3
7.0000+ 0 ~ 1.0000+ 1	3.7101+ 0	3.5509+ 0		1.5918- 1					0.0000+ 0				8.3102- 3
1.0000+ 1 ~ 2.0000+ 1	3.6271+ 0	3.4965+ 0		1.3057- 1					0.0000+ 0				8.3099- 3
2.0000+ 1 ~ 4.0000+ 1	3.4658+ 0	3.3495+ 0		1.1728- 1					0.0000+ 0				8.3096- 3
4.0000+ 1 ~ 7.0000+ 1	3.1388+ 0	2.8693+ 0		1.6944- 1					0.0000+ 0				8.3086- 3
7.0000+ 1 ~ 1.0000+ 2	6.4162+ 0	2.4238+ 0		3.9925+ 0					0.0000+ 0				8.3077- 3
1.0000+ 2 ~ 2.0000+ 2	8.8645+ 1	4.6127+ 1		4.2519+ 1					0.0000+ 0				8.3051- 3
2.0000+ 2 ~ 4.0000+ 2	5.0739+ 0	4.2128+ 0		8.6119- 1					0.0000+ 0				8.3009- 3
4.0000+ 2 ~ 7.0000+ 2	2.8726+ 1	2.3508+ 1		5.2178+ 0					0.0000+ 0				8.2921- 3
7.0000+ 2 ~ 1.0000+ 3	5.4140+ 0	4.6452+ 0		7.6881- 1					0.0000+ 0				8.2855- 3
1.0000+ 3 ~ 2.0000+ 3	2.6338+ 1	2.3888+ 1		2.4496+ 0					0.0000+ 0				8.2785- 3
2.0000+ 3 ~ 4.0000+ 3	9.1008+ 0	8.2548+ 0		8.4696- 1					0.0000+ 0				8.3943- 3
4.0000+ 3 ~ 7.0000+ 3	1.0034+ 1	9.3633+ 0		6.7066- 1					0.0000+ 0				8.4091- 3
7.0000+ 3 ~ 1.0000+ 4	9.6260+ 0	9.1150+ 0		5.1105- 1					0.0000+ 0				8.6388- 3
1.0000+ 4 ~ 2.0000+ 4	9.7223+ 0	9.2292+ 0		4.9311- 1					0.0000+ 0				9.5587- 3
2.0000+ 4 ~ 4.0000+ 4	9.0084+ 0	8.4522+ 0		3.5620- 1					0.0000+ 0				1.3073- 2
4.0000+ 4 ~ 7.0000+ 4	8.5072+ 0	8.2669+ 0		2.4027- 1					0.0000+ 0				2.1596- 2
7.0000+ 4 ~ 1.0000+ 5	8.2003+ 0	8.0216+ 0		1.7888- 1					0.0000+ 0				3.3820- 2
1.0000+ 5 ~ 2.0000+ 5	7.9890+ 0	7.8693+ 0		1.2996- 1					8.4698-21				5.6221- 2
2.0000+ 5 ~ 4.0000+ 5	7.5761+ 0	7.3878+ 0	1.1304- 1	8.9140- 2					3.9959-20				1.4438- 1
4.0000+ 5 ~ 7.0000+ 5	6.7348+ 0	6.0722+ 0	8.0391- 1	5.5422- 2					1.1347-19				2.5846- 1
7.0000+ 5 ~ 1.0000+ 6	5.7963+ 0	4.5841+ 0	1.1782+ 0	3.1943- 2					7.8762-19				3.6787- 1
1.0000+ 6 ~ 2.0000+ 6	4.5709+ 0	2.9610+ 0	1.5870+ 0	2.1646- 2			8.0675-12		3.3068-16				4.6168- 1
2.0000+ 6 ~ 4.0000+ 6	3.7542+ 0	2.0083+ 0	1.7298+ 0	1.4931- 2			4.4531- 5		2.3751-10				4.8087- 1
4.0000+ 6 ~ 7.0000+ 6	3.9302+ 0	2.3676+ 0	1.8181+ 0	4.4227- 3			1.9544- 3		3.9803- 8		2.4088-12		5.4570- 1
7.0000+ 6 ~ 1.0000+ 7	4.4716+ 0	2.8104+ 0	1.6629+ 0	1.1376- 3			6.8658- 3	4.6368- 0	2.0914- 4	1.0684-12	8.7230- 7	2.9737-20	7.7784- 1
1.0000+ 7 ~ 2.0000+ 7	3.7515+ 0	2.3790+ 0	4.0870- 1	9.6243- 4	9.0991- 1	5.7989- 3	2.0209- 2	1.7033- 2	5.3435- 3	8.8912- 4	3.8900- 3	5.2738- 4	8.0820- 1

MATERIAL =3601 CROSS SECTION ^{78}Kr (3601)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	2.7021+ 1	7.8296+ 0		1.9191+ 1			0.0000+ 0		0.0000+ 0				8.6299- 3
1.0000- 2 ~ 2.0000- 2	1.6029+ 1	7.8292+ 0		8.1998+ 0			0.0000+ 0		0.0000+ 0				8.6299- 3
2.0000- 2 ~ 4.0000- 2	1.3625+ 1	7.8288+ 0		6.7978+ 0			0.0000+ 0		0.0000+ 0				8.6299- 3
4.0000- 2 ~ 7.0000- 2	1.2090+ 1	7.8280+ 0		4.2816+ 0			0.0000+ 0		0.0000+ 0				8.6299- 3
7.0000- 2 ~ 1.0000- 1	1.1237+ 1	7.8272+ 0		3.4097+ 0			0.0000+ 0		0.0000+ 0				8.6299- 3
1.0000- 1 ~ 2.0000- 1	1.0411+ 1	7.8252+ 0		2.5855+ 0			0.0000+ 0		0.0000+ 0				8.6299- 3
2.0000- 1 ~ 4.0000- 1	9.6470+ 0	7.8208+ 0		1.8262+ 0			0.0000+ 0		0.0000+ 0				8.6299- 3
4.0000- 1 ~ 7.0000- 1	9.1504+ 0	7.8155+ 0		1.3368+ 0			0.0000+ 0		0.0000+ 0				8.6299- 3
7.0000- 1 ~ 1.0000+ 0	8.8717+ 0	7.8046+ 0		1.0669+ 0			0.0000+ 0		0.0000+ 0				8.6299- 3
1.0000+ 0 ~ 2.0000+ 0	8.5909+ 0	7.7660+ 0		8.0425- 1			0.0000+ 0		0.0000+ 0				8.6299- 3
2.0000+ 0 ~ 4.0000+ 0	8.3019+ 0	7.7434+ 0		5.6792- 1			0.0000+ 0		0.0000+ 0				8.6299- 3
4.0000+ 0 ~ 7.0000+ 0	8.0717+ 0	7.6744+ 0		3.9735- 1			0.0000+ 0		0.0000+ 0				8.6298- 3
7.0000+ 0 ~ 1.0000+ 1	7.9008+ 0	7.5946+ 0		3.0617- 1			0.0000+ 0		0.0000+ 0				8.6297- 3
1.0000+ 1 ~ 2.0000+ 1	7.6515+ 0	7.4335+ 0		2.1791- 1			0.0000+ 0		0.0000+ 0				8.6295- 3
2.0000+ 1 ~ 4.0000+ 1	7.2391+ 0	7.1025+ 0		1.3662- 1			0.0000+ 0		0.0000+ 0				8.6291- 3
4.0000+ 1 ~ 7.0000+ 1	6.7046+ 0	6.6040+ 0		1.0070- 1			0.0000+ 0		0.0000+ 0				8.6282- 3
7.0000+ 1 ~ 1.0000+ 2	5.9668+ 0	5.6929+ 0		2.7394- 1			0.0000+ 0		0.0000+ 0				8.6274- 3
1.0000+ 2 ~ 2.0000+ 2	2.5495+ 1	9.8229+ 0		1.5572+ 1			0.0000+ 0		0.0000+ 0				8.6249- 3
2.0000+ 2 ~ 4.0000+ 2	5.4194+ 0	5.4009+ 0		1.8554- 2			0.0000+ 0		0.0000+ 0				8.6203- 3
4.0000+ 2 ~ 7.0000+ 2	4.4780+ 1	3.6847+ 1		7.9329+ 0			0.0000+ 0		0.0000+ 0				8.6121- 3
7.0000+ 2 ~ 1.0000+ 3	1.9156+ 1	1.1638+ 1		1.5181+ 0			0.0000+ 0		0.0000+ 0				8.6056- 3
1.0000+ 3 ~ 2.0000+ 3	1.3646+ 1	1.2011+ 1		1.6341+ 0			0.0000+ 0		0.0000+ 0				8.5980- 3
2.0000+ 3 ~ 4.0000+ 3	1.1810+ 1	1.0719+ 1		1.0903+ 0			0.0000+ 0		0.0000+ 0				8.8103- 3
4.0000+ 3 ~ 7.0000+ 3	1.0636+ 1	9.8161+ 0		8.1913- 1			0.0000+ 0		0.0000+ 0				8.7169- 3
7.0000+ 3 ~ 1.0000+ 4	9.9940+ 0	9.5083+ 0		8.8765- 1			0.0000+ 0		0.0000+ 0				8.9352- 3
1.0000+ 4 ~ 2.0000+ 4	9.3816+ 0	8.8285+ 0		5.6308- 1			0.0000+ 0		0.0000+ 0				9.8258- 3
2.0000+ 4 ~ 4.0000+ 4	8.8146+ 0	8.4112+ 0		4.0342- 1			0.0000+ 0		0.0000+ 0				1.3295- 2
4.0000+ 4 ~ 7.0000+ 4	8.4266+ 0	8.1379+ 0		2.8771- 1			0.0000+ 0		0.0000+ 0				2.1762- 2
7.0000+ 4 ~ 1.0000+ 5	8.1767+ 0	7.9657+ 0		2.2106- 1			0.0000+ 0		0.0000+ 0				3.3744- 2
1.0000+ 5 ~ 2.0000+ 5	7.9837+ 0	7.8164+ 0		1.6695- 1			8.5428-18		2.6668- 8				6.5269- 2
2.0000+ 5 ~ 4.0000+ 5	7.5726+ 0	7.4353+ 0		1.3730- 1			3.4171-17		1.0667- 7				1.4151- 1
4.0000+ 5 ~ 7.0000+ 5	6.7231+ 0	6.3587+ 0	2.5087- 1	1.0581- 1			1.6404-15		2.9567- 7				2.4557- 1
7.0000+ 5 ~ 1.0000+ 6	6.7877+ 0	6.0609+ 0	6.5670- 1	8.0978- 2			4.1655-12		1.1692- 6				3.3216- 1
1.0000+ 6 ~ 2.0000+ 6	4.5665+ 0	3.3804+ 0	1.1200+ 0	6.4361- 2			1.3040- 6		2.0142- 5				3.9666- 1
2.0000+ 6 ~ 4.0000+ 6	3.7473+ 0	2.0722+ 0	1.6299+ 0	3.5437- 2			8.3276- 5		1.2038- 4				4.6320- 1
4.0000+ 6 ~ 7.0000+ 6	3.9917+ 0	2.3941+ 0	1.4664+ 0	1.4995- 2			9.3947- 2		2.1156- 2	1.5147-14	6.7012-17		6.4512- 1
7.0000+ 6 ~ 1.0000+ 7	4.4733+ 0	2.9399+ 0	1.2752+ 0	4.4009- 3			2.0006- 1	1.3664- 7	6.2666- 2	3.1979- 6	3.4968- 6		7.7766- 1
1.0000+ 7 ~ 2.0000+ 7	3.7517+ 0	2.5219+ 0	4.4862- 1	1.2526- 3	2.1089- 1		1.3024- 1	3.4274- 1	3.4176- 2	4.9461- 2	4.6746- 3	3.1184- 4	8.0820- 1

MATERIAL =3602 CROSS SECTION ^{80}Kr (3602)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	4.2882+ 1	7.2906+ 0		3.5691+ 1					0.0000+ 0				8.4143- 3
1.0000- 2 ~ 2.0000- 2	2.2499+ 1	7.2903+ 0		1.5208+ 1					0.0000+ 0				8.4143- 3
2.0000- 2 ~ 4.0000- 2	1.8043+ 1	7.2894+ 0		1.0763+ 1					0.0000+ 0				8.4143- 3
4.0000- 2 ~ 7.0000- 2	1.5193+ 1	7.2880+ 0		7.9050+ 0					0.0000+ 0				8.4143- 3
7.0000- 2 ~ 1.0000- 1	1.3613+ 1	7.2864+ 0		6.3264+ 0					0.0000+ 0				8.4143- 3
1.0000- 1 ~ 2.0000- 1	1.2082+ 1	7.2827+ 0		4.7997+ 0					0.0000+ 0				8.4143- 3
2.0000- 1 ~ 4.0000- 1	1.0668+ 1	7.2744+ 0		3.3934+ 0					0.0000+ 0				8.4143- 3
4.0000- 1 ~ 7.0000- 1	9.7484+ 0	7.2605+ 0		2.4880+ 0					0.0000+ 0				8.4143- 3
7.0000- 1 ~ 1.0000+ 0	9.2332+ 0	7.2438+ 0		1.9894+ 0					0.0000+ 0				8.4143- 3
1.0000+ 0 ~ 2.0000+ 0	8.7140+ 0	7.2080+ 0		1.5080+ 0					0.0000+ 0				8.4143- 3
2.0000+ 0 ~ 4.0000+ 0	8.1813+ 0	7.1260+ 0		1.0554+ 0					0.0000+ 0				8.4143- 3
4.0000+ 0 ~ 7.0000+ 0	7.7587+ 0	6.9915+ 0		7.6526- 1					0.0000+ 0				8.4143- 3
7.0000+ 0 ~ 1.0000+ 1	7.4367+ 0	6.8330+ 0		6.0365- 1					0.0000+ 0				8.4142- 3
1.0000+ 1 ~ 2.0000+ 1	6.9528+ 0	6.4987+ 0		4.5408- 1					0.0000+ 0				8.4140- 3
2.0000+ 1 ~ 4.0000+ 1	6.0700+ 0	5.7317+ 0		3.3836- 1					0.0000+ 0				8.4136- 3
4.0000+ 1 ~ 7.0000+ 1	4.6040+ 0	4.2140+ 0		3.9002- 1					0.0000+ 0				8.4128- 3
7.0000+ 1 ~ 1.0000+ 2	4.3056+ 0	1.6819+ 0		2.8236+ 0					0.0000+ 0				8.4121- 3
1.0000+ 2 ~ 2.0000+ 2	1.8350+ 2	1.3257+ 2		5.0932+ 1					0.0000+ 0				8.4097- 3
2.0000+ 2 ~ 4.0000+ 2	6.4484+ 0	6.4198+ 0		2.8623- 2					0.0000+ 0				8.4052- 3
4.0000+ 2 ~ 7.0000+ 2	1.2689+ 1	9.0913+ 0		3.6982+ 0					0.0000+ 0				8.3970- 3
7.0000+ 2 ~ 1.0000+ 3	3.6783+ 1	3.5653+ 1		3.1397+ 0					0.0000+ 0				8.3908- 3
1.0000+ 3 ~ 2.0000+ 3	1.3571+ 1	1.2266+ 1		1.3050+ 0					0.0000+ 0				8.3824- 3
2.0000+ 3 ~ 4.0000+ 3	1.1742+ 1	1.0858+ 1		8.8405- 1					0.0000+ 0				8.3924- 3
4.0000+ 3 ~ 7.0000+ 3	1.0574+ 1	9.9043+ 0		6.6981- 1					0.0000+ 0				8.4960- 3
7.0000+ 3 ~ 1.0000+ 4	9.9386+ 0	9.3774+ 0		5.6106- 1					0.0000+ 0				8.7062- 3
1.0000+ 4 ~ 2.0000+ 4	9.3352+ 0	8.8930+ 0		4.4220- 1					0.0000+ 0				9.6932- 3
2.0000+ 4 ~ 4.0000+ 4	8.7786+ 0	8.4680+ 0		3.1091- 1					0.0000+ 0				1.3043- 2
4.0000+ 4 ~ 7.0000+ 4	8.4104+ 0	8.1933+ 0		2.1706- 1					0.0000+ 0				2.1491- 2
7.0000+ 4 ~ 1.0000+ 5	8.1747+ 0	8.0082+ 0		1.6653- 1					0.0000+ 0				3.3488- 2
1.0000+ 5 ~ 2.0000+ 5	7.9880+ 0	7.8609+ 0		1.2689- 1					1.8810-13				6.5996- 2
2.0000+ 5 ~ 4.0000+ 5	7.5726+ 0	7.4839+ 0		1.0865- 1					7.5236-13				1.4131- 1
4.0000+ 5 ~ 7.0000+ 5	6.7302+ 0	6.5850+ 0	3.1088- 2	1.1319- 1					2.8800-12				2.3710- 1
7.0000+ 5 ~ 1.0000+ 6	6.7930+ 0	6.2349+ 0	4.7880- 1	7.7758- 2					2.1828-11				3.2172- 1
1.0000+ 6 ~ 2.0000+ 6	4.5703+ 0	3.5340+ 0	9.6296- 1	7.1292- 2			3.1140-16		6.9346- 8				3.7984- 1
2.0000+ 6 ~ 4.0000+ 6	5.7394+ 0	2.2548+ 0	1.4123+ 0	7.2216- 2			6.6288- 5		1.0762- 5				4.2148- 1
4.0000+ 6 ~ 7.0000+ 6	3.9866+ 0	2.4585+ 0	1.4419+ 0	7.9227- 2			1.1251- 2		1.4170- 3	4.9751-17			6.2358- 1
7.0000+ 6 ~ 1.0000+ 7	4.4721+ 0	2.9296+ 0	1.4786+ 0	1.6278- 2			4.0733- 2	2.9099-17	8.6637- 3	9.8062- 6	1.0861- 7		7.7726- 1
1.0000+ 7 ~ 2.0000+ 7	3.7518+ 0	2.3987+ 0	5.2080- 1	3.0089- 3	8.5093- 1		4.1671- 2	8.3969- 2	1.3574- 2	3.4848- 2	2.3341- 3	1.4274- 4	8.0821- 1

^{82}Kr (3603)

MATERIAL =3603

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.0508+ 2	1.8468+ 1		8.6616- 1					0.0000+ 0				8.2092- 3
1.0000- 2 ~ 2.0000- 2	6.6406+ 1	1.8465+ 1		9.7020+ 1					0.0000+ 0				8.2092- 3
2.0000- 2 ~ 4.0000- 2	4.4702+ 1	1.8462+ 1		2.6239+ 1					0.0000+ 0				8.2092- 3
4.0000- 2 ~ 7.0000- 2	3.7687+ 1	1.8457+ 1		1.9230+ 1					0.0000+ 0				8.2092- 3
7.0000- 2 ~ 1.0000- 1	3.3859+ 1	1.8451+ 1		1.5408+ 1					0.0000+ 0				8.2092- 3
1.0000- 1 ~ 2.0000- 1	3.0178+ 1	1.8438+ 1		1.1741+ 1					0.0000+ 0				8.2092- 3
2.0000- 1 ~ 4.0000- 1	2.6716+ 1	1.8407+ 1		8.3086+ 0					0.0000+ 0				8.2092- 3
4.0000- 1 ~ 7.0000- 1	2.4485+ 1	1.8355+ 1		6.1303+ 0					0.0000+ 0				8.2092- 3
7.0000- 1 ~ 1.0000+ 0	2.3214+ 1	1.8293+ 1		4.9219+ 0					0.0000+ 0				8.2092- 3
1.0000+ 0 ~ 2.0000+ 0	2.1944+ 1	1.8157+ 1		3.7867+ 0					0.0000+ 0				8.2092- 3
2.0000+ 0 ~ 4.0000+ 0	2.0690+ 1	1.7839+ 1		2.7507+ 0					0.0000+ 0				8.2092- 3
4.0000+ 0 ~ 7.0000+ 0	1.9431+ 1	1.7295+ 1		2.1363+ 0					0.0000+ 0				8.2091- 3
7.0000+ 0 ~ 1.0000+ 1	1.8487+ 1	1.6608+ 1		1.8614+ 0					0.0000+ 0				8.2091- 3
1.0000+ 1 ~ 2.0000+ 1	1.6732+ 1	1.4850+ 1		1.8821+ 0					0.0000+ 0				8.2090- 3
2.0000+ 1 ~ 4.0000+ 1	6.5664+ 2	1.9059+ 2		3.6606+ 2					0.0000+ 0				8.2087- 3
4.0000+ 1 ~ 7.0000+ 1	9.7073+ 1	5.8177+ 1		3.8896+ 1					0.0000+ 0				8.2080- 3
7.0000+ 1 ~ 1.0000+ 2	1.8873+ 1	1.8571+ 1		3.0267- 1					0.0000+ 0				8.2074- 3
1.0000+ 2 ~ 2.0000+ 2	1.4527+ 1	1.4439+ 1		8.8013- 2					0.0000+ 0				8.2052- 3
2.0000+ 2 ~ 4.0000+ 2	1.0976+ 1	1.0950+ 1		2.5776- 2					0.0000+ 0				8.2009- 3
4.0000+ 2 ~ 7.0000+ 2	1.7434+ 1	1.6421+ 1		1.0120+ 0					0.0000+ 0				8.1924- 3
7.0000+ 2 ~ 1.0000+ 3	1.5353+ 1	1.4509+ 1		7.4409- 1					0.0000+ 0				8.1856- 3
1.0000+ 3 ~ 2.0000+ 3	1.3371+ 1	1.2925+ 1		6.4621- 1					0.0000+ 0				8.1760- 3
2.0000+ 3 ~ 4.0000+ 3	1.1555+ 1	1.1164+ 1		3.9128- 1					0.0000+ 0				8.1790- 3
4.0000+ 3 ~ 7.0000+ 3	1.0403+ 1	1.0111+ 1		2.9279- 1					0.0000+ 0				8.2704- 3
7.0000+ 3 ~ 1.0000+ 4	9.7828+ 0	9.5501+ 0		2.3274- 1					0.0000+ 0				8.4729- 3
1.0000+ 4 ~ 2.0000+ 4	9.2001+ 0	9.0330+ 0		1.6713- 1					0.0000+ 0				9.3351- 3
2.0000+ 4 ~ 4.0000+ 4	8.6874+ 0	8.5824+ 0		1.0502- 1					0.0000+ 0				1.2739- 2
4.0000+ 4 ~ 7.0000+ 4	8.3622+ 0	8.2927+ 0		6.9463- 2					0.0000+ 0				2.1106- 2
7.0000+ 4 ~ 1.0000+ 6	8.1630+ 0	8.1090+ 0		6.4016- 2					0.0000+ 0				3.3006- 2
1.0000+ 6 ~ 2.0000+ 6	7.9906+ 0	7.9460+ 0		4.4600- 2					2.6694-18				6.6396- 2
2.0000+ 6 ~ 4.0000+ 6	7.5787+ 0	7.5343+ 0		4.2287- 2					1.1477-17				1.4025- 1
4.0000+ 6 ~ 7.0000+ 6	8.7251+ 0	8.6771+ 0		4.7819- 2					4.1898-17				2.3330- 1
7.0000+ 6 ~ 1.0000+ 6	6.7966+ 0	6.6496+ 0	2.0613- 1	4.0176- 2					3.7693-16				3.0456- 1
1.0000+ 6 ~ 2.0000+ 6	4.6726+ 0	3.7149+ 0	8.2668- 1	2.9036- 2					2.0642-13				3.6004- 1
2.0000+ 6 ~ 4.0000+ 6	3.7482+ 0	2.2514+ 0	1.4772+ 0	1.9373- 2			8.2799- 9		3.4001- 8				4.2677- 1
4.0000+ 6 ~ 7.0000+ 6	3.9900+ 0	2.3996+ 0	1.5807+ 0	8.7380- 3			5.1509- 4		8.7498- 5	2.9275-20			6.3732- 1
7.0000+ 6 ~ 1.0000+ 7	4.4712+ 0	2.9116+ 0	1.5606+ 0	2.1300- 3			5.3043- 3		1.6988- 3	4.9863-11	2.6187-10		9.7747- 1
1.0000+ 7 ~ 2.0000+ 7	3.7515+ 0	2.3824+ 0	4.7964- 1	1.0284- 3	8.4710- 1	6.8088- 4	1.9413- 2	8.4225- 3	7.6204- 3	2.8604- 3	1.3536- 3	1.0897- 4	8.0820- 1

^{83}Kr (3604)

MATERIAL =3604

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.7176+ 2	9.1029+ 0		6.6265+ 2					0.0000+ 0				8.1101- 3
1.0000- 2 ~ 2.0000- 2	2.4820+ 2	9.0914+ 0		2.3911+ 2					0.0000+ 0				8.1101- 3
2.0000- 2 ~ 4.0000- 2	1.7687+ 2	9.0742+ 0		1.6788+ 2					0.0000+ 0				8.1101- 3
4.0000- 2 ~ 7.0000- 2	1.3102+ 2	9.0460+ 0		1.2197+ 2					0.0000+ 0				8.1101- 3
7.0000- 2 ~ 1.0000- 1	1.0620+ 2	9.0126+ 0		9.6192+ 1					0.0000+ 0				8.1101- 3
1.0000- 1 ~ 2.0000- 1	7.9708+ 1	8.9424+ 0		7.0648+ 1					0.0000+ 0				8.1101- 3
2.0000- 1 ~ 4.0000- 1	5.5627+ 1	8.7902+ 0		4.6837+ 1					0.0000+ 0				8.1101- 3
4.0000- 1 ~ 7.0000- 1	3.9397+ 1	8.5818+ 0		3.0836+ 1					0.0000+ 0				8.1101- 3
7.0000- 1 ~ 1.0000+ 0	3.0048+ 1	8.3218+ 0		2.1726+ 1					0.0000+ 0				8.1101- 3
1.0000+ 0 ~ 2.0000+ 0	2.1097+ 1	7.9101+ 0		1.3187+ 1					0.0000+ 0				8.1101- 3
2.0000+ 0 ~ 4.0000+ 0	1.3343+ 1	7.2664+ 0		6.0770+ 0					0.0000+ 0				8.1101- 3
4.0000+ 0 ~ 7.0000+ 0	9.3381+ 0	6.6355+ 0		2.7026+ 0					0.0000+ 0				8.1100- 3
7.0000+ 0 ~ 1.0000+ 1	7.6988+ 0	6.1635+ 0		1.5339+ 0					0.0000+ 0				8.1099- 3
1.0000+ 1 ~ 2.0000+ 1	6.7489+ 0	5.3616+ 0		1.3873+ 0					0.0000+ 0				8.1097- 3
2.0000+ 1 ~ 4.0000+ 1	1.7362+ 2	9.3916+ 1		1.3970+ 2					0.0000+ 0				8.1092- 3
4.0000+ 1 ~ 7.0000+ 1	7.1990+ 0	7.0028+ 0		1.9612- 1					0.0000+ 0				8.1083- 3
7.0000+ 1 ~ 1.0000+ 2	6.4488+ 0	8.4137+ 0		9.5157- 2					0.0000+ 0				8.1074- 3
1.0000+ 2 ~ 2.0000+ 2	5.9379+ 0	5.9046+ 0		3.3317- 2					0.0000+ 0				8.1046- 3
2.0000+ 2 ~ 4.0000+ 2	2.8114+ 1	1.9558+ 1		8.5561+ 0					0.0000+ 0				8.1001- 3
4.0000+ 2 ~ 7.0000+ 2	1.6816+ 1	1.3126+ 1		3.6891+ 0					0.0000+ 0				8.0918- 3
7.0000+ 2 ~ 1.0000+ 3	1.4763+ 1	1.2083+ 1		2.6796+ 0					0.0000+ 0				8.0853- 3
1.0000+ 3 ~ 2.0000+ 3	1.2796+ 1	1.0952+ 1		1.8431+ 0					0.0000+ 0				8.0784- 3
2.0000+ 3 ~ 4.0000+ 3	1.0996+ 1	9.7992+ 0		1.1982+ 0					0.0000+ 0				8.0944- 3
4.0000+ 3 ~ 7.0000+ 3	9.8993+ 0	9.0405+ 0		8.5882- 1					0.0000+ 0				8.2103- 3
7.0000+ 3 ~ 1.0000+ 4	9.2895+ 0	8.5696+ 0	7.7491- 3	6.7194- 1					0.0000+ 0				8.4591- 3
1.0000+ 4 ~ 2.0000+ 4	8.7908+ 0	8.1438+ 0	1.8068- 1	4.6698- 1					0.0000+ 0				9.3902- 3
2.0000+ 4 ~ 4.0000+ 4	8.3802+ 0	7.8240+ 0	2.7701- 1	2.8009- 1					0.0000+ 0				1.2904- 2
4.0000+ 4 ~ 7.0000+ 4	8.1766+ 0	7.8486+ 0	3.5687- 1	1.7276- 1					0.0000+ 0				2.1885- 2
7.0000+ 4 ~ 1.0000+ 6	8.0810+ 0	7.6401+ 0	4.1966- 1	1.2182- 1					0.0000+ 0				3.4788- 2
1.0000+ 6 ~ 2.0000+ 6	7.9921+ 0	7.4069+ 0	5.0290- 1	8.2887- 2					2.8120-10				6.9941- 2
2.0000+ 6 ~ 4.0000+ 6	7.5790+ 0	6.9460+ 0	5.7893- 1	5.6658- 2			0.0000+ 0		8.1118-10				1.5209- 1
4.0000+ 6 ~ 7.0000+ 6	6.7372+ 0	6.1051+ 0	5.8684- 1	4.4947- 2			8.7975-17		2.5615- 9				2.5594- 1
7.0000+ 6 ~ 1.0000+ 6	6.7983+ 0	6.1476+ 0	6.1179- 1	3.8604- 2			8.1437-16		8.6101- 9				3.2738- 1
1.0000+ 6 ~ 2.0000+ 6	4.6746+ 0	3.3701+ 0	1.1812+ 0	1.9548- 2			4.0743- 8		1.6752- 7				4.0103- 1
2.0000+ 6 ~ 4.0000+ 6	3.7615+ 0	2.0352+ 0	1.7164+ 0	4.8518- 3			6.9005- 5		8.4406- 6				4.7970- 1
4.0000+ 6 ~ 7.0000+ 6	3.9695+ 0	2.3623+ 0	1.6258+ 0	8.5368- 4			5.1730- 4		9.2427- 5				6.4682- 1
7.0000+ 6 ~ 1.0000+ 7	4.4706+ 0	2.6156+ 0	1.6672+ 0	1.0718- 3	2.9120- 1		1.6403- 3		2.1014- 4	2.3034-14	1.0813- 8	4.7364-22	7.7772- 1
1.0000+ 7 ~ 2.0000+ 7	3.7514+ 0	1.3496+ 0	1.3649+ 0	1.0600- 3	9.9962- 1	6.9474- 4	1.3706- 2	6.7700- 3	6.1222- 3	1.0242- 3	6.2846- 3	6.3269- 4	8.0820- 1

MATERIAL =3605

CROSS SECTION

^{84}Kr (3605)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.4998+ 0	6.1593+ 0		3.4047- 1									8.0137- 3
1.0000- 2 ~ 2.0000- 2	6.3048+ 0	6.1693+ 0		1.4648- 1									8.0137- 3
2.0000- 2 ~ 4.0000- 2	6.2622+ 0	6.1693+ 0		1.0296- 1									8.0137- 3
4.0000- 2 ~ 7.0000- 2	6.2350+ 0	6.1592+ 0		7.5719- 2									8.0137- 3
7.0000- 2 ~ 1.0000- 1	6.2196+ 0	6.1592+ 0		6.0420- 2									8.0137- 3
1.0000- 1 ~ 2.0000- 1	6.2051+ 0	6.1592+ 0		4.5956- 2									8.0137- 3
2.0000- 1 ~ 4.0000- 1	6.1915+ 0	6.1590+ 0		3.2437- 2									8.0137- 3
4.0000- 1 ~ 7.0000- 1	6.1826+ 0	6.1588+ 0		2.3805- 2									8.0137- 3
7.0000- 1 ~ 1.0000+ 0	6.1776+ 0	6.1585+ 0		1.9014- 2									8.0137- 3
1.0000+ 0 ~ 2.0000+ 0	6.1729+ 0	6.1580+ 0		1.4384- 2									8.0137- 3
2.0000+ 0 ~ 4.0000+ 0	6.1667+ 0	6.1566+ 0		1.0067- 2									8.0137- 3
4.0000+ 0 ~ 7.0000+ 0	6.1617+ 0	6.1545+ 0		7.2504- 3									8.0137- 3
7.0000+ 0 ~ 1.0000+ 1	6.1576+ 0	6.1519+ 0		5.6811- 3									8.0136- 3
1.0000+ 1 ~ 2.0000+ 1	6.1508+ 0	6.1468+ 0		4.1471- 3									8.0135- 3
2.0000+ 1 ~ 4.0000+ 1	6.1379+ 0	6.1352+ 0		2.7022- 3									8.0133- 3
4.0000+ 1 ~ 7.0000+ 1	6.1194+ 0	6.1176+ 0		1.8127- 3									8.0126- 3
7.0000+ 1 ~ 1.0000+ 2	6.0994+ 0	6.0980+ 0		1.3826- 3									8.0120- 3
1.0000+ 2 ~ 2.0000+ 2	6.0560+ 0	6.0549+ 0		1.1447- 3									8.0098- 3
2.0000+ 2 ~ 4.0000+ 2	5.8878+ 0	5.8857+ 0		2.1219- 3									8.0052- 3
4.0000+ 2 ~ 7.0000+ 2	1.7653+ 0	1.4023+ 1		3.6299+ 0									7.9866- 3
7.0000+ 2 ~ 1.0000+ 3	6.4868+ 0	6.4861+ 0		7.1648- 4									7.9578- 3
1.0000+ 3 ~ 2.0000+ 3	6.2996+ 0	6.2995+ 0		6.4864- 5									7.9749- 3
2.0000+ 3 ~ 4.0000+ 3	9.7549+ 0	9.6192+ 0		1.3562- 1									7.9750- 3
4.0000+ 3 ~ 7.0000+ 3	9.9523+ 0	9.8207+ 0		1.3162- 1									8.0637- 3
7.0000+ 3 ~ 1.0000+ 4	9.3697+ 0	9.2715+ 0		9.8142- 2									8.2648- 3
1.0000+ 4 ~ 2.0000+ 4	8.6545+ 0	8.7881+ 0		6.6412- 2									9.1262- 3
2.0000+ 4 ~ 4.0000+ 4	8.4440+ 0	8.4041+ 0		3.9898- 2									1.2523- 2
4.0000+ 4 ~ 7.0000+ 4	8.2345+ 0	8.2078+ 0		2.6763- 2									2.0902- 2
7.0000+ 4 ~ 1.0000+ 5	8.1321+ 0	8.1104+ 0		2.1768- 2									3.2816- 2
1.0000+ 5 ~ 2.0000+ 5	7.9943+ 0	7.9760+ 0		1.8272- 2									6.6224- 2
2.0000+ 5 ~ 4.0000+ 5	7.5820+ 0	7.5649+ 0		1.7055- 2									1.5997- 1
4.0000+ 5 ~ 7.0000+ 5	6.7303+ 0	6.7134+ 0		1.6950- 2					0.0000+ 0				2.3251- 1
7.0000+ 5 ~ 1.0000+ 6	6.8008+ 0	6.7222+ 0	6.1910- 2	1.5649- 2					0.0000+ 0				2.9544- 1
1.0000+ 6 ~ 2.0000+ 6	4.6768+ 0	3.8794+ 0	6.8460- 1	9.0617- 3					6.6666-19				3.4614- 1
2.0000+ 6 ~ 4.0000+ 6	3.7390+ 0	2.3792+ 0	1.3594+ 0	5.8910- 3					2.9764-19				4.0440- 1
4.0000+ 6 ~ 7.0000+ 6	3.9893+ 0	2.4346+ 0	1.5519+ 0	2.4449- 3			3.4105- 6		3.7209- 7				6.2810- 1
7.0000+ 6 ~ 1.0000+ 7	4.4703+ 0	2.9188+ 0	1.5600+ 0	6.7047- 4			6.8432- 4		7.6621- 6	1.2261-14	1.7864-12		7.7661- 1
1.0000+ 7 ~ 2.0000+ 7	3.7516+ 0	2.4198+ 0	4.5900- 1	9.4706- 4	8.1842- 1	6.8200- 3	7.9534- 3	2.6110- 2	4.1064- 3	5.0466- 3	2.7621- 3	2.4123- 4	8.0819- 1

MATERIAL =3606

CROSS SECTION

^{85}Kr (3606)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.1424+ 1	6.2667+ 0		6.1169+ 0					0.0000+ 0				7.9192- 3
1.0000- 2 ~ 2.0000- 2	8.4826+ 0	6.2667+ 0		2.1874+ 0					0.0000+ 0				7.9192- 3
2.0000- 2 ~ 4.0000- 2	7.8316+ 0	6.2667+ 0		1.5467+ 0					0.0000+ 0				7.9192- 3
4.0000- 2 ~ 7.0000- 2	7.4421+ 0	6.2557+ 0		1.1387+ 0					0.0000+ 0				7.9192- 3
7.0000- 2 ~ 1.0000- 1	7.1810+ 0	6.2557+ 0		9.0922- 1					0.0000+ 0				7.9192- 3
1.0000- 1 ~ 2.0000- 1	6.9728+ 0	6.2557+ 0		8.9171- 1					0.0000+ 0				7.9192- 3
2.0000- 1 ~ 4.0000- 1	6.7690+ 0	6.2557+ 0		4.8911- 1					0.0000+ 0				7.9192- 3
4.0000- 1 ~ 7.0000- 1	6.6452+ 0	6.2557+ 0		3.5945- 1					0.0000+ 0				7.9192- 3
7.0000- 1 ~ 1.0000+ 0	6.6902+ 0	6.2557+ 0		2.8752- 1					0.0000+ 0				7.9192- 3
1.0000+ 0 ~ 2.0000+ 0	6.5221+ 0	6.2557+ 0		2.1874- 1					0.0000+ 0				7.9192- 3
2.0000+ 0 ~ 4.0000+ 0	6.4379+ 0	6.2557+ 0		1.5467- 1					0.0000+ 0				7.9192- 3
4.0000+ 0 ~ 7.0000+ 0	6.3756+ 0	6.2557+ 0		1.1387- 1					0.0000+ 0				7.9192- 3
7.0000+ 0 ~ 1.0000+ 1	6.3626+ 0	6.2557+ 0		9.0922- 2					0.0000+ 0				7.9192- 3
1.0000+ 1 ~ 2.0000+ 1	6.3511+ 0	6.2557+ 0		8.9171- 2					0.0000+ 0				7.9190- 3
2.0000+ 1 ~ 4.0000+ 1	6.3367+ 0	6.2557+ 0		4.8911- 2					0.0000+ 0				7.9187- 3
4.0000+ 1 ~ 7.0000+ 1	6.3240+ 0	6.2557+ 0		3.5945- 2					0.0000+ 0				7.9180- 3
7.0000+ 1 ~ 1.0000+ 2	6.3149+ 0	6.2557+ 0		2.8752- 2					0.0000+ 0				7.9174- 3
1.0000+ 2 ~ 2.0000+ 2	6.3034+ 0	6.2557+ 0		2.1874- 2					0.0000+ 0				7.9152- 3
2.0000+ 2 ~ 4.0000+ 2	6.2892+ 0	6.2557+ 0		1.5467- 2					0.0000+ 0				7.9110- 3
4.0000+ 2 ~ 7.0000+ 2	6.2765+ 0	6.2557+ 0		1.1367- 2					0.0000+ 0				7.9032- 3
7.0000+ 2 ~ 1.0000+ 3	6.2675+ 0	6.2557+ 0		9.0922- 3					0.0000+ 0				7.8989- 3
1.0000+ 3 ~ 2.0000+ 3	1.2835+ 1	1.2274+ 1		6.6110- 1					0.0000+ 0				7.8893- 3
2.0000+ 3 ~ 4.0000+ 3	1.1045+ 1	1.0677+ 1		3.6775- 1					0.0000+ 0				7.8021- 3
4.0000+ 3 ~ 7.0000+ 3	9.9442+ 0	9.6946+ 0		2.4970- 1					0.0000+ 0				8.0099- 3
7.0000+ 3 ~ 1.0000+ 4	9.3828+ 0	9.1790+ 0		1.8363- 1					0.0000+ 0				8.2297- 3
1.0000+ 4 ~ 2.0000+ 4	8.8487+ 0	8.7265+ 0		1.2222- 1					0.0000+ 0				9.1230- 3
2.0000+ 4 ~ 4.0000+ 4	8.4351+ 0	8.3650+ 0		7.0184- 2					0.0000+ 0				1.2578- 2
4.0000+ 4 ~ 7.0000+ 4	8.2260+ 0	8.1829+ 0		4.3132- 2					0.0000+ 0				2.1029- 2
7.0000+ 4 ~ 1.0000+ 5	8.1246+ 0	8.0933+ 0		3.1342- 2					0.0000+ 0				3.3064- 2
1.0000+ 5 ~ 2.0000+ 5	7.9965+ 0	7.9740+ 0		2.2619- 2					4.7925-17				6.5518- 2
2.0000+ 5 ~ 4.0000+ 5	7.5698+ 0	7.5729+ 0	6.1540- 4	1.6001- 2					1.9170-18				1.4025- 1
4.0000+ 5 ~ 7.0000+ 5	6.7345+ 0	6.7155+ 0	6.6188- 3	1.2248- 2					6.3331-16				2.3307- 1
7.0000+ 5 ~ 1.0000+ 6	6.8038+ 0	6.7766+ 0	1.7140- 2	1.0837- 2					4.2594-16				2.9298- 1
1.0000+ 6 ~ 2.0000+ 6	4.6774+ 0	4.3614+ 0	2.1534- 1	1.0265- 2					1.4738-12				3.0000- 1
2.0000+ 6 ~ 4.0000+ 6	3.7487+ 0	2.8393+ 0	8.9748- 1	7.4344- 3			1.7917- 9		1.6354- 8				3.5165- 1
4.0000+ 6 ~ 7.0000+ 6	3.9868+ 0	2.4198+ 0	1.5680+ 0	9.6790- 4			1.9427- 5		7.0364- 8				6.3188- 1
7.0000+ 6 ~ 1.0000+ 7	4.4687+ 0	2.9308+ 0	8.9111- 1	8.8642- 4	6.4633- 1		3.9643- 4		8.7997- 6	1.7082-17	2.8606-16		7.7739- 1
1.0000+ 7 ~ 2.0000+ 7	3.7517+ 0	2.3942+ 0	1.5719- 1	1.0664- 3	1.1707+ 0	6.1076- 3	6.3482- 3	6.3201- 3	3.0414- 3	1.2821- 3	5.3402- 3	7.0492- 4	8.0822- 1

^{86}Kr (3607)

MATERIAL =3607

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.1589+ 0	6.1496+ 0		9.2817- 3									7.8272- 3
1.0000- 2 ~ 2.0000- 2	6.1636+ 0	6.1496+ 0		9.9664- 3									7.8272- 3
2.0000- 2 ~ 4.0000- 2	6.1624+ 0	6.1496+ 0		2.8043- 3									7.8272- 3
4.0000- 2 ~ 7.0000- 2	6.1516+ 0	6.1496+ 0		2.0597- 3									7.8272- 3
7.0000- 2 ~ 1.0000- 1	6.1512+ 0	6.1496+ 0		1.6600- 3									7.8272- 3
1.0000- 1 ~ 2.0000- 1	6.1508+ 0	6.1496+ 0		1.2532- 3									7.8272- 3
2.0000- 1 ~ 4.0000- 1	6.1505+ 0	6.1496+ 0		8.8653- 4									7.8272- 3
4.0000- 1 ~ 7.0000- 1	6.1502+ 0	6.1496+ 0		6.5190- 4									7.8272- 3
7.0000- 1 ~ 1.0000+ 0	6.1601+ 0	6.1496+ 0		5.2088- 4									7.8272- 3
1.0000+ 0 ~ 2.0000+ 0	6.1500+ 0	6.1496+ 0		3.9883- 4									7.8272- 3
2.0000+ 0 ~ 4.0000+ 0	6.1498+ 0	6.1496+ 0		2.8049- 4									7.8272- 3
4.0000+ 0 ~ 7.0000+ 0	6.1497+ 0	6.1495+ 0		2.0622- 4									7.8272- 3
7.0000+ 0 ~ 1.0000+ 1	6.1496+ 0	6.1495+ 0		1.5502- 4									7.8272- 3
1.0000+ 1 ~ 2.0000+ 1	8.1495+ 0	6.1494+ 0		1.2551- 4									7.8271- 3
2.0000+ 1 ~ 4.0000+ 1	6.1493+ 0	6.1492+ 0		8.8794- 5									7.8268- 3
4.0000+ 1 ~ 7.0000+ 1	6.1490+ 0	6.1489+ 0		6.5245- 5									7.8259- 3
7.0000+ 1 ~ 1.0000+ 2	6.1487+ 0	6.1486+ 0		5.2341- 5									7.8252- 3
1.0000+ 2 ~ 2.0000+ 2	6.1479+ 0	6.1479+ 0		3.9855- 5									7.8221- 3
2.0000+ 2 ~ 4.0000+ 2	6.1462+ 0	6.1462+ 0		2.8316- 5									7.8159- 3
4.0000+ 2 ~ 7.0000+ 2	6.1433+ 0	6.1433+ 0		2.0985- 5									7.8036- 3
7.0000+ 2 ~ 1.0000+ 3	6.1399+ 0	6.1399+ 0		1.6944- 5									7.7937- 3
1.0000+ 3 ~ 2.0000+ 3	6.1325+ 0	6.1326+ 0		1.3211- 5									7.7788- 3
2.0000+ 3 ~ 4.0000+ 3	6.1155+ 0	6.1155+ 0		1.0078- 5									7.7780- 3
4.0000+ 3 ~ 7.0000+ 3	6.0937+ 0	6.0874+ 0		6.3669- 3									7.8676- 3
7.0000+ 3 ~ 1.0000+ 4	8.0525+ 0	8.0525+ 0		8.1186- 8									8.0686- 3
1.0000+ 4 ~ 2.0000+ 4	6.3415+ 0	6.3368+ 0		4.6942- 3									8.9315- 3
2.0000+ 4 ~ 4.0000+ 4	6.0948+ 0	6.0893+ 0		5.2280- 3									1.2333- 2
4.0000+ 4 ~ 7.0000+ 4	7.3017+ 0	7.2969+ 0		5.8031- 3									2.0724- 2
7.0000+ 4 ~ 1.0000+ 5	6.3090+ 0	6.3066+ 0		3.4916- 3									3.2663- 2
1.0000+ 5 ~ 2.0000+ 5	6.4660+ 0	6.4536+ 0		2.4462- 3									6.6091- 2
2.0000+ 5 ~ 4.0000+ 5	8.7219+ 0	8.7200+ 0		1.8488- 3									1.3982- 1
4.0000+ 5 ~ 7.0000+ 5	7.9818+ 0	7.9803+ 0		1.4535- 3									2.3219- 1
7.0000+ 5 ~ 1.0000+ 6	6.8041+ 0	6.8022+ 0		1.8211- 3									2.9136- 1
1.0000+ 6 ~ 2.0000+ 6	4.6781+ 0	4.4183+ 0	1.6586- 1	2.2460- 3									3.0401- 1
2.0000+ 6 ~ 4.0000+ 6	3.7402+ 0	2.6322+ 0	1.1052- 0	1.0475- 3					5.5508-19				3.6827- 1
4.0000+ 6 ~ 7.0000+ 6	3.9870+ 0	2.4805+ 0	1.5062+ 0	4.3342- 4					1.6770-10				6.1668- 1
7.0000+ 6 ~ 1.0000+ 7	4.4693+ 0	2.9158+ 0	1.6632+ 0	1.1893- 4			2.3063- 6		1.8801- 6	1.2716-18			7.7678- 1
1.0000+ 7 ~ 2.0000+ 7	3.7614+ 0	2.3674+ 0	4.4424- 1	7.7064- 4	8.9577- 1	1.9076- 2	1.5474- 2	9.1603- 4	3.7321- 3	1.0746- 3	1.6984- 3	2.1704- 4	8.0820- 1

^{85}Rb (3701)

MATERIAL =3701

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	7.9393+ 0	6.8641+ 0		1.4863+ 0			0.0000+ 0		0.0000+ 0				7.9193- 3
1.0000- 2 ~ 2.0000- 2	6.4888+ 0	6.8640+ 0		6.3473- 1			0.0000+ 0		0.0000+ 0				7.9193- 3
2.0000- 2 ~ 4.0000- 2	6.3028+ 0	5.8640+ 0		4.4977- 1			0.0000+ 0		0.0000+ 0				7.9193- 3
4.0000- 2 ~ 7.0000- 2	8.1836+ 0	5.8540+ 0		3.2982- 1			0.0000+ 0		0.0000+ 0				7.9193- 3
7.0000- 2 ~ 1.0000- 1	6.1180+ 0	5.8539+ 0		2.5407- 1			0.0000+ 0		0.0000+ 0				7.9193- 3
1.0000- 1 ~ 2.0000- 1	6.0543+ 0	5.8598+ 0		2.0058- 1			0.0000+ 0		0.0000+ 0				7.9193- 3
2.0000- 1 ~ 4.0000- 1	6.9963+ 0	5.8634+ 0		1.4193- 1			0.0000+ 0		0.0000+ 0				7.9193- 3
4.0000- 1 ~ 7.0000- 1	5.9572+ 0	5.8529+ 0		1.0440- 1			0.0000+ 0		0.0000+ 0				7.9193- 3
7.0000- 1 ~ 1.0000+ 0	6.9366+ 0	6.8622+ 0		8.3468- 2			0.0000+ 0		0.0000+ 0				7.9193- 3
1.0000+ 0 ~ 2.0000+ 0	5.9143+ 0	5.8507+ 0		6.3610- 2			0.0000+ 0		0.0000+ 0				7.9193- 3
2.0000+ 0 ~ 4.0000+ 0	6.8926+ 0	6.8474+ 0		4.5086- 2			0.0000+ 0		0.0000+ 0				7.9193- 3
4.0000+ 0 ~ 7.0000+ 0	5.8751+ 0	5.8418+ 0		3.3274- 2			0.0000+ 0		0.0000+ 0				7.8192- 3
7.0000+ 0 ~ 1.0000+ 1	5.8619+ 0	5.8351+ 0		2.6752- 2			0.0000+ 0		0.0000+ 0				7.9191- 3
1.0000+ 1 ~ 2.0000+ 1	5.8413+ 0	5.8207+ 0		2.0557- 2			0.0000+ 0		0.0000+ 0				7.9188- 3
2.0000+ 1 ~ 4.0000+ 1	5.8024+ 0	5.7874+ 0		1.4927- 2			0.0000+ 0		0.0000+ 0				7.9186- 3
4.0000+ 1 ~ 7.0000+ 1	5.7436+ 0	5.7321+ 0		1.1545- 2			0.0000+ 0		0.0000+ 0				7.9175- 3
7.0000+ 1 ~ 1.0000+ 2	5.6754+ 0	5.6653+ 0		1.0009- 2			0.0000+ 0		0.0000+ 0				7.9167- 3
1.0000+ 2 ~ 2.0000+ 2	5.6650+ 0	5.5158+ 0		1.4923- 1			0.0000+ 0		0.0000+ 0				7.9142- 3
2.0000+ 2 ~ 4.0000+ 2	5.8193+ 0	5.0886+ 0		7.3070- 1			0.0000+ 0		0.0000+ 0				7.9094- 3
4.0000+ 2 ~ 7.0000+ 2	3.0672+ 1	2.4100+ 1		6.5718+ 0			0.0000+ 0		0.0000+ 0				7.9013- 3
7.0000+ 2 ~ 1.0000+ 3	5.2407+ 0	5.0486+ 0		1.9210- 1			0.0000+ 0		0.0000+ 0				7.8948- 3
1.0000+ 3 ~ 2.0000+ 3	2.1203+ 1	1.8684+ 1		2.5190+ 0			0.0000+ 0		0.0000+ 0				7.8878- 3
2.0000+ 3 ~ 4.0000+ 3	1.3840+ 1	1.2573+ 1		1.0668+ 0			0.0000+ 0		0.0000+ 0				7.9036- 3
4.0000+ 3 ~ 7.0000+ 3	1.1777+ 1	1.1212+ 1		5.6479- 1			0.0000+ 0		0.0000+ 0				8.0181- 3
7.0000+ 3 ~ 1.0000+ 4	1.0290+ 1	9.8849+ 0		6.0541- 1			0.0000+ 0		0.0000+ 0				8.2601- 3
1.0000+ 4 ~ 2.0000+ 4	9.8320+ 0	9.3638+ 0		4.6818- 1			0.0000+ 0		0.0000+ 0				9.1742- 3
2.0000+ 4 ~ 4.0000+ 4	8.9725+ 0	8.6888+ 0		3.0369- 1			0.0000+ 0		0.0000+ 0				1.2704- 2
4.0000+ 4 ~ 7.0000+ 4	8.4653+ 0	8.2552+ 0		1.9906- 1			0.0000+ 0		0.0000+ 0				2.1266- 2
7.0000+ 4 ~ 1.0000+ 5	8.1889+ 0	8.0433+ 0		1.4560- 1			0.0000+ 0		0.0000+ 0				3.3367- 2
1.0000+ 5 ~ 2.0000+ 5	7.9970+ 0	7.8647+ 0	4.0422- 2	1.0117- 1			9.1596-19		6.9607-19				6.0438- 2
2.0000+ 5 ~ 4.0000+ 5	7.5859+ 0	7.1858+ 0	3.3939- 1	6.4784- 2			3.6838-18		2.7843-18				1.4800- 1
4.0000+ 5 ~ 7.0000+ 5	8.7375+ 0	8.1241+ 0	5.8187- 1	4.8410- 2			1.4452-18		8.8830-18				2.5597- 1
7.0000+ 6 ~ 1.0000+ 6	6.8048+ 0	6.0004+ 0	7.7200- 1	3.2062- 2			2.5380-13		4.8641-17				3.3832- 1
1.0000+ 6 ~ 2.0000+ 6	4.6779+ 0	3.3121+ 0	1.2433+ 0	2.0163- 2			4.6393- 7		1.1897-14				4.0564- 1
2.0000+ 6 ~ 4.0000+ 6	3.7616+ 0	2.0842+ 0	1.6676+ 0	8.0270- 3			2.9925- 4		1.4850- 9				4.6974- 1
4.0000+ 6 ~ 7.0000+ 6	3.9888+ 0	2.3714+ 0	1.6114+ 0	2.4279- 3			3.2697- 3		6.9581- 5		2.1868-10		8.4365- 1
7.0000+ 6 ~ 1.0000+ 7	4.4697+ 0	2.9108+ 0	1.5500+ 0	1.0625- 3			7.3146- 3	9.1686- 6	2.9171- 4	1.6024-13	2.4715- 6		7.7762- 1
1.0000+ 7 ~ 2.0000+ 7	3.7517+ 0	2.2873+ 0	5.2044- 1	1.0517- 3	8.8270- 1	2.0410- 5	1.6368- 2	2.7187- 2	7.1690- 3	2.3636- 3	4.9104- 3	8.9034- 4	8.0822- 1

MATERIAL =3702

CROSS SECTION

^{87}Rb (3702)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.7303+ 0	4.3690+ 0		3.7130- 1									7.7373- 3
1.0000- 2 ~ 2.0000- 2	4.5177+ 0	4.3690+ 0		1.6058- 1									7.7373- 3
2.0000- 2 ~ 4.0000- 2	4.4713+ 0	4.3690+ 0		1.1234- 1									7.7373- 3
4.0000- 2 ~ 7.0000- 2	4.4414+ 0	4.3690+ 0		8.2403- 2									7.7373- 3
7.0000- 2 ~ 1.0000- 1	4.4249+ 0	4.3689+ 0		5.5942- 2									7.7373- 3
1.0000- 1 ~ 2.0000- 1	4.4091+ 0	4.3689+ 0		5.0217- 2									7.7373- 3
2.0000- 1 ~ 4.0000- 1	4.3943+ 0	4.3688+ 0		3.5603- 2									7.7373- 3
4.0000- 1 ~ 7.0000- 1	4.3847+ 0	4.3685+ 0		2.6133- 2									7.7373- 3
7.0000- 1 ~ 1.0000+ 0	4.3792+ 0	4.3683+ 0		2.0947- 2									7.7373- 3
1.0000+ 0 ~ 2.0000+ 0	4.3737+ 0	4.3577+ 0		1.5971- 2									7.7373- 3
2.0000+ 0 ~ 4.0000+ 0	4.3678+ 0	4.3565+ 0		1.1366- 2									7.7373- 3
4.0000+ 0 ~ 7.0000+ 0	4.3628+ 0	4.3543+ 0		8.4370- 3									7.7373- 3
7.0000+ 0 ~ 1.0000+ 1	4.3586+ 0	4.3517+ 0		6.8458- 3									7.7372- 3
1.0000+ 1 ~ 2.0000+ 1	4.3513+ 0	4.3459+ 0		5.3564- 3									7.7371- 3
2.0000+ 1 ~ 4.0000+ 1	4.3360+ 0	4.3320+ 0		4.0600- 3									7.7368- 3
4.0000+ 1 ~ 7.0000+ 1	4.3098+ 0	4.3064+ 0		3.3903- 3									7.7362- 3
7.0000+ 1 ~ 1.0000+ 2	4.2746+ 0	4.2714+ 0		3.2259- 3									7.7356- 3
1.0000+ 2 ~ 2.0000+ 2	4.1688+ 0	4.1645+ 0		4.0865- 3									7.7335- 3
2.0000+ 2 ~ 4.0000+ 2	3.3506+ 1	2.9150+ 1		4.3555+ 0									7.7293- 3
4.0000+ 2 ~ 7.0000+ 2	5.4306+ 0	6.4169+ 0		1.3668- 2									7.7211- 3
7.0000+ 2 ~ 1.0000+ 3	4.7026+ 0	4.6167+ 0		8.5859- 2									7.7146- 3
1.0000+ 3 ~ 2.0000+ 3	4.2762+ 0	4.2759+ 0		2.9261- 4									7.7062- 3
2.0000+ 3 ~ 4.0000+ 3	1.0586+ 1	1.0548+ 1		3.8573- 2									7.7174- 3
4.0000+ 3 ~ 7.0000+ 3	1.0101+ 1	1.0089+ 1		1.2620- 2									7.8226- 3
7.0000+ 3 ~ 1.0000+ 4	3.1393+ 1	3.1352+ 1		4.1593- 2									8.0308- 3
1.0000+ 4 ~ 2.0000+ 4	1.0901+ 1	1.0863+ 1		3.7866- 2									8.9289- 3
2.0000+ 4 ~ 4.0000+ 4	9.6785+ 0	9.6517+ 0		2.6784- 2									1.2302- 2
4.0000+ 4 ~ 7.0000+ 4	8.7566+ 0	8.7397+ 0		1.6937- 2									2.0844- 2
7.0000+ 4 ~ 1.0000+ 5	8.2479+ 0	8.2344+ 0		1.2951- 2									3.2846- 2
1.0000+ 5 ~ 2.0000+ 5	8.0003+ 0	7.9904+ 0		9.8385- 3									6.5418- 2
2.0000+ 5 ~ 4.0000+ 5	7.6056+ 0	7.5962+ 0		7.3364- 3									1.4009- 1
4.0000+ 5 ~ 7.0000+ 5	6.7491+ 0	6.4252+ 0	3.1474- 1	4.2351- 3									2.4539- 1
7.0000+ 5 ~ 1.0000+ 6	5.8086+ 0	5.2026+ 0	6.0233- 1	3.1245- 3									3.2649- 1
1.0000+ 6 ~ 2.0000+ 6	4.6806+ 0	3.7164+ 0	8.6028- 1	2.7229- 3									3.6116- 1
2.0000+ 6 ~ 4.0000+ 6	3.7493+ 0	2.4423+ 0	1.3042+ 0	1.5997- 3			2.3773-17		3.8920-16				5.9810- 1
4.0000+ 6 ~ 7.0000+ 6	3.9880+ 0	2.4220+ 0	1.5652+ 0	5.2373- 4			1.0927- 5		1.4042- 8				6.3082- 1
7.0000+ 6 ~ 1.0000+ 7	4.4688+ 0	2.9136+ 0	1.6544+ 0	2.8927- 4			4.6171- 4	3.6313-12	1.8492- 6	6.9823-18	4.3032- 8		7.7721- 1
1.0000+ 7 ~ 2.0000+ 7	3.7618+ 0	2.1303+ 0	4.5405- 1	8.3704- 4	1.1336+ 0	1.1611- 3	1.1134- 2	4.9481- 3	6.6200- 3	3.8266- 3	3.5673- 3	3.3493- 4	8.0822- 1

MATERIAL =3801

CROSS SECTION

^{86}Sr (3801)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	7.3611+ 0	4.1330+ 0		3.2181+ 0					0.0000+ 0				7.8274- 3
1.0000- 2 ~ 2.0000- 2	5.6083+ 0	4.1330+ 0		1.3753+ 0					0.0000+ 0				7.8274- 3
2.0000- 2 ~ 4.0000- 2	6.1071+ 0	4.1330+ 0		8.7414- 1					0.0000+ 0				7.8274- 3
4.0000- 2 ~ 7.0000- 2	4.8470+ 0	4.1329+ 0		7.1410- 1					0.0000+ 0				7.8274- 3
7.0000- 2 ~ 1.0000- 1	4.7043+ 0	4.1328+ 0		6.7147- 1					0.0000+ 0				7.8274- 3
1.0000- 1 ~ 2.0000- 1	4.5681+ 0	4.1327+ 0		4.3548- 1					0.0000+ 0				7.8274- 3
2.0000- 1 ~ 4.0000- 1	4.4399+ 0	4.1323+ 0		3.0760- 1					0.0000+ 0				7.8274- 3
4.0000- 1 ~ 7.0000- 1	4.3580+ 0	4.1316+ 0		2.2643- 1					0.0000+ 0				7.8274- 3
7.0000- 1 ~ 1.0000+ 0	4.3120+ 0	4.1308+ 0		1.8116- 1					0.0000+ 0				7.8274- 3
1.0000+ 0 ~ 2.0000+ 0	4.2673+ 0	4.1291+ 0		1.3820- 1					0.0000+ 0				7.8274- 3
2.0000+ 0 ~ 4.0000+ 0	4.2233+ 0	4.1251+ 0		9.8204- 2					0.0000+ 0				7.8276- 3
4.0000+ 0 ~ 7.0000+ 0	4.1911+ 0	4.1184+ 0		7.2798- 2					0.0000+ 0				7.8276- 3
7.0000+ 0 ~ 1.0000+ 1	4.1691+ 0	4.1102+ 0		5.8859- 2					0.0000+ 0				7.8278- 3
1.0000+ 1 ~ 2.0000+ 1	4.1380+ 0	4.0923+ 0		4.5696- 2					0.0000+ 0				7.8283- 3
2.0000+ 1 ~ 4.0000+ 1	4.0836+ 0	4.0496+ 0		3.3999- 2					0.0000+ 0				7.8297- 3
4.0000+ 1 ~ 7.0000+ 1	4.0008+ 0	3.9736+ 0		2.7331- 2					0.0000+ 0				7.8331- 3
7.0000+ 1 ~ 1.0000+ 2	3.8984+ 0	3.8739+ 0		2.4485- 2					0.0000+ 0				7.8380- 3
1.0000+ 2 ~ 2.0000+ 2	3.6349+ 0	3.6104+ 0		2.4514- 2					0.0000+ 0				7.8484- 3
2.0000+ 2 ~ 4.0000+ 2	2.8474+ 0	2.6040+ 0		4.3324- 2					0.0000+ 0				7.8765- 3
4.0000+ 2 ~ 7.0000+ 2	1.6640+ 2	1.4947+ 2		6.9260+ 0					0.0000+ 0				7.9484- 3
7.0000+ 2 ~ 1.0000+ 3	1.1393+ 1	1.1349+ 1		4.3778- 2					0.0000+ 0				8.0078- 3
1.0000+ 3 ~ 2.0000+ 3	7.1909+ 0	7.0624+ 0		1.2856- 1					0.0000+ 0				8.1067- 3
2.0000+ 3 ~ 4.0000+ 3	8.2879+ 0	7.8711+ 0		3.9874- 1					0.0000+ 0				8.7216- 3
4.0000+ 3 ~ 7.0000+ 3	5.3626+ 0	5.1627+ 0		1.9990- 1					0.0000+ 0				9.8077- 3
7.0000+ 3 ~ 1.0000+ 4	5.2230+ 0	5.1383+ 0		8.4709- 2					0.0000+ 0				1.1236- 2
1.0000+ 4 ~ 2.0000+ 4	1.1786+ 1	1.1673+ 1		1.1296- 1					0.0000+ 0				1.6064- 2
2.0000+ 4 ~ 4.0000+ 4	9.0499+ 0	8.9871+ 0		8.2802- 2					0.0000+ 0				2.5608- 2
4.0000+ 4 ~ 7.0000+ 4	9.3478+ 0	9.2977+ 0		6.0086- 2					0.0000+ 0				4.6703- 2
7.0000+ 4 ~ 1.0000+ 6	9.1981+ 0	9.1600+ 0		3.8127- 2					0.0000+ 0				7.0062- 2
1.0000+ 6 ~ 2.0000+ 6	9.2607+ 0	9.2187+ 0		3.1944- 2					6.4417-19				1.2341- 1
2.0000+ 6 ~ 4.0000+ 6	8.9857+ 0	8.9543+ 0		9.1414- 2					2.5787-18				2.2091- 1
4.0000+ 6 ~ 7.0000+ 6	8.0464+ 0	8.0192+ 0		3.9187- 2					9.0167-18				3.1890- 1
7.0000+ 6 ~ 1.0000+ 6	7.0006+ 0	6.9651+ 0		3.5641- 2					7.1788-17				3.6778- 1
1.0000+ 6 ~ 2.0000+ 6	6.4692+ 0	4.8386+ 0	6.0207- 1	2.6368- 2			7.9012-14		2.4564-14				4.0312- 1
2.0000+ 6 ~ 4.0000+ 6	3.9758+ 0	2.6446+ 0	1.3161+ 0	1.4322- 2			4.0308- 5		2.4910- 9				4.3345- 1
4.0000+ 6 ~ 7.0000+ 6	3.9297+ 0	2.2855+ 0	1.6345+ 0	4.1221- 3			5.3538- 3		1.1599- 5				5.0803- 1
7.0000+ 6 ~ 1.0000+ 7	4.4242+ 0	2.8897+ 0	1.5132+ 0	1.4032- 3			1.9458- 2		3.9531- 4	1.6694-12	1.0443- 8		7.6716- 1
1.0000+ 7 ~ 2.0000+ 7	4.1226+ 0	2.6669+ 0	6.3952- 1	1.0801- 3	7.3109- 1		3.6616- 2	1.9440- 2	1.0610- 2	1.2966- 2	3.2466- 3	1.4929- 4	8.7160- 1

MATERIAL -3802 CROSS SECTION

^{87}Sr (3802)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000 2	6.6936+ 1	6.8995+ 0		4.9036+ 1			0.0000+ 0		0.0000+ 0				7.7373- 3
1.0000- 2 ~ 2.0000 2	2.7957+ 1	6.8986+ 0		2.1059+ 1			0.0000+ 0		0.0000+ 0				7.7373- 3
2.0000- 2 ~ 4.0000- 2	2.1897+ 1	6.8969+ 0		1.4990+ 1			0.0000+ 0		0.0000+ 0				7.7373- 3
4.0000- 2 ~ 7.0000- 2	1.0039+ 1	6.8943+ 0		1.1145+ 1			0.0000+ 0		0.0000+ 0				7.7373- 3
7.0000- 2 ~ 1.0000- 1	1.6932+ 1	6.8912+ 0		9.0409+ 0			0.0000+ 0		0.0000+ 0				7.7373- 3
1.0000- 1 ~ 2.0000- 1	1.3965+ 1	6.8843+ 0		7.0812+ 0			0.0000+ 0		0.0000+ 0				7.7373- 3
2.0000- 1 ~ 4.0000- 1	1.2235+ 1	6.8676+ 0		5.3674+ 0			0.0000+ 0		0.0000+ 0				7.7373- 3
4.0000- 1 ~ 7.0000- 1	1.1337+ 1	6.8374+ 0		4.4996+ 0			0.0000+ 0		0.0000+ 0				7.7373- 3
7.0000- 1 ~ 1.0000+ 0	1.1119+ 1	6.7968+ 0		4.3233+ 0			0.0000+ 0		0.0000+ 0				7.7373- 3
1.0000+ 0 ~ 2.0000+ 0	1.2239+ 1	6.6683+ 0		5.5710+ 0			0.0000+ 0		0.0000+ 0				7.7374- 3
2.0000+ 0 ~ 4.0000+ 0	1.9201+ 2	7.0933+ 0		1.8491+ 2			0.0000+ 0		0.0000+ 0				7.7376- 3
4.0000+ 0 ~ 7.0000+ 0	1.4742+ 1	7.5597+ 0		7.1826+ 0			0.0000+ 0		0.0000+ 0				7.7377- 3
7.0000+ 0 ~ 1.0000+ 1	7.5948+ 0	7.0712+ 0		5.2358- 1			0.0000+ 0		0.0000+ 0				7.7378- 3
1.0000+ 1 ~ 2.0000+ 1	8.9799+ 0	6.8301+ 0		1.4984- 1			0.0000+ 0		0.0000+ 0				7.7386- 3
2.0000+ 1 ~ 4.0000+ 1	6.7729+ 0	6.6468+ 0		2.2612- 1			0.0000+ 0		0.0000+ 0				7.7400- 3
4.0000+ 1 ~ 7.0000+ 1	6.3049+ 0	6.2850+ 0		1.9930- 2			0.0000+ 0		0.0000+ 0				7.7430- 3
7.0000+ 1 ~ 1.0000+ 2	8.1097+ 0	6.1002+ 0		9.5104- 3			0.0000+ 0		0.0000+ 0				7.7489- 3
1.0000+ 2 ~ 2.0000+ 2	5.8927+ 0	5.8807+ 0		4.0145- 3			0.0000+ 0		0.0000+ 0				7.7604- 3
2.0000+ 2 ~ 4.0000+ 2	5.7854+ 0	5.8344+ 0		1.5099- 1			0.0000+ 0		0.0000+ 0				7.7909- 3
4.0000+ 2 ~ 7.0000+ 2	1.2423+ 1	1.1077+ 1		1.3450- 0			0.0000+ 0		0.0000+ 0				7.8692- 3
7.0000+ 2 ~ 1.0000+ 3	8.7415+ 0	8.6547+ 0		1.0880+ 0			0.0000+ 0		0.0000+ 0				7.9395- 3
1.0000+ 3 ~ 2.0000+ 3	1.2029+ 1	1.1706+ 1		3.2326- 1			0.0000+ 0		0.0000+ 0				8.1379- 3
2.0000+ 3 ~ 4.0000+ 3	8.5623+ 0	8.3183+ 0		2.6397- 1			0.0000+ 0		0.0000+ 0				8.6950- 3
4.0000+ 3 ~ 7.0000+ 3	1.2111+ 1	1.1802+ 1		3.0941- 1			0.0000+ 0		0.0000+ 0				9.8244- 3
7.0000+ 3 ~ 1.0000+ 4	9.4059+ 0	9.2153+ 0		1.9067- 1			0.0000+ 0		0.0000+ 0				1.1791- 2
1.0000+ 4 ~ 2.0000+ 4	9.0428+ 0	8.9022+ 0		1.4066- 1			0.0000+ 0		0.0000+ 0				1.6167- 2
2.0000+ 4 ~ 4.0000+ 4	8.8775+ 0	8.7911+ 0		8.5402- 2			0.0000+ 0		0.0000+ 0				2.5607- 2
4.0000+ 4 ~ 7.0000+ 4	8.9839+ 0	8.9321+ 0		5.1762- 2			0.0000+ 0		0.0000+ 0				4.6981- 2
7.0000+ 4 ~ 1.0000+ 5	9.0873+ 0	9.0602+ 0		3.7114- 2			0.0000+ 0		0.0000+ 0				7.0378- 2
1.0000+ 5 ~ 2.0000+ 5	9.2493+ 0	9.2225+ 0		2.6722- 2			3.1407-14		8.5462-12				1.2379- 1
2.0000+ 5 ~ 4.0000+ 5	9.0047+ 0	8.9852+ 0	8.3807- 8	1.9493- 2			1.2583-13		3.4185-11				2.7174- 1
4.0000+ 5 ~ 7.0000+ 5	8.0558+ 0	8.0337+ 0	8.7753- 3	1.5127- 2			5.6191-12		1.0599-10				3.1895- 1
7.0000+ 5 ~ 1.0000+ 6	6.9998+ 0	6.9625+ 0	2.3888- 2	1.3373- 2			1.2600- 8		6.8860-10				3.6826- 1
1.0000+ 6 ~ 2.0000+ 6	5.4681+ 0	6.2108+ 0	2.4361- 1	1.2221- 2			6.6945- 6		2.4490- 8				3.7066- 1
2.0000+ 6 ~ 4.0000+ 6	3.9955+ 0	2.7013+ 0	1.2855+ 0	4.6584- 3			8.3533- 4		5.1514- 6				4.3741- 1
4.0000+ 6 ~ 7.0000+ 6	3.9297+ 0	2.2738+ 0	1.6499+ 0	1.3634- 3			4.4114- 9		2.3820- 4				6.0183- 1
7.0000+ 6 ~ 1.0000+ 7	4.4239+ 0	2.9010+ 0	1.3720+ 0	1.2690- 3	1.4102- 1		7.2162- 3		9.6000- 4	3.6240-17	0.3338- 0		7.6742- 1
1.0000+ 7 ~ 2.0000+ 7	4.1.24+ 0	2.6630+ 0	2.6213- 1	1.0677- 3	1.1527+ 0		1.8139- 2	9.6293- 3	7.9466- 3	6.2009- 4	6.1024- 3	3.2717- 4	8.2169- 1

MATERIAL =3803 CROSS SECTION

^{88}Sr (3803)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.4486+ 0	6.4307+ 0		1.7913- 2									7.6496- 3
1.0000- 2 ~ 2.0000- 2	6.4383+ 0	6.4307+ 0		7.6547- 3									7.6498- 3
2.0000- 2 ~ 4.0000- 2	6.4361+ 0	6.4307+ 0		5.4120- 3									7.6495- 3
4.0000- 2 ~ 7.0000- 2	5.4347+ 0	5.4307+ 0		3.9748- 3									7.6490- 3
7.0000- 2 ~ 1.0000- 1	6.4339+ 0	6.4307+ 0		3.1643- 3									7.6486- 3
1.0000- 1 ~ 2.0000- 1	6.4331+ 0	6.4307+ 0		2.4238- 3									7.6486- 3
2.0000- 1 ~ 4.0000- 1	6.4324+ 0	6.4307+ 0		1.7110- 3									7.6486- 3
4.0000- 1 ~ 7.0000- 1	5.4319+ 0	5.4307+ 0		1.2581- 3									7.6486- 3
7.0000- 1 ~ 1.0000+ 0	6.4317+ 0	6.4306+ 0		1.0064- 3									7.6486- 3
1.0000+ 0 ~ 2.0000+ 0	5.4314+ 0	6.4306+ 0		7.6686- 4									7.6486- 3
2.0000+ 0 ~ 4.0000+ 0	6.4311+ 0	6.4306+ 0		6.4160- 4									7.6487- 3
4.0000+ 0 ~ 7.0000+ 0	6.4308+ 0	6.4304+ 0		3.9857- 4									7.6488- 3
7.0000+ 0 ~ 1.0000+ 1	6.4306+ 0	6.4303+ 0		3.1699- 4									7.6480- 3
1.0000+ 1 ~ 2.0000+ 1	6.4302+ 0	6.4300+ 0		2.4287- 4									7.6503- 3
2.0000+ 1 ~ 4.0000+ 1	.4298+ 0	6.4293+ 0		1.7227- 4									7.6613- 3
4.0000+ 1 ~ 7.0000+ 1	6.4282+ 0	6.4281+ 0		1.2716- 4									7.6836- 3
7.0000+ 1 ~ 1.0000+ 2	5.4266+ 0	6.4267+ 0		1.0266- 4									7.6888- 3
1.0000+ 2 ~ 2.0000+ 2	5.4236+ 0	6.4236+ 0		7.8988- 5									7.8044- 3
2.0000+ 2 ~ 4.0000+ 2	6.4164+ 0	6.4163+ 0		6.7063- 5									7.8661- 3
4.0000+ 2 ~ 7.0000+ 2	6.4038+ 0	6.4038+ 0		4.4770- 5									7.7484- 3
7.0000+ 2 ~ 1.0000+ 3	6.3862+ 0	6.3862+ 0		3.8406- 5									7.8000- 3
1.0000+ 3 ~ 2.0000+ 3	6.3608+ 0	6.3608+ 0		3.6497- 5									7.8700- 3
2.0000+ 3 ~ 4.0000+ 3	5.3309+ 0	5.2865+ 0		4.0386- 2									8.4937- 3
4.0000+ 3 ~ 7.0000+ 3	6.0336+ 0	6.0336+ 0		4.1744- 5									9.6791- 3
7.0000+ 3 ~ 1.0000+ 4	4.5011+ 0	4.5010+ 0		9.5137- 5									1.0999- 2
1.0000+ 4 ~ 2.0000+ 4	1.3568+ 1	1.3568+ 1		1.8714- 2									1.4871- 2
2.0000+ 4 ~ 4.0000+ 4	7.7213+ 0	7.7148+ 0		6.5750- 3									2.8399- 2
4.0000+ 4 ~ 7.0000+ 4	6.1264+ 0	6.1210+ 0		3.5650- 3									4.6634- 2
7.0000+ 4 ~ 1.0000+ 5	7.2622+ 0	7.2601+ 0		2.0999- 3									6.9914- 2
1.0000+ 5 ~ 2.0000+ 5	7.2974+ 0	7.2949+ 0		2.4993- 3									1.2324- 1
2.0000+ 5 ~ 4.0000+ 5	8.9924+ 0	8.9899+ 0		2.4287- 3									2.7048- 1
4.0000+ 5 ~ 7.0000+ 5	8.0468+ 0	8.0450+ 0		1.8460- 3									3.1599- 1
7.0000+ 5 ~ 1.0000+ 6	7.0014+ 0	6.9994+ 0		2.0492- 3									3.6818- 1
1.0000+ 6 ~ 2.0000+ 6	6.4893+ 0	6.4346+ 0	3.0901- 2	2.9743- 3					4.0349-20				3.8226- 1
2.0000+ 6 ~ 4.0000+ 6	3.9705+ 0	3.1045+ 0	6.8317- 1	2.4255- 3					1.5214-14				3.7051- 1
4.0000+ 6 ~ 7.0000+ 6	3.9219+ 0	2.3446+ 0	1.0760+ 0	6.8623- 4			7.7170- 8		8.3376- 8				5.8239- 1
7.0000+ 6 ~ 1.0000+ 7	4.4233+ 0	2.8917+ 0	1.6311+ 0	1.0209- 4			1.8447- 4		2.8026- 6	6.0993-18	0.2813-13		7.6727- 1
1.0000+ 7 ~ 2.0000+ 7	4.1220+ 0	2.8666+ 0	6.4031- 1	8.6772- 4	7.8346- 1	6.0171- 7	1.0136- 2	4.2600- 3	7.0276- 3	3.6600- 4	2.2986- 3	1.4406- 4	8.2169- 1

MATERIAL =3804 CROSS SECTION ^{89}Sr (3804)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	7.0144+ 0	6.7000+ 0		1.2952+ 0					0.0000+ 0				7.6634- 3
1.0000- 2 ~ 2.0000- 2	6.2657+ 0	6.7000+ 0		6.5344- 1					0.0000+ 0				7.6634- 3
2.0000- 2 ~ 4.0000- 2	6.1067+ 0	6.7000+ 0		3.9133- 1					0.0000+ 0				7.6634- 3
4.0000- 2 ~ 7.0000- 2	8.0309+ 0	5.7000+ 0		2.8759- 1					0.0000+ 0				7.6634- 3
7.0000- 2 ~ 1.0000- 1	6.9798+ 0	5.7000+ 0		2.3004- 1					0.0000+ 0				7.6634- 3
1.0000- 1 ~ 2.0000- 1	5.9165+ 0	5.7000+ 0		1.7500- 1					0.0000+ 0				7.6634- 3
2.0000- 1 ~ 4.0000- 1	5.8383+ 0	5.7000+ 0		1.2374- 1					0.0000+ 0				7.6634- 3
4.0000- 1 ~ 7.0000- 1	5.7973+ 0	5.7000+ 0		9.0940- 2					0.0000+ 0				7.6634- 3
7.0000- 1 ~ 1.0000+ 0	5.7844+ 0	5.7000+ 0		7.2740- 2					0.0000+ 0				7.6634- 3
1.0000+ 0 ~ 2.0000+ 0	5.7681+ 0	5.7000+ 0		5.5338- 2					0.0000+ 0				7.6634- 3
2.0000+ 0 ~ 4.0000+ 0	5.7479+ 0	5.7000+ 0		3.9129- 2					0.0000+ 0				7.6636- 3
4.0000+ 0 ~ 7.0000+ 0	5.7308+ 0	5.7000+ 0		2.8756- 2					0.0000+ 0				7.6656- 3
7.0000+ 0 ~ 1.0000+ 1	5.7257+ 0	5.7000+ 0		2.3001- 2					0.0000+ 0				7.6637- 3
1.0000+ 1 ~ 2.0000+ 1	5.7231+ 0	5.7000+ 0		1.7498- 2					0.0000+ 0				7.6642- 3
2.0000+ 1 ~ 4.0000+ 1	5.7199+ 0	5.7000+ 0		1.2373- 2					0.0000+ 0				7.6666- 3
4.0000+ 1 ~ 7.0000+ 1	5.7170+ 0	5.7000+ 0		9.0930- 3					0.0000+ 0				7.6688- 3
7.0000+ 1 ~ 1.0000+ 2	5.7149+ 0	5.7000+ 0		7.2739- 3					0.0000+ 0				7.5715- 3
1.0000+ 2 ~ 2.0000+ 2	5.7123+ 0	5.7000+ 0		5.5332- 3					0.0000+ 0				7.6637- 3
2.0000+ 2 ~ 4.0000+ 2	5.7091+ 0	5.7000+ 0		3.9125- 3					0.0000+ 0				7.6119- 3
4.0000+ 2 ~ 7.0000+ 2	5.7062+ 0	5.7000+ 0		2.8753- 3					0.0000+ 0				7.6869- 3
7.0000+ 2 ~ 1.0000+ 3	5.7041+ 0	5.7000+ 0		2.2990- 3					0.0000+ 0				7.7489- 3
1.0000+ 3 ~ 2.0000+ 3	8.5426+ 0	8.4475+ 0		9.4727- 2					0.0000+ 0				7.9442- 3
2.0000+ 3 ~ 4.0000+ 3	9.6670+ 0	9.5641+ 0		1.0283- 1					0.0000+ 0				8.4892- 3
4.0000+ 3 ~ 7.0000+ 3	9.0927+ 0	9.0314+ 0		6.1304- 2					0.0000+ 0				9.6067- 3
7.0000+ 3 ~ 1.0000+ 4	8.8368+ 0	8.7975+ 0		4.1229- 2					0.0000+ 0				1.1067- 2
1.0000+ 4 ~ 2.0000+ 4	8.6948+ 0	8.6693+ 0		2.5439- 2					0.0000+ 0				1.4944- 2
2.0000+ 4 ~ 4.0000+ 4	8.7229+ 0	8.7089+ 0		1.3954- 2					0.0000+ 0				2.6608- 2
4.0000+ 4 ~ 7.0000+ 4	8.8949+ 0	8.8860+ 0		8.7710- 3					0.0000+ 0				4.6836- 2
7.0000+ 4 ~ 1.0000+ 5	9.0650+ 0	9.0583+ 0		6.7069- 3					0.0000+ 0				7.0287- 2
1.0000+ 5 ~ 2.0000+ 5	9.2620+ 0	9.2469+ 0		5.1275- 3					2.3899-14				1.2369- 1
2.0000+ 5 ~ 4.0000+ 5	8.9862+ 0	8.9825+ 0		3.7322- 3					9.4798-14				2.2095- 1
4.0000+ 5 ~ 7.0000+ 5	8.0468+ 0	8.0438+ 0		2.9542- 3					9.2277-13				3.1832- 1
7.0000+ 5 ~ 1.0000+ 6	7.0016+ 0	6.9987+ 0		2.8439- 3					2.3733-12				3.6667- 1
1.0000+ 6 ~ 2.0000+ 6	6.4664+ 0	5.2092+ 0	2.6574- 1	2.9878- 3					3.6345-10				3.7938- 1
2.0000+ 6 ~ 4.0000+ 6	3.9862+ 0	2.7229+ 0	1.2608+ 0	1.9263- 3					2.8293- 7				4.2699- 1
4.0000+ 6 ~ 7.0000+ 6	3.9287+ 0	2.3087+ 0	1.5943+ 0	9.4478- 4	2.4794- 2		5.6858- 7		2.5846- 6				5.9774- 1
7.0000+ 6 ~ 1.0000+ 7	4.4228+ 0	2.8832+ 0	6.4207- 1	3.8210- 4	8.8457- 1		1.0107- 4		1.9054- 4	7.3301-17	1.6967-16	6.6811-16	7.6746- 1
1.0000+ 7 ~ 2.0000+ 7	4.1228+ 0	2.6693+ 0	1.0731- 1	9.9220- 4	1.3098+ 0	1.3807- 2	1.0091- 2	3.0710- 3	3.1946- 3	7.6938- 4	3.1101- 3	9.1473- 4	8.2169- 1

MATERIAL =3901 CROSS SECTION ^{89}Y (3901)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.1656+ 1	7.7129+ 0		3.9527+ 0					0.0000+ 0				7.6636- 3
1.0000- 2 ~ 2.0000- 2	9.4018+ 0	7.7126+ 0		1.6890+ 0					0.0000+ 0				7.6636- 3
2.0000- 2 ~ 4.0000- 2	8.9068+ 0	7.7126+ 0		1.1940+ 0					0.0000+ 0				7.6636- 3
4.0000- 2 ~ 7.0000- 2	8.5989+ 0	7.7123+ 0		8.7868- 1					0.0000+ 0				7.6636- 3
7.0000- 2 ~ 1.0000- 1	8.4140+ 0	7.7120+ 0		7.0205- 1					0.0000+ 0				7.6636- 3
1.0000- 1 ~ 2.0000- 1	8.2459+ 0	7.7112+ 0		5.3408- 1					0.0000+ 0				7.6636- 3
2.0000- 1 ~ 4.0000- 1	8.0881+ 0	7.7084+ 0		3.7870- 1					0.0000+ 0				7.6636- 3
4.0000- 1 ~ 7.0000- 1	7.9929+ 0	7.7066+ 0		2.7834- 1					0.0000+ 0				7.6636- 3
7.0000- 1 ~ 1.0000+ 0	7.9234+ 0	7.7030+ 0		2.2032- 1					0.0000+ 0				7.6636- 3
1.0000+ 0 ~ 2.0000+ 0	7.8625+ 0	7.8056+ 0		1.8695- 1					0.0000+ 0				7.6636- 3
2.0000+ 0 ~ 4.0000+ 0	7.7950+ 0	7.6703+ 0		1.1871- 1					0.0000+ 0				7.6636- 3
4.0000+ 0 ~ 7.0000+ 0	7.7344+ 0	7.6602+ 0		8.4172- 2					0.0000+ 0				7.6636- 3
7.0000+ 0 ~ 1.0000+ 1	7.6830+ 0	7.6172+ 0		6.6658- 2					0.0000+ 0				7.5636- 3
1.0000+ 1 ~ 2.0000+ 1	7.6985+ 0	7.5488+ 0		4.7751- 2					0.0000+ 0				7.6644- 3
2.0000+ 1 ~ 4.0000+ 1	7.4347+ 0	7.4044+ 0		3.0309- 2					0.0000+ 0				7.6664- 3
4.0000+ 1 ~ 7.0000+ 1	7.2187+ 0	7.1978+ 0		1.8865- 2					0.0000+ 0				7.6699- 3
7.0000+ 1 ~ 1.0000+ 2	7.0044+ 0	6.9920+ 0		1.2475- 2					0.0000+ 0				7.5718- 3
1.0000+ 2 ~ 2.0000+ 2	6.8749+ 0	6.8581+ 0		8.8723- 3					0.0000+ 0				7.6836- 3
2.0000+ 2 ~ 4.0000+ 2	6.2211+ 0	6.2104+ 0		2.6712- 3					0.0000+ 0				7.6106- 3
4.0000+ 2 ~ 7.0000+ 2	6.8438+ 0	6.8428+ 0		9.8318- 4					0.0000+ 0				7.6821- 3
7.0000+ 2 ~ 1.0000+ 3	6.8117+ 0	6.8112+ 0		4.3689- 4					0.0000+ 0				7.7408- 3
1.0000+ 3 ~ 2.0000+ 3	6.3625+ 0	6.3622+ 0		2.8280- 4					0.0000+ 0				7.9223- 3
2.0000+ 3 ~ 4.0000+ 3	8.8295+ 0	8.8185+ 0		5.1121- 1					0.0000+ 0				8.4884- 3
4.0000+ 3 ~ 7.0000+ 3	4.8088+ 0	4.8811+ 0		2.6386- 2					0.0000+ 0				9.5707- 3
7.0000+ 3 ~ 1.0000+ 4	8.6748+ 0	8.6407+ 0		3.4184- 2					0.0000+ 0				1.1018- 2
1.0000+ 4 ~ 2.0000+ 4	7.1889+ 0	7.1832+ 0		2.5734- 2					0.0000+ 0				1.4878- 2
2.0000+ 4 ~ 4.0000+ 4	7.0887+ 0	7.0490+ 0		2.2887- 2					0.0000+ 0				2.9550- 2
4.0000+ 4 ~ 7.0000+ 4	8.1268+ 0	8.1139+ 0		1.2182- 2					0.0000+ 0				4.8750- 2
7.0000+ 4 ~ 1.0000+ 5	9.0784+ 0	9.0672+ 0		1.2166- 2					0.0000+ 0				7.0176- 2
1.0000+ 5 ~ 2.0000+ 5	9.2620+ 0	9.2412+ 0		1.0783- 2					1.1102-20				1.2380- 1
2.0000+ 5 ~ 4.0000+ 5	8.8882+ 0	8.8744+ 0		9.8787- 3					4.4408-20				2.2099- 1
4.0000+ 5 ~ 7.0000+ 5	8.0488+ 0	8.0377+ 0		8.1398- 3					1.5546-19				3.1841- 1
7.0000+ 5 ~ 1.0000+ 6	7.0019+ 0	6.9868+ 0	6.7734- 3	8.1641- 3					1.2087-18				3.6717- 1
1.0000+ 6 ~ 2.0000+ 6	5.4898+ 0	5.1468+ 0	3.1381- 1	6.3813- 3			1.8168-11		4.1627-18				3.8488- 1
2.0000+ 6 ~ 4.0000+ 6	3.8733+ 0	2.7438+ 0	1.2244+ 0	5.8841- 3			2.0800- 5		7.0807-11				4.1725- 1
4.0000+ 6 ~ 7.0000+ 6	3.9287+ 0	2.2874+ 0	1.9378+ 0	1.7484- 3			1.5987- 3		1.8278- 6		3.6207-11		5.1819- 1
7.0000+ 6 ~ 1.0000+ 7	4.4228+ 0	2.8886+ 0	1.8248+ 0	8.9066- 4			8.1300- 3	1.2883- 4	1.4678- 4	1.4442-17	3.4778- 6		7.6722- 1
1.0000+ 7 ~ 2.0000+ 7	4.1228+ 0	2.6707+ 0	5.9105- 1	9.8588- 4	7.9398- 1		2.1117- 2	1.1700- 1	7.1817- 3	3.3887- 3	7.8161- 3	3.0409- 4	8.2168- 1

MATERIAL =3805 CROSS SECTION ^{90}Sr (3805)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NF)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.6123+ 0	5.8037+ 0		2.7753+ 0					0.0000+ 0				7.4793- 3
1.0000- 2 ~ 2.0000- 2	7.0136+ 0	5.8037+ 0		1.1859+ 0					0.0000+ 0				7.4793- 3
2.0000- 2 ~ 4.0000- 2	8.6620+ 0	5.8037+ 0		8.3857- 1					0.0000+ 0				7.4793- 3
4.0000- 2 ~ 7.0000- 2	8.4800+ 0	5.8037+ 0		8.1628- 1					0.0000+ 0				7.4793- 3
7.0000- 2 ~ 1.0000- 1	6.3225+ 0	5.8037+ 0		4.9296- 1					0.0000+ 0				7.4793- 3
1.0000- 1 ~ 2.0000- 1	8.1901+ 0	5.8037+ 0		3.7502- 1					0.0000+ 0				7.4793- 3
2.0000- 1 ~ 4.0000- 1	6.0869+ 0	5.8037+ 0		2.6516- 1					0.0000+ 0				7.4793- 3
4.0000- 1 ~ 7.0000- 1	8.0044+ 0	5.8037+ 0		1.9466- 1					0.0000+ 0				7.4793- 3
7.0000- 1 ~ 1.0000+ 0	5.9748+ 0	5.8037+ 0		1.5686- 1					0.0000+ 0				7.4793- 3
1.0000+ 0 ~ 2.0000+ 0	5.9476+ 0	5.8037+ 0		1.1859- 1					0.0000+ 0				7.4793- 3
2.0000+ 0 ~ 4.0000+ 0	6.9138+ 0	5.8037+ 0		8.3858- 2					0.0000+ 0				7.4793- 3
4.0000+ 0 ~ 7.0000+ 0	5.8840+ 0	5.8037+ 0		6.1628- 2					0.0000+ 0				7.4795- 3
7.0000+ 0 ~ 1.0000+ 1	5.8828+ 0	5.8037+ 0		4.9295- 2					0.0000+ 0				7.4796- 3
1.0000+ 1 ~ 2.0000+ 1	5.8443+ 0	5.8037+ 0		3.7502- 2					0.0000+ 0				7.4801- 3
2.0000+ 1 ~ 4.0000+ 1	5.8390+ 0	5.8037+ 0		2.6516- 2					0.0000+ 0				7.4812- 3
4.0000+ 1 ~ 7.0000+ 1	5.8361+ 0	5.8037+ 0		1.9466- 2					0.0000+ 0				7.4843- 3
7.0000+ 1 ~ 1.0000+ 2	5.8329+ 0	5.8037+ 0		1.5566- 2					0.0000+ 0				7.4866- 3
1.0000+ 2 ~ 2.0000+ 2	5.8288+ 0	5.8037+ 0		1.1859- 2					0.0000+ 0				7.4976- 3
2.0000+ 2 ~ 4.0000+ 2	5.8245+ 0	5.8037+ 0		8.3858- 3					0.0000+ 0				7.5225- 3
4.0000+ 2 ~ 7.0000+ 2	5.8207+ 0	5.8037+ 0		6.1628- 3					0.0000+ 0				7.5885- 3
7.0000+ 2 ~ 1.0000+ 3	5.8179+ 0	5.8037+ 0		4.9295- 3					0.0000+ 0				7.6429- 3
1.0000+ 3 ~ 2.0000+ 3	5.8144+ 0	5.8037+ 0		3.7502- 3					0.0000+ 0				7.8264- 3
2.0000+ 3 ~ 4.0000+ 3	5.8100+ 0	5.8037+ 0		2.6516- 3					0.0000+ 0				8.3477- 3
4.0000+ 3 ~ 7.0000+ 3	5.7690+ 0	5.7403+ 0		1.8063- 2					0.0000+ 0				9.4389- 3
7.0000+ 3 ~ 1.0000+ 4	5.5535+ 0	5.5130+ 0		4.0465- 2					0.0000+ 0				1.0878- 2
1.0000+ 4 ~ 2.0000+ 4	5.4664+ 0	5.4296+ 0		2.5627- 2					0.0000+ 0				1.4728- 2
2.0000+ 4 ~ 4.0000+ 4	5.5519+ 0	5.5471+ 0		1.4782- 2					0.0000+ 0				2.5365- 2
4.0000+ 4 ~ 7.0000+ 4	5.8223+ 0	5.8120+ 0		1.0305- 2					0.0000+ 0				4.5584- 2
7.0000+ 4 ~ 1.0000+ 5	9.0660+ 0	9.0660+ 0		8.9230- 3					0.0000+ 0				7.0048- 2
1.0000+ 5 ~ 2.0000+ 5	9.2528+ 0	9.2445+ 0		8.2764- 3					0.0000+ 0				1.2350- 1
2.0000+ 5 ~ 4.0000+ 5	8.9867+ 0	8.9780+ 0		7.7459- 3					0.0000+ 0				2.2084- 1
4.0000+ 5 ~ 7.0000+ 5	8.0472+ 0	8.0399+ 0		7.3025- 3					2.5906-20				3.1530- 1
7.0000+ 5 ~ 1.0000+ 6	7.0014+ 0	6.8222+ 0	1.7296- 1	6.1202- 3					1.5175-10				3.7681- 1
1.0000+ 6 ~ 2.0000+ 6	5.4693+ 0	4.5400+ 0	8.2456- 1	3.6390- 3					4.2469-17				4.2484- 1
2.0000+ 6 ~ 4.0000+ 6	3.9876+ 0	2.5609+ 0	1.4011+ 0	2.6846- 3					1.4608-11				4.4607- 1
4.0000+ 6 ~ 7.0000+ 6	3.9265+ 0	2.2893+ 0	1.6376+ 0	1.0986- 3			1.5630-12		6.5181- 7	1.1026-17			5.9717- 1
7.0000+ 6 ~ 1.0000+ 7	4.4223+ 0	2.6656+ 0	1.1877+ 0	2.4688- 4	3.4612- 1		9.6700- 6		3.7046- 6	6.8263-11			7.6727- 1
1.0000+ 7 ~ 2.0000+ 7	4.1229+ 0	2.6610+ 0	1.6684- 1	8.1467- 4	1.0674+ 0	2.1137- 1	8.4530- 3	1.6726- 3	1.8808- 3	1.1666- 3	1.4733- 3	5.6766- 4	8.2159- 1

MATERIAL =4001 CROSS SECTION ^{90}Zr (4001)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NF)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	5.6066+ 0	5.4646+ 0		1.4166- 1					0.0000+ 0				7.4796- 3
1.0000- 2 ~ 2.0000- 2	5.5264+ 0	5.4646+ 0		6.0822- 2					0.0000+ 0				7.4796- 3
2.0000- 2 ~ 4.0000- 2	5.5077+ 0	5.4646+ 0		4.2890- 2					0.0000+ 0				7.4796- 3
4.0000- 2 ~ 7.0000- 2	5.4883+ 0	5.4646+ 0		3.1543- 2					0.0000+ 0				7.4796- 3
7.0000- 2 ~ 1.0000- 1	5.4900+ 0	5.4646+ 0		2.5214- 2					0.0000+ 0				7.4796- 3
1.0000- 1 ~ 2.0000- 1	5.4839+ 0	5.4647+ 0		1.9157- 2					0.0000+ 0				7.4796- 3
2.0000- 1 ~ 4.0000- 1	5.4782+ 0	5.4647+ 0		1.3644- 2					0.0000+ 0				7.4796- 3
4.0000- 1 ~ 7.0000- 1	5.4748+ 0	5.4647+ 0		9.8887- 3					0.0000+ 0				7.4796- 3
7.0000- 1 ~ 1.0000+ 0	5.4726+ 0	5.4646+ 0		7.9894- 3					0.0000+ 0				7.4796- 3
1.0000+ 0 ~ 2.0000+ 0	5.4705+ 0	5.4644+ 0		6.0580- 3					0.0000+ 0				7.4796- 3
2.0000+ 0 ~ 4.0000+ 0	5.4683+ 0	5.4640+ 0		4.2808- 3					0.0000+ 0				7.4796- 3
4.0000+ 0 ~ 7.0000+ 0	5.4666+ 0	5.4634+ 0		3.1429- 3					0.0000+ 0				7.4797- 3
7.0000+ 0 ~ 1.0000+ 1	5.4652+ 0	5.4627+ 0		2.5074- 3					0.0000+ 0				7.4798- 3
1.0000+ 1 ~ 2.0000+ 1	5.4690+ 0	5.4611+ 0		1.9029- 3					0.0000+ 0				7.4803- 3
2.0000+ 1 ~ 4.0000+ 1	5.4687+ 0	5.4574+ 0		1.3367- 3					0.0000+ 0				7.4814- 3
4.0000+ 1 ~ 7.0000+ 1	5.4623+ 0	5.4513+ 0		9.7007- 4					0.0000+ 0				7.4845- 3
7.0000+ 1 ~ 1.0000+ 2	5.4447+ 0	5.4440+ 0		7.6361- 4					0.0000+ 0				7.4866- 3
1.0000+ 2 ~ 2.0000+ 2	5.4292+ 0	5.4285+ 0		5.5498- 4					0.0000+ 0				7.4976- 3
2.0000+ 2 ~ 4.0000+ 2	5.3947+ 0	5.3944+ 0		3.7569- 4					0.0000+ 0				7.5261- 3
4.0000+ 2 ~ 7.0000+ 2	5.3405+ 0	5.3403+ 0		2.5343- 4					0.0000+ 0				7.5976- 3
7.0000+ 2 ~ 1.0000+ 3	5.2785+ 0	5.2781+ 0		1.8826- 4					0.0000+ 0				7.6419- 3
1.0000+ 3 ~ 2.0000+ 3	5.1402+ 0	5.1401+ 0		1.4041- 4					0.0000+ 0				7.8248- 3
2.0000+ 3 ~ 4.0000+ 3	9.7529+ 0	9.7155+ 0		3.7417- 2					0.0000+ 0				8.3488- 3
4.0000+ 3 ~ 7.0000+ 3	6.7186+ 0	6.5859+ 0		6.1763- 2					0.0000+ 0				9.4292- 3
7.0000+ 3 ~ 1.0000+ 4	6.7432+ 0	6.6377+ 0		1.0550- 1					0.0000+ 0				1.0878- 2
1.0000+ 4 ~ 2.0000+ 4	1.1737+ 1	1.1707+ 1		3.0457- 2					0.0000+ 0				1.4724- 2
2.0000+ 4 ~ 4.0000+ 4	8.2121+ 0	8.1881+ 0		1.4042- 2					0.0000+ 0				2.5367- 2
4.0000+ 4 ~ 7.0000+ 4	8.7818+ 0	8.7807+ 0		2.1238- 2					0.0000+ 0				4.5578- 2
7.0000+ 4 ~ 1.0000+ 5	8.0717+ 0	8.0610+ 0		1.0708- 2					0.0000+ 0				7.0038- 2
1.0000+ 5 ~ 2.0000+ 5	8.7276+ 0	8.7188+ 0		1.0701- 2					0.0000+ 0				1.2349- 1
2.0000+ 5 ~ 4.0000+ 5	8.8867+ 0	8.8800+ 0		6.7363- 3					1.0318-16				2.2083- 1
4.0000+ 5 ~ 7.0000+ 5	8.0472+ 0	8.0408+ 0		6.3108- 3					5.0875-10				3.1529- 1
7.0000+ 5 ~ 1.0000+ 6	7.0021+ 0	6.8963+ 0		6.8588- 3					3.4338-16				3.6866- 1
1.0000+ 6 ~ 2.0000+ 6	6.4702+ 0	5.4408+ 0	1.0473- 2	1.0330- 2			1.1090-20		1.0998-12				8.8176- 1
2.0000+ 6 ~ 4.0000+ 6	3.8720+ 0	3.0882+ 0	8.7746- 1	7.2188- 3			6.9466- 7		3.2875- 8				3.7447- 1
4.0000+ 6 ~ 7.0000+ 6	3.9228+ 0	2.3862+ 0	1.5543+ 0	2.2871- 3			1.1199- 3		8.6523- 5	2.6532-20			6.7792- 1
7.0000+ 6 ~ 1.0000+ 7	4.4223+ 0	2.8916+ 0	1.5109+ 0	6.4634- 4			9.3052- 3	1.0478- 9	7.2982- 4	6.1238-14	2.2788- 7		7.6727- 1
1.0000+ 7 ~ 2.0000+ 7	4.1229+ 0	2.6093+ 0	6.9631- 1	9.9006- 4	6.8466- 1		3.0052- 2	6.2690- 2	1.0867- 2	2.6601- 3	4.6104- 3	2.0248- 4	8.2158- 1

MATERIAL =3902 CROSS SECTION

^{91}Y (3902)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.0060+ 1	6.7000+ 0		4.3172+ 0					0.0000+ 0				7.3970- 3
1.0000- 2 ~ 2.0000- 2	7.6787+ 0	6.7000+ 0		1.8448+ 0					0.0000+ 0				7.3970- 3
2.0000- 2 ~ 4.0000- 2	7.0271+ 0	6.7000+ 0		1.3044+ 0					0.0000+ 0				7.3970- 3
4.0000- 2 ~ 7.0000- 2	6.6916+ 0	6.7000+ 0		9.5869- 1					0.0000+ 0				7.3970- 3
7.0000- 2 ~ 1.0000- 1	6.4760+ 0	6.7000+ 0		7.6878- 1					0.0000+ 0				7.3970- 3
1.0000- 1 ~ 2.0000- 1	6.3143+ 0	5.7000+ 0		5.8334- 1					0.0000+ 0				7.3970- 3
2.0000- 1 ~ 4.0000- 1	6.1246+ 0	6.7000+ 0		4.1247- 1					0.0000+ 0				7.3970- 3
4.0000- 1 ~ 7.0000- 1	6.0363+ 0	5.7000+ 0		3.0312- 1					0.0000+ 0				7.3970- 3
7.0000- 1 ~ 1.0000+ 0	6.9837+ 0	6.7000+ 0		2.4246- 1					0.0000+ 0				7.3970- 3
1.0000+ 0 ~ 2.0000+ 0	5.9182+ 0	5.7000+ 0		1.8445- 1					0.0000+ 0				7.3971- 3
2.0000+ 0 ~ 4.0000+ 0	6.8384+ 0	6.7000+ 0		1.3049- 1					0.0000+ 0				7.3971- 3
4.0000+ 0 ~ 7.0000+ 0	5.8129+ 0	5.7000+ 0		9.5850- 2					0.0000+ 0				7.3973- 3
7.0000+ 0 ~ 1.0000+ 1	6.8022+ 0	5.7000+ 0		7.6867- 2					0.0000+ 0				7.3975- 3
1.0000+ 1 ~ 2.0000+ 1	5.7889+ 0	5.7000+ 0		5.8325- 2					0.0000+ 0				7.3981- 3
2.0000+ 1 ~ 4.0000+ 1	6.7723+ 0	6.7000+ 0		4.1241- 2					0.0000+ 0				7.3986- 3
4.0000+ 1 ~ 7.0000+ 1	5.7577+ 0	5.7000+ 0		3.0308- 2					0.0000+ 0				7.4034- 3
7.0000+ 1 ~ 1.0000+ 2	5.7471+ 0	5.7000+ 0		2.4249- 2					0.0000+ 0				7.4065- 3
1.0000+ 2 ~ 2.0000+ 2	5.7339+ 0	5.7000+ 0		1.8443- 2					0.0000+ 0				7.4199- 3
2.0000+ 2 ~ 4.0000+ 2	6.5284+ 0	6.3844+ 0		1.3752- 1					0.0000+ 0				7.4503- 3
4.0000+ 2 ~ 7.0000+ 2	1.2863+ 1	1.1649+ 1		1.0344+ 0					0.0000+ 0				7.6263- 3
7.0000+ 2 ~ 1.0000+ 3	1.1417+ 1	1.0810+ 1		8.0711- 1					0.0000+ 0				7.5925- 3
1.0000+ 3 ~ 2.0000+ 3	1.0257+ 1	8.6411+ 0		6.1646- 1					0.0000+ 0				7.7962- 3
2.0000+ 3 ~ 4.0000+ 3	9.2643+ 0	8.8182+ 0		4.3811- 1					0.0000+ 0				8.3536- 3
4.0000+ 3 ~ 7.0000+ 3	8.7161+ 0	8.4083+ 0		3.0884- 1					0.0000+ 0				9.4889- 3
7.0000+ 3 ~ 1.0000+ 4	8.4987+ 0	8.2881+ 0		2.2859- 1					0.0000+ 0				1.0987- 2
1.0000+ 4 ~ 2.0000+ 4	8.4067+ 0	8.2526+ 0		1.5314- 1					0.0000+ 0				1.4880- 2
2.0000+ 4 ~ 4.0000+ 4	8.5271+ 0	8.4379+ 0		8.9171- 2					0.0000+ 0				2.5815- 2
4.0000+ 4 ~ 7.0000+ 4	8.8029+ 0	8.7477+ 0		5.6280- 2					0.0000+ 0				4.5944- 2
7.0000+ 4 ~ 1.0000+ 5	9.0560+ 0	9.0168+ 0		4.1223- 2					0.0000+ 0				7.0502- 2
1.0000+ 5 ~ 2.0000+ 5	9.2549+ 0	9.2216+ 0		3.3362- 2					2.0667-16				1.2412- 1
2.0000+ 5 ~ 4.0000+ 5	8.8885+ 0	8.8571+ 0		3.1413- 2					8.2826-16				2.2176- 1
4.0000+ 5 ~ 7.0000+ 5	8.0809+ 0	8.0068+ 0	2.4818- 2	2.9744- 2					2.8898-15				3.1828- 1
7.0000+ 5 ~ 1.0000+ 6	7.0039+ 0	6.4086+ 0	5.7763- 1	1.5841- 2					1.7915-14				4.0150- 1
1.0000+ 6 ~ 2.0000+ 6	6.4726+ 0	4.2372+ 0	1.2260+ 0	7.8160- 3					2.5607-12				4.6799- 1
2.0000+ 6 ~ 4.0000+ 6	3.9748+ 0	2.3308+ 0	1.6388+ 0	5.0174- 3			8.1585- 9		1.8082- 8				4.8777- 1
4.0000+ 6 ~ 7.0000+ 6	3.9277+ 0	2.2438+ 0	1.6821+ 0	1.7659- 3			3.7520- 5		8.3908- 8	1.2790-14	1.3845-13		8.0874- 1
7.0000+ 6 ~ 1.0000+ 7	4.4197+ 0	2.8918+ 0	1.2626+ 0	4.1129- 4	2.7394- 1		6.3006- 4	6.4876- 9	1.9682- 4	8.7064- 9	2.0886- 7	8.2023-11	7.6762- 1
1.0000+ 7 ~ 2.0000+ 7	4.1230+ 0	2.8644+ 0	2.4266- 1	8.9970- 4	1.0388+ 0	1.4614- 1	9.2208- 3	7.6149- 3	2.8801- 3	2.8220- 3	5.4291- 3	1.8484- 3	8.2169- 1

MATERIAL =4002 CROSS SECTION

^{91}Zr (4002)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.4446+ 1	1.0586+ 1		3.8601+ 0					0.0000+ 0				7.3972- 3
1.0000- 2 ~ 2.0000- 2	1.2236+ 1	1.0586+ 1		1.6495+ 0					0.0000+ 0				7.3972- 3
2.0000- 2 ~ 4.0000- 2	1.1756+ 1	1.0586+ 1		1.1889+ 0					0.0000+ 0				7.3972- 3
4.0000- 2 ~ 7.0000- 2	1.1442+ 1	1.0585+ 1		8.5830- 1					0.0000+ 0				7.3972- 3
7.0000- 2 ~ 1.0000- 1	1.1271+ 1	1.0566+ 1		6.8684- 1					0.0000+ 0				7.3972- 3
1.0000- 1 ~ 2.0000- 1	1.1108+ 1	1.0584+ 1		5.2202- 1					0.0000+ 0				7.3972- 3
2.0000- 1 ~ 4.0000- 1	1.0960+ 1	1.0582+ 1		3.8882- 1					0.0000+ 0				7.3972- 3
4.0000- 1 ~ 7.0000- 1	1.0848+ 1	1.0578+ 1		2.7076- 1					0.0000+ 0				7.3972- 3
7.0000- 1 ~ 1.0000+ 0	1.0790+ 1	1.0574+ 1		2.1828- 1					0.0000+ 0				7.3972- 3
1.0000+ 0 ~ 2.0000+ 0	1.0729+ 1	1.0566+ 1		1.6451- 1					0.0000+ 0				7.3972- 3
2.0000+ 0 ~ 4.0000+ 0	1.0650+ 1	1.0549+ 1		1.1804- 1					0.0000+ 0				7.3973- 3
4.0000+ 0 ~ 7.0000+ 0	1.0595+ 1	1.0508+ 1		8.4982- 2					0.0000+ 0				7.3975- 3
7.0000+ 0 ~ 1.0000+ 1	1.0554+ 1	1.0466+ 1		6.7878- 2					0.0000+ 0				7.3978- 3
1.0000+ 1 ~ 2.0000+ 1	1.0428+ 1	1.0377+ 1		5.0981- 2					0.0000+ 0				7.3983- 3
2.0000+ 1 ~ 4.0000+ 1	1.0214+ 1	1.0170+ 1		3.5423- 2					0.0000+ 0				7.3997- 3
4.0000+ 1 ~ 7.0000+ 1	9.8812+ 0	9.8665+ 0		2.5723- 2					0.0000+ 0				7.4036- 3
7.0000+ 1 ~ 1.0000+ 2	9.5326+ 0	9.5115+ 0		2.1019- 2					0.0000+ 0				7.4088- 3
1.0000+ 2 ~ 2.0000+ 2	10.0008+ 0	9.8058+ 0		1.1939- 0					0.0000+ 0				7.4201- 3
2.0000+ 2 ~ 4.0000+ 2	9.4984+ 1	2.9239+ 1		6.7444+ 0					0.0000+ 0				7.4608- 3
4.0000+ 2 ~ 7.0000+ 2	1.7262+ 1	1.5930+ 1		1.3320+ 0					0.0000+ 0				7.5500- 3
7.0000+ 2 ~ 1.0000+ 3	7.9757+ 0	7.7029+ 0		2.7376- 1					0.0000+ 0				7.5880- 3
1.0000+ 3 ~ 2.0000+ 3	1.0011+ 1	1.0493+ 1		5.1706- 1					0.0000+ 0				7.8018- 3
2.0000+ 3 ~ 4.0000+ 3	1.0124+ 1	1.0629+ 1		4.9612- 1					0.0000+ 0				8.3586- 3
4.0000+ 3 ~ 7.0000+ 3	9.8284+ 0	9.6942+ 0		3.3218- 1					0.0000+ 0				9.4094- 3
7.0000+ 3 ~ 1.0000+ 4	9.8527+ 0	9.7221+ 0		2.3058- 1					0.0000+ 0				1.0996- 2
1.0000+ 4 ~ 2.0000+ 4	8.6714+ 0	8.5526+ 0		1.1889- 1					0.0000+ 0				1.4817- 2
2.0000+ 4 ~ 4.0000+ 4	8.6044+ 0	8.5389+ 0		6.7814- 2					0.0000+ 0				2.5886- 2
4.0000+ 4 ~ 7.0000+ 4	8.7811+ 0	8.7428+ 0		5.6562- 2					0.0000+ 0				4.5906- 2
7.0000+ 4 ~ 1.0000+ 5	9.0383+ 0	9.0115+ 0		2.8018- 2					0.0000+ 0				7.0688- 2
1.0000+ 5 ~ 2.0000+ 5	9.2549+ 0	9.2338+ 0		2.0883- 2					2.8608- 7				1.2417- 1
2.0000+ 5 ~ 4.0000+ 5	8.8885+ 0	8.8725+ 0		1.6218- 2					1.1403- 6				2.2166- 1
4.0000+ 5 ~ 7.0000+ 5	8.0487+ 0	8.0348+ 0		1.3821- 2					8.7232- 6				3.1728- 1
7.0000+ 5 ~ 1.0000+ 6	7.0038+ 0	6.9901+ 0		1.3627- 2					6.8880- 6				3.6730- 1
1.0000+ 6 ~ 2.0000+ 6	5.4718+ 0	5.2613+ 0	2.0328- 1	1.5400- 2			3.1371-12		2.0422- 5				3.7881- 1
2.0000+ 6 ~ 4.0000+ 6	3.8868+ 0	2.8888+ 0	1.3092+ 0	6.8013- 3			8.2281- 8		1.8001- 4				4.3798- 1
4.0000+ 6 ~ 7.0000+ 6	3.9277+ 0	2.2687+ 0	1.6651+ 0	1.2890- 3			7.1869- 4		8.1094- 4	8.4733-10			6.0100- 1
7.0000+ 6 ~ 1.0000+ 7	4.4212+ 0	2.8001+ 0	8.6924- 1	7.8840- 4	5.5472- 1		4.1888- 3	8.8613-14	1.6188- 3	1.4130-11	1.1608- 7	5.7288-11	7.6148- 1
1.0000+ 7 ~ 2.0000+ 7	4.1231+ 0	2.8626+ 0	1.3698- 1	1.0434- 3	1.2867+ 0	1.1311- 4	2.4337- 2	1.3279- 2	7.2881- 3	2.7396- 3	7.2318- 3	1.1010- 3	8.2169- 1

MATERIAL =4003 CROSS SECTION ^{92}Zr (4003)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.6428+ 0	4.8694+ 0		6.7335- 1					0.0000+ 0				7.3167- 3
1.0000- 2 ~ 2.0000- 2	5.1571+ 0	4.8694+ 0		2.8771- 1					0.0000+ 0				7.3167- 3
2.0000- 2 ~ 4.0000- 2	5.0728+ 0	4.8694+ 0		2.0356- 1					0.0000+ 0				7.3167- 3
4.0000- 2 ~ 7.0000- 2	5.0190+ 0	4.8693+ 0		1.4967- 1					0.0000+ 0				7.3167- 3
7.0000- 2 ~ 1.0000- 1	4.9888+ 0	4.8693+ 0		1.1948- 1					0.0000+ 0				7.3167- 3
1.0000- 1 ~ 2.0000- 1	4.9800+ 0	4.8692+ 0		9.0789- 2					0.0000+ 0				7.3167- 3
2.0000- 1 ~ 4.0000- 1	4.9331+ 0	4.8690+ 0		6.4034- 2					0.0000+ 0				7.3167- 3
4.0000- 1 ~ 7.0000- 1	4.9157+ 0	4.8687+ 0		4.6993- 2					0.0000+ 0				7.3167- 3
7.0000- 1 ~ 1.0000+ 0	4.9068+ 0	4.8684+ 0		3.7416- 2					0.0000+ 0				7.3167- 3
1.0000+ 0 ~ 2.0000+ 0	4.8958+ 0	4.8678+ 0		2.6203- 2					0.0000+ 0				7.3167- 3
2.0000+ 0 ~ 4.0000+ 0	4.8863+ 0	4.8666+ 0		1.9658- 2					0.0000+ 0				7.3168- 3
4.0000+ 0 ~ 7.0000+ 0	4.8786+ 0	4.8629+ 0		1.3924- 2					0.0000+ 0				7.3170- 3
7.0000+ 0 ~ 1.0000+ 1	4.8709+ 0	4.8595+ 0		1.0738- 2					0.0000+ 0				7.3171- 3
1.0000+ 1 ~ 2.0000+ 1	4.8605+ 0	4.8528+ 0		7.6395- 3					0.0000+ 0				7.3177- 3
2.0000+ 1 ~ 4.0000+ 1	4.8439+ 0	4.8391+ 0		4.7392- 3					0.0000+ 0				7.3191- 3
4.0000+ 1 ~ 7.0000+ 1	4.8230+ 0	4.8201+ 0		2.9920- 3					0.0000+ 0				7.3226- 3
7.0000+ 1 ~ 1.0000+ 2	4.8028+ 0	4.8007+ 0		2.1382- 3					0.0000+ 0				7.3256- 3
1.0000+ 2 ~ 2.0000+ 2	4.7870+ 0	4.7855+ 0		1.4899- 3					0.0000+ 0				7.3383- 3
2.0000+ 2 ~ 4.0000+ 2	4.6938+ 0	4.6927+ 0		1.0159- 3					0.0000+ 0				7.3672- 3
4.0000+ 2 ~ 7.0000+ 2	4.6684+ 0	4.6676+ 0		8.5060- 4					0.0000+ 0				7.4411- 3
7.0000+ 2 ~ 1.0000+ 3	4.5923+ 0	4.5915+ 0		8.5848- 4					0.0000+ 0				7.5019- 3
1.0000+ 3 ~ 2.0000+ 3	3.7276+ 0	3.7256+ 0		1.9606- 3					0.0000+ 0				7.6966- 3
2.0000+ 3 ~ 4.0000+ 3	2.4356+ 1	2.4178+ 1		1.7942- 1					0.0000+ 0				8.2380- 3
4.0000+ 3 ~ 7.0000+ 3	2.4564+ 1	2.4112+ 1		4.4197- 1					0.0000+ 0				9.3493- 3
7.0000+ 3 ~ 1.0000+ 4	1.2725+ 1	1.2658+ 1		6.7147- 2					0.0000+ 0				1.0810- 2
1.0000+ 4 ~ 2.0000+ 4	8.1936+ 0	8.1486+ 0		4.5021- 2					0.0000+ 0				1.4698- 2
2.0000+ 4 ~ 4.0000+ 4	9.8477+ 0	9.8036+ 0		4.4086- 2					0.0000+ 0				2.5407- 2
4.0000+ 4 ~ 7.0000+ 4	1.0819+ 1	1.0774+ 1		2.4539- 2					0.0000+ 0				4.5722- 2
7.0000+ 4 ~ 1.0000+ 5	8.9337+ 0	8.8928+ 0		3.0929- 2					0.0000+ 0				7.0278- 2
1.0000+ 5 ~ 2.0000+ 5	9.2549+ 0	9.2271+ 0		2.7774- 2					8.8402-12				1.2390- 1
2.0000+ 5 ~ 4.0000+ 5	8.9885+ 0	8.9602+ 0		2.8138- 2					3.6381-11				2.2156- 1
4.0000+ 5 ~ 7.0000+ 5	8.0484+ 0	8.0177+ 0		3.0628- 2					1.1227-10				3.1740- 1
7.0000+ 5 ~ 1.0000+ 6	7.0038+ 0	6.9462+ 0	2.5260- 2	9.2804- 2					6.7037-10				3.6969- 1
1.0000+ 6 ~ 2.0000+ 6	5.4717+ 0	4.6248+ 0	8.2350- 1	1.9264- 2					3.6879- 8				4.2836- 1
2.0000+ 6 ~ 4.0000+ 6	3.9105+ 0	2.5032+ 0	1.4840+ 0	1.1814- 2			5.4638-14		6.5667- 6	5.4629-19			4.5802- 1
4.0000+ 6 ~ 7.0000+ 6	3.9474+ 0	2.2872+ 0	1.6649+ 0	4.6667- 3			3.8656- 5		4.2738- 4	2.3177-11			6.0239- 1
7.0000+ 6 ~ 1.0000+ 7	4.4213+ 0	2.8930+ 0	1.4073+ 0	1.1630- 3	1.1573- 1		1.3634- 3		2.2167- 3	4.4123- 6	1.4031- 9	3.4901-20	7.6741- 1
1.0000+ 7 ~ 2.0000+ 7	4.1228+ 0	2.6362+ 0	2.0112- 1	9.6787- 4	1.1434+ 0	9.7346- 2	1.9929- 2	6.3496- 3	7.7910- 3	3.7202- 3	6.4982- 3	7.8138- 4	8.2157- 1

MATERIAL =4004 CROSS SECTION ^{93}Zr (4004)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	1.2688+ 1	6.6536+ 0		6.9344+ 0					0.0000+ 0				7.2379- 3
1.0000- 2 ~ 2.0000- 2	8.6154+ 0	6.6534+ 0		2.9620+ 0					0.0000+ 0				7.2379- 3
2.0000- 2 ~ 4.0000- 2	7.7467+ 0	6.6532+ 0		2.0935+ 0					0.0000+ 0				7.2379- 3
4.0000- 2 ~ 7.0000- 2	7.1908+ 0	6.6528+ 0		1.5379+ 0					0.0000+ 0				7.2379- 3
7.0000- 2 ~ 1.0000- 1	6.8818+ 0	6.6524+ 0		1.2294+ 0					0.0000+ 0				7.2379- 3
1.0000- 1 ~ 2.0000- 1	6.5822+ 0	6.6516+ 0		9.3067- 1					0.0000+ 0				7.2379- 3
2.0000- 1 ~ 4.0000- 1	6.3042+ 0	6.5494+ 0		6.6484- 1					0.0000+ 0				7.2379- 3
4.0000- 1 ~ 7.0000- 1	6.1222+ 0	6.6458+ 0		4.7840- 1					0.0000+ 0				7.2379- 3
7.0000- 1 ~ 1.0000+ 0	6.0190+ 0	6.6417+ 0		3.7739- 1					0.0000+ 0				7.2379- 3
1.0000+ 0 ~ 2.0000+ 0	5.9192+ 0	5.6328+ 0		2.8039- 1					0.0000+ 0				7.2379- 3
2.0000+ 0 ~ 4.0000+ 0	5.8020+ 0	5.6132+ 0		1.8879- 1					0.0000+ 0				7.2380- 3
4.0000+ 0 ~ 7.0000+ 0	5.7115+ 0	5.5825+ 0		1.2899- 1					0.0000+ 0				7.2382- 3
7.0000+ 0 ~ 1.0000+ 1	5.6450+ 0	5.5483+ 0		9.8854- 2					0.0000+ 0				7.2384- 3
1.0000+ 1 ~ 2.0000+ 1	5.5489+ 0	5.4808+ 0		6.8158- 2					0.0000+ 0				7.2391- 3
2.0000+ 1 ~ 4.0000+ 1	5.3613+ 0	5.3309+ 0		6.0421- 2					0.0000+ 0				7.2407- 3
4.0000+ 1 ~ 7.0000+ 1	5.0712+ 0	5.0053+ 0		6.5931- 2					0.0000+ 0				7.2440- 3
7.0000+ 1 ~ 1.0000+ 2	4.4209+ 0	4.0949+ 0		3.2600- 1					0.0000+ 0				7.2482- 3
1.0000+ 2 ~ 2.0000+ 2	5.1502+ 1	4.5799+ 1		1.5703+ 1					0.0000+ 0				7.2624- 3
2.0000+ 2 ~ 4.0000+ 2	8.9558+ 0	8.1475+ 0		8.0898- 1					0.0000+ 0				7.2845- 3
4.0000+ 2 ~ 7.0000+ 2	1.2404+ 1	1.0762+ 1		1.6219+ 0					0.0000+ 0				7.3766- 3
7.0000+ 2 ~ 1.0000+ 3	7.7768+ 0	6.9339+ 0		8.4289- 1					0.0000+ 0				7.4441- 3
1.0000+ 3 ~ 2.0000+ 3	7.6309+ 0	7.0308+ 0		5.0010- 1					0.0000+ 0				7.6671- 3
2.0000+ 3 ~ 4.0000+ 3	9.2287+ 0	8.7012+ 0		5.2541- 1					0.0000+ 0				8.2948- 3
4.0000+ 3 ~ 7.0000+ 3	8.8974+ 0	8.3941+ 0		3.6338- 1					0.0000+ 0				9.3991- 3
7.0000+ 3 ~ 1.0000+ 4	8.4817+ 0	8.2156+ 0		2.8611- 1					0.0000+ 0				1.0906- 2
1.0000+ 4 ~ 2.0000+ 4	8.3973+ 0	8.2106+ 0		1.7772- 1					0.0000+ 0				1.4886- 2
2.0000+ 4 ~ 4.0000+ 4	8.6235+ 0	8.4229+ 0		1.0161- 1					0.0000+ 0				2.5879- 2
4.0000+ 4 ~ 7.0000+ 4	8.8036+ 0	8.7423+ 0		6.1419- 2					0.0000+ 0				4.8099- 2
7.0000+ 4 ~ 1.0000+ 5	9.0618+ 0	8.9178+ 0		4.4177- 2					0.0000+ 0				7.0726- 2
1.0000+ 5 ~ 2.0000+ 5	9.2547+ 0	9.2223+ 0		3.2326- 2					4.9038- 9				1.2440- 1
2.0000+ 5 ~ 4.0000+ 5	8.8869+ 0	8.8370+ 0	1.2379- 1	2.4188- 2					1.9818- 8				2.2884- 1
4.0000+ 5 ~ 7.0000+ 5	8.0482+ 0	7.5588+ 0	4.8730- 1	1.9449- 2					4.6729- 8				3.3729- 1
7.0000+ 5 ~ 1.0000+ 6	7.0039+ 0	6.4908+ 0	4.9474- 1	1.8343- 2					1.3267- 7				3.8621- 1
1.0000+ 6 ~ 2.0000+ 6	5.4721+ 0	4.7302+ 0	7.2232- 1	1.8395- 2					9.5653- 7				4.1888- 1
2.0000+ 6 ~ 4.0000+ 6	3.9912+ 0	2.4830+ 0	1.5208+ 0	8.1712- 3			1.2629- 9		2.0988- 6	1.1762-20			4.7440- 1
4.0000+ 6 ~ 7.0000+ 6	3.9275+ 0	2.2407+ 0	1.6798+ 0	6.8330- 4	9.1530- 4		2.1701- 5		1.6811- 4	9.1170-19			6.0808- 1
7.0000+ 6 ~ 1.0000+ 7	4.4108+ 0	2.8848+ 0	7.2484- 1	5.8269- 4	6.0820- 1		3.5209- 4		4.3730- 4	6.9340- 8	4.4096-10	1.9426-13	7.6798- 1
1.0000+ 7 ~ 2.0000+ 7	4.1230+ 0	2.8609+ 0	1.1666- 1	1.0303- 3	1.2071+ 0	1.1441- 1	1.2824- 2	2.0099- 3	3.3037- 3	1.7343- 3	2.8156- 3	1.0104- 3	8.2157- 1

MATERIAL =4005

CROSS SECTION

^{94}Zr (4005)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	6.3061+ 0	8.1620+ 0		1.5413- 1					0.0000+ 0				7.1608- 3
1.0000- 2 ~ 2.0000- 2	6.2178+ 0	8.1620+ 0		6.6866- 2					0.0000+ 0				7.1608- 3
2.0000- 2 ~ 4.0000- 2	6.1986+ 0	8.1620+ 0		4.6640- 2					0.0000+ 0				7.1608- 3
4.0000- 2 ~ 7.0000- 2	8.1862+ 0	8.1620+ 0		9.4198- 2					0.0000+ 0				7.1608- 3
7.0000- 2 ~ 1.0000- 1	8.1793+ 0	8.1619+ 0		2.7367- 2					0.0000+ 0				7.1608- 3
1.0000- 1 ~ 2.0000- 1	8.1728+ 0	8.1619+ 0		2.0837- 2					0.0000+ 0				7.1608- 3
2.0000- 1 ~ 4.0000- 1	8.1666+ 0	8.1619+ 0		1.4714- 2					0.0000+ 0				7.1608- 3
4.0000- 1 ~ 7.0000- 1	8.1626+ 0	8.1618+ 0		1.0016- 2					0.0000+ 0				7.1608- 3
7.0000- 1 ~ 1.0000+ 0	8.1603+ 0	8.1616+ 0		8.6490- 3					0.0000+ 0				7.1608- 3
1.0000+ 0 ~ 2.0000+ 0	8.1580+ 0	8.1514+ 0		8.5764- 3					0.0000+ 0				7.1608- 3
2.0000+ 0 ~ 4.0000+ 0	6.1564+ 0	6.1508+ 0		4.6424- 3					0.0000+ 0				7.1609- 3
4.0000+ 0 ~ 7.0000+ 0	8.1552+ 0	8.1498+ 0		3.3969- 3					0.0000+ 0				7.1610- 3
7.0000+ 0 ~ 1.0000+ 1	8.1519+ 0	8.1486+ 0		2.7145- 3					0.0000+ 0				7.1612- 3
1.0000+ 1 ~ 2.0000+ 1	8.1481+ 0	8.1481+ 0		2.0481- 3					0.0000+ 0				7.1617- 3
2.0000+ 1 ~ 4.0000+ 1	6.1416+ 0	6.1402+ 0		1.4242- 3					0.0000+ 0				7.1630- 3
4.0000+ 1 ~ 7.0000+ 1	6.1317+ 0	6.1307+ 0		1.0102- 3					0.0000+ 0				7.1664- 3
7.0000+ 1 ~ 1.0000+ 2	8.1205+ 0	8.1198+ 0		7.8735- 4					0.0000+ 0				7.1699- 3
1.0000+ 2 ~ 2.0000+ 2	6.0972+ 0	8.0966+ 0		5.6294- 4					0.0000+ 0				7.1816- 3
2.0000+ 2 ~ 4.0000+ 2	8.0465+ 0	8.0461+ 0		3.4898- 4					0.0000+ 0				7.2097- 3
4.0000+ 2 ~ 7.0000+ 2	5.9770+ 0	5.9769+ 0		2.1748- 4					0.0000+ 0				7.2818- 3
7.0000+ 2 ~ 1.0000+ 3	5.8993+ 0	5.8992+ 0		1.5594- 4					0.0000+ 0				7.3411- 3
1.0000+ 3 ~ 2.0000+ 3	6.6919+ 0	6.6917+ 0		2.0938- 4					0.0000+ 0				7.5339- 3
2.0000+ 3 ~ 4.0000+ 3	8.8102+ 0	8.7280+ 0		8.2207- 2					0.0000+ 0				8.0725- 3
4.0000+ 3 ~ 7.0000+ 3	9.0760+ 0	8.9486+ 0		1.2641- 1					0.0000+ 0				9.1690- 3
7.0000+ 3 ~ 1.0000+ 4	1.2156+ 1	1.2112+ 1		4.4592- 2					0.0000+ 0				1.0855- 2
1.0000+ 4 ~ 2.0000+ 4	1.1862+ 1	1.1789+ 1		6.3648- 2					0.0000+ 0				1.4561- 2
2.0000+ 4 ~ 4.0000+ 4	1.1113+ 1	1.1092+ 1		2.1280- 2					0.0000+ 0				2.5513- 2
4.0000+ 4 ~ 7.0000+ 4	9.9776+ 0	9.9671+ 0		2.0464- 2					0.0000+ 0				4.5895- 2
7.0000+ 4 ~ 1.0000+ 5	9.0483+ 0	9.0262+ 0		2.0131- 2					0.0000+ 0				7.0312- 2
1.0000+ 5 ~ 2.0000+ 5	9.2668+ 0	9.2365+ 0		1.8272- 2					6.2726-16				1.2400- 1
2.0000+ 5 ~ 4.0000+ 5	8.9897+ 0	8.9710+ 0		1.8712- 2					2.5091-15				2.2181- 1
4.0000+ 5 ~ 7.0000+ 5	8.0496+ 0	8.0298+ 0		1.9997- 2					8.1795-15				5.1721- 1
7.0000+ 5 ~ 1.0000+ 6	7.0051+ 0	6.9423+ 0	4.0596- 2	2.1339- 2					5.2671-14				3.7008- 1
1.0000+ 6 ~ 2.0000+ 6	6.4732+ 0	4.6803+ 0	8.7680- 1	1.2081- 2					9.5239-12				4.3318- 1
2.0000+ 6 ~ 4.0000+ 6	3.9864+ 0	2.4825+ 0	1.4962+ 0	7.4419- 3					7.1457- 8				4.8385- 1
4.0000+ 6 ~ 7.0000+ 6	3.9268+ 0	2.2811+ 0	1.8828+ 0	2.6649- 3			1.2774- 7		2.5390- 6	1.5092-13			8.0576- 1
7.0000+ 6 ~ 1.0000+ 7	4.4197+ 0	2.9019+ 0	1.2647+ 0	5.1641- 4	2.6176- 1		9.4238- 6		3.0139- 4	3.6699- 8	1.6643-13		7.8743- 1
1.0000+ 7 ~ 2.0000+ 7	4.1231+ 0	2.6602+ 0	1.6409- 1	9.0981- 4	1.1100+ 0	1.8808- 1	1.1662- 2	6.8726- 4	4.3931- 3	1.2840- 3	1.2826- 3	6.1156- 4	8.2167- 1

MATERIAL =4006

CROSS SECTION

^{95}Zr (4006)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	9.4436+ 0	6.7036+ 0		3.7004+ 0					0.0000+ 0				7.0852- 3
1.0000- 2 ~ 2.0000- 2	7.3149+ 0	6.7036+ 0		1.6812+ 0					0.0000+ 0				7.0852- 3
2.0000- 2 ~ 4.0000- 2	6.8391+ 0	6.7036+ 0		1.1181+ 0					0.0000+ 0				7.0852- 3
4.0000- 2 ~ 7.0000- 2	6.5447+ 0	6.7035+ 0		6.2189- 1					0.0000+ 0				7.0852- 3
7.0000- 2 ~ 1.0000- 1	6.3692+ 0	6.7036+ 0		6.5726- 1					0.0000+ 0				7.0852- 3
1.0000- 1 ~ 2.0000- 1	6.2188+ 0	5.7035+ 0		5.0000- 1					0.0000+ 0				7.0852- 3
2.0000- 1 ~ 4.0000- 1	6.0766+ 0	6.7036+ 0		3.6366- 1					0.0000+ 0				7.0852- 3
4.0000- 1 ~ 7.0000- 1	5.9985+ 0	6.7036+ 0		2.5985- 1					0.0000+ 0				7.0852- 3
7.0000- 1 ~ 1.0000+ 0	5.9401+ 0	6.7036+ 0		2.0784- 1					0.0000+ 0				7.0852- 3
1.0000+ 0 ~ 2.0000+ 0	6.8716+ 0	5.7036+ 0		1.6811- 1					0.0000+ 0				7.0853- 3
2.0000+ 0 ~ 4.0000+ 0	6.8316+ 0	6.7036+ 0		1.1180- 1					0.0000+ 0				7.0854- 3
4.0000+ 0 ~ 7.0000+ 0	5.8133+ 0	5.7036+ 0		8.2184- 2					0.0000+ 0				7.0857- 3
7.0000+ 0 ~ 1.0000+ 1	5.8001+ 0	5.7035+ 0		6.5721- 2					0.0000+ 0				7.0859- 3
1.0000+ 1 ~ 2.0000+ 1	5.7858+ 0	5.7035+ 0		5.0000- 2					0.0000+ 0				7.0867- 3
2.0000+ 1 ~ 4.0000+ 1	5.7531+ 0	5.7036+ 0		3.5354- 2					0.0000+ 0				7.0864- 3
4.0000+ 1 ~ 7.0000+ 1	5.7461+ 0	5.7036+ 0		2.5982- 2					0.0000+ 0				7.0878- 3
7.0000+ 1 ~ 1.0000+ 2	5.7320+ 0	5.7035+ 0		2.0782- 2					0.0000+ 0				7.0884- 3
1.0000+ 2 ~ 2.0000+ 2	1.4995+ 1	1.1976+ 1		3.0190+ 0					0.0000+ 0				7.1114- 3
2.0000+ 2 ~ 4.0000+ 2	1.4989+ 1	1.2370+ 1		2.8189+ 0					0.0000+ 0				7.1450- 3
4.0000+ 2 ~ 7.0000+ 2	1.2663+ 1	1.0937+ 1		1.7259+ 0					0.0000+ 0				7.2299- 3
7.0000+ 2 ~ 1.0000+ 3	1.1399+ 1	1.0087+ 1		1.5120+ 0					0.0000+ 0				7.2998- 3
1.0000+ 3 ~ 2.0000+ 3	1.0234+ 1	9.2614+ 0		9.7248- 1					0.0000+ 0				7.5187- 3
2.0000+ 3 ~ 4.0000+ 3	9.2417+ 0	8.5810+ 0		6.8069- 1					0.0000+ 0				8.1103- 3
4.0000+ 3 ~ 7.0000+ 3	8.7069+ 0	8.2229+ 0		4.8306- 1					0.0000+ 0				9.2983- 3
7.0000+ 3 ~ 1.0000+ 4	8.4901+ 0	9.1268+ 0		3.6486- 1					0.0000+ 0				1.0828- 2
1.0000+ 4 ~ 2.0000+ 4	8.4017+ 0	8.1647+ 0		2.4696- 1					0.0000+ 0				1.4826- 2
2.0000+ 4 ~ 4.0000+ 4	8.5287+ 0	8.3848+ 0		1.4421- 1					0.0000+ 0				2.8710- 2
4.0000+ 4 ~ 7.0000+ 4	8.8084+ 0	8.7203+ 0		8.8094- 2					0.0000+ 0				4.8718- 2
7.0000+ 4 ~ 1.0000+ 5	9.0642+ 0	9.0012+ 0		6.2982- 2					0.0000+ 0				7.0924- 2
1.0000+ 5 ~ 2.0000+ 5	9.2581+ 0	9.2104+ 0		4.5481- 2					2.7817-14				1.2471- 1
2.0000+ 5 ~ 4.0000+ 5	8.9888+ 0	8.9834+ 0		3.5464- 2					1.1047-13				2.2239- 1
4.0000+ 5 ~ 7.0000+ 5	8.0488+ 0	8.0186+ 0		3.2271- 2					3.6225-15				3.1802- 1
7.0000+ 5 ~ 1.0000+ 6	7.0047+ 0	6.9706+ 0	1.5881- 3	3.2482- 2					2.1302-12				3.8880- 1
1.0000+ 6 ~ 2.0000+ 6	5.4732+ 0	5.0027+ 0	4.3693- 1	3.3687- 2					1.7037-10				3.8713- 1
2.0000+ 6 ~ 4.0000+ 6	3.9779+ 0	2.5796+ 0	1.5787+ 0	1.7788- 2					7.2056- 8				4.4604- 1
4.0000+ 6 ~ 7.0000+ 6	3.9285+ 0	2.2639+ 0	1.8493+ 0	1.8251- 3	1.6697- 2		1.0875- 7		5.2487- 6	1.6405-18			6.0820- 1
7.0000+ 6 ~ 1.0000+ 7	4.4200+ 0	2.8823+ 0	6.0674- 1	6.2080- 4	9.2746- 1		1.7049- 6		2.6177- 6	4.3311-10	1.3780-13	4.5786-18	7.6784- 1
1.0000+ 7 ~ 2.0000+ 7	4.1230+ 0	2.6843+ 0	1.0634- 1	1.0206- 3	1.1602+ 0	1.7924- 1	7.5747- 3	6.6792- 4	1.8668- 3	1.1009- 3	1.2970- 3	6.6798- 4	8.2188- 1

^{96}Zr (4007)

MATERIAL =4007

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.2016+ 0	6.1310+ 0		7.0522- 2					0.0000+ 0				7.0113- 3
1.0000- 2 ~ 2.0000- 2	6.1611+ 0	6.1310+ 0		3.0146- 2					0.0000+ 0				7.0113- 3
2.0000- 2 ~ 4.0000- 2	6.1524+ 0	6.1310+ 0		2.1362- 2					0.0000+ 0				7.0113- 3
4.0000- 2 ~ 7.0000- 2	6.1487+ 0	6.1310+ 0		1.5685- 2					0.0000+ 0				7.0113- 3
7.0000- 2 ~ 1.0000- 1	6.1436+ 0	6.1310+ 0		1.2547- 2					0.0000+ 0				7.0113- 3
1.0000- 1 ~ 2.0000- 1	6.1406+ 0	6.1310+ 0		9.5713- 3					0.0000+ 0				7.0113- 3
2.0000- 1 ~ 4.0000- 1	6.1377+ 0	6.1310+ 0		6.7807- 3					0.0000+ 0				7.0113- 3
4.0000- 1 ~ 7.0000- 1	6.1369+ 0	6.1309+ 0		6.0156- 3					0.0000+ 0				7.0113- 3
7.0000- 1 ~ 1.0000+ 0	6.1349+ 0	6.1308+ 0		4.0363- 3					0.0000+ 0				7.0113- 3
1.0000+ 0 ~ 2.0000+ 0	6.1339+ 0	6.1307+ 0		3.1184- 3					0.0000+ 0				7.0113- 3
2.0000+ 0 ~ 4.0000+ 0	6.1327+ 0	6.1306+ 0		2.2809- 3					0.0000+ 0				7.0114- 3
4.0000+ 0 ~ 7.0000+ 0	6.1316+ 0	6.1300+ 0		1.7728- 3					0.0000+ 0				7.0115- 3
7.0000+ 0 ~ 1.0000+ 1	6.1309+ 0	6.1294+ 0		1.5188- 3					0.0000+ 0				7.0118- 3
1.0000+ 1 ~ 2.0000+ 1	6.1295+ 0	6.1282+ 0		1.3187- 3					0.0000+ 0				7.0122- 3
2.0000+ 1 ~ 4.0000+ 1	6.1267+ 0	6.1256+ 0		1.2664- 3					0.0000+ 0				7.0133- 3
4.0000+ 1 ~ 7.0000+ 1	6.1224+ 0	6.1209+ 0		1.4671- 3					0.0000+ 0				7.0166- 3
7.0000+ 1 ~ 1.0000+ 2	6.1178+ 0	6.1156+ 0		1.9548- 3					0.0000+ 0				7.0191- 3
1.0000+ 2 ~ 2.0000+ 2	6.1105+ 0	6.1054+ 0		5.1655- 3					0.0000+ 0				7.0302- 3
2.0000+ 2 ~ 4.0000+ 2	2.1305+ 1	1.2783+ 1		8.5427+ 0					0.0000+ 0				7.0501- 3
4.0000+ 2 ~ 7.0000+ 2	6.0471+ 0	6.0425+ 0		4.5216- 3					0.0000+ 0				7.1247- 3
7.0000+ 2 ~ 1.0000+ 3	6.0534+ 0	5.9919+ 0		8.2050- 2					0.0000+ 0				7.1812- 3
1.0000+ 3 ~ 2.0000+ 3	6.8863+ 0	6.8849+ 0		3.4569- 4					0.0000+ 0				7.3716- 3
2.0000+ 3 ~ 4.0000+ 3	7.7409+ 0	7.7148+ 0		2.6095- 2					0.0000+ 0				7.9090- 3
4.0000+ 3 ~ 7.0000+ 3	1.9923+ 1	1.9790+ 1		1.3360- 1					0.0000+ 0				9.0280- 3
7.0000+ 3 ~ 1.0000+ 4	7.8602+ 0	7.8512+ 0		8.9898- 3					0.0000+ 0				1.0499- 2
1.0000+ 4 ~ 2.0000+ 4	8.6023+ 0	8.6781+ 0		2.4228- 2					0.0000+ 0				1.4418- 2
2.0000+ 4 ~ 4.0000+ 4	1.1383+ 1	1.1351+ 1		1.2124- 2					0.0000+ 0				2.5201- 2
4.0000+ 4 ~ 7.0000+ 4	9.3726+ 0	9.3692+ 0		3.3490- 3					0.0000+ 0				4.5826- 2
7.0000+ 4 ~ 1.0000+ 5	1.5671+ 1	1.5668+ 1		3.0667- 3					0.0000+ 0				7.0283- 2
1.0000+ 5 ~ 2.0000+ 5	9.2568+ 0	9.2493+ 0		7.4780- 3					3.4828-21				1.2999- 1
2.0000+ 5 ~ 4.0000+ 5	8.9894+ 0	8.9822+ 0		7.2108- 3					1.3931-20				2.2150- 1
4.0000+ 5 ~ 7.0000+ 5	8.0492+ 0	8.0422+ 0		6.2139- 3					4.8059-20				3.1864- 1
7.0000+ 5 ~ 1.0000+ 6	7.0048+ 0	6.9965+ 0		8.3389- 3					3.5719-19				3.6898- 1
1.0000+ 6 ~ 2.0000+ 6	5.4731+ 0	5.3399+ 0	1.1943- 1	1.2421- 2					1.2470-16				3.7024- 1
2.0000+ 6 ~ 4.0000+ 6	3.9857+ 0	2.7878+ 0	1.1872+ 0	5.5834- 3					1.4262-11				4.1596- 1
4.0000+ 6 ~ 7.0000+ 6	3.8262+ 0	2.2837+ 0	1.6410+ 0	1.2057- 3			3.7575-20		4.3024- 7	8.8146-18			5.9802- 1
7.0000+ 6 ~ 1.0000+ 7	4.4195+ 0	2.8488+ 0	1.1470+ 0	1.8883- 4	4.2076- 1		1.0361- 6		2.3660- 5	4.4289-11			7.6747- 1
1.0000+ 7 ~ 2.0000+ 7	4.1231+ 0	2.6679+ 0	1.5006- 1	8.2929- 4	1.1437+ 0	2.4602- 1	7.5686- 3	1.0767- 3	3.7877- 3	1.0437- 3	4.8991- 4	3.4476- 4	8.2166- 1

^{93}Nb (4101)

MATERIAL =4101

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	9.8879+ 0	6.3229+ 0		3.6661+ 0			0.0000+ 0		0.0000+ 0				7.0713- 3
1.0000- 2 ~ 2.0000- 2	7.8460+ 0	6.3228+ 0		1.5232+ 0			0.0000+ 0		0.0000+ 0				7.0713- 3
2.0000- 2 ~ 4.0000- 2	7.4012+ 0	6.3227+ 0		1.0786+ 0			0.0000+ 0		0.0000+ 0				7.0713- 3
4.0000- 2 ~ 7.0000- 2	7.1126+ 0	6.3225+ 0		7.9031- 1			0.0000+ 0		0.0000+ 0				7.0713- 3
7.0000- 2 ~ 1.0000- 1	6.9649+ 0	6.3223+ 0		6.3200- 1			0.0000+ 0		0.0000+ 0				7.0713- 3
1.0000- 1 ~ 2.0000- 1	6.8028+ 0	6.3219+ 0		4.8098- 1			0.0000+ 0		0.0000+ 0				7.0713- 3
2.0000- 1 ~ 4.0000- 1	6.6697+ 0	6.3209+ 0		3.3882- 1			0.0000+ 0		0.0000+ 0				7.0713- 3
4.0000- 1 ~ 7.0000- 1	6.5873+ 0	6.3191+ 0		2.4819- 1			0.0000+ 0		0.0000+ 0				7.0713- 3
7.0000- 1 ~ 1.0000+ 0	6.5146+ 0	6.3171+ 0		1.9744- 1			0.0000+ 0		0.0000+ 0				7.0713- 3
1.0000+ 0 ~ 2.0000+ 0	6.4815+ 0	6.3128+ 0		1.4877- 1			0.0000+ 0		0.0000+ 0				7.0711- 3
2.0000+ 0 ~ 4.0000+ 0	6.4067+ 0	6.3029+ 0		1.0277- 1			0.0000+ 0		0.0000+ 0				7.0704- 3
4.0000+ 0 ~ 7.0000+ 0	6.3508+ 0	6.2870+ 0		7.2829- 2			0.0000+ 0		0.0000+ 0				7.0693- 3
7.0000+ 0 ~ 1.0000+ 1	6.3245+ 0	6.2668+ 0		5.5688- 2			0.0000+ 0		0.0000+ 0				7.0679- 3
1.0000+ 1 ~ 2.0000+ 1	6.2713+ 0	6.2324+ 0		3.8941- 2			0.0000+ 0		0.0000+ 0				7.0643- 3
2.0000+ 1 ~ 4.0000+ 1	6.4963+ 0	6.1601+ 0		3.3624- 1			0.0000+ 0		0.0000+ 0				7.0563- 3
4.0000+ 1 ~ 7.0000+ 1	6.2160+ 0	6.0621+ 0		1.5287- 1			0.0000+ 0		0.0000+ 0				7.0404- 3
7.0000+ 1 ~ 1.0000+ 2	6.2110+ 0	5.9576+ 0		2.5338- 1			0.0000+ 0		0.0000+ 0				7.0228- 3
1.0000+ 2 ~ 2.0000+ 2	1.0887+ 1	8.6057+ 0		4.2818+ 0			0.0000+ 0		0.0000+ 0				8.9723- 3
2.0000+ 2 ~ 4.0000+ 2	9.4872+ 0	8.9870+ 0		2.5002+ 0			0.0000+ 0		0.0000+ 0				6.8461- 3
4.0000+ 2 ~ 7.0000+ 2	6.1263+ 0	6.7129+ 0		4.1337- 1			0.0000+ 0		0.0000+ 0				6.0413- 3
7.0000+ 2 ~ 1.0000+ 3	1.0512+ 1	8.7208+ 0		1.7918+ 0			0.0000+ 0		0.0000+ 0				6.3031- 3
1.0000+ 3 ~ 2.0000+ 3	1.1171+ 1	8.2522+ 0		1.9188+ 0			2.7108-13		0.0000+ 0				5.8401- 3
2.0000+ 3 ~ 4.0000+ 3	1.1383+ 1	1.0610+ 1		1.3527+ 0			1.1481-12		0.0000+ 0				4.8084- 3
4.0000+ 3 ~ 7.0000+ 3	1.1641+ 1	1.0851+ 1		8.9023- 1			3.0500-12		0.0000+ 0				2.9607- 3
7.0000+ 3 ~ 1.0000+ 4	8.4870+ 0	7.8069+ 0		6.8005- 1			5.4045-12		0.0000+ 0				1.0451- 3
1.0000+ 4 ~ 2.0000+ 4	8.3907+ 0	7.9370+ 0		4.5373- 1			6.4725-12		0.0000+ 0				-8.849- 4
2.0000+ 4 ~ 4.0000+ 4	8.5543+ 0	8.2764+ 0	1.7338- 5	2.7582- 1			6.2620-12		0.0000+ 0				-2.862- 3
4.0000+ 4 ~ 7.0000+ 4	9.1864+ 0	9.0116+ 0	1.8286- 4	1.7366- 1			3.6471-11		3.0099- 8				2.8133- 3
7.0000+ 4 ~ 1.0000+ 5	9.4986+ 0	9.3729+ 0	4.9974- 4	1.2304- 1			9.7207-11		1.6802- 7				1.6800- 2
1.0000+ 5 ~ 2.0000+ 5	9.8662+ 0	9.5868+ 0	1.7704- 3	8.6671- 2			2.5480-10		2.7981- 7				8.8033- 2
2.0000+ 5 ~ 4.0000+ 5	9.3458+ 0	9.2780+ 0	8.4318- 3	6.9194- 2			1.1963- 8		8.9285- 7				1.8182- 1
4.0000+ 5 ~ 7.0000+ 5	8.2054+ 0	8.1300+ 0	1.8944- 2	5.8514- 2			1.2388- 7		1.9864- 8				3.0389- 1
7.0000+ 5 ~ 1.0000+ 6	7.1313+ 0	6.7846+ 0	2.9621- 1	5.1161- 2			5.2410- 1		3.3063- 6				3.8011- 1
1.0000+ 6 ~ 2.0000+ 6	5.6803+ 0	4.2303+ 0	1.4283+ 0	2.1781- 2			1.1962- 5		9.8723- 8				4.8863- 1
2.0000+ 6 ~ 4.0000+ 6	4.1917+ 0	2.4415+ 0	1.7437+ 0	8.2779- 3			2.1857- 4		1.0202- 4	0.0000+ 0			4.8046- 1
4.0000+ 6 ~ 7.0000+ 6	3.9348+ 0	2.2584+ 0	1.6714+ 0	1.9718- 3		5.8874-12	8.8404- 3		7.7552- 4	2.2828- 8	7.3268- 0		5.6714- 1
7.0000+ 6 ~ 1.0000+ 7	4.2894+ 0	2.5770+ 0	1.6668+ 0	4.8756- 4	4.2832- 2		0.3670- 3	1.1837- 4	3.1806- 3	1.1174- 4	1.3621- 4		7.8080- 1
1.0000+ 7 ~ 2.0000+ 7	3.8860+ 0	2.1866+ 0	4.4649- 1	9.7619- 4	1.1430+ 0	3.1938- 2	3.4434- 2	2.6209- 2	5.8087- 3	4.7048- 3	7.1482- 3		8.5823- 1

MATERIAL =4102 CROSS SECTION

^{94}Nb (4102)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	6.6344+ 1	6.4644+ 0		4.8890+ 1			0.0000+ 0		0.0000+ 0				7.1607- 3
1.0000- 2 ~ 2.0000- 2	2.7323+ 1	6.4636+ 0		2.0870+ 1			0.0000+ 0		0.0000+ 0				7.1607- 3
2.0000- 2 ~ 4.0000- 2	2.1186+ 1	6.4621+ 0		1.4734+ 1			0.0000+ 0		0.0000+ 0				7.1607- 3
4.0000- 2 ~ 7.0000- 2	1.7250+ 1	6.4499+ 0		1.0800+ 1			0.0000+ 0		0.0000+ 0				7.1607- 3
7.0000- 2 ~ 1.0000- 1	1.6070+ 1	6.4473+ 0		9.6220+ 0			0.0000+ 0		0.0000+ 0				7.1607- 3
1.0000- 1 ~ 2.0000- 1	1.2955+ 1	6.4415+ 0		6.5195+ 0			0.0000+ 0		0.0000+ 0				7.1607- 3
2.0000- 1 ~ 4.0000- 1	1.0976+ 1	6.4284+ 0		4.5476+ 0			0.0000+ 0		0.0000+ 0				7.1607- 3
4.0000- 1 ~ 7.0000- 1	9.8869+ 0	6.4070+ 0		3.2798+ 0			0.0000+ 0		0.0000+ 0				7.1607- 3
7.0000- 1 ~ 1.0000+ 0	8.9610+ 0	6.3818+ 0		2.6693+ 0			0.0000+ 0		0.0000+ 0				7.1607- 3
1.0000+ 0 ~ 2.0000+ 0	8.2363+ 0	6.3285+ 0		1.9078+ 0			0.0000+ 0		0.0000+ 0				7.1608- 3
2.0000+ 0 ~ 4.0000+ 0	7.6839+ 0	6.2061+ 0		1.3777+ 0			0.0000+ 0		0.0000+ 0				7.1611- 3
4.0000+ 0 ~ 7.0000+ 0	7.4084+ 0	5.9818+ 0		1.4446+ 0			0.0000+ 0		0.0000+ 0				7.1615- 3
7.0000+ 0 ~ 1.0000+ 1	9.6475+ 0	5.9470+ 0		4.3005+ 0			0.0000+ 0		0.0000+ 0				7.1618- 3
1.0000+ 1 ~ 2.0000+ 1	1.1027+ 2	1.0878+ 1		9.8196+ 1			0.0000+ 0		0.0000+ 0				7.1629- 3
2.0000+ 1 ~ 4.0000+ 1	2.3086+ 1	1.2269+ 1		1.1618+ 1			0.0000+ 0		0.0000+ 0				7.1663- 3
4.0000+ 1 ~ 7.0000+ 1	2.8421+ 1	1.4641+ 1		1.3781+ 1			0.0000+ 0		0.0000+ 0				7.1708- 3
7.0000+ 1 ~ 1.0000+ 2	2.9966+ 1	1.3520+ 1		1.0446+ 1			0.0000+ 0		0.0000+ 0				7.1763- 3
1.0000+ 2 ~ 2.0000+ 2	1.9642+ 1	1.2321+ 1		7.3209+ 0			0.0000+ 0		0.0000+ 0				7.1926- 3
2.0000+ 2 ~ 4.0000+ 2	1.5657+ 1	1.1093+ 1		4.6239+ 0			0.0000+ 0		0.0000+ 0				7.2304- 3
4.0000+ 2 ~ 7.0000+ 2	1.3137+ 1	1.0036+ 1		3.1014+ 0			0.0000+ 0		0.0000+ 0				7.3228- 3
7.0000+ 2 ~ 1.0000+ 3	1.1765+ 1	9.4055+ 0		2.3599+ 0			0.0000+ 0		0.0000+ 0				7.3904- 3
1.0000+ 3 ~ 2.0000+ 3	1.0606+ 1	8.7632+ 0		1.7619+ 0			0.0000+ 0		0.0000+ 0				7.5320- 3
2.0000+ 3 ~ 4.0000+ 3	9.4098+ 0	8.1520+ 0		1.2578+ 0			0.0000+ 0		0.0000+ 0				8.2678- 3
4.0000+ 3 ~ 7.0000+ 3	8.8132+ 0	7.8602+ 0		9.5294- 1			0.0000+ 0		0.0000+ 0				9.6007- 3
7.0000+ 3 ~ 1.0000+ 4	8.5848+ 0	7.7981+ 0		7.8648- 1			0.0000+ 0		0.0000+ 0				1.1080- 2
1.0000+ 4 ~ 2.0000+ 4	8.4427+ 0	7.8834+ 0		5.5932- 1			0.0000+ 0		0.0000+ 0				1.6106- 2
2.0000+ 4 ~ 4.0000+ 4	8.5457+ 0	8.1928+ 0		3.5314- 1			0.0000+ 0		0.0000+ 0				2.5941- 2
4.0000+ 4 ~ 7.0000+ 4	8.8168+ 0	8.6628+ 0	3.4540- 2	2.1962- 1			0.0000+ 0		0.0000+ 0				4.6184- 2
7.0000+ 4 ~ 1.0000+ 5	9.0802+ 0	8.6806+ 0	2.6174- 1	1.3918- 1			0.0000+ 0		0.0000+ 0				7.3463- 2
1.0000+ 5 ~ 2.0000+ 5	9.2613+ 0	8.1770+ 0	1.0145+ 0	6.7951- 2			9.8388- 7		6.2145- 7				1.4017- 1
2.0000+ 5 ~ 4.0000+ 5	9.0148+ 0	7.4311+ 0	1.5477+ 0	3.5853- 2			3.9356- 8		2.0658- 8				2.5804- 1
4.0000+ 5 ~ 7.0000+ 5	8.0719+ 0	6.5278+ 0	1.5194+ 0	2.5108- 2			9.2994- 8		4.3322- 8				3.9103- 1
7.0000+ 5 ~ 1.0000+ 6	7.0058+ 0	5.6507+ 0	1.4344+ 0	2.0726- 2			2.1218- 6		6.1011- 6				4.6154- 1
1.0000+ 6 ~ 2.0000+ 6	5.4742+ 0	3.9240+ 0	1.5331+ 0	1.4760- 2			9.1308- 6		1.6765- 5				6.0411- 1
2.0000+ 6 ~ 4.0000+ 6	3.9956+ 0	2.2233+ 0	1.7675+ 0	3.4232- 3			5.7880- 4		1.0250- 4	2.1181-17			5.1894- 1
4.0000+ 6 ~ 7.0000+ 6	3.9288+ 0	2.2297+ 0	1.5951+ 0	5.7444- 4			1.4471- 3		5.4296- 4	8.0639-10	3.7830-10	2.2750-13	6.1208- 1
7.0000+ 6 ~ 1.0000+ 7	4.4203+ 0	2.8969+ 0	9.8098- 1	5.7230- 4	6.3475- 1		4.6123- 3	4.3103- 6	1.7888- 3	3.0383- 6	3.6087- 6	7.0018- 8	6.6764- 1
1.0000+ 7 ~ 2.0000+ 7	4.1231+ 0	2.6691+ 0	1.6806- 1	1.0427- 3	1.1666+ 0	7.2341- 2	1.9363- 2	1.3292- 2	6.4496- 3	4.3433- 3	8.7714- 3	2.2118- 3	8.2167- 1

MATERIAL =4103 CROSS SECTION

^{95}Nb (4103)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.7381+ 1	6.7000+ 0		2.1686+ 1					0.0000+ 0				7.0853- 3
1.0000- 2 ~ 2.0000- 2	1.6011+ 1	6.7000+ 0		9.2239+ 0					0.0000+ 0				7.0853- 3
2.0000- 2 ~ 4.0000- 2	1.2268+ 1	6.7000+ 0		5.5223+ 0					0.0000+ 0				7.0853- 3
4.0000- 2 ~ 7.0000- 2	1.0525+ 1	6.7000+ 0		4.7933+ 0					0.0000+ 0				7.0853- 3
7.0000- 2 ~ 1.0000- 1	9.6818+ 0	6.7000+ 0		3.8341+ 0					0.0000+ 0				7.0853- 3
1.0000- 1 ~ 2.0000- 1	8.6431+ 0	6.7000+ 0		2.9189+ 0					0.0000+ 0				7.0853- 3
2.0000- 1 ~ 4.0000- 1	7.7836+ 0	6.7000+ 0		2.0626+ 0					0.0000+ 0				7.0853- 3
4.0000- 1 ~ 7.0000- 1	7.2397+ 0	6.7000+ 0		1.5158+ 0					0.0000+ 0				7.0853- 3
7.0000- 1 ~ 1.0000+ 0	6.9212+ 0	6.7000+ 0		1.2126+ 0					0.0000+ 0				7.0853- 3
1.0000+ 0 ~ 2.0000+ 0	6.8349+ 0	6.7000+ 0		9.2249- 1					0.0000+ 0				7.0854- 3
2.0000+ 0 ~ 4.0000+ 0	6.3630+ 0	6.7000+ 0		6.6226- 1					0.0000+ 0				7.0857- 3
4.0000+ 0 ~ 7.0000+ 0	6.1929+ 0	6.7000+ 0		4.7935- 1					0.0000+ 0				7.0862- 3
7.0000+ 0 ~ 1.0000+ 1	6.1125+ 0	6.7000+ 0		3.9349- 1					0.0000+ 0				7.0865- 3
1.0000+ 1 ~ 2.0000+ 1	6.0148+ 0	5.7000+ 0		2.9170- 1					0.0000+ 0				7.0878- 3
2.0000+ 1 ~ 4.0000+ 1	2.6217+ 1	1.0924+ 1		1.5291+ 1					0.0000+ 0				7.0903- 3
4.0000+ 1 ~ 7.0000+ 1	2.5688+ 1	1.1579+ 1		1.4809+ 1					0.0000+ 0				7.0963- 3
7.0000+ 1 ~ 1.0000+ 2	2.2595+ 1	1.1250+ 1		1.1315+ 1					0.0000+ 0				7.1011- 3
1.0000+ 2 ~ 2.0000+ 2	1.8805+ 1	1.0598+ 1		8.0008+ 0					0.0000+ 0				7.1192- 3
2.0000+ 2 ~ 4.0000+ 2	1.4929+ 1	9.8034+ 0		5.1255+ 0					0.0000+ 0				7.1686- 3
4.0000+ 2 ~ 7.0000+ 2	1.2606+ 1	9.1346+ 0		3.4706+ 0					0.0000+ 0				7.2530- 3
7.0000+ 2 ~ 1.0000+ 3	1.1342+ 1	8.6954+ 0		2.6471+ 0					0.0000+ 0				7.3317- 3
1.0000+ 3 ~ 2.0000+ 3	1.0187+ 1	8.2204+ 0		1.9666+ 0					0.0000+ 0				7.4708- 3
2.0000+ 3 ~ 4.0000+ 3	9.1909+ 0	7.7714+ 0		1.4190+ 0					0.0000+ 0				8.2100- 3
4.0000+ 3 ~ 7.0000+ 3	8.6586+ 0	7.6677+ 0		1.0909+ 0					0.0000+ 0				9.4771- 3
7.0000+ 3 ~ 1.0000+ 4	8.4488+ 0	7.5542+ 0		8.9241- 1					0.0000+ 0				1.1093- 2
1.0000+ 4 ~ 2.0000+ 4	8.3804+ 0	7.6934+ 0		6.6898- 1					0.0000+ 0				1.5243- 2
2.0000+ 4 ~ 4.0000+ 4	8.4998+ 0	8.0683+ 0		4.3349- 1					0.0000+ 0				2.8349- 2
4.0000+ 4 ~ 7.0000+ 4	8.7926+ 0	8.6122+ 0		2.8030- 1					0.0000+ 0				4.7006- 2
7.0000+ 4 ~ 1.0000+ 5	9.0579+ 0	8.8654+ 0		2.0251- 1					0.0000+ 0				7.1974- 2
1.0000+ 5 ~ 2.0000+ 5	9.2661+ 0	9.1132+ 0		1.4226- 1					3.9161-11				1.2683- 1
2.0000+ 5 ~ 4.0000+ 5	8.9898+ 0	8.8838+ 0	1.7498- 3	1.0425- 1					1.5675-10				2.2408- 1
4.0000+ 5 ~ 7.0000+ 5	8.0488+ 0	7.9487+ 0	8.9082- 3	9.3704- 2			2.0281-19		4.9098-10				3.2060- 1
7.0000+ 5 ~ 1.0000+ 6	7.0049+ 0	6.8067+ 0	3.1674- 1	8.1914- 2			1.3707-18		2.0763- 8				3.8870- 1
1.0000+ 6 ~ 2.0000+ 6	5.4743+ 0	4.6428+ 0	7.5884- 1	7.2304- 2			6.0244-10		4.4446- 8				4.2666- 1
2.0000+ 6 ~ 4.0000+ 6	3.9049+ 0	2.5670+ 0	1.3831+ 0	4.0456- 2			8.1847- 8		4.8665- 8	1.7829-18			4.8780- 1
4.0000+ 6 ~ 7.0000+ 6	3.9985+ 0	2.2412+ 0	1.0709+ 0	5.2688- 3			3.4370- 4		1.5726- 4	3.0006-11	7.9449-11		6.0668- 1
7.0000+ 6 ~ 1.0000+ 7	4.4900+ 0	2.8959+ 0	1.3606+ 0	8.6686- 4	1.6081- 1		2.4470- 3	3.1619- 6	8.6409- 4	2.4008- 8	7.2300- 7	6.6697-10	7.8769- 1
1.0000+ 7 ~ 2.0000+ 7	4.1930+ 0	2.6664+ 0	2.0646- 1	9.6726- 4	1.1111+ 0	1.0061- 1	1.3779- 2	1.2996- 2	3.6683- 3	2.3702- 3	4.9908- 3	1.7149- 3	8.2168- 1

MATERIAL =4201

CROSS SECTION

^{92}Mo (4201)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.6096+ 0	6.6462+ 0		6.4216- 2			0.0000+ 0		0.0000+ 0				7.3166- 3
1.0000- 2 ~ 2.0000- 2	6.6727+ 0	6.6462+ 0		2.7442- 2			0.0000+ 0		0.0000+ 0				7.3166- 3
2.0000- 2 ~ 4.0000- 2	6.6646+ 0	6.6462+ 0		1.9402- 2			0.0000+ 0		0.0000+ 0				7.3166- 3
4.0000- 2 ~ 7.0000- 2	6.5595+ 0	6.5452+ 0		1.4250- 2			0.0000+ 0		0.0000+ 0				7.3166- 3
7.0000- 2 ~ 1.0000- 1	6.6667+ 0	6.6462+ 0		1.1417- 2			0.0000+ 0		0.0000+ 0				7.3166- 3
1.0000- 1 ~ 2.0000- 1	5.5539+ 0	5.5452+ 0		8.6908- 3			0.0000+ 0		0.0000+ 0				7.3166- 3
2.0000- 1 ~ 4.0000- 1	6.6613+ 0	6.6462+ 0		6.1366- 3			0.0000+ 0		0.0000+ 0				7.3166- 3
4.0000- 1 ~ 7.0000- 1	5.5497+ 0	5.5452+ 0		4.5139- 3			0.0000+ 0		0.0000+ 0				7.3166- 3
7.0000- 1 ~ 1.0000+ 0	6.6488+ 0	6.6462+ 0		3.6089- 3			0.0000+ 0		0.0000+ 0				7.3166- 3
1.0000+ 0 ~ 2.0000+ 0	5.5479+ 0	5.5451+ 0		2.7508- 3			0.0000+ 0		0.0000+ 0				7.3166- 3
2.0000+ 0 ~ 4.0000+ 0	6.5469+ 0	6.5460+ 0		1.9601- 3			0.0000+ 0		0.0000+ 0				7.3167- 3
4.0000+ 0 ~ 7.0000+ 0	5.5462+ 0	5.5447+ 0		1.4388- 3			0.0000+ 0		0.0000+ 0				7.3168- 3
7.0000+ 0 ~ 1.0000+ 1	5.5458+ 0	5.5444+ 0		1.1584- 3			0.0000+ 0		0.0000+ 0				7.3170- 3
1.0000+ 1 ~ 2.0000+ 1	5.5447+ 0	5.5438+ 0		8.9078- 4			0.0000+ 0		0.0000+ 0				7.3178- 3
2.0000+ 1 ~ 4.0000+ 1	5.5430+ 0	5.5424+ 0		6.4798- 4			0.0000+ 0		0.0000+ 0				7.3189- 3
4.0000+ 1 ~ 7.0000+ 1	5.5404+ 0	5.5398+ 0		5.0186- 4			0.0000+ 0		0.0000+ 0				7.3226- 3
7.0000+ 1 ~ 1.0000+ 2	5.5372+ 0	5.5388+ 0		4.3442- 4			0.0000+ 0		0.0000+ 0				7.3254- 3
1.0000+ 2 ~ 2.0000+ 2	5.5295+ 0	5.5291+ 0		4.2575- 4			0.0000+ 0		0.0000+ 0				7.3382- 3
2.0000+ 2 ~ 4.0000+ 2	5.5913+ 0	5.5272+ 0		4.6410- 1			0.0000+ 0		0.0000+ 0				7.3872- 3
4.0000+ 2 ~ 7.0000+ 2	6.6101+ 0	6.6090+ 0		3.7467- 4			0.0000+ 0		0.0000+ 0				7.4414- 3
7.0000+ 2 ~ 1.0000+ 3	5.4881+ 0	5.4860+ 0		1.7572- 4			0.0000+ 0		0.0000+ 0				7.5023- 3
1.0000+ 3 ~ 2.0000+ 3	6.4667+ 0	6.3662+ 0		1.0160- 1			0.0000+ 0		0.0000+ 0				7.6974- 3
2.0000+ 3 ~ 4.0000+ 3	1.0673+ 1	1.0449+ 1		2.2349- 1			0.0000+ 0		0.0000+ 0				8.2376- 3
4.0000+ 3 ~ 7.0000+ 3	6.6911+ 0	6.3939+ 0		2.9716- 1			0.0000+ 0		0.0000+ 0				9.3617- 3
7.0000+ 3 ~ 1.0000+ 4	8.6888+ 0	6.5460+ 0		1.4279- 1			0.0000+ 0		0.0000+ 0				1.0813- 2
1.0000+ 4 ~ 2.0000+ 4	8.8962+ 0	8.9142+ 0		8.2072- 2			0.0000+ 0		0.0000+ 0				1.4702- 2
2.0000+ 4 ~ 4.0000+ 4	9.5459+ 0	9.4662+ 0		7.9794- 2			0.0000+ 0		0.0000+ 0				2.5412- 2
4.0000+ 4 ~ 7.0000+ 4	8.6079+ 0	8.4642+ 0		4.3703- 2			0.0000+ 0		0.0000+ 0				4.6728- 2
7.0000+ 4 ~ 1.0000+ 5	9.0626+ 0	9.0294+ 0		3.3196- 2			0.0000+ 0		0.0000+ 0				7.0284- 2
1.0000+ 5 ~ 2.0000+ 5	9.2649+ 0	9.2266+ 0		2.8229- 2			1.0286-11		2.6366-11				1.2391- 1
2.0000+ 5 ~ 4.0000+ 5	8.3883+ 0	8.8802+ 0		2.8104- 2			4.1142-14		1.0546-10				2.2156- 1
4.0000+ 5 ~ 7.0000+ 5	8.0484+ 0	8.0187+ 0		2.5893- 2			1.4972-12		9.3429-10				3.1738- 1
7.0000+ 5 ~ 1.0000+ 6	7.0034+ 0	6.8713+ 0		3.2043- 2			2.2638- 9		1.8859- 6				3.6700- 1
1.0000+ 6 ~ 2.0000+ 6	6.4713+ 0	6.2090+ 0	2.2200- 1	3.6022- 2			2.3143- 6		1.3026- 7				3.7990- 1
2.0000+ 6 ~ 4.0000+ 6	3.9849+ 0	2.8773+ 0	1.0759+ 0	2.2488- 2			8.8800- 3		3.0262- 5				4.0337- 1
4.0000+ 6 ~ 7.0000+ 6	3.9274+ 0	2.2574+ 0	1.5703+ 0	6.7059- 3			9.2189- 2		1.2085- 3	5.0993-19	4.6724-13		5.9928- 1
7.0000+ 6 ~ 1.0000+ 7	4.4213+ 0	2.8185+ 0	1.4616+ 0	1.4062- 3			1.3367- 1	4.7480- 6	6.1748- 3	1.2046-11	1.4773- 6		7.6726- 1
1.0000+ 7 ~ 2.0000+ 7	4.1228+ 0	2.5310+ 0	6.7253- 1	1.0913- 3	4.1496- 1		1.0632- 1	3.6944- 1	2.1169- 2	6.2813- 3	6.9969- 3	2.3977- 4	8.2167- 1

MATERIAL =4202

CROSS SECTION

^{94}Mo (4202)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.0386+ 0	6.9980+ 0		4.0666- 2					0.0000+ 0				7.1606- 3
1.0000- 2 ~ 2.0000- 2	6.0163+ 0	6.9980+ 0		1.7336- 2					0.0000+ 0				7.1609- 3
2.0000- 2 ~ 4.0000- 2	6.0102+ 0	6.9980+ 0		1.2260- 2					0.0000+ 0				7.1609- 3
4.0000- 2 ~ 7.0000- 2	6.0070+ 0	5.9979+ 0		9.0151- 3					0.0000+ 0				7.1609- 3
7.0000- 2 ~ 1.0000- 1	6.0062+ 0	6.9979+ 0		7.2161- 3					0.0000+ 0				7.1609- 3
1.0000- 1 ~ 2.0000- 1	6.0034+ 0	6.9979+ 0		5.4760- 3					0.0000+ 0				7.1609- 3
2.0000- 1 ~ 4.0000- 1	6.0016+ 0	6.9979+ 0		3.8771- 3					0.0000+ 0				7.1609- 3
4.0000- 1 ~ 7.0000- 1	6.0007+ 0	5.9979+ 0		2.8469- 3					0.0000+ 0				7.1609- 3
7.0000- 1 ~ 1.0000+ 0	6.0002+ 0	6.9978+ 0		2.2839- 3					0.0000+ 0				7.1609- 3
1.0000+ 0 ~ 2.0000+ 0	6.9995+ 0	5.9978+ 0		1.7378- 3					0.0000+ 0				7.1609- 3
2.0000+ 0 ~ 4.0000+ 0	6.9989+ 0	6.9977+ 0		1.2318- 3					0.0000+ 0				7.1610- 3
4.0000+ 0 ~ 7.0000+ 0	5.9985+ 0	5.9974+ 0		9.0908- 4					0.0000+ 0				7.1612- 3
7.0000+ 0 ~ 1.0000+ 1	5.9979+ 0	5.9971+ 0		7.3048- 4					0.0000+ 0				7.1614- 3
1.0000+ 1 ~ 2.0000+ 1	5.9970+ 0	5.9965+ 0		5.6297- 4					0.0000+ 0				7.1620- 3
2.0000+ 1 ~ 4.0000+ 1	6.9964+ 0	6.9960+ 0		4.1332- 4					0.0000+ 0				7.1636- 3
4.0000+ 1 ~ 7.0000+ 1	5.9928+ 0	6.9924+ 0		3.4617- 4					0.0000+ 0				7.1676- 3
7.0000+ 1 ~ 1.0000+ 2	5.9901+ 0	5.9894+ 0		7.0878- 4					0.0000+ 0				7.1707- 3
1.0000+ 2 ~ 2.0000+ 2	8.0439+ 0	5.9824+ 0		6.1457- 2					0.0000+ 0				7.1845- 3
2.0000+ 2 ~ 4.0000+ 2	5.9650+ 0	5.9849+ 0		1.7606- 4					0.0000+ 0				7.2160- 3
4.0000+ 2 ~ 7.0000+ 2	6.9208+ 0	6.9206+ 0		1.7109- 4					0.0000+ 0				7.2846- 3
7.0000+ 2 ~ 1.0000+ 3	5.8701+ 0	5.8699+ 0		2.6585- 4					0.0000+ 0				7.3590- 3
1.0000+ 3 ~ 2.0000+ 3	7.9969+ 0	7.6068+ 0		3.9107- 1					0.0000+ 0				7.6666- 3
2.0000+ 3 ~ 4.0000+ 3	8.0746+ 0	7.5937+ 0		4.8080- 1					0.0000+ 0				8.1271- 3
4.0000+ 3 ~ 7.0000+ 3	1.4035+ 1	1.3691+ 1		3.4367- 1					0.0000+ 0				9.2712- 3
7.0000+ 3 ~ 1.0000+ 4	7.5998+ 0	7.1785+ 0		2.2107- 1					0.0000+ 0				1.0762- 2
1.0000+ 4 ~ 2.0000+ 4	1.0061+ 1	8.8066+ 0		1.6484- 1					0.0000+ 0				1.4704- 2
2.0000+ 4 ~ 4.0000+ 4	8.4824+ 0	8.3635+ 0		1.2082- 1					0.0000+ 0				2.5507- 2
4.0000+ 4 ~ 7.0000+ 4	8.7663+ 0	8.6848+ 0		8.1482- 2					0.0000+ 0				4.6938- 2
7.0000+ 4 ~ 1.0000+ 5	9.0278+ 0	8.9670+ 0		6.0828- 2					0.0000+ 0				7.0607- 2
1.0000+ 5 ~ 2.0000+ 5	9.2660+ 0	9.2077+ 0		4.9015- 2					2.9153- 7				1.2439- 1
2.0000+ 5 ~ 4.0000+ 5	8.9897+ 0	8.9417+ 0		4.7964- 2					1.1661- 8				2.2291- 1
4.0000+ 5 ~ 7.0000+ 5	8.0496+ 0	7.9950+ 0		5.4475- 2					2.9120- 8				3.1668- 1
7.0000+ 5 ~ 1.0000+ 6	7.0061+ 0	6.8484+ 0	1.0086- 1	6.4317- 2					8.0741- 8				3.7640- 1
1.0000+ 6 ~ 2.0000+ 6	6.4727+ 0	4.6240+ 0	8.0854- 1	3.6644- 2			6.0196-17		7.3001- 6				4.2727- 1
2.0000+ 6 ~ 4.0000+ 6	3.9883+ 0	2.4929+ 0	1.4883+ 0	2.3109- 2			8.2459- 8		1.0949- 3	1.0007-18			4.8745- 1
4.0000+ 6 ~ 7.0000+ 6	3.9786+ 0	2.2492+ 0	1.6021+ 0	8.0885- 3			2.7958- 3		8.3458- 3	2.5724- 0	2.1730-22		6.0528- 1
7.0000+ 6 ~ 1.0000+ 7	4.4203+ 0	2.8743+ 0	1.5210+ 0	1.0181- 3	3.7348- 4		1.2030- 2	4.0620-12	0.6801- 3	1.0700- 4	3.2306- 8	4.8781-21	7.0760- 1
1.0000+ 7 ~ 2.0000+ 7	4.1231+ 0	2.5206+ 0	3.6936- 1	1.0112- 3	1.0204+ 0	1.2967- 2	4.7069- 2	1.9946- 2	1.6339- 2	9.8083- 3	4.8107- 3	8.4192- 4	8.2167- 1

MATERIAL =4203 CROSS SECTION

^{95}Mo (4203)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.8936+ 1	6.6007+ 0		4.3334+ 1					0.0000+ 0				7.0864- 3
1.0000- 2 ~ 2.0000- 2	2.4109+ 1	6.6998+ 0		1.8609+ 1					0.0000+ 0				7.0864- 3
2.0000- 2 ~ 4.0000- 2	1.8676+ 1	6.6984+ 0		1.3078+ 1					0.0000+ 0				7.0864- 3
4.0000- 2 ~ 7.0000- 2	1.5192+ 1	5.5982+ 0		9.6982+ 0					0.0000+ 0				7.0864- 3
7.0000- 2 ~ 1.0000- 1	1.3270+ 1	6.5936+ 0		7.6763+ 0					0.0000+ 0				7.0864- 3
1.0000- 1 ~ 2.0000- 1	1.1409+ 1	5.5877+ 0		5.8154+ 0					0.0000+ 0				7.0864- 3
2.0000- 1 ~ 4.0000- 1	9.6626+ 0	6.6743+ 0		4.0882+ 0					0.0000+ 0				7.0864- 3
4.0000- 1 ~ 7.0000- 1	8.5292+ 0	5.5625+ 0		2.9769+ 0					0.0000+ 0				7.0864- 3
7.0000- 1 ~ 1.0000+ 0	7.8776+ 0	6.6263+ 0		2.3613+ 0					0.0000+ 0				7.0864- 3
1.0000+ 0 ~ 2.0000+ 0	7.2250+ 0	5.4718+ 0		1.7533+ 0					0.0000+ 0				7.0865- 3
2.0000+ 0 ~ 4.0000+ 0	6.5468+ 0	6.3630+ 0		1.1938+ 0					0.0000+ 0				7.0868- 3
4.0000+ 0 ~ 7.0000+ 0	6.0219+ 0	5.1705+ 0		8.5141- 1					0.0000+ 0				7.0862- 3
7.0000+ 0 ~ 1.0000+ 1	5.6531+ 0	4.9681+ 0		6.8699- 1					0.0000+ 0				7.0865- 3
1.0000+ 1 ~ 2.0000+ 1	5.1889+ 0	4.5288+ 0		6.9809- 1					0.0000+ 0				7.0877- 3
2.0000+ 1 ~ 4.0000+ 1	6.9634+ 0	3.4990+ 0		2.4644+ 0					0.0000+ 0				7.0903- 3
4.0000+ 1 ~ 7.0000+ 1	3.5061+ 2	1.9724+ 2		1.5337+ 2					0.0000+ 0				7.0961- 3
7.0000+ 1 ~ 1.0000+ 2	7.8879+ 0	7.7188+ 0		1.4912- 1					0.0000+ 0				7.1008- 3
1.0000+ 2 ~ 2.0000+ 2	8.6409+ 0	6.5897+ 0		2.0711+ 0					0.0000+ 0				7.1187- 3
2.0000+ 2 ~ 4.0000+ 2	1.5819+ 1	1.2264+ 1		3.5489+ 0					0.0000+ 0				7.1578- 3
4.0000+ 2 ~ 7.0000+ 2	1.6202+ 1	1.3467+ 1		2.8147+ 0					0.0000+ 0				7.2520- 3
7.0000+ 2 ~ 1.0000+ 3	9.1290+ 0	7.6663+ 0		1.4627+ 0					0.0000+ 0				7.3294- 3
1.0000+ 3 ~ 2.0000+ 3	1.3986+ 1	1.2005+ 1		1.9806+ 0					0.0000+ 0				7.5672- 3
2.0000+ 3 ~ 4.0000+ 3	9.1681+ 0	7.7900+ 0		1.3781+ 0					0.0000+ 0				8.2091- 3
4.0000+ 3 ~ 7.0000+ 3	8.6226+ 0	7.5688+ 0		1.0539+ 0					0.0000+ 0				9.4660- 3
7.0000+ 3 ~ 1.0000+ 4	8.4100+ 0	7.5486+ 0		8.6138- 1					0.0000+ 0				1.1075- 2
1.0000+ 4 ~ 2.0000+ 4	8.3413+ 0	7.5891+ 0		6.5219- 1					0.0000+ 0				1.5216- 2
2.0000+ 4 ~ 4.0000+ 4	8.4671+ 0	8.0487+ 0		4.2036- 1					0.0000+ 0				2.5509- 2
4.0000+ 4 ~ 7.0000+ 4	8.7623+ 0	8.4829+ 0		2.6944- 1					0.0000+ 0				4.7011- 2
7.0000+ 4 ~ 1.0000+ 5	9.0160+ 0	8.8227+ 0		1.9416- 1					0.0000+ 0				7.1868- 2
1.0000+ 5 ~ 2.0000+ 5	9.2660+ 0	9.1193+ 0		1.3611- 1					1.9212- 4				1.2584- 1
2.0000+ 5 ~ 4.0000+ 5	8.9895+ 0	8.5887+ 0	3.0714- 1	9.1090- 2			0.0000+ 0		2.4501- 4				2.3247- 1
4.0000+ 5 ~ 7.0000+ 5	8.0488+ 0	7.4415+ 0	5.2861- 1	7.9249- 2			9.2291-16		2.6799- 4				3.4239- 1
7.0000+ 5 ~ 1.0000+ 6	7.0058+ 0	6.2391+ 0	6.8671- 1	6.9138- 2			1.6963-15		3.3284- 4				4.1218- 1
1.0000+ 6 ~ 2.0000+ 6	5.4744+ 0	4.0264+ 0	1.4088+ 0	3.7670- 2			2.0996- 8		6.4676- 4				4.9284- 1
2.0000+ 6 ~ 4.0000+ 6	3.9950+ 0	2.2820+ 0	1.6898+ 0	1.8001- 2			6.3836- 5		2.4012- 3	5.8868-17			5.0592- 1
4.0000+ 6 ~ 7.0000+ 6	3.9285+ 0	2.2320+ 0	1.6821+ 0	4.4598- 3			1.9863- 3		5.7348- 3	9.6248-10			6.1011- 1
7.0000+ 6 ~ 1.0000+ 7	4.4200+ 0	2.8934+ 0	1.0183+ 0	1.2444- 3	4.9291- 1		6.8668- 3	1.5230-13	6.3800- 3	7.0694- 6	6.9041- 8	1.1486-12	7.6762- 1
1.0000+ 7 ~ 2.0000+ 7	4.1230+ 0	2.6366+ 0	1.2961- 1	1.0626- 3	1.2643+ 0	3.8017- 2	3.3979- 2	6.4290- 3	1.1706- 2	4.6946- 3	6.2031- 3	1.0116- 3	8.2166- 1

MATERIAL =4204 CROSS SECTION

^{96}Mo (4204)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.6688+ 0	4.7270+ 0		1.8418+ 0					0.0000+ 0				7.0116- 3
1.0000- 2 ~ 2.0000- 2	6.6141+ 0	4.7263+ 0		7.8721- 1					0.0000+ 0				7.0116- 3
2.0000- 2 ~ 4.0000- 2	5.2837+ 0	4.7268+ 0		5.5690- 1					0.0000+ 0				7.0116- 3
4.0000- 2 ~ 7.0000- 2	5.1364+ 0	4.7267+ 0		4.0988- 1					0.0000+ 0				7.0116- 3
7.0000- 2 ~ 1.0000- 1	6.0646+ 0	4.7265+ 0		3.2794- 1					0.0000+ 0				7.0116- 3
1.0000- 1 ~ 2.0000- 1	4.9763+ 0	4.7261+ 0		2.4916- 1					0.0000+ 0				7.0116- 3
2.0000- 1 ~ 4.0000- 1	4.9018+ 0	4.7262+ 0		1.7868- 1					0.0000+ 0				7.0116- 3
4.0000- 1 ~ 7.0000- 1	4.8540+ 0	4.7297+ 0		1.3030- 1					0.0000+ 0				7.0116- 3
7.0000- 1 ~ 1.0000+ 0	4.8267+ 0	4.7219+ 0		1.0483- 1					0.0000+ 0				7.0116- 3
1.0000+ 0 ~ 2.0000+ 0	4.7904+ 0	4.7179+ 0		8.0432- 2					0.0000+ 0				7.0118- 3
2.0000+ 0 ~ 4.0000+ 0	4.7658+ 0	4.7086+ 0		6.8138- 2					0.0000+ 0				7.0117- 3
4.0000+ 0 ~ 7.0000+ 0	4.7370+ 0	4.6927+ 0		4.4379- 2					0.0000+ 0				7.0119- 3
7.0000+ 0 ~ 1.0000+ 1	4.7099+ 0	4.6727+ 0		3.7162- 2					0.0000+ 0				7.0120- 3
1.0000+ 1 ~ 2.0000+ 1	4.6671+ 0	4.6257+ 0		3.1355- 2					0.0000+ 0				7.0127- 3
2.0000+ 1 ~ 4.0000+ 1	4.5234+ 0	4.4944+ 0		2.9070- 2					0.0000+ 0				7.0142- 3
4.0000+ 1 ~ 7.0000+ 1	4.2038+ 0	4.1667+ 0		3.8140- 2					0.0000+ 0				7.0181- 3
7.0000+ 1 ~ 1.0000+ 2	3.4421+ 0	3.3639+ 0		8.0281- 2					0.0000+ 0				7.0213- 3
1.0000+ 2 ~ 2.0000+ 2	1.0988+ 2	8.8713+ 1		2.1161+ 1					0.0000+ 0				7.0350- 3
2.0000+ 2 ~ 4.0000+ 2	8.2455+ 0	8.2393+ 0		5.9790- 3					0.0000+ 0				7.0880- 3
4.0000+ 2 ~ 7.0000+ 2	6.8871+ 0	6.8841+ 0		1.9302- 1					0.0000+ 0				7.1461- 3
7.0000+ 2 ~ 1.0000+ 3	5.5202+ 0	5.4810+ 0		3.9147- 2					0.0000+ 0				7.2100- 3
1.0000+ 3 ~ 2.0000+ 3	6.0861+ 0	6.0619+ 0		3.4163- 2					0.0000+ 0				7.4166- 3
2.0000+ 3 ~ 4.0000+ 3	1.8988+ 1	1.8545+ 1		4.4169- 1					0.0000+ 0				7.9770- 3
4.0000+ 3 ~ 7.0000+ 3	9.0861+ 0	8.8275+ 0		2.5761- 1					0.0000+ 0				9.1245- 3
7.0000+ 3 ~ 1.0000+ 4	1.0984+ 1	1.0872+ 1		3.1189- 1					0.0000+ 0				1.0819- 2
1.0000+ 4 ~ 2.0000+ 4	9.2206+ 0	9.0568+ 0		1.6397- 1					0.0000+ 0				1.4674- 2
2.0000+ 4 ~ 4.0000+ 4	8.5063+ 0	8.3959+ 0		1.0946- 1					0.0000+ 0				2.5408- 2
4.0000+ 4 ~ 7.0000+ 4	8.7980+ 0	8.7266+ 0		8.9361- 2					0.0000+ 0				4.6866- 2
7.0000+ 4 ~ 1.0000+ 5	9.0614+ 0	9.0092+ 0		5.2196- 2					0.0000+ 0				7.0694- 2
1.0000+ 5 ~ 2.0000+ 5	9.2668+ 0	9.2136+ 0		4.2936- 2					2.3977-10				1.2444- 1
2.0000+ 5 ~ 4.0000+ 5	8.9894+ 0	8.9464+ 0		4.2887- 2					8.5009-10				2.2238- 1
4.0000+ 5 ~ 7.0000+ 5	8.0492+ 0	8.0000+ 0		4.9088- 2					2.8458- 9				3.1860- 1
7.0000+ 5 ~ 1.0000+ 6	7.0062+ 0	6.6844+ 0	2.7872- 1	3.9780- 2					1.3761- 8				3.8826- 1
1.0000+ 6 ~ 2.0000+ 6	6.4740+ 0	4.4310+ 0	1.0132+ 0	2.8030- 2					3.0830- 7				4.4792- 1
2.0000+ 6 ~ 4.0000+ 6	3.9871+ 0	2.3659+ 0	1.5871+ 0	1.4888- 2			7.3777-11		2.5573- 6	6.4521-10			4.8278- 1
4.0000+ 6 ~ 7.0000+ 6	3.9262+ 0	2.2472+ 0	1.6723+ 0	5.8301- 3			5.8453- 5		6.9888- 4	5.0898-11			6.0703- 1
7.0000+ 6 ~ 1.0000+ 7	4.4196+ 0	2.9120+ 0	1.4707+ 0	1.0039- 3	3.2602- 2		1.6366- 3	1.6050-21	2.7029- 3	2.0311- 6	3.8946-10		7.8751- 1
1.0000+ 7 ~ 2.0000+ 7	4.1230+ 0	2.6383+ 0	2.4083- 1	9.7180- 4	1.1301+ 0	7.0766- 2	2.1060- 2	3.8277- 3	8.3935- 3	6.5831- 3	1.9585- 3	4.8098- 4	8.2168- 1

MATERIAL =4205 CROSS SECTION ^{97}Mo (4205)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	1.2373+ 1	5.8574+ 0		6.5168+ 0					0.0000+ 0				8.9391- 3
1.0000- 2 ~ 2.0000- 2	8.6389+ 0	5.8673+ 0		2.7817+ 0					0.0000+ 0				8.9391- 3
2.0000- 2 ~ 4.0000- 2	7.0233+ 0	5.8670+ 0		1.9663+ 0					0.0000+ 0				8.9391- 3
4.0000- 2 ~ 7.0000- 2	7.2998+ 0	5.8587+ 0		1.4431+ 0					0.0000+ 0				8.9391- 3
7.0000- 2 ~ 1.0000- 1	7.0050+ 0	5.8662+ 0		1.1488+ 0					0.0000+ 0				8.9391- 3
1.0000- 1 ~ 2.0000- 1	6.7246+ 0	5.8552+ 0		8.6938- 1					0.0000+ 0				8.9391- 3
2.0000- 1 ~ 4.0000- 1	6.4694+ 0	5.8629+ 0		6.0848- 1					0.0000+ 0				8.9391- 3
4.0000- 1 ~ 7.0000- 1	6.2857+ 0	5.8492+ 0		4.3851- 1					0.0000+ 0				8.9391- 3
7.0000- 1 ~ 1.0000+ 0	6.1865+ 0	5.8449+ 0		3.4067- 1					0.0000+ 0				8.9391- 3
1.0000+ 0 ~ 2.0000+ 0	6.0819+ 0	5.8359+ 0		2.4808- 1					0.0000+ 0				8.9393- 3
2.0000+ 0 ~ 4.0000+ 0	5.9720+ 0	5.8169+ 0		1.6614- 1					0.0000+ 0				8.9395- 3
4.0000+ 0 ~ 7.0000+ 0	5.8659+ 0	5.7995+ 0		9.6347- 2					0.0000+ 0				8.9400- 3
7.0000+ 0 ~ 1.0000+ 1	5.8264+ 0	5.7619+ 0		8.4558- 2					0.0000+ 0				8.9409- 3
1.0000+ 1 ~ 2.0000+ 1	5.7868+ 0	5.7155+ 0		7.1297- 2					0.0000+ 0				8.9415- 3
2.0000+ 1 ~ 4.0000+ 1	5.6565+ 0	5.6332+ 0		2.2369- 2					0.0000+ 0				8.9441- 3
4.0000+ 1 ~ 7.0000+ 1	5.6970+ 0	5.2861+ 0		4.1183- 1					0.0000+ 0				8.9500- 3
7.0000+ 1 ~ 1.0000+ 2	2.1515+ 1	8.0362+ 0		1.3479+ 1					0.0000+ 0				8.9548- 3
1.0000+ 2 ~ 2.0000+ 2	5.8366+ 0	5.5821+ 0		2.5455- 1					0.0000+ 0				8.9750- 3
2.0000+ 2 ~ 4.0000+ 2	1.2220+ 1	7.4652+ 0		4.7549+ 0					0.0000+ 0				7.0124- 3
4.0000+ 2 ~ 7.0000+ 2	1.8314+ 1	1.4064+ 1		4.2499+ 0					0.0000+ 0				7.1080- 3
7.0000+ 2 ~ 1.0000+ 3	1.0417+ 1	8.7647+ 0		1.6518+ 0					0.0000+ 0				7.1883- 3
1.0000+ 3 ~ 2.0000+ 3	1.1361+ 1	9.3071+ 0		2.0537+ 0					0.0000+ 0				7.4267- 3
2.0000+ 3 ~ 4.0000+ 3	9.1747+ 0	7.8027+ 0		1.9720+ 0					0.0000+ 0				8.0891- 3
4.0000+ 3 ~ 7.0000+ 3	8.6464+ 0	7.6910+ 0		1.0644+ 0					0.0000+ 0				9.3421- 3
7.0000+ 3 ~ 1.0000+ 4	8.4358+ 0	7.5736+ 0		8.8199- 1					0.0000+ 0				1.0965- 2
1.0000+ 4 ~ 2.0000+ 4	8.3628+ 0	7.7083+ 0		6.4349- 1					0.0000+ 0				1.6132- 2
2.0000+ 4 ~ 4.0000+ 4	8.4989+ 0	8.0792+ 0		4.1774- 1					0.0000+ 0				2.8262- 2
4.0000+ 4 ~ 7.0000+ 4	8.7940+ 0	8.6236+ 0		2.7062- 1					0.0000+ 0				4.7064- 2
7.0000+ 4 ~ 1.0000+ 5	8.0521+ 0	8.8686+ 0		1.9646- 1					0.0000+ 0				7.1986- 2
1.0000+ 5 ~ 2.0000+ 5	9.2583+ 0	9.1207+ 0		1.3699- 1					2.9844- 7				1.2607- 1
2.0000+ 5 ~ 4.0000+ 5	8.9931+ 0	9.8911+ 0		1.0194- 1					1.1936- 6				2.2439- 1
4.0000+ 5 ~ 7.0000+ 5	8.0598+ 0	7.8162+ 0	1.5048- 1	9.0212- 2					2.5451- 6				3.2805- 1
7.0000+ 5 ~ 1.0000+ 6	7.0067+ 0	5.0241+ 0	8.1903- 1	6.1608- 2					3.8992- 6				4.2761- 1
1.0000+ 6 ~ 2.0000+ 6	5.4761+ 0	3.9247+ 0	1.6206+ 0	2.9777- 2			2.3494-17		1.3641- 6				5.0805- 1
2.0000+ 6 ~ 4.0000+ 6	3.9956+ 0	2.2278+ 0	1.7536+ 0	9.7380- 3			2.5828- 7		1.1464- 4	1.2086-18			5.1700- 1
4.0000+ 6 ~ 7.0000+ 6	3.9257+ 0	2.2301+ 0	1.6923+ 0	2.4288- 3			8.1822- 5		5.3721- 4	8.7977-12			5.1159- 1
7.0000+ 6 ~ 1.0000+ 7	4.4181+ 0	2.8803+ 0	7.2459- 1	8.7369- 4	8.0981- 1		7.3470- 4	7.8166-21	1.0118- 3	2.8516- 7	1.7228- 9	3.0982-14	7.6760- 1
1.0000+ 7 ~ 2.0000+ 7	4.1234+ 0	2.6634+ 0	9.4133- 2	1.0629- 3	1.2421+ 0	1.0167- 1	1.6801- 2	1.9483- 3	6.4984- 3	2.1036- 3	3.0781- 3	5.2474- 4	8.2156- 1

MATERIAL =4206 CROSS SECTION ^{98}Mo (4206)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	6.0438+ 0	6.6419+ 0		4.0187- 1					0.0000+ 0				8.8603- 3
1.0000- 2 ~ 2.0000- 2	6.8137+ 0	6.6419+ 0		1.7181- 1					0.0000+ 0				8.8603- 3
2.0000- 2 ~ 4.0000- 2	6.7534+ 0	6.6419+ 0		1.2154- 1					0.0000+ 0				8.8603- 3
4.0000- 2 ~ 7.0000- 2	6.7312+ 0	6.6418+ 0		8.9413- 2					0.0000+ 0				8.8603- 3
7.0000- 2 ~ 1.0000- 1	6.7134+ 0	6.6418+ 0		7.1661- 2					0.0000+ 0				8.8603- 3
1.0000- 1 ~ 2.0000- 1	6.6981+ 0	6.6417+ 0		5.4674- 2					0.0000+ 0				8.8603- 3
2.0000- 1 ~ 4.0000- 1	6.6803+ 0	6.6416+ 0		3.8830- 2					0.0000+ 0				8.8603- 3
4.0000- 1 ~ 7.0000- 1	6.6700+ 0	6.6412+ 0		2.8843- 2					0.0000+ 0				8.8603- 3
7.0000- 1 ~ 1.0000+ 0	6.6642+ 0	6.6407+ 0		2.3390- 2					0.0000+ 0				8.8603- 3
1.0000+ 0 ~ 2.0000+ 0	6.6587+ 0	6.6399+ 0		1.8412- 2					0.0000+ 0				8.8603- 3
2.0000+ 0 ~ 4.0000+ 0	6.6024+ 0	6.6378+ 0		1.4664- 2					0.0000+ 0				8.8604- 3
4.0000+ 0 ~ 7.0000+ 0	5.8490+ 0	5.6346+ 0		1.5362- 2					0.0000+ 0				8.8606- 3
7.0000+ 0 ~ 1.0000+ 1	5.6883+ 0	5.6304+ 0		3.7944- 2					0.0000+ 0				8.8608- 3
1.0000+ 1 ~ 2.0000+ 1	7.5082+ 0	5.6220+ 0		1.9862+ 0					0.0000+ 0				8.8604- 3
2.0000+ 1 ~ 4.0000+ 1	6.6073+ 0	5.6007+ 0		6.6099- 3					0.0000+ 0				8.8710- 3
4.0000+ 1 ~ 7.0000+ 1	5.5686+ 0	5.6649+ 0		3.6458- 3					0.0000+ 0				8.8749- 3
7.0000+ 1 ~ 1.0000+ 2	5.5226+ 0	5.5197+ 0		2.9458- 3					0.0000+ 0				8.8781- 3
1.0000+ 2 ~ 2.0000+ 2	5.4084+ 0	5.4056+ 0		2.7898- 3					0.0000+ 0				8.8920- 3
2.0000+ 2 ~ 4.0000+ 2	4.8686+ 0	4.8579+ 0		1.0710- 2					0.0000+ 0				8.9234- 3
4.0000+ 2 ~ 7.0000+ 2	3.2640+ 1	2.7496+ 1		5.1454+ 0					0.0000+ 0				7.0034- 3
7.0000+ 2 ~ 1.0000+ 3	8.1711+ 0	6.7784+ 0		1.3927+ 0					0.0000+ 0				7.0891- 3
1.0000+ 3 ~ 2.0000+ 3	8.2216+ 0	8.0208+ 0		3.0080- 1					0.0000+ 0				7.2789- 3
2.0000+ 3 ~ 4.0000+ 3	7.7478+ 0	7.3787+ 0		3.6787- 1					0.0000+ 0				7.6445- 3
4.0000+ 3 ~ 7.0000+ 3	8.5084+ 0	8.1701+ 0		3.3829- 1					0.0000+ 0				9.0007- 3
7.0000+ 3 ~ 1.0000+ 4	1.2558+ 1	1.2358+ 1		2.0122- 1					0.0000+ 0				1.0606- 2
1.0000+ 4 ~ 2.0000+ 4	8.5361+ 0	8.4046+ 0		1.3154- 1					0.0000+ 0				1.4484- 2
2.0000+ 4 ~ 4.0000+ 4	7.7835+ 0	7.6999+ 0		9.3851- 2					0.0000+ 0				2.5366- 2
4.0000+ 4 ~ 7.0000+ 4	8.7910+ 0	8.7213+ 0		6.9640- 2					0.0000+ 0				4.6916- 2
7.0000+ 4 ~ 1.0000+ 5	9.0616+ 0	9.0090+ 0		5.2498- 2					0.0000+ 0				7.0888- 2
1.0000+ 5 ~ 2.0000+ 5	9.2687+ 0	9.2166+ 0		4.3215- 2					4.6611-13				1.2482- 1
2.0000+ 5 ~ 4.0000+ 5	8.9906+ 0	8.9475+ 0		4.3371- 2					1.6804-12				2.2203- 1
4.0000+ 5 ~ 7.0000+ 5	8.0504+ 0	8.0004+ 0		4.0851- 2					5.7036-12				3.1673- 1
7.0000+ 5 ~ 1.0000+ 6	7.0069+ 0	6.6546+ 0	3.8867- 1	4.0439- 2					3.0808-11				3.8312- 1
1.0000+ 6 ~ 2.0000+ 6	6.4746+ 0	4.3482+ 0	1.0966+ 0	2.7586- 2					2.0412- 8				4.6626- 1
2.0000+ 6 ~ 4.0000+ 6	5.9807+ 0	2.9285+ 0	1.0459+ 0	1.2284- 2					8.1549- 7	1.3430-20			4.9954- 1
4.0000+ 6 ~ 7.0000+ 6	5.9264+ 0	2.2382+ 0	1.8826+ 0	9.8977- 3			9.7608- 8		8.4204- 5	8.1757-13			5.0808- 1
7.0000+ 6 ~ 1.0000+ 7	4.4187+ 0	2.8873+ 0	1.3802+ 0	7.9398- 4	1.4009- 1		8.2416- 6		9.0460- 4	2.4480- 7	2.1611-12		7.8764- 1
1.0000+ 7 ~ 2.0000+ 7	4.1232+ 0	2.6617+ 0	1.6001- 1	8.9743- 4	1.1230+ 0	1.7181- 1	8.3229- 3	8.6347- 4	5.4186- 3	1.2617- 3	1.0049- 3	3.4180- 4	8.2166- 1

MATERIAL =4207

CROSS SECTION

^{99}Mo (4207)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	3.0467+ 1	6.7000+ 0		2.4670+ 1					0.0000+ 0				6.7987- 3
1.0000- 2 ~ 2.0000- 2	1.5333+ 1	6.7000+ 0		1.0642+ 1					0.0000+ 0				6.7987- 3
2.0000- 2 ~ 4.0000- 2	1.3203+ 1	6.7000+ 0		7.4640+ 0					0.0000+ 0				6.7987- 3
4.0000- 2 ~ 7.0000- 2	1.1211+ 1	6.7000+ 0		5.4779+ 0					0.0000+ 0				6.7987- 3
7.0000- 2 ~ 1.0000- 1	1.0133+ 1	6.7000+ 0		4.3817+ 0					0.0000+ 0				6.7987- 3
1.0000- 1 ~ 2.0000- 1	9.0818+ 0	5.7000+ 0		3.3334+ 0					0.0000+ 0				6.7987- 3
2.0000- 1 ~ 4.0000- 1	8.0797+ 0	6.7000+ 0		2.3570+ 0					0.0000+ 0				6.7987- 3
4.0000- 1 ~ 7.0000- 1	7.4580+ 0	5.7000+ 0		1.7322+ 0					0.0000+ 0				6.7987- 3
7.0000- 1 ~ 1.0000+ 0	7.0966+ 0	6.7000+ 0		1.3866+ 0					0.0000+ 0				6.7987- 3
1.0000+ 0 ~ 2.0000+ 0	6.7674+ 0	6.7000+ 0		1.0541+ 0					0.0000+ 0				6.7988- 3
2.0000+ 0 ~ 4.0000+ 0	6.4572+ 0	6.7000+ 0		7.4631- 1					0.0000+ 0				6.7991- 3
4.0000+ 0 ~ 7.0000+ 0	6.2648+ 0	5.7000+ 0		5.4773- 1					0.0000+ 0				6.7995- 3
7.0000+ 0 ~ 1.0000+ 1	6.1717+ 0	5.7000+ 0		4.9812- 1					0.0000+ 0				6.7998- 3
1.0000+ 1 ~ 2.0000+ 1	6.0569+ 0	5.7000+ 0		3.3330- 1					0.0000+ 0				6.8010- 3
2.0000+ 1 ~ 4.0000+ 1	2.7747+ 1	1.1938+ 1		1.6807+ 1					0.0000+ 0				6.8036- 3
4.0000+ 1 ~ 7.0000+ 1	2.6667+ 1	1.2617+ 1		1.4140+ 1					0.0000+ 0				6.8065- 3
7.0000+ 1 ~ 1.0000+ 2	2.2577+ 1	1.1805+ 1		1.0772+ 1					0.0000+ 0				6.8142- 3
1.0000+ 2 ~ 2.0000+ 2	1.8594+ 1	1.0992+ 1		7.6011+ 0					0.0000+ 0				6.8325- 3
2.0000+ 2 ~ 4.0000+ 2	1.4820+ 1	1.0080+ 1		4.8008+ 0					0.0000+ 0				6.8721- 3
4.0000+ 2 ~ 7.0000+ 2	1.2599+ 1	9.3079+ 0		3.2908+ 0					0.0000+ 0				6.9583- 3
7.0000+ 2 ~ 1.0000+ 3	1.1338+ 1	8.8180+ 0		2.5197+ 0					0.0000+ 0				7.0471- 3
1.0000+ 3 ~ 2.0000+ 3	1.0104+ 1	8.2826+ 0		1.8916+ 0					0.0000+ 0				7.2807- 3
2.0000+ 3 ~ 4.0000+ 3	9.1897+ 0	7.7854+ 0		1.4044+ 0					0.0000+ 0				7.9304- 3
4.0000+ 3 ~ 7.0000+ 3	8.6697+ 0	7.5336+ 0		1.1262+ 0					0.0000+ 0				9.2321- 3
7.0000+ 3 ~ 1.0000+ 4	8.4492+ 0	7.4694+ 0		8.5982- 1					0.0000+ 0				1.0883- 2
1.0000+ 4 ~ 2.0000+ 4	8.3672+ 0	7.6091+ 0		7.6800- 1					0.0000+ 0				1.6122- 2
2.0000+ 4 ~ 4.0000+ 4	8.5056+ 0	7.9810+ 0		5.2482- 1					0.0000+ 0				2.6415- 2
4.0000+ 4 ~ 7.0000+ 4	8.7988+ 0	8.4422+ 0		3.5662- 1					0.0000+ 0				4.7378- 2
7.0000+ 4 ~ 1.0000+ 5	9.0525+ 0	8.7988+ 0	2.7225- 4	2.6342- 1					0.0000+ 0				7.2436- 2
1.0000+ 5 ~ 2.0000+ 5	9.2580+ 0	8.6569+ 0	6.6181- 1	1.4911- 1					1.6613- 8				1.3609- 1
2.0000+ 5 ~ 4.0000+ 5	9.0192+ 0	7.7893+ 0	1.1407+ 0	8.2060- 2					8.2052- 8				2.5885- 1
4.0000+ 5 ~ 7.0000+ 5	8.0897+ 0	6.4914+ 0	1.5234+ 0	5.2900- 2					1.3904- 7				3.9525- 1
7.0000+ 5 ~ 1.0000+ 6	7.0079+ 0	6.2006+ 0	1.7711+ 0	3.6008- 2					2.1428- 7				4.9318- 1
1.0000+ 6 ~ 2.0000+ 6	5.4752+ 0	3.6068+ 0	1.8432+ 0	2.4949- 2					7.7417- 7				6.4719- 1
2.0000+ 6 ~ 4.0000+ 6	3.9955+ 0	2.1734+ 0	1.8081+ 0	1.2409- 2			5.1033-15		7.5580- 6	6.4806-10			8.2027- 1
4.0000+ 6 ~ 7.0000+ 6	3.9251+ 0	2.2264+ 0	1.6649+ 0	2.9878- 3	1.2773- 1		1.9667- 6		3.4464- 5	5.3954-13			8.1240- 1
7.0000+ 6 ~ 1.0000+ 7	4.4183+ 0	2.8746+ 0	3.3898- 1	7.2123- 4	1.2030+ 0		8.6261- 6		1.1807- 4	6.0620- 8	3.6066-11	1.0629-13	7.6761- 1
1.0000+ 7 ~ 2.0000+ 7	4.1236+ 0	2.6646+ 0	6.7578- 2	1.0470- 3	1.1276+ 0	2.4688- 1	9.3222- 3	1.2675- 3	1.9127- 3	9.2402- 4	1.7498- 3	4.8027- 4	8.7166- 1

MATERIAL =4208

CROSS SECTION

^{100}Mo (4208)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.9163+ 0	6.3004+ 0		6.1594- 1					0.0000+ 0				6.7307- 3
1.0000- 2 ~ 2.0000- 2	6.5636+ 0	6.3003+ 0		2.6320- 1					0.0000+ 0				6.7307- 3
2.0000- 2 ~ 4.0000- 2	6.4864+ 0	6.3003+ 0		1.8608- 1					0.0000+ 0				6.7307- 3
4.0000- 2 ~ 7.0000- 2	6.4370+ 0	6.3002+ 0		1.3875- 1					0.0000+ 0				6.7307- 3
7.0000- 2 ~ 1.0000- 1	6.4096+ 0	6.3001+ 0		1.0944- 1					0.0000+ 0				6.7307- 3
1.0000- 1 ~ 2.0000- 1	6.3031+ 0	5.9000+ 0		8.3124- 2					0.0000+ 0				6.7307- 3
2.0000- 1 ~ 4.0000- 1	6.3683+ 0	6.2996+ 0		6.8768- 2					0.0000+ 0				6.7307- 3
4.0000- 1 ~ 7.0000- 1	6.3420+ 0	6.2989+ 0		4.3130- 2					0.0000+ 0				6.7307- 3
7.0000- 1 ~ 1.0000+ 0	6.3326+ 0	6.2981+ 0		3.4461- 2					0.0000+ 0				6.7307- 3
1.0000+ 0 ~ 2.0000+ 0	6.3225+ 0	6.2983+ 0		2.8142- 2					0.0000+ 0				6.7307- 3
2.0000+ 0 ~ 4.0000+ 0	6.3107+ 0	6.2923+ 0		1.8368- 2					0.0000+ 0				6.7308- 3
4.0000+ 0 ~ 7.0000+ 0	6.2980+ 0	6.2857+ 0		1.3382- 2					0.0000+ 0				6.7310- 3
7.0000+ 0 ~ 1.0000+ 1	6.2884+ 0	6.2778+ 0		1.0547- 2					0.0000+ 0				6.7311- 3
1.0000+ 1 ~ 2.0000+ 1	6.2680+ 0	6.2612+ 0		7.8658- 3					0.0000+ 0				6.7316- 3
2.0000+ 1 ~ 4.0000+ 1	6.2295+ 0	6.2242+ 0		6.3860- 3					0.0000+ 0				6.7333- 3
4.0000+ 1 ~ 7.0000+ 1	6.1687+ 0	6.1647+ 0		3.9746- 3					0.0000+ 0				6.7372- 3
7.0000+ 1 ~ 1.0000+ 2	6.0098+ 0	6.0845+ 0		6.1608- 1					0.0000+ 0				6.7406- 3
1.0000+ 2 ~ 2.0000+ 2	4.9103+ 0	4.9081+ 0		4.2198- 3					0.0000+ 0				6.7543- 3
2.0000+ 2 ~ 4.0000+ 2	4.1012+ 1	3.7402+ 1		3.6099+ 0					0.0000+ 0				6.7858- 3
4.0000+ 2 ~ 7.0000+ 2	6.6001+ 0	6.3766+ 0		2.2430- 1					0.0000+ 0				6.8660- 3
7.0000+ 2 ~ 1.0000+ 3	6.6801+ 0	6.5638+ 0		9.6[illegible]9- 2					0.0000+ 0				6.8318- 3
1.0000+ 3 ~ 2.0000+ 3	9.4184+ 0	8.3981+ 0		1.0203+ 0					0.0000+ 0				7.1402- 3
2.0000+ 3 ~ 4.0000+ 3	7.8583+ 0	7.4782+ 0		5.8203- 1					0.0000+ 0				7.7100- 3
4.0000+ 3 ~ 7.0000+ 3	9.4382+ 0	9.2303+ 0		2.0791- 1					0.0000+ 0				8.6708- 3
7.0000+ 3 ~ 1.0000+ 4	9.0666+ 0	8.8712+ 0		1.8637- 1					0.0000+ 0				1.0383- 2
1.0000+ 4 ~ 2.0000+ 4	8.9628+ 0	8.8371+ 0		1.1687- 1					0.0000+ 0				1.4376- 2
2.0000+ 4 ~ 4.0000+ 4	9.3598+ 0	9.2817+ 0		9.2033- 2					0.0000+ 0				2.6292- 2
4.0000+ 4 ~ 7.0000+ 4	9.7713+ 0	9.7089+ 0		6.2397- 2					0.0000+ 0				4.6803- 2
7.0000+ 4 ~ 1.0000+ 5	9.0673+ 0	9.0094+ 0		4.7887- 2					0.0000+ 0				7.0718- 2
1.0000+ 5 ~ 2.0000+ 5	9.2692+ 0	9.2190+ 0		4.0207- 2					1.0902-16				1.2471- 1
2.0000+ 5 ~ 4.0000+ 5	8.9909+ 0	8.8494+ 0		4.1378- 2					4.3987-16				2.2878- 1
4.0000+ 5 ~ 7.0000+ 5	8.0578+ 0	7.8937+ 0	1.7310- 1	3.9767- 2					1.3404-14				3.5769- 1
7.0000+ 5 ~ 1.0000+ 6	7.0064+ 0	6.0893+ 0	8.9327- 1	2.2266- 2					7.0700-14				4.2207- 1
1.0000+ 6 ~ 2.0000+ 6	5.4760+ 0	4.1472+ 0	1.3081+ 0	1.0027- 2					6.0297-12				4.7776- 1
2.0000+ 6 ~ 4.0000+ 6	3.9862+ 0	2.3137+ 0	1.6681+ 0	1.5037- 2					1.2211- 8	2.31[illegible]			4.9898- 1
4.0000+ 6 ~ 7.0000+ 6	3.9240+ 0	2.2321+ 0	1.6889+ 0	2.9570- 3			8.2208-12		2.10[illegible]				5.1048- 1
7.0000+ 6 ~ 1.0000+ 7	4.4178+ 0	1.8825+ 0	1.2673+ 0	4.0104- 4	2.6687- 1		2.3358- 6		4.1880- 6	2.87[illegible]	1.1068-20		5.6768- 1
1.0000+ 7 ~ 2.0000+ 7	4.1231+ 0	2.6744+ 0	1.3064- 1	8.4762- 4	1.0682+ 0	1.4072- 1	4.0196- 3	3.9602- 4	2.6149- 3	4.1973- 4	6.3077- 4	2.2061- 4	8.2164- 1

MATERIAL =4301 CROSS SECTION

^{99}Tc (4301)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 1.0000- 2	6.4163+ 1	3.3748+ 0		6.0779+ 1					0.0000+ 0				6.7986- 3
1.0000- 2 ~ 2.0000- 2	2.9444+ 1	3.3740+ 0		2.6070+ 1					0.0000+ 0				6.7988- 3
2.0000- 2 ~ 4.0000- 2	2.1896+ 1	3.3727+ 0		1.8623+ 1					0.0000+ 0				6.7988- 3
4.0000- 2 ~ 7.0000- 2	1.7069+ 1	3.3706+ 0		1.3719+ 1					0.0000+ 0				6.7988- 3
7.0000- 2 ~ 1.0000- 1	1.4470+ 1	3.3680+ 0		1.1102+ 1					0.0000+ 0				6.7988- 3
1.0000- 1 ~ 2.0000- 1	1.1995+ 1	3.3624+ 0		8.3378+ 0					0.0000+ 0				3.7988- 3
2.0000- 1 ~ 4.0000- 1	9.7637+ 0	3.3490+ 0		6.4147+ 0					0.0000+ 0				6.7988- 3
4.0000- 1 ~ 7.0000- 1	8.1688+ 0	3.3260+ 0		5.1638+ 0					0.0000+ 0				6.7988- 3
7.0000- 1 ~ 1.0000+ 0	7.5301+ 0	3.2936+ 0		4.6366+ 0					0.0000+ 0				6.7988- 3
1.0000+ 0 ~ 2.0000+ 0	7.8932+ 0	3.2088+ 0		4.6848+ 0					0.0000+ 0				6.7997- 3
2.0000+ 0 ~ 4.0000+ 0	1.1818+ 1	2.8579+ 0		8.9599+ 0					0.0000+ 0				6.8016- 3
4.0000+ 0 ~ 7.0000+ 0	4.5579+ 2	1.2693+ 1		4.4409+ 2					0.0000+ 0				6.8046- 3
7.0000+ 0 ~ 1.0000+ 1	1.0190+ 1	4.8488+ 0		5.3414+ 0					0.0000+ 0				6.8089- 3
1.0000+ 1 ~ 2.0000+ 1	9.8901+ 0	3.6639+ 0		6.2262+ 0					0.0000+ 0				6.8146- 3
2.0000+ 1 ~ 4.0000+ 1	3.9220+ 1	5.7954+ 0		3.3424+ 1					0.0000+ 0				6.8301- 3
4.0000+ 1 ~ 7.0000+ 1	1.0030+ 1	4.1780+ 0		5.8624+ 0					0.0000+ 0				6.8634- 3
7.0000+ 1 ~ 1.0000+ 2	4.0820+ 0	3.8404+ 0		2.2160- 1					0.0000+ 0				6.8904- 3
1.0000+ 2 ~ 2.0000+ 2	2.6158+ 1	9.3616+ 0		1.6796+ 1					0.0000+ 0				6.9623- 3
2.0000+ 2 ~ 4.0000+ 2	1.4306+ 1	8.7241+ 0		7.5821+ 0					0.0000+ 0				7.1703- 3
4.0000+ 2 ~ 7.0000+ 2	1.1660+ 1	8.0764+ 0		6.7734+ 0					0.0000+ 0				7.6852- 3
7.0000+ 2 ~ 1.0000+ 3	1.0112+ 1	8.1658+ 0		3.9458+ 0					0.0000+ 0				7.9227- 3
1.0000+ 3 ~ 2.0000+ 3	9.0795+ 0	6.3976+ 0		2.6819+ 0					0.0000+ 0				8.8634- 3
2.0000+ 3 ~ 4.0000+ 3	9.2894+ 0	7.2108+ 0		2.0785+ 0					0.0000+ 0				1.1119- 2
4.0000+ 3 ~ 7.0000+ 3	8.6961+ 0	6.7796+ 0		1.8165+ 0					0.0000+ 0				1.5142- 2
7.0000+ 3 ~ 1.0000+ 4	8.0248+ 0	8.5254+ 0		1.4992+ 0					0.0000+ 0				1.9830- 2
1.0000+ 4 ~ 2.0000+ 4	7.7142+ 0	6.5237+ 0		1.1905+ 0					0.0000+ 0				3.0211- 2
2.0000+ 4 ~ 4.0000+ 4	7.8585+ 0	8.8021+ 0		8.5818- 1					0.0000+ 0				5.2962- 2
4.0000+ 4 ~ 7.0000+ 4	7.3801+ 0	6.9817+ 0		6.7835- 1					0.0000+ 0				8.7661- 2
7.0000+ 4 ~ 1.0000+ 5	7.6577+ 0	7.2401+ 0		4.2766- 1					0.0000+ 0				1.2344- 1
1.0000+ 5 ~ 2.0000+ 5	7.7803+ 0	7.4014+ 0	8.4576- 2	2.9352- 1					6.7007-11				1.8901- 1
2.0000+ 5 ~ 4.0000+ 5	7.8021+ 0	6.9401+ 0	4.7985- 1	1.8139- 1					3.4803-10				3.0426- 1
4.0000+ 5 ~ 7.0000+ 5	7.1845+ 0	6.4158+ 0	5.9908- 1	1.5154- 1					9.5879-10				3.8952- 1
7.0000+ 5 ~ 1.0000+ 6	6.6609+ 0	6.6441+ 0	9.0237- 1	1.1363- 1			0.0000+ 0		3.2982- 9				4.8666- 1
1.0000+ 6 ~ 2.0000+ 6	5.7623+ 0	4.2817+ 0	1.3969+ 0	7.2329- 2			1.3327-10		5.9814- 8				6.3914- 1
2.0000+ 6 ~ 4.0000+ 6	4.4066+ 0	2.5602+ 0	1.8014+ 0	3.5448- 2			7.7348- 6		5.3881- 6	5.9788-19			8.1369- 1
4.0000+ 6 ~ 7.0000+ 6	9.8739+ 0	1.9491+ 0	1.9159+ 0	6.1285- 3			4.9262- 4		1.5551- 4	2.0459-12	1.9813-10		8.6006- 1
7.0000+ 6 ~ 1.0000+ 7	4.0888+ 0	2.3207+ 0	1.6980+ 0	1.0487- 3	8.4787- 2		2.1084- 3	1.2661- 6	1.0133- 3	9.4860- 7	4.1366- 7	5.9022-11	7.6088- 1
1.0000+ 7 ~ 2.0000+ 7	4.4222+ 0	2.9137+ 0	3.1607- 1	9.8446- 4	1.0476+ 0	1.0064- 1	1.2946- 2	1.4196- 2	8.2761- 3	1.8170- 3	4.8294- 3	1.1638- 3	8.6266- 1

MATERIAL =4401 CROSS SECTION

^{96}Ru (4401)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.0293+ 0	6.1000+ 0		8.9434- 1			0.0000+ 0		0.0000+ 0				7.0114- 3
1.0000- 2 ~ 2.0000- 2	6.6195+ 0	6.1000+ 0		3.8214- 1			0.0000+ 0		0.0000+ 0				7.0114- 3
2.0000- 2 ~ 4.0000- 2	6.3810+ 0	6.1000+ 0		2.7021- 1			0.0000+ 0		0.0000+ 0				7.0114- 3
4.0000- 2 ~ 7.0000- 2	6.2226+ 0	6.1000+ 0		1.9858- 1			0.0000+ 0		0.0000+ 0				7.0114- 3
7.0000- 2 ~ 1.0000- 1	6.2839+ 0	6.1000+ 0		1.5884- 1			0.0000+ 0		0.0000+ 0				7.0114- 3
1.0000- 1 ~ 2.0000- 1	5.2360+ 0	5.1000+ 0		1.2064- 1			0.0000+ 0		0.0000+ 0				7.0114- 3
2.0000- 1 ~ 4.0000- 1	6.1894+ 0	5.1000+ 0		8.5447- 2			0.0000+ 0		0.0000+ 0				7.0114- 3
4.0000- 1 ~ 7.0000- 1	6.1710+ 0	5.1000+ 0		6.2798- 2			0.0000+ 0		0.0000+ 0				7.0114- 3
7.0000- 1 ~ 1.0000+ 0	6.1684+ 0	5.1000+ 0		5.0229- 2			0.0000+ 0		0.0000+ 0				7.0114- 3
1.0000+ 0 ~ 2.0000+ 0	5.1427+ 0	5.1000+ 0		9.8213- 2			0.0000+ 0		0.0000+ 0				7.0117- 3
2.0000+ 0 ~ 4.0000+ 0	5.1293+ 0	5.1000+ 0		2.7021- 2			0.0000+ 0		0.0000+ 0				7.0123- 3
4.0000+ 0 ~ 7.0000+ 0	5.1253+ 0	5.1000+ 0		1.9858- 2			0.0000+ 0		0.0000+ 0				7.0136- 3
7.0000+ 0 ~ 1.0000+ 1	5.1228+ 0	5.1000+ 0		1.5884- 2			0.0000+ 0		0.0000+ 0				7.0144- 3
1.0000+ 1 ~ 2.0000+ 1	5.1182+ 0	5.1000+ 0		1.2064- 2			0.0000+ 0		0.0000+ 0				7.0160- 3
2.0000+ 1 ~ 4.0000+ 1	5.1160+ 0	5.1000+ 0		8.5447- 3			0.0000+ 0		0.0000+ 0				7.0200- 3
4.0000+ 1 ~ 7.0000+ 1	5.1112+ 0	5.1000+ 0		6.2798- 3			0.0000+ 0		0.0000+ 0				7.0464- 3
7.0000+ 1 ~ 1.0000+ 2	5.1085+ 0	5.1000+ 0		5.0230- 3			0.0000+ 0		0.0000+ 0				7.0814- 3
1.0000+ 2 ~ 2.0000+ 2	5.1061+ 0	5.1000+ 0		3.8213- 3			0.0000+ 0		0.0000+ 0				7.1248- 3
2.0000+ 2 ~ 4.0000+ 2	1.5600+ 1	1.2533+ 1		3.2885+ 0			0.0000+ 0		0.0000+ 0				7.2631- 3
4.0000+ 2 ~ 7.0000+ 2	1.3005+ 1	1.0884+ 1		2.1109+ 0			0.0000+ 0		0.0000+ 0				7.5974- 3
7.0000+ 2 ~ 1.0000+ 3	1.1474+ 1	9.9980+ 0		1.5780+ 0			0.0000+ 0		0.0000+ 0				7.8710- 3
1.0000+ 3 ~ 2.0000+ 3	1.0043+ 1	8.8704+ 0		1.1540+ 0			0.0000+ 0		0.0000+ 0				8.4720- 3
2.0000+ 3 ~ 4.0000+ 3	8.7876+ 0	7.5341+ 0		8.6336- 1			0.0000+ 0		0.0000+ 0				1.0677- 2
4.0000+ 3 ~ 7.0000+ 3	8.0568+ 0	7.3869+ 0		6.6990- 1			0.0000+ 0		0.0000+ 0				1.4299- 2
7.0000+ 3 ~ 1.0000+ 4	7.7201+ 0	7.1838+ 0		5.5834- 1			0.0000+ 0		0.0000+ 0				1.8885- 2
1.0000+ 4 ~ 2.0000+ 4	7.4867+ 0	7.0847+ 0		4.2207- 1			0.0000+ 0		0.0000+ 0				2.8180- 2
2.0000+ 4 ~ 4.0000+ 4	7.4400+ 0	7.1600+ 0		2.8003- 1			0.0000+ 0		0.0000+ 0				4.8835- 2
4.0000+ 4 ~ 7.0000+ 4	7.6884+ 0	7.3807+ 0		1.8767- 1			0.0000+ 0		0.0000+ 0				9.3584- 2
7.0000+ 4 ~ 1.0000+ 5	7.7198+ 0	7.6770+ 0		1.4285- 1			0.0000+ 0		0.0000+ 0				1.1801- 1
1.0000+ 5 ~ 2.0000+ 5	7.7842+ 0	7.8714+ 0		1.1266- 1			2.9898-14		2.9902- 5				1.8333- 1
2.0000+ 5 ~ 4.0000+ 5	7.8081+ 0	7.5041+ 0		1.0371- 1			1.1959-13		1.1981- 4				2.8138- 1
4.0000+ 5 ~ 7.0000+ 5	7.1892+ 0	7.0442+ 0		1.1860- 1			5.7638-12		2.7110- 4				3.6312- 1
7.0000+ 5 ~ 1.0000+ 6	6.6822+ 0	6.3988+ 0	1.4198- 1	1.2076- 1			4.2603- 9		6.3807- 4				4.1087- 1
1.0000+ 6 ~ 2.0000+ 6	5.7524+ 0	4.9042+ 0	7.4057- 1	1.0442- 1			1.0606- 5		2.3203- 3	1.1746-20			4.6588- 1
2.0000+ 6 ~ 4.0000+ 6	4.4067+ 0	2.8107+ 0	1.4699+ 0	8.8601- 2			2.0749- 3		1.5839- 2	1.5244-18			6.4860- 1
4.0000+ 6 ~ 7.0000+ 6	3.8742+ 0	1.6594+ 0	1.9151+ 0	2.5870- 2			2.6779- 2		4.7870- 2	7.2885- 9	4.2034-13		8.8009- 1
7.0000+ 6 ~ 1.0000+ 7	4.0894+ 0	2.1888+ 0	1.7844+ 0	3.7070- 3			7.0074- 2	2.7191- 0	4.3882- 2	2.0066- 4	7.6081- 7	8.6294-21	7.5087- 1
1.0000+ 7 ~ 2.0000+ 7	4.4228+ 0	2.3739+ 0	8.8308- 1	1.2084- 3	8.7247- 1		1.2410- 1	3.0661- 1	3.2101- 2	1.8126- 2	9.1895- 3	3.8880- 4	8.6269- 1

MATERIAL =4402 CROSS SECTION

^{98}Ru (4402)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 7	2.9869+ 1	6.1000+ 0		2.4670+ 1					0.0000+ 0				6.8683- 3
1.0000- 2 ~ 2.0000- 2	1.5727+ 1	5.1000+ 0		1.0542+ 1					0.0000+ 0				
2.0000- 2 ~ 4.0000- 2	1.2514+ 1	5.1000+ 0		7.4539+ 0					0.0000+ 0				6.8683- 3
4.0000- 2 ~ 7.0000- 2	1.0649+ 1	5.1000+ 0		5.4778+ 0					0.0000+ 0				6.8683- 3
7.0000- 2 ~ 1.0000- 1	9.5162+ 0	5.1000+ 0		4.3816+ 0					0.0000+ 0				6.8683- 3
1.0000- 1 ~ 2.0000- 1	8.4923+ 0	5.1000+ 0		3.9333+ 0					0.0000+ 0				6.8683- 3
2.0000- 1 ~ 4.0000- 1	7.4967+ 0	5.1000+ 0		2.3669+ 0					0.0000+ 0				6.8683- 3
4.0000- 1 ~ 7.0000- 1	6.6570+ 0	5.1000+ 0		1.7320+ 0					0.0000+ 0				6.8683- 3
7.0000- 1 ~ 1.0000+ 0	6.5125+ 0	5.1000+ 0		1.3864+ 0					0.0000+ 0				6.8683- 3
1.0000+ 0 ~ 2.0000+ 0	6.1744+ 0	5.1000+ 0		1.0540+ 0					0.0000+ 0				6.8684- 3
2.0000+ 0 ~ 4.0000+ 0	5.8644+ 0	5.1000+ 0		7.4523- 1					0.0000+ 0				6.8691- 3
4.0000+ 0 ~ 7.0000+ 0	5.5555+ 0	5.1000+ 0		5.4788- 1					0.0000+ 0				6.8702- 3
7.0000+ 0 ~ 1.0000+ 1	5.5611+ 0	5.1000+ 0		4.3808- 1					0.0000+ 0				6.8711- 3
1.0000+ 1 ~ 2.0000+ 1	5.4453+ 0	5.1000+ 0		3.3325- 1					0.0000+ 0				6.8748- 3
2.0000+ 1 ~ 4.0000+ 1	5.3574+ 0	5.1000+ 0		2.3664- 1					0.0000+ 0				6.8822- 3
4.0000+ 1 ~ 7.0000+ 1	5.2980+ 0	5.1000+ 0		1.7317- 1					0.0000+ 0				6.9011- 3
7.0000+ 1 ~ 1.0000+ 2	5.2555+ 0	5.1000+ 0		1.3851- 1					0.0000+ 0				6.9166- 3
1.0000+ 2 ~ 2.0000+ 2	1.3554+ 1	1.0825+ 1		2.7293+ 0					0.0000+ 0				6.9709- 3
2.0000+ 2 ~ 4.0000+ 2	1.57[illegible] 1	1.2775+ 1		2.9880+ 0					0.0000+ 0				7.1164- 3
4.0000+ 2 ~ 7.0000+ 2	1.2[illegible] 1	1.1040+ 1		1.8280+ 0					0.0000+ 0				7.4467- 3
7.0000+ 2 ~ 1.0000+ 3	1.1[illegible] 1	9.8942+ 0		1.4443+ 0					0.0000+ 0				7.7160- 3
1.0000+ 3 ~ 2.0000+ 3	1.0010+ 1	8.8380+ 0		1.0719+ 0					0.0000+ 0				8.5142- 3
2.0000+ 3 ~ 4.0000+ 3	8.7564+ 0	7.9803+ 0		7.8718- 1					0.0000+ 0				1.0509- 2
4.0000+ 3 ~ 7.0000+ 3	8.0308+ 0	7.4169+ 0		6.1387- 1					0.0000+ 0				1.4114- 2
7.0000+ 3 ~ 1.0000+ 4	7.8947+ 0	7.1898+ 0		5.0510- 1					0.0000+ 0				1.8361- 2
1.0000+ 4 ~ 2.0000+ 4	7.4565+ 0	7.0868+ 0		3.7890- 1					0.0000+ 0				2.7039- 2
2.0000+ 4 ~ 4.0000+ 4	7.4245+ 0	7.1757+ 0		2.4881- 1					0.0000+ 0				4.9585- 2
4.0000+ 4 ~ 7.0000+ 4	7.5585+ 0	7.3926+ 0		1.6589- 1					0.0000+ 0				8.3342- 2
7.0000+ 4 ~ 1.0000+ 5	7.7139+ 0	7.5878+ 0		1.2627- 1					0.0000+ 0				1.1878- 1
1.0000+ 5 ~ 2.0000+ 5	7.7792+ 0	7.6763+ 0		1.0062- 1					7.7665- 5				1.8312- 1
2.0000+ 5 ~ 4.0000+ 5	7.8094+ 0	7.5086+ 0		9.4672- 2					3.1088- 7				2.8112- 1
4.0000+ 5 ~ 7.0000+ 5	7.1828+ 0	7.0409+ 0	1.4020- 2	1.0767- 1					7.8052- 7				5.8588- 1
7.0000+ 5 ~ 1.0000+ 6	6.6604+ 0	6.0019+ 0	6.0273- 1	7.6300- 2					2.3072- 6				4.2988- 1
1.0000+ 6 ~ 2.0000+ 6	5.7641+ 0	4.6869+ 0	9.8706- 1	7.8596- 2			1.7191-14		1.9139- 6				4.8466- 1
2.0000+ 6 ~ 4.0000+ 6	4.4097+ 0	2.8472+ 0	1.6079+ 0	8.7826- 2			1.1558- 5		4.6105- 4	8.1251-17			5.8592- 1
4.0000+ 6 ~ 7.0000+ 6	3.8742+ 0	1.7902+ 0	2.0421+ 0	3.2651- 2			3.6094- 3		5.2379- 3	3.6782-10	1.8506-19		6.4995- 1
7.0000+ 6 ~ 1.0000+ 7	4.0801+ 0	2.1234+ 0	1.8745+ 0	7.5403- 3			2.0927- 2	7.3266-10	1.2416- 2	8.3366- 6	1.1366- 7		7.6066- 1
1.0000+ 7 ~ 2.0000+ 7	4.4226+ 0	2.5817+ 0	8.1193- 1	1.6866- 3	8.1798- 1	6.8800- 3	6.1680- 2	1.1072- 1	1.4897- 2	1.8964- 2	4.3805- 3	6.0063- 4	8.6268- 1

MATERIAL =4403 CROSS SECTION

^{99}Ru (4403)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.8197+ 1	3.6762+ 0		2.2621+ 1			0.0000+ 0		0.0000+ 0				6.7988- 3
1.0000- 2 ~ 2.0000- 2	1.3317+ 1	3.6759+ 0		9.6407+ 0			0.0000+ 0		0.0000+ 0				
2.0000- 2 ~ 4.0000- 2	1.0623+ 1	3.6756+ 0		6.8478+ 0			0.0000+ 0		0.0000+ 0				6.7988- 3
4.0000- 2 ~ 7.0000- 2	8.7105+ 0	3.6748+ 0		5.0358+ 0			0.0000+ 0		0.0000+ 0				6.7988- 3
7.0000- 2 ~ 1.0000- 1	7.7264+ 0	3.6739+ 0		4.0626+ 0			0.0000+ 0		0.0000+ 0				6.7988- 3
1.0000- 1 ~ 2.0000- 1	6.7870+ 0	3.6719+ 0		3.1151+ 0			0.0000+ 0		0.0000+ 0				6.7988- 3
2.0000- 1 ~ 4.0000- 1	5.8191+ 0	3.6673+ 0		2.2518+ 0			0.0000+ 0		0.0000+ 0				6.7988- 3
4.0000- 1 ~ 7.0000- 1	5.3628+ 0	3.6584+ 0		1.7295+ 0			0.0000+ 0		0.0000+ 0				6.7988- 3
7.0000- 1 ~ 1.0000+ 0	5.0990+ 0	3.6496+ 0		1.4496+ 0			0.0000+ 0		0.0000+ 0				6.7988- 3
1.0000+ 0 ~ 2.0000+ 0	4.8630+ 0	3.8280+ 0		1.2378+ 0			0.0000+ 0		0.0000+ 0				6.7997- 3
2.0000+ 0 ~ 4.0000+ 0	4.7874+ 0	3.8592+ 0		1.2092+ 0			0.0000+ 0		0.0000+ 0				6.8016- 3
4.0000+ 0 ~ 7.0000+ 0	6.4064+ 0	3.5621+ 0		2.0485+ 0			0.0000+ 0		0.0000+ 0				6.8044- 3
7.0000+ 0 ~ 1.0000+ 1	1.0020+ 2	3.2752+ 0		9.8929+ 1			0.0000+ 0		0.0000+ 0				6.8087- 3
1.0000+ 1 ~ 2.0000+ 1	6.1624+ 1	6.8325+ 0		5.5992+ 1			0.0000+ 0		0.0000+ 0				6.8143- 3
2.0000+ 1 ~ 4.0000+ 1	6.2442+ 1	6.8269+ 0		4.6816+ 1			0.0000+ 0		0.0000+ 0				6.8224- 3
4.0000+ 1 ~ 7.0000+ 1	2.1435+ 1	6.4033+ 0		1.6033+ 1			0.0000+ 0		0.0000+ 0				6.8521- 3
7.0000+ 1 ~ 1.0000+ 2	8.0017+ 0	3.7297+ 0		4.2720+ 0			0.0000+ 0		0.0000+ 0				6.8887- 3
1.0000+ 2 ~ 2.0000+ 2	3.9122+ 1	1.8890+ 1		2.2232+ 1			0.0000+ 0		0.0000+ 0				6.9793- 3
2.0000+ 2 ~ 4.0000+ 2	1.1604+ 1	8.8824+ 0		5.1216+ 0			0.0000+ 0		0.0000+ 0				7.1852- 3
4.0000+ 2 ~ 7.0000+ 2	1.8818+ 1	1.0209+ 1		8.6093+ 0			0.0000+ 0		0.0000+ 0				7.6787- 3
7.0000+ 2 ~ 1.0000+ 3	1.8835+ 1	1.2826+ 1		6.0085+ 0			0.0000+ 0		0.0000+ 0				7.8116- 3
1.0000+ 3 ~ 2.0000+ 3	1.0069+ 1	7.1[illegible]4+ 0		2.8892+ 0			0.0000+ 0		0.0000+ 0				8.8368- 3
2.0000+ 3 ~ 4.0000+ 3	8.8077+ 0	6.7881+ 0		2.0390+ 0			0.0000+ 0		0.0000+ 0				1.1081- 2
4.0000+ 3 ~ 7.0000+ 3	8.0733+ 0	5.6101+ 0		1.6531+ 0			0.0000+ 0		0.0000+ 0				1.5099- 2
7.0000+ 3 ~ 1.0000+ 4	7.7338+ 0	5.4197+ 0		1.3180+ 0			0.0000+ 0		0.0000+ 0				1.9778- 2
1.0000+ 4 ~ 2.0000+ 4	7.4990+ 0	5.4363+ 0		1.0827+ 0			0.0000+ 0		0.0000+ 0				3.0118- 2
2.0000+ 4 ~ 4.0000+ 4	7.4480+ 0	5.8783+ 0		7.8948- 1			0.0000+ 0		0.0000+ 0				5.5967- 2
4.0000+ 4 ~ 7.0000+ 4	7.5704+ 0	7.0298+ 0		5.4068- 1			0.0000+ 0		0.0000+ 0				9.7384- 2
7.0000+ 4 ~ 1.0000+ 5	7.7028+ 0	7.2881+ 0	1.1297- 2	4.0318- 1			0.0000+ 0		0.0000+ 0				1.2376- 1
1.0000+ 5 ~ 2.0000+ 5	7.7778+ 0	7.2408+ 0	2.7119- 1	2.6416- 1			1.5428-14		2.8737- 5				1.8434- 1
2.0000+ 5 ~ 4.0000+ 5	7.8107+ 0	6.9254+ 0	6.1138- 1	1.7439- 1			6.1705-14		1.1888- 4				3.0823- 1
4.0000+ 5 ~ 7.0000+ 5	7.1891+ 0	5.8930+ 0	1.0724+ 0	1.0267- 1			1.6257-12		2.3324- 4				4.7840- 1
7.0000+ 5 ~ 1.0000- 6	6.8404+ 0	5.2436+ 0	1.5464+ 0	7.1090- 2			1.0859- 9		2.8657- 4				6.0000- 1
1.0000+ 6 ~ 2.0000+ 6	8.7648+ 0	4.2387+ 0	1.4606+ 0	6.6284- 2			1.3832- 6		4.4449- 4				6.4324- 1
2.0000+ 6 ~ 4.0000+ 6	4.4085+ 0	2.5623+ 0	1.7842+ 0	2.6210- 2			2.7766- 4		1.4470- 3	1.1828-17			6.1157- 1
4.0000+ 6 ~ 7.0000+ 6	3.8740+ 0	1.9452+ 0	1.9188+ 0	4.4654- 3			2.5374- 3		2.9506- 3	5.2598-11			6.6038- 1
7.0000+ 6 ~ 1.0000+ 7	4.0888+ 0	2.3082+ 0	1.3562+ 0	1.2736- 3	4.1133- 1		7.4336- 3	8.6364-12	3.3173- 3	2.7718- 6	7.4484- 8	4.8978-13	7.6088- 1
1.0000+ 7 ~ 2.0000+ 7	4.4223+ 0	2.6988+ 0	2.7988- 1	1.0888- 3	1.3427+ 0	1.4792- 2	4.5944- 2	1.4018- 2	1.1012- 2	8.3128- 3	7.0981- 3	8.5945- 4	8.6268- 1

MATERIAL =4404 CROSS SECTION ^{100}Ru (4404)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	2.2009+ 1	6.4665+ 0		1.6544+ 1					0.0000+ 0				6.7309- 3
1.0000- 2 ~ 2.0000- 2	1.3107+ 1	6.4663+ 0		6.6417+ 0					0.0000+ 0				6.7309- 3
2.0000- 2 ~ 4.0000- 2	1.1153+ 1	6.4661+ 0		4.5981+ 0					0.0000+ 0				6.7309- 3
4.0000- 2 ~ 7.0000- 2	9.9190+ 0	6.4647+ 0		3.4544+ 0					0.0000+ 0				6.7309- 3
7.0000- 2 ~ 1.0000- 1	9.2247+ 0	6.4642+ 0		2.7606+ 0					0.0000+ 0				6.7309- 3
1.0000- 1 ~ 2.0000- 1	8.5591+ 0	8.4632+ 0		2.0959+ 0					0.0000+ 0				6.7309- 3
2.0000- 1 ~ 4.0000- 1	7.9405+ 0	6.4608+ 0		1.4797+ 0					0.0000+ 0				6.7309- 3
4.0000- 1 ~ 7.0000- 1	7.5421+ 0	6.4589+ 0		1.0852+ 0					0.0000+ 0				6.7309- 3
7.0000- 1 ~ 1.0000+ 0	7.3181+ 0	6.4622+ 0		8.6686- 1					0.0000+ 0				6.7309- 3
1.0000+ 0 ~ 2.0000+ 0	7.0962+ 0	6.4421+ 0		6.5407- 1					0.0000+ 0				6.7311- 3
2.0000+ 0 ~ 4.0000+ 0	6.8746+ 0	6.4192+ 0		4.5648- 1					0.0000+ 0				6.7317- 3
4.0000+ 0 ~ 7.0000+ 0	6.7081+ 0	6.3817+ 0		3.2636- 1					0.0000+ 0				6.7327- 3
7.0000+ 0 ~ 1.0000+ 1	6.5909+ 0	6.3380+ 0		2.5287- 1					0.0000+ 0				6.7355- 3
1.0000+ 1 ~ 2.0000+ 1	6.4296+ 0	6.2484+ 0		1.8117- 1					0.0000+ 0				6.7368- 3
2.0000+ 1 ~ 4.0000+ 1	6.1739+ 0	6.0620+ 0		1.1193- 1					0.0000+ 0				6.7441- 3
4.0000+ 1 ~ 7.0000+ 1	5.8643+ 0	5.7364+ 0		8.7631- 2					0.0000+ 0				6.7624- 3
7.0000+ 1 ~ 1.0000+ 2	5.5581+ 0	5.5097+ 0		4.8403- 2					0.0000+ 0				6.7779- 3
1.0000+ 2 ~ 2.0000+ 2	7.8278+ 0	5.3440+ 0		2.4838+ 0					0.0000+ 0				6.8384- 3
2.0000+ 2 ~ 4.0000+ 2	7.0988+ 0	4.9344+ 0		2.1644+ 0					0.0000+ 0				6.9727- 3
4.0000+ 2 ~ 7.0000+ 2	2.2099+ 1	1.7371+ 1		4.7278+ 0					0.0000+ 0				7.3006- 3
7.0000+ 2 ~ 1.0000+ 3	5.0000+ 0	4.9452+ 0		5.4876- 2					0.0000+ 0				7.5592- 3
1.0000+ 3 ~ 2.0000+ 3	1.0766+ 1	9.6067+ 0		1.1688+ 0					0.0000+ 0				8.3686- 3
2.0000+ 3 ~ 4.0000+ 3	8.7495+ 0	8.0510+ 0		6.9268- 1					0.0000+ 0				1.0340- 2
4.0000+ 3 ~ 7.0000+ 3	7.9863+ 0	7.4432+ 0		5.4204- 1					0.0000+ 0				1.3923- 2
7.0000+ 3 ~ 1.0000+ 4	1.4079+ 1	1.3567+ 1		5.2196- 1					0.0000+ 0				1.8147- 2
1.0000+ 4 ~ 2.0000+ 4	7.0300+ 0	6.7136+ 0		3.1636- 1					0.0000+ 0				2.7692- 2
2.0000+ 4 ~ 4.0000+ 4	6.7434+ 0	6.5297+ 0		2.1383- 1					0.0000+ 0				4.9306- 2
4.0000+ 4 ~ 7.0000+ 4	7.1850+ 0	7.0426+ 0		1.4251- 1					0.0000+ 0				8.3066- 2
7.0000+ 4 ~ 1.0000+ 5	7.5969+ 0	7.4881+ 0		1.0881- 1					0.0000+ 0				1.1850- 1
1.0000+ 5 ~ 2.0000+ 5	7.7762+ 0	7.6879+ 0		8.7168- 2					8.9603-11				1.8283- 1
2.0000+ 5 ~ 4.0000+ 5	7.5997+ 0	7.5187+ 0		8.2814- 2					2.7841-10				2.8072- 1
4.0000+ 5 ~ 7.0000+ 5	7.1809+ 0	6.9334+ 0	1.4152- 1	9.1685- 2					8.4328-10				3.6950- 1
7.0000+ 5 ~ 1.0000+ 6	6.6696+ 0	6.9296+ 0	6.7481- 1	5.4664- 2					4.3801- 9				4.3824- 1
1.0000+ 6 ~ 2.0000+ 6	5.7546+ 0	4.6890+ 0	1.1071+ 0	5.7664- 2					1.2894- 7				4.8144- 1
2.0000+ 6 ~ 4.0000+ 6	4.4103+ 0	2.5154+ 0	1.8417+ 0	4.4599- 2			3.4017-11		1.8419- 5	2.5203-18			5.8240- 1
4.0000+ 6 ~ 7.0000+ 6	3.8742+ 0	1.7103+ 0	2.1455+ 0	1.7120- 2			4.7523- 5		5.6353- 4	6.3828-12			6.6427- 1
7.0000+ 6 ~ 1.0000+ 7	4.0887+ 0	2.0564+ 0	2.0263+ 0	3.7197- 3	5.4299- 4		1.1864- 3	4.6190-20	2.4432- 3	7.3166- 6	4.6639-10		7.6069- 1
1.0000+ 7 ~ 2.0000+ 7	4.4222+ 0	2.4725+ 0	6.2706- 1	1.1446- 3	1.2360+ 0	4.7179- 2	1.3170- 2	8.1824- 3	7.5266- 3	5.6471- 3	2.1019- 3	3.8484- 4	8.5267- 1

MATERIAL =4405 CROSS SECTION ^{101}Ru (4405)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	1.4116+ 1	3.7410+ 0		1.0375+ 1					0.0000+ 0				8.8641- 3
1.0000- 2 ~ 2.0000- 2	8.1790+ 0	3.7409+ 0		4.4381+ 0					0.0000+ 0				8.8641- 3
2.0000- 2 ~ 4.0000- 2	6.8832+ 0	3.7407+ 0		3.1426+ 0					0.0000+ 0				8.8641- 3
4.0000- 2 ~ 7.0000- 2	5.0561+ 0	3.7404+ 0		2.3157+ 0					0.0000+ 0				8.8641- 3
7.0000- 2 ~ 1.0000- 1	4.5984+ 0	3.7400+ 0		1.8584+ 0					0.0000+ 0				8.8641- 3
1.0000- 1 ~ 2.0000- 1	5.1574+ 0	3.7392+ 0		1.4181+ 0					0.0000+ 0				8.8641- 3
2.0000- 1 ~ 4.0000- 1	4.7642+ 0	3.7374+ 0		1.0167+ 0					0.0000+ 0				8.8641- 3
4.0000- 1 ~ 7.0000- 1	4.4980+ 0	3.7344+ 0		7.6361- 1					0.0000+ 0				8.8641- 3
7.0000- 1 ~ 1.0000+ 0	4.3598+ 0	3.7306+ 0		6.2699- 1					0.0000+ 0				8.8641- 3
1.0000+ 0 ~ 2.0000+ 0	4.2299+ 0	3.7220+ 0		5.0792- 1					0.0000+ 0				8.8651- 3
2.0000+ 0 ~ 4.0000+ 0	4.1208+ 0	3.6599+ 0		4.2091- 1					0.0000+ 0				8.8679- 3
4.0000+ 0 ~ 7.0000+ 0	4.0854+ 0	3.5534+ 0		4.3195- 1					0.0000+ 0				8.8707- 3
7.0000+ 0 ~ 1.0000+ 1	4.1864+ 0	3.5690+ 0		6.1644- 1					0.0000+ 0				8.8754- 3
1.0000+ 1 ~ 2.0000+ 1	5.9401+ 1	4.5768+ 0		5.4624+ 1					0.0000+ 0				8.8821- 3
2.0000+ 1 ~ 4.0000+ 1	4.4876+ 0	3.4926+ 0		9.9466- 1					0.0000+ 0				8.8986- 3
4.0000+ 1 ~ 7.0000+ 1	6.8014+ 1	8.7879+ 0		6.8228+ 1					0.0000+ 0				8.7382- 3
7.0000+ 1 ~ 1.0000+ 2	6.0809+ 0	4.3383+ 0		1.7420+ 0					0.0000+ 0				8.7660- 3
1.0000+ 2 ~ 2.0000+ 2	1.5531+ 1	5.7211+ 0		9.8099+ 0					0.0000+ 0				8.8550- 3
2.0000+ 2 ~ 4.0000+ 2	2.4012+ 1	1.2271+ 1		1.1741+ 1					0.0000+ 0				7.0856- 3
4.0000+ 2 ~ 7.0000+ 2	2.0736+ 1	1.1284+ 1		9.4726+ 0					0.0000+ 0				7.8021- 3
7.0000+ 2 ~ 1.0000+ 3	1.4455+ 1	9.3633+ 0		5.0920+ 0					0.0000+ 0				7.8868- 3
1.0000+ 3 ~ 2.0000+ 3	1.0834+ 1	7.1669+ 0		3.6868+ 0					0.0000+ 0				8.8226- 3
2.0000+ 3 ~ 4.0000+ 3	8.5832+ 0	5.8977+ 0		2.5654+ 0					0.0000+ 0				1.1188- 2
4.0000+ 3 ~ 7.0000+ 3	7.8521+ 0	5.6419+ 0		2.0103+ 0					0.0000+ 0				1.6300- 2
7.0000+ 3 ~ 1.0000+ 4	7.2278+ 0	5.4726+ 0		1.7548+ 0					0.0000+ 0				2.0187- 2
1.0000+ 4 ~ 2.0000+ 4	6.9800+ 0	5.5686+ 0		1.3934+ 0					0.0000+ 0				3.0827- 2
2.0000+ 4 ~ 4.0000+ 4	7.0151+ 0	5.9941+ 0		1.0210+ 0					0.0000+ 0				6.4180- 2
4.0000+ 4 ~ 7.0000+ 4	7.3024+ 0	6.6869+ 0		7.1654- 1					0.0000+ 0				8.8306- 2
7.0000+ 4 ~ 1.0000+ 5	7.8172+ 0	7.0797+ 0		5.3744- 1					0.0000+ 0				1.2564- 1
1.0000+ 5 ~ 2.0000+ 5	7.7767+ 0	7.2762+ 0	1.1092- 1	3.8654- 1					3.2910- 7				1.3297- 1
2.0000+ 5 ~ 4.0000+ 5	7.6076+ 0	6.8842+ 0	5.0067- 1	2.4126- 1					1.3184- 6				3.0889- 1
4.0000+ 5 ~ 7.0000+ 5	7.1875+ 0	5.8170+ 0	1.2214+ 0	1.2065- 1					2.8498- 6				4.4123- 1
7.0000+ 5 ~ 1.0000+ 6	6.6699+ 0	5.0409+ 0	1.6476+ 0	7.1308- 2					3.4707- 6				6.1982- 1
1.0000+ 6 ~ 2.0000+ 6	5.7534+ 0	4.0421+ 0	1.6498+ 0	6.1193- 2			1.0187-13		9.8180- 6				6.6906- 1
2.0000+ 6 ~ 4.0000+ 6	4.4094+ 0	2.8041+ 0	1.7149+ 0	7.9857- 2			1.5329- 6		7.2377- 5	6.0219-19			8.0486- 1
4.0000+ 6 ~ 7.0000+ 6	3.8741+ 0	1.9477+ 0	1.9168+ 0	9.4572- 3			1.9781- 4		3.3456- 4	1.6591-12			8.6050- 1
7.0000+ 6 ~ 1.0000+ 7	4.0886+ 0	2.3061+ 0	9.3881- 1	1.5261- 3	8.3883- 1		1.5962- 3	1.6138-20	5.8008- 4	2.1676- 7	1.0559- 9	2.7738-14	7.8084- 1
1.0000+ 7 ~ 2.0000+ 7	4.4221+ 0	2.7202+ 0	1.6408- 1	1.0676- 3	1.4237+ 0	7.2447- 2	2.4262- 2	3.4888- 3	6.2684- 3	2.3807- 3	3.7484- 3	8.0868- 4	8.5267- 1

^{102}Ru (4406)

MATERIAL =4406

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	9.3662+ 0	6.6616+ 0		3.8046+ 0					0.0000+ 0				6.6988- 3
1.0000- 2 ~ 2.0000- 2	7.1871+ 0	6.6616+ 0		1.6266+ 0					0.0000+ 0				6.6988- 3
2.0000- 2 ~ 4.0000- 2	6.7130+ 0	6.6614+ 0		1.1617+ 0					0.0000+ 0				6.6988- 3
4.0000- 2 ~ 7.0000- 2	8.4047+ 0	6.6611+ 0		8.4365- 1					0.0000+ 0				6.6988- 3
7.0000- 2 ~ 1.0000- 1	6.2361+ 0	6.6608+ 0		8.7626- 1					0.0000+ 0				6.6988- 3
1.0000- 1 ~ 2.0000- 1	6.0739+ 0	5.6602+ 0		5.1377- 1					0.0000+ 0				6.6988- 3
2.0000- 1 ~ 4.0000- 1	6.9208+ 0	6.6687+ 0		3.6215- 1					0.0000+ 0				6.6988- 3
4.0000- 1 ~ 7.0000- 1	5.8216+ 0	5.5681+ 0		2.6548- 1					0.0000+ 0				6.6988- 3
7.0000- 1 ~ 1.0000+ 0	6.7646+ 0	6.6631+ 0		2.1142- 1					0.0000+ 0				6.6988- 3
1.0000+ 0 ~ 2.0000+ 0	5.7066+ 0	5.5487+ 0		1.5995- 1					0.0000+ 0				6.6990- 3
2.0000+ 0 ~ 4.0000+ 0	6.6437+ 0	6.6320+ 0		1.1169- 1					0.0000+ 0				6.6996- 3
4.0000+ 0 ~ 7.0000+ 0	5.5910+ 0	5.5082+ 0		8.2794- 2					0.0000+ 0				6.6005- 3
7.0000+ 0 ~ 1.0000+ 1	6.7171+ 0	5.4808+ 0		1.2363+ 0					0.0000+ 0				6.6013- 3
1.0000+ 1 ~ 2.0000+ 1	5.5920+ 0	5.4252+ 0		1.6679- 1					0.0000+ 0				6.6045- 3
2.0000+ 1 ~ 4.0000+ 1	6.3462+ 0	6.3133+ 0		3.1937- 2					0.0000+ 0				6.6117- 3
4.0000+ 1 ~ 7.0000+ 1	5.5058+ 0	6.1644+ 0		3.4136- 1					0.0000+ 0				6.6287- 3
7.0000+ 1 ~ 1.0000+ 2	5.0383+ 0	5.0271+ 0		9.1819- 3					0.0000+ 0				6.6444- 3
1.0000+ 2 ~ 2.0000+ 2	5.0085+ 0	4.8306+ 0		1.7796- 1					0.0000+ 0				6.7049- 3
2.0000+ 2 ~ 4.0000+ 2	4.6130+ 0	4.5628+ 0		5.0324- 2					0.0000+ 0				6.8383- 3
4.0000+ 2 ~ 7.0000+ 2	5.1977+ 0	4.4438+ 0		7.5387- 1					0.0000+ 0				7.1646- 3
7.0000+ 2 ~ 1.0000+ 3	4.9831+ 0	4.9372+ 0		6.4583- 1					0.0000+ 0				7.4323- 3
1.0000+ 3 ~ 2.0000+ 3	8.5129+ 0	7.4092+ 0		1.1038+ 0					0.0000+ 0				8.2207- 3
2.0000+ 3 ~ 4.0000+ 3	9.8385+ 0	8.9231+ 0		7.1537- 1					0.0000+ 0				1.0196- 2
4.0000+ 3 ~ 7.0000+ 3	9.5013+ 0	9.0030+ 0		4.9834- 1					0.0000+ 0				1.3769- 2
7.0000+ 3 ~ 1.0000+ 4	8.2965+ 0	7.9158+ 0		3.8083- 1					0.0000+ 0				1.7986- 2
1.0000+ 4 ~ 2.0000+ 4	7.4689+ 0	7.1465+ 0		3.1241- 1					0.0000+ 0				2.7610- 2
2.0000+ 4 ~ 4.0000+ 4	7.1604+ 0	6.9652+ 0		1.9721- 1					0.0000+ 0				4.8128- 2
4.0000+ 4 ~ 7.0000+ 4	7.3986+ 0	7.2692+ 0		1.3023- 1					0.0000+ 0				8.2880- 2
7.0000+ 4 ~ 1.0000+ 5	7.6428+ 0	7.5425+ 0		1.0004- 1					0.0000+ 0				1.1835- 1
1.0000+ 5 ~ 2.0000+ 5	7.7719+ 0	7.6912+ 0		8.0697- 2					8.6036-16				1.6268- 1
2.0000+ 5 ~ 4.0000+ 5	7.5901+ 0	7.5215+ 0		7.6888- 2					5.4414-14				2.8208- 1
4.0000+ 5 ~ 7.0000+ 5	7.1579+ 0	6.8168+ 0	2.7495- 1	6.1771- 2					9.8821-14				3.7493- 1
7.0000+ 5 ~ 1.0000+ 6	6.6606+ 0	6.8473+ 0	7.6648- 1	4.6292- 2					4.3240-13				4.4177- 1
1.0000+ 6 ~ 2.0000+ 6	6.7643+ 0	4.4204+ 0	1.2949+ 0	3.7769- 2					3.1247-11				6.0622- 1
2.0000+ 6 ~ 4.0000+ 6	4.4103+ 0	2.4421+ 0	1.9399+ 0	2.6068- 2					1.1050- 7	3.0080-21			6.8837- 1
4.0000+ 6 ~ 7.0000+ 6	3.8739+ 0	1.8265+ 0	2.2398+ 0	7.4107- 3			4.7011- 7		2.6217- 5	6.7929-14			8.6871- 1
7.0000+ 6 ~ 1.0000+ 7	4.0663+ 0	1.9898+ 0	2.0663+ 0	1.1097- 3	3.1260- 2		1.9136- 4		2.7106- 4	1.1263- 7	2.8121-13		7.5074- 1
1.0000+ 7 ~ 2.0000+ 7	4.4218+ 0	2.3796+ 0	6.3246- 1	9.7703- 4	1.2461+ 0	1.3179- 1	1.9500- 2	1.7023- 3	6.4734- 3	1.6942- 3	1.3089- 3	2.4302- 4	8.6267- 1

^{103}Ru (4407)

MATERIAL =4407

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.9859+ 1	6.1000+ 0		2.4670+ 1					0.0000+ 0				6.6346- 3
1.0000- 2 ~ 2.0000- 2	1.5727+ 1	6.1000+ 0		1.0642+ 1					0.0000+ 0				6.6346- 3
2.0000- 2 ~ 4.0000- 2	1.2693+ 1	6.1000+ 0		7.4640+ 0					0.0000+ 0				6.6346- 3
4.0000- 2 ~ 7.0000- 2	1.0604+ 1	5.1000+ 0		5.4760+ 0					0.0000+ 0				6.6346- 3
7.0000- 2 ~ 1.0000- 1	9.5201+ 0	6.1000+ 0		4.3810+ 0					0.0000+ 0				6.6346- 3
1.0000- 1 ~ 2.0000- 1	8.4588+ 0	5.1000+ 0		3.3335+ 0					0.0000+ 0				6.6346- 3
2.0000- 1 ~ 4.0000- 1	7.4767+ 0	6.1000+ 0		2.3672+ 0					0.0000+ 0				6.6346- 3
4.0000- 1 ~ 7.0000- 1	6.6452+ 0	6.1000+ 0		1.7325+ 0					0.0000+ 0				6.6346- 3
7.0000- 1 ~ 1.0000+ 0	6.6031+ 0	6.1000+ 0		1.3868+ 0					0.0000+ 0				6.6346- 3
1.0000+ 0 ~ 2.0000+ 0	8.1861+ 0	5.1000+ 0		1.0642+ 0					0.0000+ 0				6.6364- 3
2.0000+ 0 ~ 4.0000+ 0	5.8640+ 0	6.1000+ 0		7.4640- 1					0.0000+ 0				6.6372- 3
4.0000+ 0 ~ 7.0000+ 0	5.8825+ 0	5.1000+ 0		5.4781- 1					0.0000+ 0				6.6401- 3
7.0000+ 0 ~ 1.0000+ 1	5.6572+ 0	6.1000+ 0		4.3818- 1					0.0000+ 0				6.6424- 3
1.0000+ 1 ~ 2.0000+ 1	4.7354+ 1	8.2816+ 0		3.8052+ 1					0.0000+ 0				6.6500- 3
2.0000+ 1 ~ 4.0000+ 1	3.8896+ 1	9.3910+ 0		2.9606+ 1					0.0000+ 0				6.6661- 3
4.0000+ 1 ~ 7.0000+ 1	2.8637+ 1	8.9804+ 0		2.0667+ 1					0.0000+ 0				6.6970- 3
7.0000+ 1 ~ 1.0000+ 2	2.4537+ 1	8.8675+ 0		1.5878+ 1					0.0000+ 0				6.7246- 3
1.0000+ 2 ~ 2.0000+ 2	1.9884+ 1	8.2207+ 0		1.1444+ 1					0.0000+ 0				6.7154- 3
2.0000+ 2 ~ 4.0000+ 2	1.5190+ 1	7.8680+ 0		7.5241+ 0					0.0000+ 0				6.9018- 3
4.0000+ 2 ~ 7.0000+ 2	1.2366+ 1	7.1720+ 0		5.1927+ 0					0.0000+ 0				7.3146- 3
7.0000+ 2 ~ 1.0000+ 3	1.0827+ 1	8.8257+ 0		4.0017+ 0					0.0000+ 0				7.8508- 3
1.0000+ 3 ~ 2.0000+ 3	9.4160+ 0	6.4269+ 0		2.9882+ 0					0.0000+ 0				8.5796- 3
2.0000+ 3 ~ 4.0000+ 3	8.1671+ 0	5.9885+ 0	8.8018- 2	2.1031+ 0					0.0000+ 0				1.0969- 2
4.0000+ 3 ~ 7.0000+ 3	7.5090+ 0	5.7053+ 0	2.2201- 1	1.5830+ 0					0.0000+ 0				1.4010- 2
7.0000+ 3 ~ 1.0000+ 4	7.2128+ 0	5.8588+ 0	2.8193- 1	1.2947+ 0					0.0000+ 0				1.8836- 2
1.0000+ 4 ~ 2.0000+ 4	7.0374+ 0	5.7382+ 0	3.3868- 1	8.8125- 1					0.0000+ 0				3.0604- 2
2.0000+ 4 ~ 4.0000+ 4	7.1209+ 0	6.0244+ 0	4.8280- 1	6.1490- 1					0.0000+ 0				6.8157- 2
4.0000+ 4 ~ 7.0000+ 4	7.3898+ 0	6.3691+ 0	6.3469- 1	3.0990- 1					0.0000+ 0				9.3684- 2
7.0000+ 4 ~ 1.0000+ 5	7.6609+ 0	6.6230+ 0	7.3913- 1	2.9046- 1					0.0000+ 0				1.3414- 1
1.0000+ 5 ~ 2.0000+ 5	7.7726+ 0	6.8864+ 0	8.9616- 1	1.9147- 1					1.3642-10				2.0947- 1
2.0000+ 5 ~ 4.0000+ 5	7.8046+ 0	6.1731+ 0	1.5308+ 0	9.4852- 2					6.4588-10				3.4265- 1
4.0000+ 5 ~ 7.0000+ 5	7.1805+ 0	5.4665+ 0	1.6448+ 0	4.8312- 2					1.2810- 9				4.8748- 1
7.0000+ 5 ~ 1.0000+ 6	6.5675+ 0	4.8780+ 0	1.7619+ 0	2.9386- 2					2.8647- 9				6.3884- 1
1.0000+ 6 ~ 2.0000+ 6	5.7523+ 0	3.8898+ 0	1.8430+ 0	1.8887- 2					2.3860- 8				8.9147- 1
2.0000+ 6 ~ 4.0000+ 6	4.4085+ 0	2.4707+ 0	1.9240+ 0	9.0803- 3			8.7948- 9		7.4671- 7				1.3434- 2
4.0000+ 6 ~ 7.0000+ 6	3.8737+ 0	1.8814+ 0	1.8675+ 0	2.2088- 3	4.1066- 2		1.0741- 5		9.8709- 8	1.7247-10			8.8184- 1
7.0000+ 6 ~ 1.0000+ 7	4.0880+ 0	2.2965+ 0	0.7140- 1	9.4989- 4	1.1181+ 0		2.7036- 4		7.6444- 8	7.4206- 9	3.2124-12	4.6188-10	7.6073- 1
1.0000+ 7 ~ 2.0000+ 7	4.4216+ 0	2.7324+ 0	1.4929- 1	1.0829- 3	1.3740+ 0	1.4090- 1	1.3361- 2	1.7069- 3	7.9860- 7	1.1333- 8	7.8888- 3	8.9489- 4	8.8266- 1

MATERIAL =4408

CROSS SECTION

^{104}Ru (4408)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU BAR
1.0000- 6 ~ 1.0000 2	6.2340+ 0	6.2368+ 0		9.9821- 1					0.0000+ 0				6.4717- 3
1.0000 2 ~ 2.0000 2	6.6623+ 0	6.2367+ 0		4.2667- 1					0.0000+ 0				6.4717- 3
2.0000- 2 ~ 4.0000 2	6.6376+ 0	6.2367+ 0		3.0196- 1					0.0000+ 0				6.4717- 3
4.0000- 2 ~ 7.0000- 2	6.4571+ 0	6.2356+ 0		2.2148- 1					0.0000+ 0				6.4717- 3
7.0000- 2 ~ 1.0000- 1	6.4128+ 0	6.2366+ 0		1.7724- 1					0.0000+ 0				6.4717- 3
1.0000- 1 ~ 2.0000- 1	6.3702+ 0	6.2353+ 0		1.3490- 1					0.0000+ 0				6.4717- 3
2.0000- 1 ~ 4.0000- 1	6.3302+ 0	6.2349+ 0		9.6317- 2					0.0000+ 0				6.4717- 3
4.0000- 1 ~ 7.0000- 1	6.3045+ 0	6.2342+ 0		7.0081- 2					0.0000+ 0				6.4717- 3
7.0000- 1 ~ 1.0000+ 0	6.2895+ 0	6.2334+ 0		5.6106- 2					0.0000+ 0				6.4717- 3
1.0000+ 0 ~ 2.0000+ 0	6.2742+ 0	6.2316+ 0		4.2649- 2					0.0000+ 0				6.4719- 3
2.0000+ 0 ~ 4.0000+ 0	6.2674+ 0	6.2273+ 0		3.0150- 2					0.0000+ 0				6.4724- 3
4.0000+ 0 ~ 7.0000+ 0	6.2423+ 0	6.2202+ 0		2.2137- 2					0.0000+ 0				6.4733- 3
7.0000+ 0 ~ 1.0000+ 1	6.2295+ 0	6.2118+ 0		1.7732- 2					0.0000+ 0				6.4741- 3
1.0000+ 1 ~ 2.0000+ 1	6.2070+ 0	6.1935+ 0		1.3520- 2					0.0000+ 0				6.4771- 3
2.0000+ 1 ~ 4.0000+ 1	6.1616+ 0	6.1517+ 0		9.8691- 3					0.0000+ 0				6.4840- 3
4.0000+ 1 ~ 7.0000+ 1	6.6924+ 0	6.0884+ 0		1.6040+ 0					0.0000+ 0				6.6016- 3
7.0000+ 1 ~ 1.0000+ 2	6.0108+ 0	4.9992+ 0		1.1370- 2					0.0000+ 0				6.6159- 3
1.0000+ 2 ~ 2.0000+ 2	4.7803+ 0	4.7810+ 0		7.2843- 3					0.0000+ 0				6.5755- 3
2.0000+ 2 ~ 4.0000+ 2	8.2447+ 0	5.9364+ 0		2.9083+ 0					0.0000+ 0				6.7072- 3
4.0000+ 2 ~ 7.0000+ 2	1.7637+ 1	1.6819+ 1		1.7182+ 0					0.0000+ 0				7.0311- 3
7.0000+ 2 ~ 1.0000+ 3	4.8358+ 0	4.2807+ 0		3.5505- 1					0.0000+ 0				7.2966- 3
1.0000+ 3 ~ 2.0000+ 3	1.2182+ 1	1.0768+ 1		1.4236+ 0					0.0000+ 0				8.0780- 3
2.0000+ 3 ~ 4.0000+ 3	5.8498+ 0	5.5490+ 0		4.9997- 1					0.0000+ 0				1.0046- 2
4.0000+ 3 ~ 7.0000+ 3	3.1936+ 1	3.1392+ 1		6.4341- 1					0.0000+ 0				1.3602- 2
7.0000+ 3 ~ 1.0000+ 4	8.2288+ 0	7.8894+ 0		3.5920- 1					0.0000+ 0				1.7803- 2
1.0000+ 4 ~ 2.0000+ 4	7.1107+ 0	6.6[illegible]+ 0		2.6972- 1					0.0000+ 0				2.7319- 2
2.0000+ 4 ~ 4.0000+ 4	8.9559+ 0	6.7858+ 0		1.7013- 1					0.0000+ 0				4.8020- 2
4.0000+ 4 ~ 7.0000+ 4	7.3006+ 0	7.1886+ 0		1.1198- 1					0.0000+ 0				8.2693- 2
7.0000+ 4 ~ 1.0000+ 6	7.6302+ 0	7.6443+ 0		8.6909- 2					0.0000+ 0				1.1817- 1
1.0000+ 5 ~ 2.0000+ 5	7.7674+ 0	7.6963+ 0		7.1063- 2					6.3022-19				1.8262- 1
2.0000+ 5 ~ 4.0000+ 5	7.6008+ 0	7.5151+ 0	1.7437- 2	8.7031- 2					2.5209-18				2.8159- 1
4.0000+ 5 ~ 7.0000+ 5	7.1653+ 0	8.5248+ 0	5.8885- 1	9.8889- 2					7.4513-18				3.8915- 1
7.0000+ 5 ~ 1.0000+ 6	6.6669+ 0	6.7378+ 0	8.8366- 1	3.4956- 2					3.6716-17				4.4708- 1
1.0000+ 6 ~ 2.0000+ 6	6.7624+ 0	4.3112+ 0	1.4107+ 0	2.7786- 2					2.1013-16				6.1411- 1
2.0000+ 6 ~ 4.0000+ 6	4.4097+ 0	2.4219+ 0	1.9554+ 0	2.5007- 2					4.9841-11				5.8980- 1
4.0000+ 6 ~ 7.0000+ 6	3.8738+ 0	1.8863+ 0	2.1943+ 0	1.0732- 2			1.3758- 9		8.7154- 7	1.8900-10			6.5804- 1
7.0000+ 6 ~ 1.0000+ 7	4.0879+ 0	2.0049+ 0	1.9618+ 0	3.1966- 3	1.1648- 1		2.1270- 6		3.2844- 6	4.6031-10	2.1262-14		7.6060- 1
1.0000+ 7 ~ 2.0000+ 7	4.4216+ 0	2.4197+ 0	4.9896- 1	1.1087- 3	1.2434+ 0	2.4197- 1	9.6086- 3	5.4594- 4	3.6807- 3	1.2961- 3	7.9406- 4	1.6097- 4	8.6266- 1

MATERIAL =4409

CROSS SECTION

^{106}Ru (4409)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	3.6098+ 0	3.3416+ 0		4.6022- 1									6.3494- 3
1.0000- 2 ~ 2.0000- 2	3.5631+ 0	3.3416+ 0		1.9238- 1									6.3494- 3
2.0000- 2 ~ 4.0000- 2	3.4834+ 0	3.3416+ 0		1.3604- 1									6.3494- 3
4.0000- 2 ~ 7.0000- 2	3.4552+ 0	3.3415+ 0		8.9974- 2									6.3494- 3
7.0000- 2 ~ 1.0000- 1	3.4366+ 0	3.3416+ 0		7.9968- 2									6.3494- 3
1.0000- 1 ~ 2.0000- 1	3.4194+ 0	3.3416+ 0		6.0897- 2									6.3494- 3
2.0000- 1 ~ 4.0000- 1	3.3869+ 0	3.3416+ 0		4.3018- 2									6.3494- 3
4.0000- 1 ~ 7.0000- 1	3.3786+ 0	3.3415+ 0		3.1614- 2									6.3494- 3
7.0000- 1 ~ 1.0000+ 0	3.3713+ 0	3.3416+ 0		2.5288- 2									6.3494- 3
1.0000+ 0 ~ 2.0000+ 0	3.3645+ 0	3.3415+ 0		1.9238- 2									6.3496- 3
2.0000+ 0 ~ 4.0000+ 0	3.3562+ 0	3.3415+ 0		1.3603- 2									6.3499- 3
4.0000+ 0 ~ 7.0000+ 0	3.3528+ 0	3.3415+ 0		9.9974- 3									6.3507- 3
7.0000+ 0 ~ 1.0000+ 1	3.3518+ 0	3.3416+ 0		7.9966- 3									6.3513- 3
1.0000+ 1 ~ 2.0000+ 1	3.3506+ 0	3.3416+ 0		6.0897- 3									6.3540- 3
2.0000+ 1 ~ 4.0000+ 1	3.3490+ 0	3.3416+ 0		4.3018- 3									6.3602- 3
4.0000+ 1 ~ 7.0000+ 1	3.3476+ 0	3.3416+ 0		3.1614- 3									6.3706- 3
7.0000+ 1 ~ 1.0000+ 2	3.3468+ 0	3.3415+ 0		2.5288- 3									6.3808- 3
1.0000+ 2 ~ 2.0000+ 2	3.3453+ 0	3.3415+ 0		1.9238- 3									6.4467- 3
2.0000+ 2 ~ 4.0000+ 2	3.3437+ 0	3.3415+ 0		1.3603- 3									6.6733- 3
4.0000+ 2 ~ 7.0000+ 2	8.7182+ 0	8.1007+ 0		6.1846- 1									6.8923- 3
7.0000+ 2 ~ 1.0000+ 3	1.0253+ 1	9.4715+ 0		7.8188- 1									7.1491- 3
1.0000+ 3 ~ 2.0000+ 3	8.8488+ 0	8.2368+ 0		6.1307- 1									7.0146- 3
2.0000+ 3 ~ 4.0000+ 3	7.8400+ 0	7.1943+ 0		4.4672- 1									9.6400- 3
4.0000+ 3 ~ 7.0000+ 3	6.9956+ 0	6.8771+ 0		3.1850- 1									1.3338- 2
7.0000+ 3 ~ 1.0000+ 4	6.7416+ 0	6.6022+ 0		2.3945- 1									1.7484- 2
1.0000+ 4 ~ 2.0000+ 4	6.6648+ 0	6.4901+ 0		1.6471- 1									2.8923- 2
2.0000+ 4 ~ 4.0000+ 4	6.8444+ 0	6.7441+ 0		1.0028- 1									4.8444- 2
4.0000+ 4 ~ 7.0000+ 4	7.2386+ 0	7.1721+ 0		6.6363- 2									8.2173- 2
7.0000+ 4 ~ 1.0000+ 6	7.6086+ 0	7.5663+ 0		5.2228- 2					0.0000+ 0				1.1763- 1
1.0000+ 6 ~ 2.0000+ 6	7.7647+ 0	7.7200+ 0		4.4692- 2					0.0000+ 0				1.8180- 1
2.0000+ 6 ~ 4.0000+ 6	7.6803+ 0	7.3718+ 0	1.8255- 1	3.1845- 2					0.0000+ 0				2.8724- 1
4.0000+ 6 ~ 7.0000+ 6	7.1406+ 0	6.4486+ 0	6.8052- 1	1.8322- 2					0.0000+ 0				5.8819- 1
7.0000+ 6 ~ 1.0000+ 8	6.8667+ 0	6.7669+ 0	8.7419- 1	1.5219- 2					0.0000+ 0				4.8488- 1
1.0000+ 6 ~ 2.0000+ 6	6.7526+ 0	4.4110+ 0	1.3272+ 0	1.2869- 2					1.3524-18				6.2380- 1
2.0000+ 6 ~ 4.0000+ 6	4.4098+ 0	2.6120+ 0	1.7750+ 0	9.1484- 3					6.7674-15				8.0280- 1
4.0000+ 6 ~ 7.0000+ 6	3.8756+ 0	1.9523+ 0	1.9182+ 0	2.5382- 3			7.8085-13		2.8837- 9	3.1336-18			6.5804- 1
7.0000+ 6 ~ 1.0000+ 7	4.0676+ 0	2.3268+ 0	1.5360+ 0	3.8264- 4	2.2083- 1		2.1643- 8		6.3870- 7	4.8160 13	6.4349 20		7.5084- 1
1.0000+ 7 ~ 2.0000+ 7	4.4211+ 0	2.7170+ 0	1.7894- 1	8.8340- 4	1.1684+ 0	3.4626- 1	6.9068- 3	3.6862- 4	2.1367- 3	2.4439- 4	6.1184- 4	1.2977- 4	8.6266- 1

MATERIAL =4501 CROSS SECTION

^{103}Rh (4501)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	4.4133+ 2	3.2666+ 0		4.3808+ 2			0.0000+ 0		0.0000+ 0				6.6346- 3
1.0000- 2 ~ 2.0000- 2	1.9383+ 2	3.2603+ 0		1.9058+ 2			0.0000+ 0		0.0000+ 0				
2.0000- 2 ~ 4.0000- 2	1.4146+ 2	3.2408+ 0		1.3822+ 2			0.0000+ 0		0.0000+ 0				6.6346- 3
4.0000- 2 ~ 7.0000- 2	1.0873+ 2	3.2245+ 0		1.0550+ 2			0.0000+ 0		0.0000+ 0				6.6346- 3
7.0000- 2 ~ 1.0000- 1	9.2017+ 1	3.2040+ 0		8.8813+ 1			0.0000+ 0		0.0000+ 0				6.6346- 3
1.0000- 1 ~ 2.0000- 1	7.8738+ 1	3.1556+ 0		7.5580+ 1			0.0000+ 0		0.0000+ 0				6.6346- 3
2.0000- 1 ~ 4.0000- 1	7.4476+ 1	3.0219+ 0		7.1463+ 1			0.0000+ 0		0.0000+ 0				6.6346- 3
4.0000- 1 ~ 7.0000- 1	1.0073+ 2	2.6928+ 0		9.8040+ 1			0.0000+ 0		0.0000+ 0				6.6346- 3
7.0000- 1 ~ 1.0000+ 0	2.6238+ 2	1.9802+ 0		2.5040+ 2			0.0000+ 0		0.0000+ 0				6.6346- 3
1.0000+ 0 ~ 2.0000+ 0	1.1281+ 3	9.0885+ 0		1.1190+ 3			0.0000+ 0		0.0000+ 0				6.6356- 3
2.0000+ 0 ~ 4.0000+ 0	1.6942+ 1	4.9006+ 0		1.1042+ 1			0.0000+ 0		0.0000+ 0				6.6373- 3
4.0000+ 0 ~ 7.0000+ 0	5.4214+ 0	4.3834+ 0		1.0381+ 0			0.0000+ 0		0.0000+ 0				6.6403- 3
7.0000+ 0 ~ 1.0000+ 1	4.5223+ 0	4.2606+ 0		2.7181- 1			0.0000+ 0		0.0000+ 0				6.6426- 3
1.0000+ 1 ~ 2.0000+ 1	4.2415+ 0	4.1616+ 0		7.9857- 2			0.0000+ 0		0.0000+ 0				6.6502- 3
2.0000+ 1 ~ 4.0000+ 1	4.1785+ 0	4.0764+ 0		1.0313- 1			0.0000+ 0		0.0000+ 0				6.6666- 3
4.0000+ 1 ~ 7.0000+ 1	5.4543+ 0	4.0027+ 0		1.4516+ 0			0.0000+ 0		0.0000+ 0				6.6969- 3
7.0000+ 1 ~ 1.0000+ 2	8.5399+ 0	3.9813+ 0		2.5586+ 0			0.0000+ 0		0.0000+ 0				6.6260- 3
1.0000+ 2 ~ 2.0000+ 2	2.5530+ 1	1.2224+ 1		1.3306+ 1			0.0000+ 0		0.0000+ 0				6.7183- 3
2.0000+ 2 ~ 4.0000+ 2	1.5823+ 1	7.2650+ 0		8.5584+ 0			0.0000+ 0		0.0000+ 0				6.9077- 3
4.0000+ 2 ~ 7.0000+ 2	1.4178+ 1	6.3025+ 0		5.8758+ 0			0.0000+ 0		0.0000+ 0				7.3261- 3
7.0000+ 2 ~ 1.0000+ 3	1.3226+ 1	5.3342+ 0		3.8943+ 0			0.0000+ 0		0.0000+ 0				7.8686- 3
1.0000+ 3 ~ 2.0000+ 3	1.0071+ 1	7.3068+ 0		2.7645+ 0			0.0000+ 0		0.0000+ 0				8.6063- 3
2.0000+ 3 ~ 4.0000+ 3	1.0458+ 1	7.7885+ 0		2.6900+ 0			0.0000+ 0		0.0000+ 0				1.0869- 2
4.0000+ 3 ~ 7.0000+ 3	9.8472+ 0	7.6221+ 0		2.2260+ 0			0.0000+ 0		0.0000+ 0				1.4996- 2
7.0000+ 3 ~ 1.0000+ 4	8.6558+ 0	6.9162+ 0		1.7396+ 0			0.0000+ 0		0.0000+ 0				1.9808- 2
1.0000+ 4 ~ 2.0000+ 4	8.4118+ 0	6.9416+ 0		1.4702+ 0			0.0000+ 0		0.0000+ 0				3.0514- 2
2.0000+ 4 ~ 4.0000+ 4	7.7082+ 0	6.6027+ 0		1.0255+ 0			0.0000+ 0		0.0000+ 0				5.3520- 2
4.0000+ 4 ~ 7.0000+ 4	7.6493+ 0	6.8162+ 0	1.3386- 3	7.3182- 1			0.0000+ 0		0.0000+ 0				8.9200- 2
7.0000+ 4 ~ 1.0000+ 5	7.6801+ 0	7.1138+ 0	6.2322- 3	6.7133- 1			0.0000+ 0		0.0000+ 0				1.2683- 1
1.0000+ 5 ~ 2.0000+ 5	7.7694+ 0	7.3231+ 0	2.2570- 2	4.2223- 1			9.9110-20		4.2636-12				1.9149- 1
2.0000+ 5 ~ 4.0000+ 5	7.6027+ 0	7.1256+ 0	1.9512- 1	2.8011- 1			3.9644-19		1.7054-11				2.9745- 1
4.0000+ 5 ~ 7.0000+ 5	7.1622+ 0	6.1298+ 0	8.8494- 1	1.5085- 1			1.0384-17		4.8898-11				4.1869- 1
7.0000+ 5 ~ 1.0000+ 6	6.6603+ 0	6.3476+ 0	1.2081+ 0	1.0430- 1			8.2382-16		2.0838-10				4.9039- 1
1.0000+ 6 ~ 2.0000+ 6	5.7613+ 0	4.0996+ 0	1.6713+ 0	7.9609- 2			2.8021- 8		7.9801- 9				5.6252- 1
2.0000+ 6 ~ 4.0000+ 6	4.4095+ 0	2.5122+ 0	1.8345+ 0	5.4793- 2			8.5622- 5		1.9356- 8	6.3750-20			8.2487- 1
4.0000+ 6 ~ 7.0000+ 6	3.8737+ 0	1.9456+ 0	1.9081+ 0	1.7839- 2			1.6653- 3	7.7772-19	9.9770- 6	1.6869-19			9.0110- 1
7.0000+ 6 ~ 1.0000+ 7	4.0660+ 0	2.3231+ 0	1.7376+ 0	2.0573- 3	1.3202- 2		4.6166- 3	6.6666- 6	9.4227- 4	3.1028- 7	4.4970-10	6.1709- 7	8.6460-12	7.6073- 1
1.0000+ 7 ~ 2.0000+ 7	4.4216+ 0	2.7661+ 0	3.6328- 1	1.1221- 3	1.1720+ 0	6.2667- 2	1.6280- 2	2.8840- 2	9.6294- 3	3.3804- 3	5.7941- 3	9.4144- 4	8.6265- 1

MATERIAL =4502 CROSS SECTION

^{105}Rh (4502)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	5.8325+ 4	9.0666+ 3		4.9267+ 4					0.0000+ 0				6.4100- 3
1.0000- 2 ~ 2.0000- 2	3.0018+ 4	9.0248+ 3		2.0991+ 4					0.0000+ 0				6.4100- 3
2.0000- 2 ~ 4.0000- 2	2.3793+ 4	8.9762+ 3		1.4817+ 4					0.0000+ 0				6.4100- 3
4.0000- 2 ~ 7.0000- 2	1.9863+ 4	8.8942+ 3		1.0789+ 4					0.0000+ 0				6.4100- 3
7.0000- 2 ~ 1.0000- 1	1.7374+ 4	8.7990+ 3		8.5765+ 3					0.0000+ 0				6.4100- 3
1.0000- 1 ~ 2.0000- 1	1.5038+ 4	8.8004+ 3		6.4358+ 3					0.0000+ 0				6.4100- 3
2.0000- 1 ~ 4.0000- 1	1.2579+ 4	8.1761+ 3		4.4038+ 3					0.0000+ 0				6.4100- 3
4.0000- 1 ~ 7.0000- 1	1.0865+ 4	7.5560+ 3		3.1006+ 3					0.0000+ 0				6.4100- 3
7.0000- 1 ~ 1.0000+ 0	9.3194+ 3	6.9316+ 3		2.3879+ 3					0.0000+ 0				6.4100- 3
1.0000+ 0 ~ 2.0000+ 0	7.8480+ 3	6.0230+ 3		1.8249+ 3					0.0000+ 0				6.4110- 3
2.0000+ 0 ~ 4.0000+ 0	9.4686+ 3	6.8673+ 3		2.6093+ 3					0.0000+ 0				6.4130- 3
4.0000+ 0 ~ 7.0000+ 0	8.3225+ 4	4.3109+ 4		2.0056+ 4					0.0000+ 0				6.4182- 3
7.0000+ 0 ~ 1.0000+ 1	8.8211+ 2	8.4864+ 2		2.1957+ 2					0.0000+ 0				6.4187- 3
1.0000+ 1 ~ 2.0000+ 1	6.2710+ 1	6.8142+ 0		4.3898+ 1					0.0000+ 0				6.4270- 3
2.0000+ 1 ~ 4.0000+ 1	3.8492+ 1	6.6122+ 0		2.9879+ 1					0.0000+ 0				6.4494- 3
4.0000+ 1 ~ 7.0000+ 1	2.9630+ 1	6.4412+ 0		2.1189+ 1					0.0000+ 0				6.4785- 3
7.0000+ 1 ~ 1.0000+ 2	2.4879+ 1	6.3232+ 0		1.8556+ 1					0.0000+ 0				6.5070- 3
1.0000+ 2 ~ 2.0000+ 2	2.0198+ 1	6.0995+ 0		1.2099+ 1					0.0000+ 0				6.5028- 3
2.0000+ 2 ~ 4.0000+ 2	1.5777+ 1	7.7612+ 0		8.0155+ 0					0.0000+ 0				6.7975- 3
4.0000+ 2 ~ 7.0000+ 2	1.2967+ 1	7.4372+ 0		5.5497+ 0					0.0000+ 0				7.2242- 3
7.0000+ 2 ~ 1.0000+ 3	1.1459+ 1	7.1963+ 0		4.2850+ 0					0.0000+ 0				7.8711- 3
1.0000+ 3 ~ 2.0000+ 3	1.0041+ 1	6.9011+ 0		3.1398+ 0					0.0000+ 0				8.5222- 3
2.0000+ 3 ~ 4.0000+ 3	8.7794+ 0	6.5656+ 0		2.2137+ 0					0.0000+ 0				1.0930- 2
4.0000+ 3 ~ 7.0000+ 3	8.0520+ 0	6.3431+ 0		1.7098+ 0					0.0000+ 0				1.4925- 2
7.0000+ 3 ~ 1.0000+ 4	7.7157+ 0	6.2828+ 0		1.4830+ 0					0.0000+ 0				1.8707- 2
1.0000+ 4 ~ 2.0000+ 4	7.4840+ 0	6.2887+ 0		1.1953+ 0					0.0000+ 0				3.0286- 2
2.0000+ 4 ~ 4.0000+ 4	7.4378+ 0	6.5597+ 0		8.7780- 1					0.0000+ 0				5.3356- 2
4.0000+ 4 ~ 7.0000+ 4	7.5611+ 0	6.9292+ 0		6.3184- 1					0.0000+ 0				8.9304- 2
7.0000+ 4 ~ 1.0000+ 5	7.7069+ 0	7.2709+ 0		4.8498- 1					0.0000+ 0				1.2444- 1
1.0000+ 5 ~ 2.0000+ 5	7.7870+ 0	7.3604+ 0	7.4145- 2	3.4188- 1					4.4200-18				1.8088- 1
2.0000+ 5 ~ 4.0000+ 5	7.6988+ 0	8.0022+ 0	4.9589- 1	2.0059- 1					1.7890-18				3.0846- 1
4.0000+ 5 ~ 7.0000+ 5	7.1804+ 0	8.1865+ 0	8.5704- 1	1.9804- 1					4.3881-18				4.1830- 1
7.0000+ 5 ~ 1.0000+ 6	6.6680+ 0	5.2836+ 0	1.2766+ 0	9.7804- 2					1.1901-14				4.8818- 1
1.0000+ 6 ~ 2.0000+ 6	5.7620+ 0	4.0502+ 0	1.6440+ 0	6.6118- 2			4.1614-17		6.0186-19				8.8937- 1
2.0000+ 6 ~ 4.0000+ 6	4.4099+ 0	2.4955+ 0	1.8624+ 0	2.3708- 2			2.8486- 7		3.3838- 9				6.2864- 1
4.0000+ 6 ~ 7.0000+ 6	3.8738+ 0	1.9453+ 0	1.9216+ 0	6.7137- 3			1.2826- 4		2.1283- 8	1.7367-18	4.1320-18		8.8123- 1
7.0000+ 6 ~ 1.0000+ 7	4.0660+ 0	2.3111+ 0	1.7014+ 0	1.3042- 3	7.2083- 2		1.0893- 3	3.8956- 7	7.5669- 5	3.8667- 8	6.3438- 8	1.8977-13	7.6069- 1
1.0000+ 7 ~ 2.0000+ 7	4.4214+ 0	2.7169+ 0	3.1776- 1	1.0114- 3	1.2197+ 0	1.2041- 1	1.3339- 2	1.4060- 2	3.4226- 3	1.6104- 3	3.3292- 3	8.3837- 4	8.8288- 1

MATERIAL =4601 CROSS SECTION

^{102}Pd (4601)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	1.5472+ 1	5.0249+ 0		1.0448+ 1					0.0000+ 0				5.5987- 3
1.0000- 2 ~ 2.0000- 2	9.4801+ 0	5.0247+ 0		4.4554+ 0					0.0000+ 0				5.5987- 3
2.0000- 2 ~ 4.0000- 2	8.1559+ 0	5.0243+ 0		3.1417+ 0					0.0000+ 0				5.5987- 3
4.0000- 2 ~ 7.0000- 2	7.3219+ 0	5.0238+ 0		2.2989+ 0					0.0000+ 0				5.5987- 3
7.0000- 2 ~ 1.0000- 1	6.8524+ 0	5.0228+ 0		1.8296+ 0					0.0000+ 0				5.5987- 3
1.0000- 1 ~ 2.0000- 1	6.3955+ 0	5.0211+ 0		1.3745+ 0					0.0000+ 0				5.5987- 3
2.0000- 1 ~ 4.0000- 1	6.9540+ 0	5.0172+ 0		9.4684- 1					0.0000+ 0				5.5987- 3
4.0000- 1 ~ 7.0000- 1	6.5774+ 0	5.0109+ 0		6.8645- 1					0.0000+ 0				5.5987- 3
7.0000- 1 ~ 1.0000+ 0	6.5098+ 0	5.0037+ 0		6.0610- 1					0.0000+ 0				5.5987- 3
1.0000+ 0 ~ 2.0000+ 0	5.9378+ 0	4.9696+ 0		3.4812- 1					0.0000+ 0				5.5987- 3
2.0000+ 0 ~ 4.0000+ 0	6.1613+ 0	4.9517+ 0		1.9960- 1					0.0000+ 0				5.5988- 3
4.0000+ 0 ~ 7.0000+ 0	5.0348+ 0	4.9257+ 0		1.0905- 1					0.0000+ 0				5.5988- 3
7.0000+ 0 ~ 1.0000+ 1	4.9590+ 0	4.8939+ 0		6.5715- 2					0.0000+ 0				5.6007- 3
1.0000+ 1 ~ 2.0000+ 1	4.8795+ 0	4.8452+ 0		3.4331- 2					0.0000+ 0				5.6035- 3
2.0000+ 1 ~ 4.0000+ 1	4.7873+ 0	4.7708+ 0		1.5487- 2					0.0000+ 0				5.6094- 3
4.0000+ 1 ~ 7.0000+ 1	4.6780+ 0	4.6568+ 0		1.2214- 2					0.0000+ 0				5.6245- 3
7.0000+ 1 ~ 1.0000+ 2	4.5230+ 0	4.5065+ 0		1.4664- 2					0.0000+ 0				5.6568- 3
1.0000+ 2 ~ 2.0000+ 2	6.1957+ 1	4.5087+ 1		1.6870+ 1					0.0000+ 0				5.8066- 3
2.0000+ 2 ~ 4.0000+ 2	1.6588+ 1	1.4580+ 1		4.0080+ 0					0.0000+ 0				5.8059- 3
4.0000+ 2 ~ 7.0000+ 2	1.7767+ 1	1.4206+ 1		3.5619+ 0					0.0000+ 0				7.1029- 3
7.0000+ 2 ~ 1.0000+ 3	1.4944+ 1	1.2404+ 1		2.5402+ 0					0.0000+ 0				7.3488- 3
1.0000+ 3 ~ 2.0000+ 3	1.2293+ 1	1.0547+ 1		1.7460+ 0					0.0000+ 0				8.1034- 3
2.0000+ 3 ~ 4.0000+ 3	9.9128+ 0	8.7621+ 0		1.1508+ 0					0.0000+ 0				1.0084- 2
4.0000+ 3 ~ 7.0000+ 3	8.4976+ 0	7.5299+ 0		8.6766- 1					0.0000+ 0				1.3891- 2
7.0000+ 3 ~ 1.0000+ 4	7.7801+ 0	7.0723+ 0		7.1788- 1					0.0000+ 0				1.8522- 2
1.0000+ 4 ~ 2.0000+ 4	7.2366+ 0	6.6711+ 0		5.6536- 1					0.0000+ 0				2.9267- 2
2.0000+ 4 ~ 4.0000+ 4	8.9354+ 0	6.5354+ 0		3.9995- 1					0.0000+ 0				5.3818- 2
4.0000+ 4 ~ 7.0000+ 4	6.9670+ 0	5.6738+ 0		2.8339- 1					0.0000+ 0				9.1823- 2
7.0000+ 4 ~ 1.0000+ 5	7.0806+ 0	5.8573+ 0		2.2317- 1					0.0000+ 0				1.3064- 1
1.0000+ 5 ~ 2.0000+ 5	7.0763+ 0	6.8964+ 0		1.7970- 1					1.9062- 7				1.9831- 1
2.0000+ 5 ~ 4.0000+ 5	8.2135+ 0	6.7515+ 0		1.8194- 1					7.8129- 7				2.9632- 1
4.0000+ 5 ~ 7.0000+ 5	6.7240+ 0	5.4594+ 0	9.7860- 2	1.5885- 1			1.9227-17		1.9265- 6				3.7584- 1
7.0000+ 5 ~ 1.0000+ 6	6.4379+ 0	5.8408+ 0	5.4424- 1	1.1253- 1			5.9442-17		5.4126- 6				4.3864- 1
1.0000+ 6 ~ 2.0000+ 6	5.8700+ 0	4.8786+ 0	8.6581- 1	1.2392- 1			1.0260- 8		3.8518- 5				4.9432- 1
2.0000+ 6 ~ 4.0000+ 6	4.5582+ 0	2.8792+ 0	1.5971+ 0	7.5325- 2			4.9306- 4		6.8250- 4	5.7862-17			8.0250- 1
4.0000+ 6 ~ 7.0000+ 6	3.9877+ 0	2.0287+ 0	1.9162+ 0	1.8924- 2			2.0716- 2		4.9888- 3	8.2815-11	7.9698-17		8.6294- 1
7.0000+ 6 ~ 1.0000+ 7	4.3446+ 0	2.4497+ 0	1.6399+ 0	2.2643- 3		9.6457- 9	4.4377- 2		8.1999- 3	9.1355- 6	2.9810- 8		7.9773- 1
1.0000+ 7 ~ 2.0000+ 7	4.2258+ 0	2.3786+ 0	8.7117- 1	1.0841- 3	8.3385- 1	2.0663- 3	8.7310- 2	2.1073- 2	1.8210- 2	7.0007- 3	9.9068- 3	3.4036- 4	8.6537- 1

MATERIAL =4602 CROSS SECTION

^{104}Pd (4602)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	6.6364+ 0	4.9172+ 0		1.6182+ 0					0.0000+ 0				5.4718- 3
1.0000- 2 ~ 2.0000- 2	5.6088+ 0	4.9172+ 0		6.9160- 1					0.0000+ 0				5.4718- 3
2.0000- 2 ~ 4.0000- 2	5.4062+ 0	4.9171+ 0		4.8906- 1					0.0000+ 0				5.4718- 3
4.0000- 2 ~ 7.0000- 2	5.2766+ 0	4.9171+ 0		3.5944- 1					0.0000+ 0				5.4718- 3
7.0000- 2 ~ 1.0000- 1	5.2049+ 0	4.9170+ 0		2.8787- 1					0.0000+ 0				5.4718- 3
1.0000- 1 ~ 2.0000- 1	5.1358+ 0	4.9189+ 0		2.1867- 1					0.0000+ 0				5.4718- 3
2.0000- 1 ~ 4.0000- 1	5.0716+ 0	4.9166+ 0		1.6503- 1					0.0000+ 0				5.4718- 3
4.0000- 1 ~ 7.0000- 1	5.0304+ 0	4.9181+ 0		1.1491- 1					0.0000+ 0				5.4718- 3
7.0000- 1 ~ 1.0000+ 0	5.0071+ 0	4.9154+ 0		9.1548- 2					0.0000+ 0				5.4718- 3
1.0000+ 0 ~ 2.0000+ 0	4.9843+ 0	4.9141+ 0		7.0249- 2					0.0000+ 0				5.4718- 3
2.0000+ 0 ~ 4.0000+ 0	4.9614+ 0	4.9109+ 0		5.0478- 2					0.0000+ 0				5.4719- 3
4.0000+ 0 ~ 7.0000+ 0	4.9436+ 0	4.9066+ 0		3.8140- 2					0.0000+ 0				5.4728- 3
7.0000+ 0 ~ 1.0000+ 1	4.9303+ 0	4.8986+ 0		3.1524- 2					0.0000+ 0				5.4735- 3
1.0000+ 1 ~ 2.0000+ 1	4.9091+ 0	4.8853+ 0		2.5794- 2					0.0000+ 0				5.4759- 3
2.0000+ 1 ~ 4.0000+ 1	4.8645+ 0	4.8426+ 0		2.1899- 2					0.0000+ 0				5.4813- 3
4.0000+ 1 ~ 7.0000+ 1	4.7769+ 0	4.7539+ 0		2.2975- 2					0.0000+ 0				5.4952- 3
7.0000+ 1 ~ 1.0000+ 2	4.6259+ 0	4.6928+ 0		3.1259- 2					0.0000+ 0				5.5066- 3
1.0000+ 2 ~ 2.0000+ 2	6.4120+ 1	3.7148+ 1		2.6972+ 1					0.0000+ 0				5.5558- 3
2.0000+ 2 ~ 4.0000+ 2	1.5927+ 1	1.3452+ 1		2.4748+ 0					0.0000+ 0				5.6660- 3
4.0000+ 2 ~ 7.0000+ 2	1.7880+ 1	1.4895+ 1		2.7847+ 0					0.0000+ 0				5.8561- 3
7.0000+ 2 ~ 1.0000+ 3	1.4838+ 1	1.2844+ 1		1.9938+ 0					0.0000+ 0				7.1928- 3
1.0000+ 3 ~ 2.0000+ 3	1.2162+ 1	1.0783+ 1		1.3798+ 0					0.0000+ 0				7.9339- 3
2.0000+ 3 ~ 4.0000+ 3	9.7752+ 0	8.8442+ 0		9.3405- 1					0.0000+ 0				9.8815- 3
4.0000+ 3 ~ 7.0000+ 3	8.3604+ 0	7.6505+ 0		6.9976- 1					0.0000+ 0				1.3630- 2
7.0000+ 3 ~ 1.0000+ 4	7.6494+ 0	7.0717+ 0		5.7780- 1					0.0000+ 0				1.8101- 2
1.0000+ 4 ~ 2.0000+ 4	7.1139+ 0	6.8662+ 0		4.4574- 1					0.0000+ 0				2.9813- 2
2.0000+ 4 ~ 4.0000+ 4	6.8444+ 0	6.8392+ 0		3.0515- 1					0.0000+ 0				5.3108- 2
4.0000+ 4 ~ 7.0000+ 4	6.9123+ 0	6.7001+ 0		2.1223- 1					0.0000+ 0				9.0702- 2
7.0000+ 4 ~ 1.0000+ 5	7.0826+ 0	6.9162+ 0		1.6628- 1					0.0000+ 0				1.2949- 1
1.0000+ 5 ~ 2.0000+ 5	7.0738+ 0	6.9388+ 0		1.3694- 1					1.8560-10				1.9707- 1
2.0000+ 5 ~ 4.0000+ 5	6.9109+ 0	6.7058+ 0		1.2606- 1					7.4281-10				2.9386- 1
4.0000+ 5 ~ 7.0000+ 5	6.7220+ 0	6.4933+ 0	1.0627- 1	1.2001- 1					2.2084- 9				3.7399- 1
7.0000+ 5 ~ 1.0000+ 6	6.4985+ 0	5.8158+ 0	5.9769- 1	8.1649- 2					1.0774- 8				4.3704- 1
1.0000+ 6 ~ 2.0000+ 6	5.8590+ 0	4.7616+ 0	1.0336+ 0	8.3001- 2					2.7382- 7				4.9848- 1
2.0000+ 6 ~ 4.0000+ 6	4.6549+ 0	2.7194+ 0	1.7784+ 0	6.1938- 2			1.1785- 7		2.4958- 5	2.4544-18			8.0274- 1
4.0000+ 6 ~ 7.0000+ 6	3.9878+ 0	1.8481+ 0	2.1264+ 0	1.4023- 2			6.9925- 4		6.7907- 4	9.0720-12			8.8288- 1
7.0000+ 6 ~ 1.0000+ 7	4.3444+ 0	2.2798+ 0	2.0529+ 0	2.3735- 3		6.6834-16	6.9803- 3		2.4367- 3	2.8983- 8	2.1828- 9		7.8771- 1
1.0000+ 7 ~ 2.0000+ 7	4.2265+ 0	2.2310+ 0	8.8449- 1	1.1097- 3	1.2014+ 0	2.8302- 2	6.1708- 2	9.6298- 3	9.4318- 3	5.5920- 3	2.7066- 3	3.5298- 4	8.8636- 1

MATERIAL =4603 CROSS SECTION ^{105}Pd (4603)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.7886+ 1	6.1172+ 0		6.2768+ 1			0.0000+ 0		0.0000+ 0				6.4100- 3
1.0000- 2 ~ 2.0000- 2	3.1914+ 1	6.1166+ 0		2.5798+ 1			0.0000+ 0		0.0000+ 0				6.4100- 3
2.0000- 2 ~ 4.0000- 2	2.4039+ 1	5.1168+ 0		1.9923+ 1			0.0000+ 0		0.0000+ 0				6.4100- 3
4.0000- 2 ~ 7.0000- 2	1.8991+ 1	5.1145+ 0		1.3876+ 1			0.0000+ 0		0.0000+ 0				6.4100- 3
7.0000- 2 ~ 1.0000- 1	1.6194+ 1	6.1129+ 0		1.1081+ 1			0.0000+ 0		0.0000+ 0				6.4100- 3
1.0000- 1 ~ 2.0000- 1	1.3486+ 1	6.1095+ 0		8.3759+ 0			0.0000+ 0		0.0000+ 0				6.4100- 3
2.0000- 1 ~ 4.0000- 1	1.0964+ 1	6.1016+ 0		5.8628+ 0			0.0000+ 0		0.0000+ 0				6.4100- 3
4.0000- 1 ~ 7.0000- 1	9.3083+ 0	6.0885+ 0		4.2198+ 0			0.0000+ 0		0.0000+ 0				6.4100- 3
7.0000- 1 ~ 1.0000+ 0	8.3692+ 0	6.0731+ 0		3.2961+ 0			0.0000+ 0		0.0000+ 0				6.4100- 3
1.0000+ 0 ~ 2.0000+ 0	7.4446+ 0	5.0406+ 0		2.4040+ 0			0.0000+ 0		0.0000+ 0				6.4100- 3
2.0000+ 0 ~ 4.0000+ 0	6.6376+ 0	4.9674+ 0		1.6702+ 0			0.0000+ 0		0.0000+ 0				6.4106- 3
4.0000+ 0 ~ 7.0000+ 0	5.9657+ 0	4.8423+ 0		1.1234+ 0			0.0000+ 0		0.0000+ 0				6.4145- 3
7.0000+ 0 ~ 1.0000+ 1	5.9349+ 0	4.6402+ 0		1.2947+ 0			0.0000+ 0		0.0000+ 0				6.4178- 3
1.0000+ 1 ~ 2.0000+ 1	4.5279+ 1	5.4134+ 0		3.9859+ 1			0.0000+ 0		0.0000+ 0				6.4255- 3
2.0000+ 1 ~ 4.0000+ 1	2.3498+ 1	5.2416+ 0		1.8266+ 1			0.0000+ 0		0.0000+ 0				6.4407- 3
4.0000+ 1 ~ 7.0000+ 1	1.4983+ 1	4.8548+ 0		1.0119+ 1			0.0000+ 0		0.0000+ 0				6.4735- 3
7.0000+ 1 ~ 1.0000+ 2	9.0179+ 1	7.3345+ 0		2.2779+ 1			0.0000+ 0		0.0000+ 0				6.5002- 3
1.0000+ 2 ~ 2.0000+ 2	1.8591+ 1	7.9691+ 0		1.0628+ 1			0.0000+ 0		0.0000+ 0				6.5922- 3
2.0000+ 2 ~ 4.0000+ 2	1.9221+ 1	8.5390+ 0		1.0689+ 1			0.0000+ 0		0.0000+ 0				6.7621- 3
4.0000+ 2 ~ 7.0000+ 2	1.5071+ 1	8.0182+ 0		7.0623+ 0			0.0000+ 0		0.0000+ 0				7.2076- 3
7.0000+ 2 ~ 1.0000+ 3	1.5419+ 1	9.2005+ 0		7.2186+ 0			0.0000+ 0		0.0000+ 0				7.5559- 3
1.0000+ 3 ~ 2.0000+ 3	1.2338+ 1	8.2874+ 0		4.0508+ 0			0.0000+ 0		0.0000+ 0				8.6272- 3
2.0000+ 3 ~ 4.0000+ 3	8.2742+ 0	4.8721+ 0		3.8021+ 0			0.0000+ 0		0.0000+ 0				1.0943- 2
4.0000+ 3 ~ 7.0000+ 3	7.1243+ 0	4.6716+ 0		2.5527+ 0			0.0000+ 0		0.0000+ 0				1.5369- 2
7.0000+ 3 ~ 1.0000+ 4	6.6901+ 0	4.5325+ 0		2.0576+ 0			0.0000+ 0		0.0000+ 0				2.0546- 2
1.0000+ 4 ~ 2.0000+ 4	6.4211+ 0	4.7883+ 0		1.6317+ 0			0.0000+ 0		0.0000+ 0				3.2767- 2
2.0000+ 4 ~ 4.0000+ 4	6.4496+ 0	5.2122+ 0		1.2314+ 0			0.0000+ 0		0.0000+ 0				5.9716- 2
4.0000+ 4 ~ 7.0000+ 4	5.7269+ 0	5.7934+ 0		9.3249- 1			0.0000+ 0		0.0000+ 0				1.0001- 1
7.0000+ 4 ~ 1.0000+ 5	7.0356+ 0	5.2861+ 0		7.4737- 1			0.0000+ 0		0.0000+ 0				1.4054- 1
1.0000+ 5 ~ 2.0000+ 5	7.0713+ 0	5.5038+ 0		5.6609- 1			1.0456-17		6.1096- 7				2.0969- 1
2.0000+ 5 ~ 4.0000+ 5	6.9103+ 0	5.3456+ 0	1.5966- 1	3.8366- 1			4.1621-17		2.4414- 6				3.1546- 1
4.0000+ 5 ~ 7.0000+ 5	6.7221+ 0	5.5475+ 0	9.7260- 1	2.0112- 1			9.7486-16		5.0019- 6				4.5609- 1
7.0000+ 5 ~ 1.0000+ 6	6.4962+ 0	4.9774+ 0	1.5991+ 0	1.1939- 1			5.1817-13		6.7841- 5				6.1368- 1
1.0000+ 6 ~ 2.0000+ 6	6.8587+ 0	4.0841+ 0	1.7104+ 0	7.3193- 2			7.8650- 8		1.6420- 5				6.8696- 1
2.0000+ 6 ~ 4.0000+ 6	4.5507+ 0	2.8168+ 0	1.8989+ 0	2.9916- 2			5.7834- 5		9.9234- 5	8.5098-19			6.5327- 1
4.0000+ 6 ~ 7.0000+ 6	3.9675+ 0	2.0287+ 0	1.9494+ 0	7.5230- 3			1.9690- 3		4.2957- 4	4.1668-13			6.8766- 1
7.0000+ 6 ~ 1.0000+ 7	4.3441+ 0	2.6021+ 0	1.1903+ 0	1.6268- 3	6.4284- 1		3.8422- 3	1.3346-16	9.5624- 4	1.3131- 7	7.0788- 9	8.2573-14	7.9774- 1
1.0000+ 7 ~ 2.0000+ 7	4.2256+ 0	2.4219+ 0	2.0344- 1	1.0768- 3	1.5040+ 0	4.6007- 2	3.1281- 2	3.8478- 3	6.9240- 3	2.2740- 3	4.6063- 3	7.0138- 4	8.6536- 1

MATERIAL =4604 CROSS SECTION ^{106}Pd (4604)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.9390+ 0	6.0011+ 0		9.3794- 1					0.0000+ 0				6.3496- 3
1.0000- 2 ~ 2.0000- 2	6.4018+ 0	6.0010+ 0		4.0074- 1					0.0000+ 0				6.3496- 3
2.0000- 2 ~ 4.0000- 2	6.2847+ 0	6.0010+ 0		2.8371- 1					0.0000+ 0				6.3496- 3
4.0000- 2 ~ 7.0000- 2	6.2068+ 0	6.0009+ 0		2.0795- 1					0.0000+ 0				6.3496- 3
7.0000- 2 ~ 1.0000- 1	6.1671+ 0	6.0006+ 0		1.8626- 1					0.0000+ 0				6.3496- 3
1.0000- 1 ~ 2.0000- 1	6.1271+ 0	6.0006+ 0		1.2652- 1					0.0000+ 0				6.3496- 3
2.0000- 1 ~ 4.0000- 1	6.0893+ 0	6.0000+ 0		8.9136- 2					0.0000+ 0				6.3496- 3
4.0000- 1 ~ 7.0000- 1	6.0648+ 0	4.9994+ 0		6.6285- 2					0.0000+ 0				6.3496- 3
7.0000- 1 ~ 1.0000+ 0	6.0604+ 0	4.9984+ 0		5.1949- 2					0.0000+ 0				6.3496- 3
1.0000+ 0 ~ 2.0000+ 0	5.0356+ 0	4.9984+ 0		3.9142- 2					0.0000+ 0				6.3496- 3
2.0000+ 0 ~ 4.0000+ 0	5.0189+ 0	4.9918+ 0		2.7076- 2					0.0000+ 0				6.3497- 3
4.0000+ 0 ~ 7.0000+ 0	5.0036+ 0	4.9844+ 0		1.9222- 2					0.0000+ 0				6.3506- 3
7.0000+ 0 ~ 1.0000+ 1	4.9907+ 0	4.9759+ 0		1.4877- 2					0.0000+ 0				6.3513- 3
1.0000+ 1 ~ 2.0000+ 1	4.9690+ 0	4.9569+ 0		1.0897- 2					0.0000+ 0				6.3537- 3
2.0000+ 1 ~ 4.0000+ 1	4.9279+ 0	4.9201+ 0		7.1571- 3					0.0000+ 0				6.3591- 3
4.0000+ 1 ~ 7.0000+ 1	4.8627+ 0	4.8572+ 0		5.6135- 3					0.0000+ 0				6.3729- 3
7.0000+ 1 ~ 1.0000+ 2	4.7776+ 0	4.7721+ 0		5.3588- 3					0.0000+ 0				6.3847- 3
1.0000+ 2 ~ 2.0000+ 2	4.4612+ 0	4.4517+ 0		9.4436- 3					0.0000+ 0				6.4332- 3
2.0000+ 2 ~ 4.0000+ 2	4.3798+ 1	5.8407+ 1		5.3912- 0					0.0000+ 0				6.5450- 3
4.0000+ 2 ~ 7.0000+ 2	9.5745+ 0	7.1016+ 0		2.4729+ 0					0.0000+ 0				6.8326- 3
7.0000+ 2 ~ 1.0000+ 3	8.7742+ 0	8.8162+ 0		1.9559+ 0					0.0000+ 0				7.0888- 3
1.0000+ 3 ~ 2.0000+ 3	7.7209+ 0	8.3671+ 0		1.3538+ 0					0.0000+ 0				7.9087- 3
2.0000+ 3 ~ 4.0000+ 3	6.6409+ 0	5.9229+ 0		9.1600- 1					0.0000+ 0				9.7840- 3
4.0000+ 3 ~ 7.0000+ 3	6.3869+ 0	5.6970+ 0		6.8991- 1					0.0000+ 0				1.3600- 2
7.0000+ 3 ~ 1.0000+ 4	6.2235+ 0	5.5554+ 0		5.6810- 1					0.0000+ 0				1.8059- 2
1.0000+ 4 ~ 2.0000+ 4	6.2016+ 0	5.7625+ 0		4.3898- 1					0.0000+ 0				2.8877- 2
2.0000+ 4 ~ 4.0000+ 4	6.4149+ 0	5.1152+ 0		3.0173- 1					0.0000+ 0				5.2878- 2
4.0000+ 4 ~ 7.0000+ 4	5.7889+ 0	5.6781+ 0		2.1077- 1					0.0000+ 0				9.0584- 2
7.0000+ 4 ~ 1.0000+ 5	7.1272+ 0	5.9601+ 0		1.6717- 1					0.0000+ 0				1.2839- 1
1.0000+ 5 ~ 2.0000+ 5	7.0697+ 0	5.9341+ 0		1.3561- 1					7.1929-14				1.5701- 1
2.0000+ 5 ~ 4.0000+ 5	6.8069+ 0	5.7818+ 0		1.2497- 1					2.8772-13				2.5988- 1
4.0000+ 5 ~ 7.0000+ 5	6.7178+ 0	5.4384+ 0	1.5977- 1	1.1446- 1					7.8818-13				3.7878- 1
7.0000+ 5 ~ 1.0000+ 6	6.4947+ 0	5.7986+ 0	6.1545- 1	6.1127- 2					2.9347-12				4.3970- 1
1.0000+ 6 ~ 2.0000+ 6	5.8697+ 0	4.5790+ 0	1.1158+ 0	7.4009- 2					3.0860-10				6.1078- 1
2.0000+ 6 ~ 4.0000+ 6	4.5888+ 0	2.7288+ 0	1.7605+ 0	4.8979- 2			5.0449-14		4.7588- 7	5.0730-20			8.1988- 1
4.0000+ 6 ~ 7.0000+ 6	3.9677+ 0	1.9194+ 0	2.0480+ 0	1.9163- 2			1.1944- 5		7.1607- 5	6.9571-14			9.9311- 1
7.0000+ 6 ~ 1.0000+ 7	4.3441+ 0	2.3681+ 0	1.9656+ 0	6.7367- 3	3.0766- 3		7.4426- 4	3.3691-22	6.6549- 4	1.6486- 7	7.2819-11		7.9788- 1
1.0000+ 7 ~ 2.0000+ 7	4.2256+ 0	2.2778+ 0	6.0942- 1	1.3108- 3	1.3161+ 0	8.4684- 2	2.3602- 2	2.5546- 3	6.8608- 3	2.3109- 3	1.4581- 3	2.4201- 4	8.8536- 1

^{107}Pd (4605)

MATERIAL =4605

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	9.6214+ 0	3.3187+ 0		6.2027+ 0					0.0000+ 0				6.2901- 3
1.0000- 2 ~ 2.0000- 2	6.9713+ 0	3.3186+ 0		2.6627+ 0					0.0000+ 0				6.2901- 3
2.0000- 2 ~ 4.0000- 2	6.1974+ 0	3.3184+ 0		1.8790+ 0					0.0000+ 0				6.2901- 3
4.0000- 2 ~ 7.0000- 2	4.7025+ 0	3.3181+ 0		1.3844+ 0					0.0000+ 0				6.2901- 3
7.0000- 2 ~ 1.0000- 1	4.4261+ 0	3.3177+ 0		1.1084+ 0					0.0000+ 0				6.2901- 3
1.0000- 1 ~ 2.0000- 1	4.1634+ 0	3.3189+ 0		8.4647- 1					0.0000+ 0				6.2901- 3
2.0000- 1 ~ 4.0000- 1	3.9200+ 0	3.3161+ 0		6.0492- 1					0.0000+ 0				6.2901- 3
4.0000- 1 ~ 7.0000- 1	3.7657+ 0	3.3120+ 0		4.5374- 1					0.0000+ 0				6.2901- 3
7.0000- 1 ~ 1.0000+ 0	3.6810+ 0	3.3082+ 0		3.7281- 1					0.0000+ 0				6.2901- 3
1.0000+ 0 ~ 2.0000+ 0	3.6032+ 0	3.2995+ 0		3.0371- 1					0.0000+ 0				6.2901- 3
2.0000+ 0 ~ 4.0000+ 0	3.9710+ 0	3.2748+ 0		6.9616- 1					0.0000+ 0				6.2907- 3
4.0000+ 0 ~ 7.0000+ 0	1.0824+ 1	3.2434+ 0		7.5806+ 0					0.0000+ 0				6.2946- 3
7.0000+ 0 ~ 1.0000+ 1	3.9468+ 0	3.2487+ 0		6.9991- 1					0.0000+ 0				6.2983- 3
1.0000+ 1 ~ 2.0000+ 1	3.2564+ 0	3.1022+ 0		1.5425- 1					0.0000+ 0				6.3068- 3
2.0000+ 1 ~ 4.0000+ 1	6.4634+ 0	2.3672+ 0		3.0962+ 0					0.0000+ 0				6.3230- 3
4.0000+ 1 ~ 7.0000+ 1	1.0813+ 2	3.1161+ 1		7.6979+ 1					0.0000+ 0				6.3679- 3
7.0000+ 1 ~ 1.0000+ 2	3.7691+ 1	8.7952+ 0		2.9096+ 1					0.0000+ 0				6.3882- 3
1.0000+ 2 ~ 2.0000+ 2	3.4980+ 1	1.0958+ 1		2.4025+ 1					0.0000+ 0				6.4826- 3
2.0000+ 2 ~ 4.0000+ 2	2.0829+ 1	8.1770+ 0		1.2452+ 1					0.0000+ 0				6.6806- 3
4.0000+ 2 ~ 7.0000+ 2	2.0727+ 1	1.1211+ 1		9.6162+ 0					0.0000+ 0				7.1202- 3
7.0000+ 2 ~ 1.0000+ 3	3.8137+ 1	3.4848+ 1		3.2876+ 0					0.0000+ 0				7.4780- 3
1.0000+ 3 ~ 2.0000+ 3	1.3436+ 1	1.0601+ 1		2.8344+ 0					0.0000+ 0				8.4766- 3
2.0000+ 3 ~ 4.0000+ 3	2.3848+ 1	2.1678+ 1		2.1704+ 0					0.0000+ 0				1.0958- 2
4.0000+ 3 ~ 7.0000+ 3	9.6469+ 0	6.9388+ 0		2.7074+ 0					0.0000+ 0				1.5424- 2
7.0000+ 3 ~ 1.0000+ 4	8.8338+ 0	6.6472+ 0		2.1866+ 0					0.0000+ 0				2.0766- 2
1.0000+ 4 ~ 2.0000+ 4	8.1168+ 0	6.3766+ 0		1.7402+ 0					0.0000+ 0				3.3067- 2
2.0000+ 4 ~ 4.0000+ 4	7.5577+ 0	6.2296+ 0		1.3281+ 0					0.0000+ 0				6.0968- 2
4.0000+ 4 ~ 7.0000+ 4	7.2926+ 0	6.2726+ 0		1.0200+ 0					0.0000+ 0				1.0110- 1
7.0000+ 4 ~ 1.0000+ 6	7.1866+ 0	6.3663+ 0		8.2320- 1					0.0000+ 0				1.4197- 1
1.0000+ 6 ~ 2.0000+ 6	7.0691+ 0	6.4124+ 0	4.0853- 2	6.1496- 1					1.1516- 8				2.1223- 1
2.0000+ 6 ~ 4.0000+ 6	6.9083+ 0	6.2309+ 0	2.6826- 1	4.0877- 1					4.6064- 8				3.2083- 1
4.0000+ 6 ~ 7.0000+ 6	6.7202+ 0	6.4067+ 0	1.1320+ 0	1.8078- 1					9.9186- 8				4.4920- 1
7.0000+ 6 ~ 1.0000+ 6	6.4948+ 0	4.8089+ 0	1.4886+ 0	1.1722- 1					1.7029- 7				6.2246- 1
1.0000+ 6 ~ 2.0000+ 6	6.8674+ 0	4.0646+ 0	1.7170+ 0	8.4772- 2			2.0196-13		7.1284- 7				6.8123- 1
2.0000+ 6 ~ 4.0000+ 8	4.5509+ 0	2.8174+ 0	1.8698+ 0	3.7180- 2			4.4322- 7		8.7199- 8	1.8890-21			8.5337- 1
4.0000+ 6 ~ 7.0000+ 8	3.9878+ 0	2.0305+ 0	1.9345+ 0	7.8578- 3	8.1292- 3		4.9981- 5		6.1169- 5	8.5815-15			8.8775- 1
7.0000+ 6 ~ 1.0000+ 7	4.3441+ 0	2.4766+ 0	8.7322- 1	1.3402- 3	9.8098- 1		6.3068- 4		1.3686- 4	2.6843- 8	2.8614-10	3.0062-14	7.9776- 1
1.0000+ 7 ~ 2.0000+ 7	4.2264+ 0	2.4390+ 0	1.8090- 1	1.0714- 3	1.4661+ 0	1.0984- 1	1.7397- 2	2.6382- 3	3.0666- 3	7.4494- 4	2.9613- 3	6.2376- 4	8.6636- 1

^{108}Pd (4606)

MATERIAL =4608

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.8192+ 1	1.9216+ 0		2.6270+ 1					0.0000+ 0				6.2319- 3
1.0000- 2 ~ 2.0000- 2	1.3167+ 1	1.9210+ 0		1.1236+ 1					0.0000+ 0				6.2319- 3
2.0000- 2 ~ 4.0000- 2	9.8731+ 0	1.9202+ 0		7.9629+ 0					0.0000+ 0				6.2319- 3
4.0000- 2 ~ 7.0000- 2	7.7738+ 0	1.9190+ 0		5.8548+ 0					0.0000+ 0				6.2319- 3
7.0000- 2 ~ 1.0000- 1	6.6167+ 0	1.9176+ 0		4.6982+ 0					0.0000+ 0				6.2319- 3
1.0000- 1 ~ 2.0000- 1	5.5018+ 0	1.9143+ 0		3.5873+ 0					0.0000+ 0				6.2319- 3
2.0000- 1 ~ 4.0000- 1	4.4746+ 0	1.9068+ 0		2.6677+ 0					0.0000+ 0				6.2319- 3
4.0000- 1 ~ 7.0000- 1	3.8256+ 0	1.8942+ 0		1.9314+ 0					0.0000+ 0				6.2319- 3
7.0000- 1 ~ 1.0000+ 0	3.4740+ 0	1.8780+ 0		1.6961+ 0					0.0000+ 0				6.2319- 3
1.0000+ 0 ~ 2.0000+ 0	3.2270+ 0	1.8451+ 0		1.3819+ 0					0.0000+ 0				6.2319- 3
2.0000+ 0 ~ 4.0000+ 0	1.8373+ 1	1.7646+ 0		1.4808+ 1					0.0000+ 0				6.2320- 3
4.0000+ 0 ~ 7.0000+ 0	2.5495+ 0	1.6131+ 0		9.3655- 1					0.0000+ 0				6.2326- 3
7.0000+ 0 ~ 1.0000+ 1	2.2363+ 0	1.4076+ 0		8.3085- 1					0.0000+ 0				6.2334- 3
1.0000+ 1 ~ 2.0000+ 1	1.9758+ 0	6.2790- 1		1.1477+ 0					0.0000+ 0				6.2367- 3
2.0000+ 1 ~ 4.0000+ 1	7.6206+ 2	4.2698+ 2		3.2808+ 2					0.0000+ 0				6.2407- 3
4.0000+ 1 ~ 7.0000+ 1	7.6962+ 0	6.6803+ 0		9.1692- 1					0.0000+ 0				6.2639- 3
7.0000+ 1 ~ 1.0000+ 2	9.0725+ 2	2.0384+ 2		1.0341+ 2					0.0000+ 0				6.2648- 3
1.0000+ 2 ~ 2.0000+ 2	8.0626+ 0	7.0885+ 0		1.0181+ 0					0.0000+ 0				6.3125- 3
2.0000+ 2 ~ 4.0000+ 2	4.6382+ 0	4.2868+ 0		2.6947- 1					0.0000+ 0				6.4219- 3
4.0000+ 2 ~ 7.0000+ 2	2.7882+ 1	2.4136+ 1		3.7466+ 0					0.0000+ 0				6.7060- 3
7.0000+ 2 ~ 1.0000+ 3	2.8646+ 1	2.6005+ 1		2.8398+ 0					0.0000+ 0				6.9579- 3
1.0000+ 3 ~ 2.0000+ 3	1.1373+ 1	1.0616+ 1		7.6713- 1					0.0000+ 0				7.8699- 3
2.0000+ 3 ~ 4.0000+ 3	9.3981+ 0	8.7108+ 0		6.8527- 1					0.0000+ 0				8.8077- 3
4.0000+ 3 ~ 7.0000+ 3	9.6840+ 0	9.0853+ 0		5.9879- 1					0.0000+ 0				1.3312- 2
7.0000+ 3 ~ 1.0000+ 4	8.7924+ 0	8.3462+ 0		4.4617- 1					0.0000+ 0				1.7836- 2
1.0000+ 4 ~ 2.0000+ 4	7.4066+ 0	7.0306+ 0		3.7607- 1					0.0000+ 0				2.8383- 2
2.0000+ 4 ~ 4.0000+ 4	7.0810+ 0	6.8087+ 0		2.6225- 1					0.0000+ 0				5.2676- 2
4.0000+ 4 ~ 7.0000+ 4	7.0290+ 0	6.8544+ 0		1.7482- 1					0.0000+ 0				9.0094- 2
7.0000+ 4 ~ 1.0000+ 6	7.1096+ 0	6.9712+ 0		1.3836- 1					0.0000+ 0				1.2886- 1
1.0000+ 6 ~ 2.0000+ 6	7.0677+ 0	6.9527+ 0		1.1493- 1					2.1446-16				1.9638- 1
2.0000+ 6 ~ 4.0000+ 6	6.9058+ 0	6.7989+ 0		1.0882- 1					8.5702-16				2.9320- 1
4.0000+ 6 ~ 7.0000+ 6	6.7182+ 0	6.2804+ 0	9.4741- 1	7.6897- 2					2.3841-15				3.8452- 1
7.0000+ 6 ~ 1.0000+ 6	6.4939+ 0	5.6899+ 0	7.4158- 1	6.2120- 2					9.0732-15				4.4382- 1
1.0000+ 6 ~ 2.0000+ 6	6.8697+ 0	4.4650+ 0	1.3661+ 0	4.7680- 2					2.8972-13				6.2498- 1
2.0000+ 6 ~ 4.0000+ 6	4.5687+ 0	2.5887+ 0	1.9247+ 0	4.0736- 2					4.6147- 8				8.1636- 1
4.0000+ 6 ~ 7.0000+ 6	3.9878+ 0	1.7448+ 0	2.2270+ 0	1.4759- 2			8.0273- 7		4.3839- 8	1.2105-15			8.8561- 1
7.0000+ 6 ~ 1.0000+ 7	4.3440+ 0	2.1922+ 0	2.1120+ 0	4.2236- 3	3.4661- 2		1.9602- 4		7.5958- 6	2.6464- 9	1.1049-13		7.9769- 1
1.0000+ 7 ~ 2.0000+ 7	4.2263+ 0	2.1202+ 0	6.0801- 1	1.1918- 3	1.2868+ 0	1.8878- 1	1.3794- 2	1.1730- 3	3.4696- 3	8.7808- 4	1.1482- 3	1.7192- 4	8.8638- 1

MATERIAL =4607

CROSS SECTION

^{110}Pd (4607)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NF)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.6984+ 0	4.9946+ 0		7.0379- 1					0.0000+ 0				6.1184- 3
1.0000- 2 ~ 2.0000- 2	6.2960+ 0	4.9946+ 0		3.0044- 1					0.0000+ 0				6.1184- 3
2.0000- 2 ~ 4.0000- 2	6.2057+ 0	4.9946+ 0		2.1212- 1					0.0000+ 0				6.1184- 3
4.0000- 2 ~ 7.0000- 2	5.1499+ 0	4.9945+ 0		1.5542- 1					0.0000+ 0				6.1184- 3
7.0000- 2 ~ 1.0000- 1	5.1186+ 0	4.9944+ 0		1.2417- 1					0.0000+ 0				6.1184- 3
1.0000- 1 ~ 2.0000- 1	5.0880+ 0	4.9942+ 0		9.3754- 2					0.0000+ 0				6.1184- 3
2.0000- 1 ~ 4.0000- 1	5.0592+ 0	4.9938+ 0		6.5440- 2					0.0000+ 0				6.1184- 3
4.0000- 1 ~ 7.0000- 1	5.0402+ 0	4.9931+ 0		4.7037- 2					0.0000+ 0				6.1184- 3
7.0000- 1 ~ 1.0000+ 0	5.0289+ 0	4.9923+ 0		3.5580- 2					0.0000+ 0				6.1184- 3
1.0000+ 0 ~ 2.0000+ 0	5.0171+ 0	4.9907+ 0		2.6389- 2					0.0000+ 0				6.1184- 3
2.0000+ 0 ~ 4.0000+ 0	5.0037+ 0	4.9872+ 0		1.6611- 2					0.0000+ 0				6.1186- 3
4.0000+ 0 ~ 7.0000+ 0	4.9924+ 0	4.9823+ 0		1.0086- 2					0.0000+ 0				6.1191- 3
7.0000+ 0 ~ 1.0000+ 1	4.9839+ 0	4.9779+ 0		6.6087- 3					0.0000+ 0				6.1197- 3
1.0000+ 1 ~ 2.0000+ 1	4.9730+ 0	4.9694+ 0		3.6513- 3					0.0000+ 0				6.1216- 3
2.0000+ 1 ~ 4.0000+ 1	4.9588+ 0	4.9572+ 0		1.5760- 3					0.0000+ 0				6.1262- 3
4.0000+ 1 ~ 7.0000+ 1	4.9436+ 0	4.9426+ 0		9.8846- 4					0.0000+ 0				6.1383- 3
7.0000+ 1 ~ 1.0000+ 2	5.7105+ 0	4.9440+ 0		7.6647- 1					0.0000+ 0				6.1483- 3
1.0000+ 2 ~ 2.0000+ 2	4.9813+ 0	4.9248+ 0		5.6770- 2					0.0000+ 0				6.1935- 3
2.0000+ 2 ~ 4.0000+ 2	5.9428+ 0	4.9434+ 0		3.9920- 1					0.0000+ 0				6.2982- 3
4.0000+ 2 ~ 7.0000+ 2	4.9889+ 0	4.9433+ 0		1.4646- 1					0.0000+ 0				6.5729- 3
7.0000+ 2 ~ 1.0000+ 3	7.4219+ 0	6.2713+ 0		1.1500+ 0					0.0000+ 0				6.7969- 3
1.0000+ 3 ~ 2.0000+ 3	7.8170+ 0	7.3330+ 0		4.8406- 1					0.0000+ 0				7.6150- 3
2.0000+ 3 ~ 4.0000+ 3	7.8728+ 0	7.1819+ 0		4.9082- 1					0.0000+ 0				9.4150- 3
4.0000+ 3 ~ 7.0000+ 3	9.7640+ 0	9.1842+ 0		5.7978- 1					0.0000+ 0				1.3053- 2
7.0000+ 3 ~ 1.0000+ 4	7.3503+ 0	7.0205+ 0		3.2978- 1					0.0000+ 0				1.7498- 2
1.0000+ 4 ~ 2.0000+ 4	6.7371+ 0	6.4952+ 0		2.4083- 1					0.0000+ 0				2.7907- 2
2.0000+ 4 ~ 4.0000+ 4	6.5848+ 0	6.4287+ 0		1.5809- 1					0.0000+ 0				5.1900- 2
4.0000+ 4 ~ 7.0000+ 4	6.7746+ 0	6.5577+ 0		1.0692- 1					0.0000+ 0				8.9260- 2
7.0000+ 4 ~ 1.0000+ 5	7.0430+ 0	6.9559+ 0		8.6114- 2					0.0000+ 0				1.2791- 1
1.0000+ 5 ~ 2.0000+ 5	7.0636+ 0	6.9897+ 0		7.3951- 2					3.3918-19				1.9525- 1
2.0000+ 5 ~ 4.0000+ 5	6.9024+ 0	6.8269+ 0	5.6467- 3	6.9582- 2					1.3587-18				2.9222- 1
4.0000+ 5 ~ 7.0000+ 5	6.7129+ 0	6.1729+ 0	4.9713- 1	3.9708- 2					3.8925-18				3.9014- 1
7.0000+ 5 ~ 1.0000+ 6	6.4924+ 0	5.5972+ 0	8.6201- 1	5.2886- 2					1.3608-17				4.4934- 1
1.0000+ 6 ~ 2.0000+ 6	5.8592+ 0	4.3498+ 0	1.4950+ 0	2.3413- 2					4.2666-16				5.3639- 1
2.0000+ 6 ~ 4.0000+ 6	4.5511+ 0	2.5008+ 0	2.0258+ 0	1.6718- 2					5.2498-12				6.2692- 1
4.0000+ 6 ~ 7.0000+ 6	3.9876+ 0	1.7298+ 0	2.2515+ 0	5.9413- 3			1.1194- 9		1.0499- 7	2.0893-17			7.8521- 1
7.0000+ 6 ~ 1.0000+ 7	4.3436+ 0	2.1767+ 0	2.0364+ 0	1.8534- 3	1.2511- 1		1.4627- 5		6.2466- 6	1.9723-11	4.3522-16		7.9766- 1
1.0000+ 7 ~ 2.0000+ 7	4.2253+ 0	2.1442+ 0	5.0656- 1	9.9666- 4	1.2690+ 0	2.9297- 1	8.4437- 3	4.3490- 4	2.2586- 3	2.6167- 4	6.1207- 4	1.6813- 4	8.6534- 1

MATERIAL =4701

CROSS SECTION

^{107}Ag (4701)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NF)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.2761+ 2	7.5745+ 0		1.1993+ 2			0.0000+ 0		0.0000+ 0				6.1188- 3
1.0000- 2 ~ 2.0000- 2	5.8829+ 1	7.5714+ 0		5.1158+ 1			0.0000+ 0		0.0000+ 0				6.1188- 3
2.0000- 2 ~ 4.0000- 2	4.3790+ 1	7.5657+ 0		3.6124+ 1			0.0000+ 0		0.0000+ 0				6.1188- 3
4.0000- 2 ~ 7.0000- 2	3.4051+ 1	7.5589+ 0		2.6392+ 1			0.0000+ 0		0.0000+ 0				6.1188- 3
7.0000- 2 ~ 1.0000- 1	2.8569+ 1	7.5495+ 0		2.1020+ 1			0.0000+ 0		0.0000+ 0				6.1188- 3
1.0000- 1 ~ 2.0000- 1	2.3467+ 1	7.5297+ 0		1.5837+ 1			0.0000+ 0		0.0000+ 0				6.1188- 3
2.0000- 1 ~ 4.0000- 1	1.8519+ 1	7.5847+ 0		1.0936+ 1			0.0000+ 0		0.0000+ 0				6.1188- 3
4.0000- 1 ~ 7.0000- 1	1.5252+ 1	7.5125+ 0		7.7398+ 0			0.0000+ 0		0.0000+ 0				6.1188- 3
7.0000- 1 ~ 1.0000+ 0	1.3368+ 1	7.4299+ 0		5.9261+ 0			0.0000+ 0		0.0000+ 0				6.1188- 3
1.0000+ 0 ~ 2.0000+ 0	1.1390+ 1	7.2658+ 0		4.1248+ 0			0.0000+ 0		0.0000+ 0				6.1188- 3
2.0000+ 0 ~ 4.0000+ 0	9.3966+ 0	6.9443+ 0		2.4522+ 0			0.0000+ 0		0.0000+ 0				6.1188- 3
4.0000+ 0 ~ 7.0000+ 0	7.9970+ 0	6.5225+ 0		1.4745+ 0			0.0000+ 0		0.0000+ 0				6.1188- 3
7.0000+ 0 ~ 1.0000+ 1	7.2516+ 0	6.1088+ 0		1.1428+ 0			0.0000+ 0		0.0000+ 0				6.1188- 3
1.0000+ 1 ~ 2.0000+ 1	8.0668+ 1	1.1129+ 1		6.9739+ 1			0.0000+ 0		0.0000+ 0				6.1188- 3
2.0000+ 1 ~ 4.0000+ 1	6.0216+ 0	6.3435+ 0		6.7784- 1			0.0000+ 0		0.0000+ 0				6.1188- 3
4.0000+ 1 ~ 7.0000+ 1	8.5676+ 1	1.2602+ 1		5.3072+ 1			0.0000+ 0		0.0000+ 0				6.1188- 3
7.0000+ 1 ~ 1.0000+ 2	5.8558+ 0	6.7851+ 0		7.0425- 2			0.0000+ 0		0.0000+ 0				6.1188- 3
1.0000+ 2 ~ 2.0000+ 2	7.4397+ 0	5.5113+ 0		1.9284+ 0			0.0000+ 0		0.0000+ 0				6.1188- 3
2.0000+ 2 ~ 4.0000+ 2	1.4082+ 1	8.1151+ 0		5.9489+ 0			0.0000+ 0		0.0000+ 0				6.1188- 3
4.0000+ 2 ~ 7.0000+ 2	1.5286+ 1	9.8854+ 0		5.6010+ 0			0.0000+ 0		0.0000+ 0				6.1188- 3
7.0000+ 2 ~ 1.0000+ 3	1.0869+ 1	7.8257+ 0		3.0433+ 0			0.0000+ 0		0.0000+ 0				6.1188- 3
1.0000+ 3 ~ 2.0000+ 3	9.6418+ 0	7.6834+ 0		1.9602+ 0			0.0000+ 0		0.0000+ 0				6.7488- 3
2.0000+ 3 ~ 4.0000+ 3	8.9883+ 0	7.3998+ 0		1.5885+ 0			0.0000+ 0		0.0000+ 0				8.8377- 3
4.0000+ 3 ~ 7.0000+ 3	9.2739+ 0	7.8087+ 0		1.4653+ 0			0.0000+ 0		0.0000+ 0				1.1709- 2
7.0000+ 3 ~ 1.0000+ 4	8.5243+ 0	7.0855+ 0		1.4387+ 0			0.0000+ 0		0.0000+ 0				1.5871- 2
1.0000+ 4 ~ 2.0000+ 4	8.0317+ 0	6.6217+ 0		1.2100+ 0			0.0000+ 0		0.0000+ 0				2.3784- 2
2.0000+ 4 ~ 4.0000+ 4	7.7619+ 0	6.8525+ 0		9.0948- 1			0.0000+ 0		0.0000+ 0				4.2872- 2
4.0000+ 4 ~ 7.0000+ 4	7.7650+ 0	7.1281+ 0		6.2581- 1			0.0000+ 0		0.0000+ 0				7.4188- 2
7.0000+ 4 ~ 1.0000+ 6	7.6796+ 0	7.1850+ 0	7.8618- 4	4.9381- 1			0.0000+ 0		0.0000+ 0				1.1200- 1
1.0000+ 6 ~ 2.0000+ 6	7.8933+ 0	7.2888+ 0	3.2190- 2	3.8229- 1			0.0000+ 0		0.0000+ 0				1.7488- 1
2.0000+ 6 ~ 4.0000+ 6	7.0728+ 0	7.2744+ 0	1.4631- 1	2.5223- 1			0.0000+ 0		0.0000+ 0				2.7297- 1
4.0000+ 6 ~ 7.0000+ 6	7.1994+ 0	6.1714+ 0	8.8011- 1	1.4769- 1			0.0000+ 0		0.0000+ 0				3.8014- 1
7.0000+ 6 ~ 1.0000+ 6	6.5959+ 0	6.3396+ 0	1.2418+ 0	1.1460- 1			0.0000+ 0		0.0000+ 0				4.8823- 1
1.0000+ 6 ~ 2.0000+ 6	5.7703+ 0	3.9169+ 0	1.7589+ 0	9.4518- 2			4.1890- 6		2.2565- 9				6.8090- 1
2.0000+ 6 ~ 4.0000+ 6	4.4639+ 0	2.3693+ 0	2.0190+ 0	5.5070- 2			5.4585- 4		1.4442- 5	4.6131- 8			8.4888- 1
4.0000+ 6 ~ 7.0000+ 6	3.9951+ 0	1.9191+ 0	2.0572+ 0	2.1100- 2			9.5220- 3	7.5134- 6	1.2264- 4	3.6058- 7			7.0440- 1
7.0000+ 6 ~ 1.0000+ 7	4.2973+ 0	2.2698+ 0	1.9970+ 0	1.2767- 3	3.0508- 3		6.1920- 3	2.3737- 4	7.2516- 4	7.6569- 7			8.0676- 1
1.0000+ 7 ~ 2.0000+ 7	4.1411+ 0	2.3639+ 0	5.0379- 1	6.6711- 6	1.2106+ 0	8.6399- 3	1.3989- 2	1.2346- 2	4.0114- 3	3.9046- 3			8.7284- 1

^{109}Ag (4702)

MATERIAL =4702

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.8034+ 2	2.6196+ 0		2.7782+ 2					7.0225-18				6.0002- 3
1.0000- 2 ~ 2.0000- 2	1.2175+ 2	2.5160+ 0		1.1923+ 2					2.1075-17				6.0002- 3
2.0000- 2 ~ 4.0000- 2	8.7279+ 1	2.5108+ 0		8.4768+ 1					4.2163-17				6.0002- 3
4.0000- 2 ~ 7.0000- 2	6.5342+ 1	2.5021+ 0		6.2840+ 1					7.7911-17				6.0002- 3
7.0000- 2 ~ 1.0000- 1	5.3418+ 1	2.4916+ 0		5.0926+ 1					1.1949-16				6.0002- 3
1.0000- 1 ~ 2.0000- 1	4.2178+ 1	2.4684+ 0		9.9710+ 1					2.1087-18				6.0002- 3
2.0000- 1 ~ 4.0000- 1	3.2143+ 1	2.4134+ 0		2.9730+ 1					4.2178-16				6.0002- 3
4.0000- 1 ~ 7.0000- 1	2.6543+ 1	2.3170+ 0		2.4226+ 1					7.7324-15				6.0002- 3
7.0000- 1 ~ 1.0000+ 0	2.4311+ 1	2.1934+ 0		2.2117+ 1					1.1960-15				6.0002- 3
1.0000+ 0 ~ 2.0000+ 0	2.5216+ 1	1.8898+ 0		2.3325+ 1					2.1089-15				6.0002- 3
2.0000+ 0 ~ 4.0000+ 0	5.6869+ 1	1.4990+ 0		5.6360+ 1					4.2177-15				6.0002- 3
4.0000+ 0 ~ 7.0000+ 0	2.4793+ 3	2.1743+ 2		2.2559+ 3					7.7325-15				6.0002- 3
7.0000+ 0 ~ 1.0000+ 1	2.6887+ 1	1.1354+ 1		1.5533+ 1					1.1950-14				6.0002- 3
1.0000+ 1 ~ 2.0000+ 1	8.1095+ 0	6.4484+ 0		1.6629+ 0					2.1089-14				6.0002- 3
2.0000+ 1 ~ 4.0000+ 1	4.5892+ 1	6.8661+ 0		4.0036+ 1					4.2177-14				6.0002- 3
4.0000+ 1 ~ 7.0000+ 1	4.1946+ 1	1.0471+ 1		3.1474+ 1					7.7325-14				6.0002- 3
7.0000+ 1 ~ 1.0000+ 2	5.1487+ 1	1.3599+ 1		3.7888+ 1					1.1950-13				6.0002- 3
1.0000+ 2 ~ 2.0000+ 2	3.4181+ 1	1.5811+ 1		1.8370+ 1					2.1089-13				6.0002- 3
2.0000+ 2 ~ 4.0000+ 2	1.9595+ 1	1.0859+ 1		8.7415+ 0					4.2177-13				6.0002- 3
4.0000+ 2 ~ 7.0000+ 2	1.8529+ 1	1.2168+ 1		6.3610+ 0					7.7325-13				6.0002- 3
7.0000+ 2 ~ 1.0000+ 3	1.2991+ 1	9.0892+ 0		3.9217+ 0					1.1950-12				6.0002- 3
1.0000+ 3 ~ 2.0000+ 3	1.1456+ 1	8.6340+ 0		2.6223+ 0					2.1089-12				6.6666- 3
2.0000+ 3 ~ 4.0000+ 3	9.9273+ 0	8.0945+ 0		1.8328+ 0					4.2177-12				8.8217- 3
4.0000+ 3 ~ 7.0000+ 3	1.0032+ 1	8.6310+ 0		1.6014+ 0					7.7325-12				1.1992- 2
7.0000+ 3 ~ 1.0000+ 4	8.8990+ 0	7.4028+ 0		1.4962+ 0					1.1950-11				1.5831- 2
1.0000+ 4 ~ 2.0000+ 4	8.3647+ 0	7.1282+ 0		1.2256+ 0					2.1089-11				2.4360- 2
2.0000+ 4 ~ 4.0000+ 4	8.0185+ 0	7.1009+ 0		9.1584- 1					4.2177-11				4.4011- 2
4.0000+ 4 ~ 7.0000+ 4	8.0577+ 0	7.4027+ 0		6.5506- 1					7.7325-11				7.6779- 2
7.0000+ 4 ~ 1.0000+ 5	7.9987+ 0	7.6027+ 0	1.9983- 3	4.9395- 1					1.1950-10				1.1810- 1
1.0000+ 5 ~ 2.0000+ 5	8.0411+ 0	7.5447+ 0	3.5666- 2	3.6075- 1					2.1089-10				1.6018- 1
2.0000+ 5 ~ 4.0000+ 5	8.0508+ 0	7.6479+ 0	1.6581- 1	2.3725- 1			5.6599-10		4.2177-10				2.8243- 1
4.0000+ 5 ~ 7.0000+ 5	7.4558+ 0	6.4258+ 0	8.7710- 1	1.5291- 1			8.1945- 9		7.7325-10				3.9715- 1
7.0000+ 5 ~ 1.0000+ 6	6.7035+ 0	5.2014+ 0	1.3912+ 0	1.1082- 1			1.9714- 8		1.1950- 9				4.8020- 1
1.0000+ 6 ~ 2.0000+ 6	6.8568+ 0	3.9269+ 0	1.8511+ 0	7.9803- 2			4.4573- 8		2.1089- 9				5.7558- 1
2.0000+ 6 ~ 4.0000+ 6	4.5363+ 0	2.4566+ 0	2.0349+ 0	4.1776- 2			2.1610- 5		8.9204- 9	1.6395- 8			6.5505- 1
4.0000+ 6 ~ 7.0000+ 6	4.1117+ 0	2.0066+ 0	2.0929+ 0	1.1389- 2			8.7928- 4	1.0124- 8	1.0024- 5	3.4898- 7			7.0371- 1
7.0000+ 6 ~ 1.0000+ 7	4.3433+ 0	2.9214+ 0	1.9883+ 0	9.2851- 4	2.9698- 2		2.7285- 3	6.6416- 6	1.8924- 4	6.2971- 7			8.0460- 1
1.0000+ 7 ~ 2.0000+ 7	4.2114+ 0	2.4397+ 0	4.4880- 1	4.7919- 6	1.2377+ 0	4.5797- 2	1.3638- 2	1.6720- 2	4.4696- 3	6.6417- 3			8.7289- 1

^{110m}Ag (4703)

MATERIAL =4703

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.6674+ 2	6.4803+ 0	0.0000+ 0	2.5926+ 2			0.0000+ 0		0.0000+ 0				6.1183- 3
1.0000- 2 ~ 2.0000- 2	1.1606+ 2	6.4743+ 0	0.0000+ 0	1.0957+ 2			0.0000+ 0		0.0000+ 0				6.1183- 3
2.0000- 2 ~ 4.0000- 2	8.2838+ 1	6.4656+ 0	0.0000+ 0	7.6373+ 1			0.0000+ 0		0.0000+ 0				6.1183- 3
4.0000- 2 ~ 7.0000- 2	6.1254+ 1	6.4511+ 0	0.0000+ 0	5.4783+ 1			0.0000+ 0		0.0000+ 0				6.1183- 3
7.0000- 2 ~ 1.0000- 1	4.9066+ 1	6.4343+ 0	0.0000+ 0	4.2631+ 1			0.0000+ 0		0.0000+ 0				6.1183- 3
1.0000- 1 ~ 2.0000- 1	3.6970+ 1	6.3998+ 0	0.0000+ 0	3.0670+ 1			0.0000+ 0		0.0000+ 0				6.1183- 3
2.0000- 1 ~ 4.0000- 1	2.5301+ 1	6.3281+ 0	0.0000+ 0	1.8973+ 1			0.0000+ 0		0.0000+ 0				6.1183- 3
4.0000- 1 ~ 7.0000- 1	1.7650+ 1	6.2281+ 0	0.0000+ 0	1.1422+ 1			0.0000+ 0		0.0000+ 0				6.1183- 3
7.0000- 1 ~ 1.0000+ 0	1.3461+ 1	6.1312+ 0	0.0000+ 0	7.3198+ 0			0.0000+ 0		0.0000+ 0				6.1183- 3
1.0000+ 0 ~ 2.0000+ 0	9.8441+ 0	5.9841+ 0	0.0000+ 0	3.8600+ 0			0.0000+ 0		0.0000+ 0				6.1183- 3
2.0000+ 0 ~ 4.0000+ 0	7.2266+ 0	5.7872+ 0	2.6051- 7	1.4362+ 0			0.0000+ 0		0.0000+ 0				6.1198- 3
4.0000+ 0 ~ 7.0000+ 0	6.1797+ 0	5.6207+ 0	2.8386- 6	5.5906- 1			0.0000+ 0		0.0000+ 0				6.1282- 3
7.0000+ 0 ~ 1.0000+ 1	5.9191+ 0	5.4878+ 0	4.9568- 6	4.3191- 1			0.0000+ 0		0.0000+ 0				6.1555- 3
1.0000+ 1 ~ 2.0000+ 1	2.1696+ 1	5.3790+ 0	7.2490- 6	1.6317+ 1			0.0000+ 0		0.0000+ 0				6.1524- 3
2.0000+ 1 ~ 4.0000+ 1	1.4441+ 1	5.7164+ 0	1.0133- 5	8.7242+ 0			0.0000+ 0		0.0000+ 0				6.1836- 3
4.0000+ 1 ~ 7.0000+ 1	9.5098+ 0	5.6513+ 0	1.4052- 5	3.9686+ 0			0.0000+ 0		0.0000+ 0				6.2291- 3
7.0000+ 1 ~ 1.0000+ 2	8.6878+ 0	5.5331+ 0	1.7090- 5	3.1546+ 0			0.0000+ 0		0.0000+ 0				6.3001- 3
1.0000+ 2 ~ 2.0000+ 2	2.5488+ 1	5.2835+ 0	2.2976- 5	2.0202+ 1			0.0000+ 0		0.0000+ 0				6.4837- 3
2.0000+ 2 ~ 4.0000+ 2	2.4525+ 1	5.2037+ 0	3.2232- 5	1.9326+ 1			0.0000+ 0		0.0000+ 0				6.7055- 3
4.0000+ 2 ~ 7.0000+ 2	1.9303+ 1	5.1399+ 0	4.4952- 5	1.4163+ 1			0.0000+ 0		0.0000+ 0				7.4507- 3
7.0000+ 2 ~ 1.0000+ 3	1.5429+ 1	5.1731+ 0	5.4851- 5	1.1256+ 1			0.0000+ 0		0.0000+ 0				7.9821- 3
1.0000+ 3 ~ 2.0000+ 3	1.3698+ 1	5.1879+ 0	7.6433- 5	8.6099+ 0			0.0000+ 0		0.0000+ 0				9.3445- 3
2.0000+ 3 ~ 4.0000+ 3	1.1200+ 1	5.1744+ 0	1.3889- 4	6.0259+ 0			0.0000+ 0		0.0000+ 0				1.2653- 2
4.0000+ 3 ~ 7.0000+ 3	9.6617+ 0	5.1384+ 0	2.9454- 4	4.5160+ 0			0.0000+ 0		0.0000+ 0				1.8318- 2
7.0000+ 3 ~ 1.0000+ 4	8.8393+ 0	5.0952+ 0	5.4555- 4	3.7436+ 0			0.0000+ 0		0.0000+ 0				2.4918- 2
1.0000+ 4 ~ 2.0000+ 4	8.1246+ 0	5.0358+ 0	1.4166- 3	3.0874+ 0			0.0000+ 0		0.0000+ 0				3.9841- 2
2.0000+ 4 ~ 4.0000+ 4	7.5801+ 0	4.9917+ 0	4.3763- 3	2.5640+ 0			0.0000+ 0		0.0000+ 0				7.3465- 2
4.0000+ 4 ~ 7.0000+ 4	7.2876+ 0	5.0271+ 0	1.0087- 2	2.2603+ 0			0.0000+ 0		0.0000+ 0				1.2376- 1
7.0000+ 4 ~ 1.0000+ 5	7.1770+ 0	5.1202+ 0	1.7625- 2	2.0393+ 0			0.0000+ 0		0.0000+ 0				1.7404- 1
1.0000+ 5 ~ 2.0000+ 5	7.0536+ 0	5.2883+ 0	3.5391- 2	1.7365+ 0			4.4619- 8		3.1206-10				2.5531- 1
2.0000+ 5 ~ 4.0000+ 5	6.9028+ 0	5.4411+ 0	8.1301- 2	1.4009+ 0			1.7648- 7		1.2314- 9				3.6508- 1
4.0000+ 5 ~ 7.0000+ 5	6.7192+ 0	5.9632+ 0	1.6917- 1	1.1591+ 0			4.5658- 7		2.9206- 9				4.5087- 1
7.0000+ 5 ~ 1.0000+ 6	5.4918+ 0	5.0006+ 0	6.7384- 1	9.1846- 1			1.3688- 6		8.3974- 9				5.1068- 1
1.0000+ 6 ~ 2.0000+ 6	5.8561+ 0	4.0453+ 0	1.3107+ 0	5.0533- 1			9.9874- 8		4.1432- 8				5.0440- 1
2.0000+ 6 ~ 4.0000+ 6	4.5611+ 0	2.6046+ 0	1.6187+ 0	1.2378- 1			1.0655- 4		8.5293- 7				6.5889- 1
4.0000+ 6 ~ 7.0000+ 6	3.9876+ 0	2.0272+ 0	1.9423+ 0	1.6883- 2	1.1083- 8		2.9508- 4		1.1272- 5	1.1638-15	9.7377-14	1.5019-15	6.8830- 1
7.0000+ 6 ~ 1.0000+ 7	4.3436+ 0	2.4946+ 0	1.0976+ 0	2.4003- 3	7.4488- 1		1.2914- 3	6.8483- 8	1.1363- 4	1.8242- 9	5.2604- 8	1.3111- 9	7.8770- 1
1.0000+ 7 ~ 2.0000+ 7	4.2262+ 0	2.4406+ 0	1.7968- 1	1.1267- 3	1.4416+ 0	1.3330- 1	1.2190- 2	6.1018- 3	3.0032- 3	1.3182- 3	4.2698- 3	9.9298- 4	8.8534- 1

MATERIAL =4801

CROSS SECTION

^{106}Cd (4801)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	8.6236+ 0	6.6224+ 0		3.0012+ 0			0.0000+ 0		0.0000+ 0				6.3494- 3
1.0000- 2 ~ 2.0000- 2	6.8046+ 0	6.6223+ 0		1.2823+ 0			0.0000+ 0		0.0000+ 0				6.3494- 3
2.0000- 2 ~ 4.0000- 2	6.4290+ 0	6.6223+ 0		8.0677- 1			0.0000+ 0		0.0000+ 0				6.3494- 3
4.0000- 2 ~ 7.0000- 2	6.1987+ 0	6.6221+ 0		6.6855- 1			0.0000+ 0		0.0000+ 0				6.3494- 3
7.0000- 2 ~ 1.0000- 1	5.0548+ 0	6.6220+ 0		6.3287- 1			0.0000+ 0		0.0000+ 0				6.3494- 3
1.0000- 1 ~ 2.0000- 1	5.9256+ 0	5.6217+ 0		4.0412- 1			0.0000+ 0		0.0000+ 0				6.3494- 3
2.0000- 1 ~ 4.0000- 1	5.8060+ 0	5.6209+ 0		2.8612- 1			0.0000+ 0		0.0000+ 0				6.3494- 3
4.0000- 1 ~ 7.0000- 1	5.7285+ 0	5.5197+ 0		2.0853- 1			0.0000+ 0		0.0000+ 0				6.3494- 3
7.0000- 1 ~ 1.0000+ 0	5.6843+ 0	5.6182+ 0		1.6614- 1			0.0000+ 0		0.0000+ 0				6.3494- 3
1.0000+ 0 ~ 2.0000+ 0	5.8399+ 0	5.5150+ 0		1.2491- 1			0.0000+ 0		0.0000+ 0				6.3494- 3
2.0000+ 0 ~ 4.0000+ 0	5.5938+ 0	5.5078+ 0		8.6057- 2			0.0000+ 0		0.0000+ 0				6.3496- 3
4.0000+ 0 ~ 7.0000+ 0	5.5586+ 0	5.4962+ 0		6.0607- 2			0.0000+ 0		0.0000+ 0				6.3509- 3
7.0000+ 0 ~ 1.0000+ 1	5.5289+ 0	5.4829+ 0		4.6006- 2			0.0000+ 0		0.0000+ 0				6.3519- 3
1.0000+ 1 ~ 2.0000+ 1	5.4882+ 0	5.4585+ 0		3.1707- 2			0.0000+ 0		0.0000+ 0				6.3551- 3
2.0000+ 1 ~ 4.0000+ 1	5.4229+ 0	5.4046+ 0		1.8274- 2			0.0000+ 0		0.0000+ 0				6.3619- 3
4.0000+ 1 ~ 7.0000+ 1	5.3467+ 0	5.3366+ 0		1.0129- 2			0.0000+ 0		0.0000+ 0				6.3765- 3
7.0000+ 1 ~ 1.0000+ 2	5.2798+ 0	5.2733+ 0		6.2968- 3			0.0000+ 0		0.0000+ 0				6.3921- 3
1.0000+ 2 ~ 2.0000+ 2	5.1729+ 0	5.1692+ 0		3.7570- 3			0.0000+ 0		0.0000+ 0				6.4476- 3
2.0000+ 2 ~ 4.0000+ 2	4.9463+ 0	4.8974+ 0		4.8897- 2			0.0000+ 0		0.0000+ 0				6.5713- 3
4.0000+ 2 ~ 7.0000+ 2	2.6648+ 1	2.1746+ 1		4.9031+ 0			0.0000+ 0		0.0000+ 0				6.8800- 3
7.0000+ 2 ~ 1.0000+ 3	1.7515+ 1	1.4262+ 1		3.2527+ 0			0.0000+ 0		0.0000+ 0				7.1533- 3
1.0000+ 3 ~ 2.0000+ 3	1.4199+ 1	1.1766+ 1		2.4438+ 0			0.0000+ 0		0.0000+ 0				7.9101- 3
2.0000+ 3 ~ 4.0000+ 3	1.1177+ 1	9.3255+ 0		1.8515+ 0			0.0000+ 0		0.0000+ 0				9.9441- 3
4.0000+ 3 ~ 7.0000+ 3	9.3410+ 0	7.8827+ 0		1.4582+ 0			0.0000+ 0		0.0000+ 0				1.3811- 2
7.0000+ 3 ~ 1.0000+ 4	8.4104+ 0	7.2200+ 0		1.1904+ 0			0.0000+ 0		0.0000+ 0				1.8532- 2
1.0000+ 4 ~ 2.0000+ 4	7.6414+ 0	6.7470+ 0		8.9442- 1			0.0000+ 0		0.0000+ 0				2.9496- 2
2.0000+ 4 ~ 4.0000+ 4	7.1481+ 0	6.5414+ 0		6.0470- 1			0.0000+ 0		0.0000+ 0				5.4386- 2
4.0000+ 4 ~ 7.0000+ 4	7.0528+ 0	6.6522+ 0		4.0062- 1			0.0000+ 0		0.0000+ 0				9.2569- 2
7.0000+ 4 ~ 1.0000+ 5	7.1208+ 0	6.8245+ 0		2.9636- 1			0.0000+ 0		0.0000+ 0				1.3179- 1
1.0000+ 5 ~ 2.0000+ 5	7.0697+ 0	6.8331+ 0		2.3629- 1			0.0000+ 0		4.0799- 6				1.9979- 1
2.0000+ 5 ~ 4.0000+ 5	6.9068+ 0	6.6980+ 0		2.0878- 1			0.0000+ 0		1.6520- 5				2.9726- 1
4.0000+ 5 ~ 7.0000+ 5	6.7189+ 0	6.4758+ 0	2.6801- 2	2.1899- 1			5.3335- 9		5.9318- 5				3.7444- 1
7.0000+ 5 ~ 1.0000+ 6	6.4947+ 0	6.2631+ 0	4.6680- 1	1.6399- 1			2.8000- 8		8.6258- 5				4.3601- 1
1.0000+ 6 ~ 2.0000+ 6	6.8672+ 0	4.8723+ 0	8.0417- 1	1.8869- 1			9.3688- 6		5.4152- 4	1.0295-19			4.8804- 1
2.0000+ 6 ~ 4.0000+ 6	4.5564+ 0	2.8972+ 0	1.4839+ 0	1.6155- 1			1.5987- 9		7.4572- 3	1.4643-15			5.7745- 1
4.0000+ 6 ~ 7.0000+ 6	3.9878+ 0	1.8770+ 0	2.0035+ 0	5.4973- 2			1.1644- 2		4.0073- 2	1.0024- 9	3.9711-19		6.7908- 1
7.0000+ 6 ~ 1.0000+ 7	4.3440+ 0	2.3014+ 0	1.9400+ 0	1.2773- 2			3.0839- 2	3.0871- 6	6.8487- 2	6.6133- 6	1.0261- 6		7.0767- 1
1.0000+ 7 ~ 2.0000+ 7	4.2255+ 0	2.1426+ 0	9.0484- 1	2.2109- 3	6.5411- 1	1.6042- 5	9.7466- 2	2.9349- 1	8.6441- 2	9.1624- 2	9.1121- 3	5.8188- 4	8.6636- 1

MATERIAL =4802

CROSS SECTION

^{108}Cd (4802)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.8947+ 0	6.6326+ 0		3.9621+ 0					0.0000+ 0				6.2319- 3
1.0000- 2 ~ 2.0000- 2	6.9694+ 0	6.6326+ 0		1.4368+ 0					0.0000+ 0				6.2319- 3
2.0000- 2 ~ 4.0000- 2	6.6086+ 0	6.6326+ 0		1.0181+ 0					0.0000+ 0				6.2319- 3
4.0000- 2 ~ 7.0000- 2	6.2798+ 0	5.5324+ 0		7.4721- 1					0.0000+ 0				6.2319- 3
7.0000- 2 ~ 1.0000- 1	6.1304+ 0	6.6323+ 0		6.9813- 1					0.0000+ 0				6.2319- 3
1.0000- 1 ~ 2.0000- 1	6.9860+ 0	6.5320+ 0		4.6402- 1					0.0000+ 0				6.2319- 3
2.0000- 1 ~ 4.0000- 1	6.8628+ 0	6.6313+ 0		3.2146- 1					0.0000+ 0				6.2319- 3
4.0000- 1 ~ 7.0000- 1	6.7665+ 0	5.6302+ 0		2.3628- 1					0.0000+ 0				6.2319- 3
7.0000- 1 ~ 1.0000+ 0	6.7184+ 0	6.6289+ 0		1.8950- 1					0.0000+ 0				6.2319- 3
1.0000+ 0 ~ 2.0000+ 0	5.8704+ 0	5.6260+ 0		1.4431- 1					0.0000+ 0				6.2319- 3
2.0000+ 0 ~ 4.0000+ 0	5.6220+ 0	5.6196+ 0		1.0261- 1					0.0000+ 0				6.2320- 3
4.0000+ 0 ~ 7.0000+ 0	5.5845+ 0	5.5086+ 0		7.5943- 2					0.0000+ 0				6.2330- 3
7.0000+ 0 ~ 1.0000+ 1	5.5570+ 0	5.4957+ 0		6.1399- 2					0.0000+ 0				6.2358- 3
1.0000+ 1 ~ 2.0000+ 1	5.5157+ 0	5.4876+ 0		4.7885- 2					0.0000+ 0				6.2365- 3
2.0000+ 1 ~ 4.0000+ 1	5.4408+ 0	5.4038+ 0		3.5841- 2					0.0000+ 0				6.2422- 3
4.0000+ 1 ~ 7.0000+ 1	5.1325+ 0	5.2981+ 0		2.3448- 1					0.0000+ 0				6.2660- 3
7.0000+ 1 ~ 1.0000+ 2	5.1875+ 0	5.1651+ 0		9.2305- 2					0.0000+ 0				6.2889- 3
1.0000+ 2 ~ 2.0000+ 2	4.8981+ 0	4.6242+ 0		7.3901- 2					0.0000+ 0				6.3200- 3
2.0000+ 2 ~ 4.0000+ 2	4.8018+ 1	2.3458+ 1		2.5381+ 1					0.0000+ 0				6.4365- 3
4.0000+ 2 ~ 7.0000+ 2	2.4493+ 1	2.1161+ 1		3.3321+ 0					0.0000+ 0				6.7297- 3
7.0000+ 2 ~ 1.0000+ 3	2.0243+ 1	1.7859+ 1		2.3843+ 0					0.0000+ 0				6.9713- 3
1.0000+ 3 ~ 2.0000+ 3	1.6240+ 1	1.4411+ 1		1.8293+ 0					0.0000+ 0				7.7231- 3
2.0000+ 3 ~ 4.0000+ 3	1.2588+ 1	1.1194+ 1		1.4347+ 0					0.0000+ 0				9.7048- 3
4.0000+ 3 ~ 7.0000+ 3	1.0312+ 1	9.1570+ 0		1.1548+ 0					0.0000+ 0				1.3487- 2
7.0000+ 3 ~ 1.0000+ 4	9.1348+ 0	8.2270+ 0		9.0785- 1					0.0000+ 0				1.8101- 2
1.0000+ 4 ~ 2.0000+ 4	8.1391+ 0	7.4578+ 0		6.8154- 1					0.0000+ 0				2.8838- 2
2.0000+ 4 ~ 4.0000+ 4	7.4242+ 0	6.9743+ 0		4.4988- 1					0.0000+ 0				5.3934- 2
4.0000+ 4 ~ 7.0000+ 4	7.1764+ 0	6.8037+ 0		2.9271- 1					0.0000+ 0				9.1130- 2
7.0000+ 4 ~ 1.0000+ 5	7.1612+ 0	6.9431+ 0		2.0804- 1					0.0000+ 0				1.3008- 1
1.0000+ 5 ~ 2.0000+ 5	7.0677+ 0	6.8988+ 0		1.6903- 1					1.6997- 9				1.8788- 1
2.0000+ 5 ~ 4.0000+ 5	6.8047+ 0	6.7503+ 0		1.5433- 1					8.3989- 9				2.8485- 1
4.0000+ 5 ~ 7.0000+ 5	6.7172+ 0	6.5280+ 0	2.8894- 2	1.8405- 1					1.7855- 8				3.7143- 1
7.0000+ 5 ~ 1.0000+ 6	6.4936+ 0	6.2912+ 0	4.8108- 1	1.2076- 1					7.0579- 8				4.3278- 1
1.0000+ 6 ~ 2.0000+ 6	5.8660+ 0	4.8733+ 0	8.5306- 1	1.4060- 1			2.1866-13		1.1586- 6				4.8833- 1
2.0000+ 6 ~ 4.0000+ 6	4.5619+ 0	2.8011+ 0	1.6251+ 0	1.2249- 1			8.9673- 8		7.0218- 5	4.0095-17			5.9269- 1
4.0000+ 6 ~ 7.0000+ 6	3.9878+ 0	1.8763+ 0	2.0374+ 0	6.8201- 2			2.9291- 3		1.5922- 3	2.0570-11	7.1512-19		6.7788- 1
7.0000+ 6 ~ 1.0000+ 7	4.3440+ 0	2.2774+ 0	2.0209+ 0	2.2436- 2			1.7491- 2	4.7837-10	5.4144- 3	1.4298- 5	2.6660- 8		7.0766- 1
1.0000+ 7 ~ 2.0000+ 7	4.2253+ 0	2.2420+ 0	1.0410+ 0	3.9951- 3	8.0686- 1	8.0674- 3	4.7202- 2	3.4889- 2	1.0164- 2	2.6793- 2	3.2997- 3	4.4308- 4	8.6636- 1

MATERIAL =4803 CROSS SECTION

^{110}Cd (4803)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.2754+ 1	1.8648+ 1		3.4106+ 1					0.0000+ 0				6.1186- 3
1.0000- 2 ~ 2.0000- 2	3.3218+ 1	1.8646+ 1		1.4672+ 1					0.0000+ 0				
2.0000- 2 ~ 4.0000- 2	2.8944+ 1	1.8643+ 1		1.0300+ 1					0.0000+ 0				6.1186- 3
4.0000- 2 ~ 7.0000- 2	2.8202+ 1	1.8838+ 1		7.5693+ 0					0.0000+ 0				6.1186- 3
7.0000- 2 ~ 1.0000- 1	2.4688+ 1	1.8633+ 1		6.0653+ 0					0.0000+ 0				6.1186- 3
1.0000- 1 ~ 2.0000- 1	2.9218+ 1	1.8820+ 1		4.5952+ 0					0.0000+ 0				6.1186- 3
2.0000- 1 ~ 4.0000- 1	2.1836+ 1	1.8692+ 1		3.2430+ 0					0.0000+ 0				6.1186- 3
4.0000- 1 ~ 7.0000- 1	2.0971+ 1	1.8545+ 1		2.3781+ 0					0.0000+ 0				6.1185- 3
7.0000- 1 ~ 1.0000+ 0	2.0379+ 1	1.8489+ 1		1.8898+ 0					0.0000+ 0				6.1186- 3
1.0000+ 0 ~ 2.0000+ 0	1.9794+ 1	1.8368+ 1		1.4258+ 0					0.0000+ 0				6.1185- 3
2.0000+ 0 ~ 4.0000+ 0	1.9063+ 1	1.8096+ 1		9.8703- 1					0.0000+ 0				6.1186- 3
4.0000+ 0 ~ 7.0000+ 0	1.8362+ 1	1.7661+ 1		7.0105- 1					0.0000+ 0				6.1184- 3
7.0000+ 0 ~ 1.0000+ 1	1.7702+ 1	1.7163+ 1		5.3887- 1					0.0000+ 0				6.1200- 3
1.0000+ 1 ~ 2.0000+ 1	1.6560+ 1	1.6179+ 1		3.8122- 1					0.0000+ 0				6.1222- 3
2.0000+ 1 ~ 4.0000+ 1	1.4458+ 1	1.4226+ 1		2.4309- 1					0.0000+ 0				6.1272- 3
4.0000+ 1 ~ 7.0000+ 1	1.1437+ 1	1.1200+ 1		2.3748- 1					0.0000+ 0				6.1403- 3
7.0000+ 1 ~ 1.0000+ 2	2.1092+ 2	1.1886+ 2		9.2059+ 1					0.0000+ 0				6.1510- 3
1.0000+ 2 ~ 2.0000+ 2	1.1754+ 1	1.1648+ 1		1.0799- 1					0.0000+ 0				6.1984- 3
2.0000+ 2 ~ 4.0000+ 2	1.0161+ 1	8.3598+ 0		1.8007+ 0					0.0000+ 0				6.3071- 3
4.0000+ 2 ~ 7.0000+ 2	6.5390+ 0	6.4186+ 0		1.2036- 1					0.0000+ 0				6.5890- 3
7.0000+ 2 ~ 1.0000+ 3	1.4783+ 1	1.1926+ 1		2.8570+ 0					0.0000+ 0				8.8209- 3
1.0000+ 3 ~ 2.0000+ 3	9.7424+ 0	8.8965+ 0		8.4596- 1					0.0000+ 0				7.5609- 3
2.0000+ 3 ~ 4.0000+ 3	1.2407+ 1	1.1857+ 1		7.5071- 1					0.0000+ 0				9.4841- 3
4.0000+ 3 ~ 7.0000+ 3	7.8342+ 0	7.2912+ 0		5.4300- 1					0.0000+ 0				1.3192- 2
7.0000+ 3 ~ 1.0000+ 4	7.5425+ 0	7.0684+ 0		4.7407- 1					0.0000+ 0				1.7696- 2
1.0000+ 4 ~ 2.0000+ 4	7.2380+ 0	6.8802+ 0		3.5771- 1					0.0000+ 0				2.8231- 2
2.0000+ 4 ~ 4.0000+ 4	7.0740+ 0	6.8337+ 0		2.4028- 1					0.0000+ 0				5.2409- 2
4.0000+ 4 ~ 7.0000+ 4	7.0722+ 0	6.9069+ 0		1.6691- 1					0.0000+ 0				9.5926- 2
7.0000+ 4 ~ 1.0000+ 6	7.1174+ 0	6.9856+ 0		1.3186- 1					0.0000+ 0				1.2869- 1
1.0000+ 6 ~ 2.0000+ 6	7.0837+ 0	6.9639+ 0		1.0966- 1					4.1107-13				1.9522- 1
2.0000+ 5 ~ 4.0000+ 5	6.9007+ 0	6.7982+ 0		1.0244- 1					1.6449-12				2.9291- 1
4.0000+ 5 ~ 7.0000+ 6	6.7158+ 0	6.6899+ 0	1.1808- 2	1.1173- 1					6.6046-12				3.8746- 1
7.0000+ 6 ~ 1.0000+ 6	6.4918+ 0	6.9637+ 0	4.5885- 1	7.8479- 2					4.3706-11				4.2032- 1
1.0000+ 6 ~ 2.0000+ 6	6.8675+ 0	4.8689+ 0	9.2367- 1	8.3660- 2					4.0132- 9				4.9060- 1
2.0000+ 6 ~ 4.0000+ 6	4.5568+ 0	2.7691+ 0	1.7057+ 0	5.5210- 2					1.7328- 8				5.9577- 1
4.0000+ 6 ~ 7.0000+ 6	3.9178+ 0	1.8739+ 0	2.0867+ 0	2.0608- 2			1.2808- 9		1.1295- 4	1.4951-18			6.8058- 1
7.0000+ 6 ~ 1.0000+ 7	4.3436+ 0	2.2976+ 0	2.0394+ 0	3.5641- 3			2.3622- 3	8.6093-18	6.2069- 4	1.7115-19			7.9761- 1
1.0000+ 7 ~ 2.0000+ 7	4.2253+ 0	2.2610+ 0	9.2793- 1	1.2036- 3	9.3868- 1	4.9562- 2	2.9799- 2	4.3617- 3	6.6202- 3	3.3201- 7	1.7406-10		8.6534- 1
									2.8715- 3	1.8196- 3	2.3703- 4		

MATERIAL =4804 CROSS SECTION

^{111}Cd (4804)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	7.9869+ 1	6.0506+ 0		7.4818+ 1					0.0000+ 0				6.0633- 3
1.0000- 2 ~ 2.0000- 2	3.6849+ 1	6.0496+ 0		3.1799+ 1					0.0000+ 0				6.0633- 3
2.0000- 2 ~ 4.0000- 2	2.7409+ 1	6.0479+ 0		2.2361+ 1					0.0000+ 0				6.0633- 3
4.0000- 2 ~ 7.0000- 2	2.1244+ 1	6.0452+ 0		1.5199+ 1					0.0000+ 0				6.0633- 3
7.0000- 2 ~ 1.0000- 1	1.7817+ 1	6.0420+ 0		1.2776+ 1					0.0000+ 0				6.0633- 3
1.0000- 1 ~ 2.0000- 1	1.4487+ 1	5.0352+ 0		9.4620+ 0					0.0000+ 0				6.0633- 3
2.0000- 1 ~ 4.0000- 1	1.1262+ 1	5.0204+ 0		6.2417+ 0					0.0000+ 0				6.0633- 3
4.0000- 1 ~ 7.0000- 1	9.1206+ 0	4.9978+ 0		4.1230+ 0					0.0000+ 0				6.0633- 3
7.0000- 1 ~ 1.0000+ 0	7.8793+ 0	4.9735+ 0		2.9067+ 0					0.0000+ 0				6.0633- 3
1.0000+ 0 ~ 2.0000+ 0	6.7000+ 0	4.9304+ 0		1.7696+ 0					0.0000+ 0				6.0633- 3
2.0000+ 0 ~ 4.0000+ 0	5.6862+ 0	4.8684+ 0		8.2787- 1					0.0000+ 0				6.0636- 3
4.0000+ 0 ~ 7.0000+ 0	5.5966+ 0	4.7803+ 0		8.1580- 1					0.0000+ 0				6.0658- 3
7.0000+ 0 ~ 1.0000+ 1	4.9875+ 0	4.7183+ 0		2.6112- 1					0.0000+ 0				6.0676- 3
1.0000+ 1 ~ 2.0000+ 1	4.7260+ 0	4.5060+ 0		1.3912- 1					0.0000+ 0				6.0726- 3
2.0000+ 1 ~ 4.0000+ 1	3.0277+ 1	6.9016+ 0		2.4376- 1					0.0000+ 0				6.0826- 3
4.0000+ 1 ~ 7.0000+ 1	4.9153+ 0	4.5749+ 0		2.4139- 1					0.0000+ 0				6.1058- 3
7.0000+ 1 ~ 1.0000+ 2	2.0402+ 1	5.9926+ 0		1.4409+ 1					0.0000+ 0				6.1244- 3
1.0000+ 2 ~ 2.0000+ 2	2.0451+ 1	9.8056+ 0		1.0655+ 1					0.0000+ 0				6.1949- 3
2.0000+ 2 ~ 4.0000+ 2	1.6826+ 1	9.9034+ 0		6.9228+ 0					0.0000+ 0				6.3481- 3
4.0000+ 2 ~ 7.0000+ 2	8.1399+ 0	6.6373+ 0		2.5026+ 0					0.0000+ 0				6.7042- 3
7.0000+ 2 ~ 1.0000+ 3	9.5093+ 0	7.3468+ 0		2.1627+ 0					0.0000+ 0				8.9989- 3
1.0000+ 3 ~ 2.0000+ 3	1.4828+ 1	1.2743+ 1		1.8865+ 0					0.0000+ 0				7.8683- 3
2.0000+ 3 ~ 4.0000+ 3	8.1744+ 0	8.1628+ 0		2.0118- 0					0.0000+ 0				1.0080- 2
4.0000+ 3 ~ 7.0000+ 3	7.4351+ 0	5.8667+ 0		1.5694+ 0					0.0000+ 0				1.4178- 2
7.0000+ 3 ~ 1.0000+ 4	7.0881+ 0	5.7238+ 0		1.3644+ 0					0.0000+ 0				1.9187- 2
1.0000+ 4 ~ 2.0000+ 4	6.8641+ 0	6.6966+ 0		1.1686+ 0					0.0000+ 0				3.0702- 2
2.0000+ 4 ~ 4.0000+ 4	6.7937+ 0	6.8811+ 0		9.1254- 1					0.0000+ 0				5.8888- 2
4.0000+ 4 ~ 7.0000+ 4	6.9179+ 0	6.2042+ 0		7.1373- 1					0.0000+ 0				9.5989- 2
7.0000+ 4 ~ 1.0000+ 6	7.0684+ 0	6.6247+ 0		6.4175- 1					0.0000+ 0				1.3696- 1
1.0000+ 6 ~ 2.0000+ 6	7.0831+ 0	6.8609+ 0		4.1144- 1					1.1782- 7				2.0477- 1
2.0000+ 6 ~ 4.0000+ 6	6.9019+ 0	6.4298+ 0	1.8202- 1	2.8890- 1					3.6126- 7				3.1088- 1
4.0000+ 6 ~ 7.0000+ 6	6.7150+ 0	5.7689+ 0	7.7825- 1	1.8922- 1			8.5312-18		5.2855- 7				4.2033- 1
7.0000+ 6 ~ 1.0000+ 8	6.4919+ 0	5.2269+ 0	1.1424+ 0	1.2247- 1			6.0039-17		8.7243- 7				4.8889- 1
1.0000+ 6 ~ 2.0000+ 8	6.6686+ 0	4.2312+ 0	1.5379+ 0	9.8667- 2			7.8732-10		3.0352- 6				5.8890- 1
2.0000+ 6 ~ 4.0000+ 8	4.5512+ 0	2.8465+ 0	1.8457+ 0	4.8472- 2			1.0376- 8		2.8478- 5	2.1803-20			8.4878- 1
4.0000+ 6 ~ 7.0000+ 8	3.9878+ 0	2.0292+ 0	1.9474+ 0	9.8482- 3			6.0803- 4		1.1782- 4	7.6636-15			8.8781- 1
7.0000+ 6 ~ 1.0000+ 7	4.3436+ 0	2.4978+ 0	1.2099+ 0	1.5760- 3	6.2942- 1		3.2710- 3	3.6017-10	2.3730- 4	6.4228- 9	8.0776-10	3.6071-15	7.9771- 1
1.0000+ 7 ~ 2.0000+ 7	4.2261+ 0	2.4037+ 0	2.3428- 1	1.0783- 3	1.4663+ 0	6.3188- 2	6.2121- 2	4.0832- 3	4.8817- 3	9.8897- 4	3.4282- 3	4.4808- 4	8.6534- 1

MATERIAL =4805

CROSS SECTION

^{112}Cd (4805)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.3806+ 1	7.0193+ 0		6.7862+ 0					0.0000+ 0				6.0092- 3
1.0000- 2 ~ 2.0000- 2	9.9186+ 0	7.0191+ 0		2.8995+ 0					0.0000+ 0				6.0092- 3
2.0000- 2 ~ 4.0000- 2	9.0710+ 0	7.0188+ 0		2.0522+ 0					0.0000+ 0				6.0092- 3
4.0000- 2 ~ 7.0000- 2	8.5228+ 0	7.0192+ 0		1.5048+ 0					0.0000+ 0				6.0092- 3
7.0000- 2 ~ 1.0000- 1	8.2209+ 0	7.0175+ 0		1.2034+ 0					0.0000+ 0				6.0092- 3
1.0000- 1 ~ 2.0000- 1	7.9314+ 0	7.0180+ 0		9.1537- 1					0.0000+ 0				6.0092- 3
2.0000- 1 ~ 4.0000- 1	7.6680+ 0	7.0126+ 0		6.4643- 1					0.0000+ 0				6.0092- 3
4.0000- 1 ~ 7.0000- 1	7.4798+ 0	7.0069+ 0		4.7293- 1					0.0000+ 0				6.0092- 3
7.0000- 1 ~ 1.0000+ 0	7.3771+ 0	7.0001+ 0		3.7700- 1					0.0000+ 0				6.0092- 3
1.0000+ 0 ~ 2.0000+ 0	7.2698+ 0	6.9854+ 0		2.8420- 1					0.0000+ 0				6.0092- 3
2.0000+ 0 ~ 4.0000+ 0	7.1492+ 0	6.9622+ 0		1.9701- 1					0.0000+ 0				6.0093- 3
4.0000+ 0 ~ 7.0000+ 0	7.0364+ 0	6.9984+ 0		1.4000- 1					0.0000+ 0				6.0100- 3
7.0000+ 0 ~ 1.0000+ 1	6.9449+ 0	6.8383+ 0		1.0802- 1					0.0000+ 0				6.0106- 3
1.0000+ 1 ~ 2.0000+ 1	6.786[illegible]+ 0	6.7102+ 0		7.6454- 2					0.0000+ 0				6.0127- 3
2.0000+ 1 ~ 4.0000+ 1	6.4962+ 0	6.4462+ 0		4.8991- 2					0.0000+ 0				6.0176- 3
4.0000+ 1 ~ 7.0000+ 1	2.1327+ 1	7.2796+ 0		1.4048+ 1					0.0000+ 0				6.0304- 3
7.0000+ 1 ~ 1.0000+ 2	7.0844+ 0	6.2857+ 0		8.1860- 1					0.0000+ 0				6.0409- 3
1.0000+ 2 ~ 2.0000+ 2	5.6194+ 0	5.6093+ 0		1.0063- 2					0.0000+ 0				6.0676- 3
2.0000+ 2 ~ 4.0000+ 2	7.1182+ 0	5.5180+ 0		1.5993+ 0					0.0000+ 0				6.1961- 3
4.0000+ 2 ~ 7.0000+ 2	6.9735+ 0	5.5509+ 0		1.4225+ 0					0.0000+ 0				6.4748- 3
7.0000+ 2 ~ 1.0000+ 3	1.4651+ 1	1.2486+ 1		2.3654+ 0					0.0000+ 0				6.7050- 3
1.0000+ 3 ~ 2.0000+ 3	1.0449+ 1	9.3977+ 0		1.0513+ 0					0.0000+ 0				7.4310- 3
2.0000+ 3 ~ 4.0000+ 3	1.1628+ 1	1.0805+ 1		8.2285- 1					0.0000+ 0				9.3552- 3
4.0000+ 3 ~ 7.0000+ 3	8.6100+ 0	7.9646+ 0		6.4537- 1					0.0000+ 0				1.3037- 2
7.0000+ 3 ~ 1.0000+ 4	6.9879+ 0	6.5542+ 0		4.3360- 1					0.0000+ 0				1.7655- 2
1.0000+ 4 ~ 2.0000+ 4	6.7351+ 0	6.4104+ 0		3.2467- 1					0.0000+ 0				2.8036- 2
2.0000+ 4 ~ 4.0000+ 4	6.6988+ 0	6.4625+ 0		2.1636- 1					0.0000+ 0				5.2189- 2
4.0000+ 4 ~ 7.0000+ 4	6.8877+ 0	6.7184+ 0		1.4937- 1					0.0000+ 0				8.9864- 2
7.0000+ 4 ~ 1.0000+ 5	7.0634+ 0	6.9446+ 0		1.1887- 1					0.0000+ 0				1.2839- 1
1.0000+ 5 ~ 2.0000+ 5	7.0614+ 0	6.9614+ 0		9.9964- 2					2.2873-16				1.9590- 1
2.0000+ 5 ~ 4.0000+ 5	6.8983+ 0	6.8040+ 0		9.4284- 2					9.1493-15				2.9222- 1
4.0000+ 5 ~ 7.0000+ 5	6.7127+ 0	6.5707+ 0	4.1327- 2	3.9864- 2					2.4903-14				3.8885- 1
7.0000+ 5 ~ 1.0000+ 6	6.4906+ 0	6.2993+ 0	6.2261- 1	6.8204- 2					8.2707-14				4.3148- 1
1.0000+ 6 ~ 2.0000+ 6	6.8681+ 0	4.7396+ 0	1.0596+ 0	6.7670- 2					6.2914-12				6.0260- 1
2.0000+ 6 ~ 4.0000+ 6	4.5529+ 0	2.7061+ 0	1.8006+ 0	4.2498- 2			4.0851-18		3.4103- 8	4.2906-21			6.1037- 1
4.0000+ 6 ~ 7.0000+ 6	3.9878+ 0	1.9588+ 0	2.1157+ 0	1.4141- 2			5.4528- 6		1.0444- 5	3.8785-15			6.6341- 1
7.0000+ 6 ~ 1.0000+ 7	4.3436+ 0	2.2866+ 0	2.0381+ 0	2.9829- 3	6.1201- 3		4.1768- 4		1.1470- 4	8.6941- 9	1.7769-12		7.9764- 1
1.0000+ 7 ~ 2.0000+ 7	4.2261+ 0	2.2164+ 0	5.9871- 1	1.1280- 3	1.2592+ 0	1.2083- 1	1.8999- 2	1.6772- 3	4.1208- 3	1.1698- 3	1.5348- 3	1.7741- 4	8.5533- 1

MATERIAL =4806

CROSS SECTION

^{113}Cd (4806)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.0403+ 4	1.0862+ 1		6.0384+ 4					0.0000+ 0				6.9569- 3
1.0000- 2 ~ 2.0000- 2	2.4279+ 4	2.1824+ 1		2.4257+ 4					0.0000+ 0				6.9569- 3
2.0000- 2 ~ 4.0000- 2	2.0340+ 4	2.7579+ 1		2.0313+ 4					0.0000+ 0				6.9569- 3
4.0000- 2 ~ 7.0000- 2	2.0535+ 4	4.2059+ 1		2.0493+ 4					0.0000+ 0				6.9569- 3
7.0000- 2 ~ 1.0000- 1	2.6437+ 4	7.2913+ 1		2.5365+ 4					0.0000+ 0				6.9569- 3
1.0000- 1 ~ 2.0000- 1	5.0899+ 4	2.5398+ 2		5.0445+ 4					0.0000+ 0				6.9569- 3
2.0000- 1 ~ 4.0000- 1	1.4621+ 4	1.2979+ 2		1.4491+ 4					0.0000+ 0				6.9569- 3
4.0000- 1 ~ 7.0000- 1	1.0579+ 3	2.6004+ 1		1.0319+ 3					0.0000+ 0				6.9569- 3
7.0000- 1 ~ 1.0000+ 0	2.3701+ 2	1.3885+ 1		2.2332+ 2					0.0000+ 0				6.9569- 3
1.0000+ 0 ~ 2.0000+ 0	5.9446+ 1	8.8221+ 0		5.0829+ 1					0.0000+ 0				6.9569- 3
2.0000+ 0 ~ 4.0000+ 0	1.4172+ 1	5.4615+ 0		7.7208+ 0					0.0000+ 0				6.9561- 3
4.0000+ 0 ~ 7.0000+ 0	7.1093+ 0	5.5878+ 0		1.5157+ 0					0.0000+ 0				6.9576- 3
7.0000+ 0 ~ 1.0000+ 1	5.7355+ 0	5.2522+ 0		4.8324- 1					0.0000+ 0				6.9595- 3
1.0000+ 1 ~ 2.0000+ 1	7.9989+ 0	5.0038+ 0		2.9952+ 0					0.0000+ 0				6.9634- 3
2.0000+ 1 ~ 4.0000+ 1	4.8613+ 0	4.8080+ 0		5.3312- 2					0.0000+ 0				6.9719- 3
4.0000+ 1 ~ 7.0000+ 1	1.0261+ 1	4.7186+ 0		5.5313+ 0					0.0000+ 0				6.9920- 3
7.0000+ 1 ~ 1.0000+ 2	4.2744+ 1	1.9399+ 1		2.9345+ 1					0.0000+ 0				6.0084- 3
1.0000+ 2 ~ 2.0000+ 2	1.9531+ 1	1.1147+ 1		8.3844+ 0					0.0000+ 0				6.0721- 3
2.0000+ 2 ~ 4.0000+ 2	1.1108+ 1	8.7552+ 0		2.3511+ 0					0.0000+ 0				6.2108- 3
4.0000+ 2 ~ 7.0000+ 2	1.4713+ 1	1.0256+ 1		4.4671+ 0					0.0000+ 0				6.5469- 3
7.0000+ 2 ~ 1.0000+ 3	1.2317+ 1	1.0403+ 1		1.9139+ 0					0.0000+ 0				6.8270- 3
1.0000+ 3 ~ 2.0000+ 3	7.9523+ 0	7.1361+ 0		8.1718- 1					0.0000+ 0				7.6457- 3
2.0000+ 3 ~ 4.0000+ 3	6.3940+ 0	6.4459+ 0		1.9380+ 0					0.0000+ 0				9.7797- 3
4.0000+ 3 ~ 7.0000+ 3	7.8373+ 0	6.3621+ 0		1.4753+ 0					0.0000+ 0				1.3780- 2
7.0000+ 3 ~ 1.0000+ 4	7.5664+ 0	6.5581+ 0		1.2083+ 0					0.0000+ 0				1.8645- 2
1.0000+ 4 ~ 2.0000+ 4	7.3446+ 0	6.3092+ 0		9.6623- 1					0.0000+ 0				2.8006- 2
2.0000+ 4 ~ 4.0000+ 4	7.2156+ 0	6.3148+ 0		7.0167- 1					0.0000+ 0				5.6320- 2
4.0000+ 4 ~ 7.0000+ 4	7.1885+ 0	6.6750+ 0		5.1353- 1					0.0000+ 0				9.4069- 2
7.0000+ 4 ~ 1.0000+ 5	7.1895+ 0	6.7039+ 0		4.0864- 1					0.0000+ 0				1.3381- 1
1.0000+ 5 ~ 2.0000+ 5	7.0586+ 0	6.7411+ 0		3.1698- 1					3.0710-10				2.0202- [illegible]
2.0000+ 5 ~ 4.0000+ 5	6.8988+ 0	6.5272+ 0	1.2929- 1	2.5959- 1					1.2284- 9				3.0584- 1
4.0000+ 5 ~ 7.0000+ 5	6.7120+ 0	6.9046+ 0	8.8452- 1	1.2234- 1					2.9308- 9				4.1067- 1
7.0000+ 5 ~ 1.0000+ 6	6.4900+ 0	6.3092+ 0	[illegible]017+ 0	7.8821- 2					7.0309- 9				4.8110- 1
1.0000+ 6 ~ 2.0000+ 6	6.8672+ 0	4.[illegible]102+ 0	1.6994+ 0	[illegible].6244- 2			1.2926-18		6.4631- 8				6.7218- 1
2.0000+ 6 ~ 4.0000+ 6	4.5515+ 0	2.6319+ 0	1.8841+ 0	2.7040- 2			3.7573- 8		1.3927- 5				8.8128- 1
4.0000+ 6 ~ 7.0000+ 6	3.9876+ 0	2.0353+ 0	1.9420+ 0	5.6467- 3	4.2331- 3		1.5651- 6		1.2921- 6	3.1368-18			8.8773- 1
7.0000+ 6 ~ 1.0000+ 7	4.3432+ 0	2.4639+ 0	9.3767- 1	1.1984- 3	9.1610- 1		2.4617- 4		4.3442- 6	1.6300-10	6.1878-12	2.4631-18	7.8766- 1
1.0000+ 7 ~ 2.0000+ 7	4.2262+ 0	2.4364+ 0	1.8260- 1	1.0730- 3	1.4421+ 0	1.4062- 1	1.2910- 2	1.1788- 3	2.7596- 3	4.0663- 4	2.2666- 3	4.8618- 4	8.8533- 1

MATERIAL =4807

CROSS SECTION

^{114}Cd (4807)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 - 1.0000- 2	6.9632+ 0	6.9000+ 0		1.0632+ 0					0.0000+ 0				6.9036- 3
1.0000- 2 ~ 2.0000- 2	6.3500+ 0	6.8999+ 0		4.5011- 1					0.0000+ 0				
2.0000- 2 ~ 4.0000- 2	6.2183+ 0	6.8999+ 0		3.1839- 1					0.0000+ 0				6.9036- 3
4.0000- 2 ~ 7.0000- 2	6.1340+ 0	5.8998+ 0		2.3418- 1					0.0000+ 0				6.9036- 3
7.0000- 2 ~ 1.0000- 1	6.0871+ 0	6.8997+ 0		1.8743- 1					0.0000+ 0				6.9036- 3
1.0000- 1 ~ 2.0000- 1	6.0418+ 0	5.8995+ 0		1.4234- 1					0.0000+ 0				6.9036- 3
2.0000- 1 ~ 4.0000- 1	5.9998+ 0	6.8999+ 0		1.0084- 1					0.0000+ 0				6.9036- 3
4.0000- 1 ~ 7.0000- 1	5.9723+ 0	5.8981+ 0		7.4246- 2					0.0000+ 0				6.9036- 3
7.0000- 1 ~ 1.0000+ 0	6.9567+ 0	6.8971+ 0		6.9626- 2					0.0000+ 0				6.9036- 3
1.0000+ 0 ~ 2.0000+ 0	5.9404+ 0	5.8948+ 0		4.5582- 2					0.0000+ 0				6.9036- 3
2.0000+ 0 ~ 4.0000+ 0	6.9222+ 0	6.8896+ 0		3.2626- 2					0.0000+ 0				6.9037- 3
4.0000+ 0 ~ 7.0000+ 0	5.9053+ 0	5.8808+ 0		2.4511- 2					0.0000+ 0				6.9044- 3
7.0000+ 0 ~ 1.0000+ 1	6.8901+ 0	5.8700+ 0		2.0194- 2					0.0000+ 0				6.9048- 3
1.0000+ 1 ~ 2.0000+ 1	5.8817+ 0	5.8454+ 0		1.8327- 2					0.0000+ 0				6.9066- 3
2.0000+ 1 ~ 4.0000+ 1	6.7966+ 0	6.7817+ 0		1.3871- 2					0.0000+ 0				6.9113- 3
4.0000+ 1 ~ 7.0000+ 1	6.6518+ 0	5.6396+ 0		2.1228- 1					0.0000+ 0				6.9253- 3
7.0000+ 1 ~ 1.0000+ 2	5.9255+ 0	5.2869+ 0		3.8410- 2					0.0000+ 0				6.9333- 3
1.0000+ 2 ~ 2.0000+ 2	2.4974+ 1	1.2903+ 1		1.2071+ 1					0.0000+ 0				6.9783- 3
2.0000+ 2 ~ 4.0000+ 2	4.7049+ 1	4.1700+ 1		6.3493+ 0					0.0000+ 0				6.0828- 3
4.0000+ 2 ~ 7.0000+ 2	1.6720+ 1	1.3954+ 1		1.8650+ 0					0.0000+ 0				6.3656- 3
7.0000+ 2 ~ 1.0000+ 3	1.6545+ 1	1.4181+ 1		2.3637+ 0					0.0000+ 0				6.5821- 3
1.0000+ 3 ~ 2.0000+ 3	1.4662+ 1	1.3375+ 1		1.1760+ 0					0.0000+ 0				7.2969- 3
2.0000+ 3 ~ 4.0000+ 3	1.1978+ 1	1.1169+ 1		5.0871- 1					0.0000+ 0				9.1944- 3
4.0000+ 3 ~ 7.0000+ 3	9.0348+ 0	8.6919+ 0		3.4286- 1					0.0000+ 0				1.2628- 2
7.0000+ 3 ~ 1.0000+ 4	6.4865+ 0	6.1293+ 0		3.5624- 1					0.0000+ 0				1.7271- 2
1.0000+ 4 ~ 2.0000+ 4	7.4222+ 0	7.1905+ 0		2.3172- 1					0.0000+ 0				2.7677- 2
2.0000+ 4 ~ 4.0000+ 4	7.1225+ 0	6.9728+ 0		1.4978- 1					0.0000+ 0				5.1878- 2
4.0000+ 4 ~ 7.0000+ 4	7.0863+ 0	6.9626+ 0		1.0269- 1					0.0000+ 0				6.9062- 2
7.0000+ 4 ~ 1.0000+ 5	7.0988+ 0	7.0166+ 0		8.3192- 2					0.0000+ 0				1.2772- 1
1.0000+ 5 ~ 2.0000+ 5	7.0587+ 0	6.9875+ 0		7.1143- 2					2.5052-18				1.9608- 1
2.0000+ 5 ~ 4.0000+ 5	6.8950+ 0	6.8277+ 0		6.7672- 2					1.0021-17				2.8106- 1
4.0000+ 5 ~ 7.0000+ 5	6.7109+ 0	6.5360+ 0	1.0553- 1	6.5268- 2					2.7010-17				3.7089- 1
7.0000+ 5 ~ 1.0000+ 6	6.4892+ 0	5.8436+ 0	6.0218- 1	4.3080- 2					9.6447-17				4.3470- 1
1.0000+ 6 ~ 2.0000+ 6	6.8683+ 0	4.6690+ 0	1.1692+ 0	3.8977- 2					2.3438-15				6.1061- 1
2.0000+ 6 ~ 4.0000+ 6	4.5512+ 0	2.8832+ 0	1.6342+ 0	2.5865- 2					4.1196-11				6.1326- 1
4.0000+ 6 ~ 7.0000+ 6	3.9876+ 0	1.8752+ 0	2.1023+ 0	9.2454- 3			6.3550- 8		1.6974- 7	1.0817-16			6.0348- 1
7.0000+ 6 ~ 1.0000+ 7	4.3432+ 0	2.3264+ 0	1.9614+ 0	1.8946- 3	6.1953- 2		6.7599- 6		4.4424- 6	1.0101-10	1.1203-16		7.0762- 1
1.0000+ 7 ~ 2.0000+ 7	4.2248+ 0	2.2646+ 0	4.6324- 1	1.0386- 3	1.2623+ 0	2.1621- 1	1.4492- 2	6.6407- 4	1.2979- 3	3.6951- 4	6.7176- 4	1.3487- 4	6.6633- 1

MATERIAL =4808

CROSS SECTION

^{116}Cd (4808)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.2146+ 0	6.9830+ 0		2.3160- 1					0.0000+ 0				6.8017- 3
1.0000- 2 ~ 2.0000- 2	6.0819+ 0	6.9829+ 0		9.8971- 2					0.0000+ 0				6.8017- 3
2.0000- 2 ~ 4.0000- 2	6.0529+ 0	6.9829+ 0		7.0008- 2					0.0000+ 0				6.8017- 3
4.0000- 2 ~ 7.0000- 2	6.0343+ 0	5.9829+ 0		5.1482- 2					0.0000+ 0				6.8017- 3
7.0000- 2 ~ 1.0000- 1	6.0240+ 0	6.9828+ 0		4.1180- 2					0.0000+ 0				6.8017- 3
1.0000- 1 ~ 2.0000- 1	6.0139+ 0	5.9827+ 0		3.1264- 2					0.0000+ 0				6.8017- 3
2.0000- 1 ~ 4.0000- 1	6.0046+ 0	5.9824+ 0		2.2116- 2					0.0000+ 0				6.8017- 3
4.0000- 1 ~ 7.0000- 1	5.9982+ 0	5.9819+ 0		1.6262- 2					0.0000+ 0				6.8017- 3
7.0000- 1 ~ 1.0000+ 0	6.9944+ 0	6.9814+ 0		1.3011- 2					0.0000+ 0				6.8017- 3
1.0000+ 0 ~ 2.0000+ 0	6.9901+ 0	5.9802+ 0		9.8897- 3					0.0000+ 0				6.8017- 3
2.0000+ 0 ~ 4.0000+ 0	5.9844+ 0	5.9774+ 0		6.9926- 3					0.0000+ 0				6.8018- 3
4.0000+ 0 ~ 7.0000+ 0	5.9775+ 0	5.9726+ 0		5.1499- 3					0.0000+ 0				6.8023- 3
7.0000+ 0 ~ 1.0000+ 1	5.9715+ 0	5.9672+ 0		4.1428- 3					0.0000+ 0				6.8028- 3
1.0000+ 1 ~ 2.0000+ 1	5.9562+ 0	5.9548+ 0		3.3710- 3					0.0000+ 0				6.8045- 3
2.0000+ 1 ~ 4.0000+ 1	6.3372+ 0	6.9337+ 0		4.0351- 1					0.0000+ 0				6.8087- 3
4.0000+ 1 ~ 7.0000+ 1	5.8987+ 0	5.8953+ 0		1.4488- 3					0.0000+ 0				6.8201- 3
7.0000+ 1 ~ 1.0000+ 2	6.8517+ 0	5.8507+ 0		1.0071- 3					0.0000+ 0				6.8286- 3
1.0000+ 2 ~ 2.0000+ 2	5.7690+ 0	5.7683+ 0		6.6485- 4					0.0000+ 0				6.8731- 3
2.0000+ 2 ~ 4.0000+ 2	5.5166+ 0	5.4162+ 0		3.0326- 4					0.0000+ 0				6.9747- 3
4.0000+ 2 ~ 7.0000+ 2	5.6468+ 0	5.6410+ 0		3.0774- 1					0.0000+ 0				6.7436- 3
7.0000+ 2 ~ 1.0000+ 3	5.8653+ 0	5.3128+ 0		5.5069- 1					0.0000+ 0				6.4848- 3
1.0000+ 3 ~ 2.0000+ 3	5.4004+ 0	7.8490+ 0		5.5148- 1					0.0000+ 0				7.1697- 3
2.0000+ 3 ~ 4.0000+ 3	7.4382+ 0	7.2164+ 0		2.2077- 1					0.0000+ 0				9.0396- 3
4.0000+ 3 ~ 7.0000+ 3	6.5670+ 0	6.3303+ 0		2.3883- 1					0.0000+ 0				1.2827- 2
7.0000+ 3 ~ 1.0000+ 4	6.7640+ 0	6.5893+ 0		1.9486- 1					0.0000+ 0				1.7021- 2
1.0000+ 4 ~ 2.0000+ 4	6.6589+ 0	6.6132+ 0		1.4566- 1					0.0000+ 0				2.7348- 2
2.0000+ 4 ~ 4.0000+ 4	6.7769+ 0	6.6648+ 0		9.1480- 2					0.0000+ 0				5.1244- 2
4.0000+ 4 ~ 7.0000+ 4	6.9516+ 0	6.8865+ 0		6.3369- 2					0.0000+ 0				6.8641- 2
7.0000+ 4 ~ 1.0000+ 5	7.0939+ 0	7.0416+ 0		6.2302- 2					0.0000+ 0				1.2716- 1
1.0000+ 5 ~ 2.0000+ 5	7.0656+ 0	7.0100+ 0		4.5497- 2					0.0000+ 0				1.8438- 1
2.0000+ 5 ~ 4.0000+ 5	6.8924+ 0	6.8489+ 0		4.3604- 2					0.0000+ 0				2.8001- 1
4.0000+ 5 ~ 7.0000+ 5	6.7068+ 0	6.4963+ 0	1.6605- 1	3.8378- 2					1.3728-20				3.7246- 1
7.0000+ 5 ~ 1.0000+ 6	6.4679+ 0	5.8100+ 0	5.5401- 1	2.3803- 2					7.2077-20				4.3683- 1
1.0000+ 6 ~ 2.0000+ 6	5.8677+ 0	4.5827+ 0	1.1628+ 0	2.1138- 2					1.5127-18				5.0738- 1
2.0000+ 6 ~ 4.0000+ 6	4.5517+ 0	2.6921+ 0	1.8489+ 0	1.2204- 2					5.1856-16				6.1429- 1
4.0000+ 6 ~ 7.0000+ 6	3.9878+ 0	1.6711+ 0	2.1152+ 0	2.8324- 3			2.4475-12		6.1931-10	3.4844-19			6.0489- 1
7.0000+ 6 ~ 1.0000+ 7	4.3431+ 0	2.3202+ 0	1.9020+ 0	4.7348- 4	1.1032- 1		9.9167- 7		8.3482- 6	9.2341-14	2.6297-21		7.0782- 1
1.0000+ 7 ~ 2.0000+ 7	4.2260+ 0	2.2742+ 0	4.2763- 1	9.8676- 4	1.2006+ 0	3.1628- 1	6.0207- 3	2.0389- 4	3.2887- 4	8.8032- 5	3.6263- 4	1.1118- 4	6.5632- 1

MATERIAL =4901 CROSS SECTION ^{113}In (4901)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NF)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.0292+ 1	3.6814+ 0		3.6511+ 1			0.0000+ 0		0.0000+ 0				6.9669- 3
1.0000- 2 ~ 2.0000- 2	1.9484+ 1	3.6802+ 0		1.6804+ 1			0.0000+ 0		0.0000+ 0				6.9669- 3
2.0000- 2 ~ 4.0000- 2	1.6006+ 1	3.6785+ 0		1.1328+ 1			0.0000+ 0		0.0000+ 0				6.9669- 3
4.0000- 2 ~ 7.0000- 2	1.2198+ 1	3.6755+ 0		8.5225+ 0			0.0000+ 0		0.0000+ 0				6.9669- 3
7.0000- 2 ~ 1.0000- 1	1.0688+ 1	3.6719+ 0		7.0168+ 0			0.0000+ 0		0.0000+ 0				6.9669- 3
1.0000- 1 ~ 2.0000- 1	9.3418+ 0	3.6637+ 0		5.8781+ 0			0.0000+ 0		0.0000+ 0				6.9669- 3
2.0000- 1 ~ 4.0000- 1	8.3400+ 0	3.6425+ 0		4.5976+ 0			0.0000+ 0		0.0000+ 0				6.9669- 3
4.0000- 1 ~ 7.0000- 1	8.3594+ 0	3.5979+ 0		4.7614+ 0			0.0000+ 0		0.0000+ 0				6.9669- 3
7.0000- 1 ~ 1.0000+ 0	9.8662+ 0	3.5198+ 0		6.3363+ 0			0.0000+ 0		0.0000+ 0				6.9669- 3
1.0000+ 0 ~ 2.0000+ 0	2.8743+ 2	4.1412+ 0		2.6328+ 2			0.0000+ 0		0.0000+ 0				6.9669- 3
2.0000+ 0 ~ 4.0000+ 0	1.1769+ 1	4.0649+ 0		7.7040+ 0			0.0000+ 0		0.0000+ 0				6.9664- 3
4.0000+ 0 ~ 7.0000+ 0	2.1027+ 1	3.7880+ 0		1.7298+ 1			0.0000+ 0		0.0000+ 0				6.9601- 3
7.0000+ 0 ~ 1.0000+ 1	4.0789+ 0	3.4943+ 0		5.8258- 1			0.0000+ 0		0.0000+ 0				5.9652- 3
1.0000+ 1 ~ 2.0000+ 1	1.0929+ 2	1.4259+ 1		9.4969+ 1			0.0000+ 0		0.0000+ 0				5.9710- 3
2.0000+ 1 ~ 4.0000+ 1	8.1902+ 1	1.1773+ 1		7.0129+ 1			0.0000+ 0		0.0000+ 0				6.9863- 3
4.0000+ 1 ~ 7.0000+ 1	1.0396+ 1	4.6026+ 0		5.8935+ 0			0.0000+ 0		0.0000+ 0				6.0199- 3
7.0000+ 1 ~ 1.0000+ 2	3.7370+ 1	1.2127+ 1		2.5244+ 1			0.0000+ 0		0.0000+ 0				6.0473- 3
1.0000+ 2 ~ 2.0000+ 2	1.2573+ 1	8.8285+ 0		5.9441+ 0			0.0000+ 0		0.0000+ 0				6.1442- 3
2.0000+ 2 ~ 4.0000+ 2	1.1673+ 1	8.2588+ 0		5.4140+ 0			0.0000+ 0		0.0000+ 0				6.3472- 3
4.0000+ 2 ~ 7.0000+ 2	1.0016+ 1	7.1637+ 0		2.8624+ 0			0.0000+ 0		0.0000+ 0				6.8114- 3
7.0000+ 2 ~ 1.0000+ 3	1.5438+ 1	6.8885+ 0		4.7500+ 0			0.0000+ 0		0.0000+ 0				7.1900- 3
1.0000+ 3 ~ 2.0000+ 3	1.3211+ 1	8.7825+ 0		4.4289+ 0			0.0000+ 0		0.0000+ 0				8.2728- 3
2.0000+ 3 ~ 4.0000+ 3	1.0819+ 1	7.7242+ 0		2.8948+ 0			0.0000+ 0		0.0000+ 0				1.0989- 2
4.0000+ 3 ~ 7.0000+ 3	9.0163+ 0	6.9628+ 0		2.0525+ 0			0.0000+ 0		0.0000+ 0				1.5984- 2
7.0000+ 3 ~ 1.0000+ 4	8.1638+ 0	8.5024+ 0		1.6614+ 0			0.0000+ 0		0.0000+ 0				2.1966- 2
1.0000+ 4 ~ 2.0000+ 4	7.4072+ 0	6.1014+ 0		1.3068+ 0			0.0000+ 0		0.0000+ 0				3.5648- 2
2.0000+ 4 ~ 4.0000+ 4	6.8066+ 0	5.8480+ 0		9.6059- 1			0.0000+ 0		0.0000+ 0				8.5356- 2
4.0000+ 4 ~ 7.0000+ 4	6.6126+ 0	5.8098+ 0		7.0382- 1			0.0000+ 0		0.0000+ 0				1.0921- 1
7.0000+ 4 ~ 1.0000+ 5	6.3933+ 0	5.8428+ 0		6.5047- 1			0.0000+ 0		0.0000+ 0				1.6277- 1
1.0000+ 5 ~ 2.0000+ 5	6.3318+ 0	5.8191+ 0		4.1158- 1			1.7118-20		4.8061-13				2.2608- 1
2.0000+ 5 ~ 4.0000+ 5	6.3452+ 0	6.0304+ 0	2.8789- 6	3.1464- 1			8.8479-20		1.9544-12				3.2288- 1
4.0000+ 5 ~ 7.0000+ 5	6.3987+ 0	6.1039+ 0	6.7729- 5	2.8797- 1			2.7869-19		4.7561-12				3.8945- 1
7.0000+ 5 ~ 1.0000+ 6	6.3624+ 0	6.0464+ 0	4.0610- 2	2.9528- 1			3.3103-18		1.2046-11				4.1741- 1
1.0000+ 6 ~ 2.0000+ 6	5.9698+ 0	5.0648+ 0	6.4756- 1	2.4699- 1			4.3500-16		1.5228-10				4.8270- 1
2.0000+ 6 ~ 4.0000+ 6	4.6482+ 0	2.8103+ 0	1.7660+ 0	7.3207- 2			2.0798- 8		7.7650- 8	5.5604-20			5.1101- 1
4.0000+ 6 ~ 7.0000+ 6	3.9269+ 0	1.9232+ 0	1.9977+ 0	5.5771- 3			2.0389- 4		1.2623- 5	8.4095-15	5.2319-17		5.4523- 1
7.0000+ 6 ~ 1.0000+ 7	4.2777+ 0	2.4621+ 0	1.8103+ 0	7.2870- 4	2.1668- 3		2.1453- 3	2.2250-11	1.6692- 4	6.0356-10	2.3824- 8	1.7678-19	7.5813- 1
1.0000+ 7 ~ 2.0000+ 7	4.3751+ 0	2.3125+ 0	5.4667- 1	1.0466- 3	1.3229+ 0	4.2247- 2	2.3360- 2	1.1479- 2	6.6144- 3	9.1038- 4	5.9212- 3	6.3971- 4	8.6486- 1

MATERIAL =4902 CROSS SECTION ^{115}In (4902)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NF)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.0620+ 2	2.6434+ 0		6.0366+ 2					0.0000+ 0				6.0622- 3
1.0000- 2 ~ 2.0000- 2	2.6445+ 2	2.6347+ 0		2.8193+ 2					0.0000+ 0				6.0622- 3
2.0000- 2 ~ 4.0000- 2	1.9148+ 2	2.6217+ 0		1.8898+ 2					0.0000+ 0				6.0622- 3
4.0000- 2 ~ 7.0000- 2	1.4820+ 2	2.6000+ 0		1.4370+ 2					0.0000+ 0				6.0622- 3
7.0000- 2 ~ 1.0000- 1	1.2257+ 2	2.4739+ 0		1.2010+ 2					0.0000+ 0				6.0622- 3
1.0000- 1 ~ 2.0000- 1	1.0276+ 2	2.4175+ 0		1.0035+ 2					0.0000+ 0				6.0622- 3
2.0000- 1 ~ 4.0000- 1	9.2651+ 1	2.2982+ 0		9.0366+ 1					0.0000+ 0				6.0622- 3
4.0000- 1 ~ 7.0000- 1	1.1110+ 2	2.2073+ 0		1.0889+ 2					0.0000+ 0				6.0622- 3
7.0000- 1 ~ 1.0000+ 0	2.0222+ 2	3.0762+ 0		1.9816+ 2					0.0000+ 0				6.0622- 3
1.0000+ 0 ~ 2.0000+ 0	4.4641+ 2	1.8240+ 2		4.2817+ 2					0.0000+ 0				6.0622- 3
2.0000+ 0 ~ 4.0000+ 0	1.2659+ 2	1.0171+ 1		1.1641+ 2					0.0000+ 0				6.0626- 3
4.0000+ 0 ~ 7.0000+ 0	1.2942+ 1	8.3838+ 0		8.5577+ 0					0.0000+ 0				6.0622- 3
7.0000+ 0 ~ 1.0000+ 1	1.2908+ 2	7.7457+ 0		1.2221+ 2					0.0000+ 0				6.0674- 3
1.0000+ 1 ~ 2.0000+ 1	8.0899+ 0	5.8248+ 0		2.4481+ 0					0.0000+ 0				6.0632- 3
2.0000+ 1 ~ 4.0000+ 1	1.9900+ 1	6.6613+ 0		1.4398+ 1					0.0000+ 0				6.0748- 3
4.0000+ 1 ~ 7.0000+ 1	8.0419+ 0	5.2649+ 0		2.7770+ 0					0.0000+ 0				6.0918- 3
7.0000+ 1 ~ 1.0000+ 2	1.4085+ 1	5.5088+ 0		8.4785+ 0					0.0000+ 0				6.0292- 3
1.0000+ 2 ~ 2.0000+ 2	1.2289+ 1	5.8799+ 0		6.3898+ 0					0.0000+ 0				6.0048- 3
2.0000+ 2 ~ 4.0000+ 2	1.4647+ 1	7.9055+ 0		6.7368+ 0					0.0000+ 0				6.1798- 3
4.0000+ 2 ~ 7.0000+ 2	1.0052+ 1	6.3289+ 0		3.7217+ 0					0.0000+ 0				6.0938- 3
7.0000+ 2 ~ 1.0000+ 3	8.8451+ 0	6.1105+ 0		2.7346+ 0					0.0000+ 0				6.0322- 3
1.0000+ 3 ~ 2.0000+ 3	8.1199+ 0	6.4208+ 0		1.6991+ 0					0.0000+ 0				7.0298- 3
2.0000+ 3 ~ 4.0000+ 3	1.0065+ 1	7.8249+ 0		2.2408+ 0					0.0000+ 0				1.0478- 2
4.0000+ 3 ~ 7.0000+ 3	8.6291+ 0	7.0402+ 0		1.5889+ 0					0.0000+ 0				1.6224- 2
7.0000+ 3 ~ 1.0000+ 4	7.8714+ 0	6.5978+ 0		1.2736+ 0					0.0000+ 0				2.0834- 2
1.0000+ 4 ~ 2.0000+ 4	7.2056+ 0	6.2231+ 0		9.8244- 1					0.0000+ 0				3.3840- 2
2.0000+ 4 ~ 4.0000+ 4	6.8925+ 0	5.9992+ 0		8.9323- 1					0.0000+ 0				8.3984- 2
4.0000+ 4 ~ 7.0000+ 4	6.4671+ 0	5.8691+ 0		4.8799- 1					0.0000+ 0				1.0849- 1
7.0000+ 4 ~ 1.0000+ 5	6.3712+ 0	6.0873+ 0		3.7388- 1					0.0000+ 0				1.4937- 1
1.0000+ 5 ~ 2.0000+ 5	6.3264+ 0	6.0601+ 0		2.7662- 1					2.0499-15				2.1014- 1
2.0000+ 5 ~ 4.0000+ 5	6.3398+ 0	6.1280+ 0	4.4382- 4	2.1124- 1					9.1997-15				2.7738- 1
4.0000+ 5 ~ 7.0000+ 5	6.3852+ 0	6.1912+ 0	1.1270- 2	1.9272- 1					2.0786-14				3.0388- 1
7.0000+ 5 ~ 1.0000+ 6	6.3808+ 0	6.1230+ 0	6.2817- 2	1.8498- 1			0.0000+ 0		4.9268-14				4.1203- 1
1.0000+ 6 ~ 2.0000+ 6	5.9573+ 0	5.0222+ 0	7.8436- 1	1.4881- 1					6.7907-13				4.8882- 1
2.0000+ 6 ~ 4.0000+ 6	4.8524+ 0	2.8146+ 0	1.7774+ 0	6.3394- 2			5.8888-20		7.0235-10				6.0838- 1
4.0000+ 6 ~ 7.0000+ 6	3.9289+ 0	1.9288+ 0	1.9867+ 0	1.0788- 3			2.5369-13		3.3710- 8	1.8907-15	2.4395-19		5.4381- 1
7.0000+ 6 ~ 1.0000+ 7	4.2774+ 0	2.4996+ 0	1.7834+ 0	1.8731- 3	2.1991- 2		2.4069- 6	6.1706-14	1.2399- 5	1.6816-10	7.2268- 9	8.7047-20	7.8801- 1
1.0000+ 7 ~ 2.0000+ 7	4.3751+ 0	2.8634+ 0	3.4224- 1	1.0660- 3	1.2264+ 0	1.0309- 1	8.0766- 3	1.9207- 2	2.7141- 3	1.8813- 3	4.0088- 3	7.1338- 4	8.6486- 1

MATERIAL =5001 CROSS SECTION

^{112}Sn (5001)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	7.7133+ 0	4.6883+ 0		3.1260+ 0			0.0000+ 0		0.0000+ 0				6.0091- 3
1.0000- 2 ~ 2.0000- 2	6.9231+ 0	4.6882+ 0		1.3349+ 0			0.0000+ 0		0.0000+ 0				6.0091- 3
2.0000- 2 ~ 4.0000- 2	6.5313+ 0	4.6881+ 0		9.4321- 1			0.0000+ 0		0.0000+ 0				6.0091- 3
4.0000- 2 ~ 7.0000- 2	5.2799+ 0	4.5879+ 0		6.9198- 1			0.0000+ 0		0.0000+ 0				6.0091- 3
7.0000- 2 ~ 1.0000- 1	5.1414+ 0	4.6877+ 0		6.5376- 1			0.0000+ 0		0.0000+ 0				6.0091- 3
1.0000- 1 ~ 2.0000- 1	5.0078+ 0	4.5872+ 0		4.2045- 1			0.0000+ 0		0.0000+ 0				6.0091- 3
2.0000- 1 ~ 4.0000- 1	4.8813+ 0	4.6860+ 0		2.9523- 1			0.0000+ 0		0.0000+ 0				6.0091- 3
4.0000- 1 ~ 7.0000- 1	4.7992+ 0	4.6841+ 0		2.1607- 1			0.0000+ 0		0.0000+ 0				6.0091- 3
7.0000- 1 ~ 1.0000+ 0	4.7620+ 0	4.6819+ 0		1.7010- 1			0.0000+ 0		0.0000+ 0				6.0091- 3
1.0000+ 0 ~ 2.0000+ 0	4.7041+ 0	4.5771+ 0		1.2697- 1			0.0000+ 0		0.0000+ 0				6.0091- 3
2.0000+ 0 ~ 4.0000+ 0	4.6528+ 0	4.5664+ 0		8.6369- 2			0.0000+ 0		0.0000+ 0				6.0092- 3
4.0000+ 0 ~ 7.0000+ 0	4.5102+ 0	4.5494+ 0		6.0795- 2			0.0000+ 0		0.0000+ 0				6.0100- 3
7.0000+ 0 ~ 1.0000+ 1	4.5770+ 0	4.5298+ 0		4.7298- 2			0.0000+ 0		0.0000+ 0				6.0107- 3
1.0000+ 1 ~ 2.0000+ 1	4.5252+ 0	4.4871+ 0		3.8098- 2			0.0000+ 0		0.0000+ 0				6.0132- 3
2.0000+ 1 ~ 4.0000+ 1	4.4463+ 0	4.3723+ 0		7.2994- 2			0.0000+ 0		0.0000+ 0				6.0187- 3
4.0000+ 1 ~ 7.0000+ 1	6.1130+ 0	4.0186+ 0		1.0844+ 0			0.0000+ 0		0.0000+ 0				6.0334- 3
7.0000+ 1 ~ 1.0000+ 2	1.2079+ 2	5.7860+ 1		7.0929+ 1			0.0000+ 0		0.0000+ 0				6.0455- 3
1.0000+ 2 ~ 2.0000+ 2	8.7689+ 0	6.2879+ 0		3.4810+ 0			0.0000+ 0		0.0000+ 0				6.0903- 3
2.0000+ 2 ~ 4.0000+ 2	5.2204+ 0	5.0128+ 0		2.0758- 1			0.0000+ 0		0.0000+ 0				6.2292- 3
4.0000+ 2 ~ 7.0000+ 2	6.8482+ 0	6.4303+ 0		1.4169+ 0			0.0000+ 0		0.0000+ 0				6.6456- 3
7.0000+ 2 ~ 1.0000+ 3	8.0280+ 0	6.9039+ 0		1.1241+ 0			0.0000+ 0		0.0000+ 0				6.8120- 3
1.0000+ 3 ~ 2.0000+ 3	8.8641+ 0	7.8676+ 0		8.8664- 1			0.0000+ 0		0.0000+ 0				7.6537- 3
2.0000+ 3 ~ 4.0000+ 3	7.0475+ 0	6.3898+ 0		6.5790- 1			0.0000+ 0		0.0000+ 0				9.8841- 3
4.0000+ 3 ~ 7.0000+ 3	6.6683+ 0	6.0625+ 0		4.9576- 1			0.0000+ 0		0.0000+ 0				1.4146- 2
7.0000+ 3 ~ 1.0000+ 4	6.5287+ 0	5.9255+ 0		4.0316- 1			0.0000+ 0		0.0000+ 0				1.9334- 2
1.0000+ 4 ~ 2.0000+ 4	6.1697+ 0	5.8678+ 0		3.0191- 1			0.0000+ 0		0.0000+ 0				3.1361- 2
2.0000+ 4 ~ 4.0000+ 4	6.1355+ 0	5.8344+ 0		2.0104- 1			0.0000+ 0		0.0000+ 0				5.8824- 2
4.0000+ 4 ~ 7.0000+ 4	6.2151+ 0	5.0770+ 0		1.3610- 1			0.0000+ 0		0.0000+ 0				1.0021- 1
7.0000+ 4 ~ 1.0000+ 6	6.3073+ 0	5.1978+ 0		1.0962- 1			0.0000+ 0		0.0000+ 0				1.4248- 1
1.0000+ 6 ~ 2.0000+ 6	6.3321+ 0	5.2404+ 0		9.1679- 2			0.0000+ 0		4.4323-10				2.1391- 1
2.0000+ 6 ~ 4.0000+ 6	6.3459+ 0	5.2594+ 0		8.5472- 2			0.0000+ 0		1.7729- 9				3.1041- 1
4.0000+ 6 ~ 7.0000+ 6	6.3978+ 0	5.3007+ 0		9.8948- 2			1.7689-20		4.6263- 9				5.7846- 1
7.0000+ 6 ~ 1.0000+ 7	6.3828+ 0	5.2664+ 0		1.1632- 1			9.2207-20		1.4849- 8				4.0282- 1
1.0000+ 6 ~ 2.0000+ 6	5.9646+ 0	5.6042+ 0	3.1126- 1	1.3729- 1			1.5641-16		3.8080- 7				4.4200- 1
2.0000+ 6 ~ 4.0000+ 6	4.8542+ 0	3.2142+ 0	1.3312+ 0	1.0571- 1			5.3429- 8		6.8809- 5	5.0421-18			5.4011- 1
4.0000+ 6 ~ 7.0000+ 6	3.9271+ 0	1.9704+ 0	1.9206+ 0	3.2268- 2			1.2925- 3		1.1194- 3	5.2174-11	5.0145-20		8.3049- 1
7.0000+ 6 ~ 1.0000+ 7	4.2778+ 0	2.4627+ 0	1.7987+ 0	6.4463- 3			9.3611- 3	6.2160-16	3.4508- 3	6.4934- 6	3.1686- 9		7.5787- 1
1.0000+ 7 ~ 2.0000+ 7	4.3756+ 0	2.6876+ 0	6.4609- 1	1.3603- 3	8.6865- 1	6.1268- 4	2.2671- 2	1.8899- 1	1.1430- 2	4.7696- 2	7.6210- 3	6.3967- 4	8.6487- 1

MATERIAL =5002 CROSS SECTION

^{114}Sn (5002)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.9334+ 0	4.6468+ 0		3.8769- 1					0.0000+ 0				6.9036- 3
1.0000- 2 ~ 2.0000- 2	4.7114+ 0	4.6467+ 0		1.6666- 1					0.0000+ 0				6.9036- 3
2.0000- 2 ~ 4.0000- 2	4.6631+ 0	4.6467+ 0		1.1739- 1					0.0000+ 0				6.9036- 3
4.0000- 2 ~ 7.0000- 2	4.8317+ 0	4.6467+ 0		8.6017- 2					0.0000+ 0				6.9036- 3
7.0000- 2 ~ 1.0000- 1	4.8146+ 0	4.6467+ 0		6.8906- 2					0.0000+ 0				6.9036- 3
1.0000- 1 ~ 2.0000- 1	4.6981+ 0	4.6468+ 0		5.2478- 2					0.0000+ 0				6.9036- 3
2.0000- 1 ~ 4.0000- 1	4.6826+ 0	4.6464+ 0		3.7092- 2					0.0000+ 0				6.9036- 3
4.0000- 1 ~ 7.0000- 1	4.5724+ 0	4.6451+ 0		2.7310- 2					0.0000+ 0				6.9036- 3
7.0000- 1 ~ 1.0000+ 0	4.6667+ 0	4.6448+ 0		2.1868- 2					0.0000+ 0				6.9036- 3
1.0000+ 0 ~ 2.0000+ 0	4.6807+ 0	4.6440+ 0		1.6722- 2					0.0000+ 0				6.9036- 3
2.0000+ 0 ~ 4.0000+ 0	4.6642+ 0	4.6422+ 0		1.1840- 2					0.0000+ 0				6.9036- 3
4.0000+ 0 ~ 7.0000+ 0	4.6482+ 0	4.6385+ 0		8.9244- 3					0.0000+ 0				6.9046- 3
7.0000+ 0 ~ 1.0000+ 1	4.5429+ 0	4.5368+ 0		7.2693- 3					0.0000+ 0				6.9061- 3
1.0000+ 1 ~ 2.0000+ 1	4.5332+ 0	4.5274+ 0		5.7885- 3					0.0000+ 0				6.9074- 3
2.0000+ 1 ~ 4.0000+ 1	4.6116+ 0	4.6070+ 0		4.6626- 3					0.0000+ 0				6.9127- 3
4.0000+ 1 ~ 7.0000+ 1	4.4713+ 0	4.4672+ 0		4.0808- 3					0.0000+ 0				6.9267- 3
7.0000+ 1 ~ 1.0000+ 2	4.4118+ 0	4.4075+ 0		4.9025- 3					0.0000+ 0				6.9582- 3
1.0000+ 2 ~ 2.0000+ 2	4.2532+ 0	4.1848+ 0		8.8626- 2					0.0000+ 0				6.9905- 3
2.0000+ 2 ~ 4.0000+ 2	9.2637+ 1	2.7209+ 1		5.4281+ 0					0.0000+ 0				6.1118- 3
4.0000+ 2 ~ 7.0000+ 2	1.0168+ 1	8.8616+ 0		1.4766+ 0					0.0000+ 0				6.4297- 3
7.0000+ 2 ~ 1.0000+ 3	1.1653+ 1	1.0292+ 1		1.2404+ 0					0.0000+ 0				6.8916- 3
1.0000+ 3 ~ 2.0000+ 3	7.6310+ 0	7.2187+ 0		4.1236- 1					0.0000+ 0				7.5224- 3
2.0000+ 3 ~ 4.0000+ 3	6.1754+ 0	5.7808+ 0		4.1506- 1					0.0000+ 0				8.7265- 3
4.0000+ 3 ~ 7.0000+ 3	6.0898+ 0	5.6846+ 0		4.0624- 1					0.0000+ 0				1.3948- 2
7.0000+ 3 ~ 1.0000+ 4	5.9779+ 0	5.5618+ 0		3.2662- 1					0.0000+ 0				1.9086- 2
1.0000+ 4 ~ 2.0000+ 4	5.9332+ 0	5.6839+ 0		2.3930- 1					0.0000+ 0				3.1024- 2
2.0000+ 4 ~ 4.0000+ 4	6.0078+ 0	5.8521+ 0		1.5565- 1					0.0000+ 0				5.6193- 2
4.0000+ 4 ~ 7.0000+ 4	6.1602+ 0	6.0636+ 0		1.0666- 1					0.0000+ 0				9.8866- 2
7.0000+ 4 ~ 1.0000+ 6	6.2946+ 0	6.2091+ 0		8.5438- 2					0.0000+ 0				1.4187- 1
1.0000+ 6 ~ 2.0000+ 6	6.3299+ 0	6.2572+ 0		7.2697- 2					1.6695-12				2.1320- 1
2.0000+ 6 ~ 4.0000+ 6	6.3436+ 0	6.2741+ 0		6.9627- 2					6.8782-12				3.0990- 1
4.0000+ 6 ~ 7.0000+ 6	6.3980+ 0	6.3171+ 0		7.8799- 2					1.7524-11				3.7827- 1
7.0000+ 6 ~ 1.0000+ 6	6.3814+ 0	6.2867+ 0		9.5696- 2					5.7306-11				4.0140- 1
1.0000+ 6 ~ 2.0000+ 6	6.9549+ 0	6.6457+ 0	2.9028- 1	1.1761- 1					1.6066- 9				4.3667- 1
2.0000+ 6 ~ 4.0000+ 6	4.8646+ 0	3.1864+ 0	1.3604+ 0	8.4366- 2			2.5330-14		1.7195- 8	2.8792-18			8.4828- 1
4.0000+ 6 ~ 7.0000+ 6	3.9269+ 0	1.9838+ 0	1.9400+ 0	2.1179- 2			8.0325- 6		1.3938- 4	4.8498-13			8.3839- 1
7.0000+ 6 ~ 1.0000+ 7	4.2776+ 0	2.4607+ 0	1.8104+ 0	2.8624- 3			3.0012- 3	4.4614-20	6.8317- 4	4.9465- 8	1.9374-14		7.8798- 1
1.0000+ 7 ~ 2.0000+ 7	4.3760+ 0	2.6766+ 0	6.8721- 1	1.1323- 3	1.0282+ 0	1.1612- 2	3.9486- 2	1.1392- 2	7.3849- 3	1.1626- 2	4.8183- 3	3.7874- 4	8.6486- 1

MATERIAL =5003 CROSS SECTION ^{115}Sn (5003)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.0116+ 2	6.3780+ 0		9.2772+ 1			0.0000+ 0		0.0000+ 0				5.8623- 3
1.0000- 2 ~ 2.0000- 2	4.7930+ 1	8.3740+ 0		3.9566+ 1			0.0000+ 0		0.0000+ 0				5.8623- 3
2.0000- 2 ~ 4.0000- 2	3.6304+ 1	8.3660+ 0		2.7936+ 1			0.0000+ 0		0.0000+ 0				5.8623- 3
4.0000- 2 ~ 7.0000- 2	2.8734+ 1	8.3580+ 0		2.0376+ 1			0.0000+ 0		0.0000+ 0				5.8623- 3
7.0000- 2 ~ 1.0000- 1	2.4563+ 1	8.3481+ 0		1.6207+ 1			0.0000+ 0		0.0000+ 0				5.8623- 3
1.0000- 1 ~ 2.0000- 1	2.0618+ 1	8.3207+ 0		1.2197+ 1			0.0000+ 0		0.0000+ 0				5.8623- 3
2.0000- 1 ~ 4.0000- 1	1.6832+ 1	8.2634+ 0		8.3686+ 0			0.0000+ 0		0.0000+ 0				5.8623- 3
4.0000- 1 ~ 7.0000- 1	1.4043+ 1	8.1720+ 0		5.5709+ 0			0.0000+ 0		0.0000+ 0				5.8623- 3
7.0000- 1 ~ 1.0000+ 0	1.2603+ 1	8.0884+ 0		4.4349+ 0			0.0000+ 0		0.0000+ 0				5.8623- 3
1.0000+ 0 ~ 2.0000+ 0	1.0990+ 1	7.8870+ 0		3.0227+ 0			0.0000+ 0		0.0000+ 0				5.8623- 3
2.0000+ 0 ~ 4.0000+ 0	9.1736+ 0	7.4878+ 0		1.6861+ 0			0.0000+ 0		0.0000+ 0				5.8626- 3
4.0000+ 0 ~ 7.0000+ 0	7.9056+ 0	7.0308+ 0		8.7477- 1			0.0000+ 0		0.0000+ 0				5.8638- 3
7.0000+ 0 ~ 1.0000+ 1	7.1425+ 0	6.8539+ 0		2.8867- 1			0.0000+ 0		0.0000+ 0				5.8550- 3
1.0000+ 1 ~ 2.0000+ 1	6.4003+ 0	6.1656+ 0		2.1455- 1			0.0000+ 0		0.0000+ 0				5.8565- 3
2.0000+ 1 ~ 4.0000+ 1	5.7631+ 0	5.8918+ 0		8.1327- 2			0.0000+ 0		0.0000+ 0				5.8860- 3
4.0000+ 1 ~ 7.0000+ 1	5.3947+ 0	5.3777+ 0		1.7069- 2			0.0000+ 0		0.0000+ 0				5.8847- 3
7.0000+ 1 ~ 1.0000+ 2	5.2238+ 0	5.2175+ 0		8.3871- 3			0.0000+ 0		0.0000+ 0				5.9000- 3
1.0000+ 2 ~ 2.0000+ 2	5.0748+ 0	5.0725+ 0		2.2659- 3			0.0000+ 0		0.0000+ 0				5.9632- 3
2.0000+ 2 ~ 4.0000+ 2	8.1127+ 0	5.1794+ 0		9.3325- 1			0.0000+ 0		0.0000+ 0				6.1046- 3
4.0000+ 2 ~ 7.0000+ 2	8.1368+ 0	7.2483+ 0		8.8829- 1			0.0000+ 0		0.0000+ 0				6.4597- 3
7.0000+ 2 ~ 1.0000+ 3	7.8540+ 0	6.7188+ 0		1.1356+ 0			0.0000+ 0		0.0000+ 0				8.7511- 3
1.0000+ 3 ~ 2.0000+ 3	7.8712+ 0	5.8627+ 0		1.9884+ 0			0.0000+ 0		0.0000+ 0				7.8484- 3
2.0000+ 3 ~ 4.0000+ 3	7.0176+ 0	5.7189+ 0		1.2978+ 0			0.0000+ 0		0.0000+ 0				8.9981- 3
4.0000+ 3 ~ 7.0000+ 3	5.5316+ 0	5.5877+ 0		9.4396- 1			0.0000+ 0		0.0000+ 0				1.4463- 2
7.0000+ 3 ~ 1.0000+ 4	8.3049+ 0	5.5370+ 0		7.6849- 1			0.0000+ 0		0.0000+ 0				1.9856- 2
1.0000+ 4 ~ 2.0000+ 4	5.1486+ 0	5.5680+ 0		5.9060- 1			0.0000+ 0		0.0000+ 0				3.2297- 2
2.0000+ 4 ~ 4.0000+ 4	6.1183+ 0	5.7094+ 0		4.0885- 1			0.0000+ 0		0.0000+ 0				6.0188- 2
4.0000+ 4 ~ 7.0000+ 4	6.2038+ 0	6.9183+ 0		2.8669- 1			0.0000+ 0		0.0000+ 0				1.0230- 1
7.0000+ 4 ~ 1.0000+ 5	6.2992+ 0	5.0781+ 0		2.2111- 1			0.0000+ 0		0.0000+ 0				1.4487- 1
1.0000+ 5 ~ 2.0000+ 5	5.3254+ 0	5.1628+ 0		1.7333- 1			0.0000+ 0		5.0578- 9				2.1659- 1
2.0000+ 5 ~ 4.0000+ 5	6.3403+ 0	5.1900+ 0		1.5026- 1			0.0000+ 0		2.0231- 8				3.1349- 1
4.0000+ 5 ~ 7.0000+ 5	6.5963+ 0	6.0654+ 0	1.7429- 1	1.9464- 1			2.1365-19		5.1741- 8				3.9046- 1
7.0000+ 5 ~ 1.0000+ 6	5.3803+ 0	5.6889+ 0	6.0016- 1	9.1126- 2			1.1211-18		1.5629- 7				4.4299- 1
1.0000+ 6 ~ 2.0000+ 6	5.9573+ 0	4.8136+ 0	1.0660+ 0	7.7188- 2			9.8103-18		2.1337- 6				5.0633- 1
2.0000+ 6 ~ 4.0000+ 6	4.8665+ 0	2.0351+ 0	1.7862+ 0	4.7792- 2			8.7287- 9		4.0187- 5	1.3059-19			6.0462- 1
4.0000+ 6 ~ 7.0000+ 6	3.9269+ 0	1.9265+ 0	1.9895+ 0	9.8535- 3			3.5278- 4		1.8202- 4	1.9241-14			8.4385- 1
7.0000+ 6 ~ 1.0000+ 7	4.2774+ 0	2.4869+ 0	1.4697+ 0	1.6071- 3	3.3435- 1		2.0415- 3	2.4191-21	3.8140- 4	8.9525-10	8.9380-16	8.0147-21	7.6803- 1
1.0000+ 7 ~ 2.0000+ 7	4.3761+ 0	2.6665+ 0	2.7283- 1	1.0836- 3	1.3818+ 0	1.4210- 2	2.8276- 2	4.4694- 3	5.6515- 3	3.8147- 3	4.8745- 3	7.5615- 4	8.5486- 1

MATERIAL =5004 CROSS SECTION ^{116}Sn (5004)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.7087+ 0	4.3116+ 0		3.9603- 1					0.0000+ 0				5.8018- 3
1.0000- 2 ~ 2.0000- 2	4.4905+ 0	4.3116+ 0		1.6864- 1					0.0000+ 0				5.8018- 3
2.0000- 2 ~ 4.0000- 2	4.4310+ 0	4.3116+ 0		1.1944- 1					0.0000+ 0				5.8018- 3
4.0000- 2 ~ 7.0000- 2	4.3994+ 0	4.3116+ 0		8.7865- 2					0.0000+ 0				5.8018- 3
7.0000- 2 ~ 1.0000- 1	4.3816+ 0	4.3116+ 0		7.0361- 2					0.0000+ 0				5.8018- 3
1.0000- 1 ~ 2.0000- 1	4.3646+ 0	4.3114+ 0		5.3447- 2					0.0000+ 0				5.8018- 3
2.0000- 1 ~ 4.0000- 1	4.3490+ 0	4.3111+ 0		3.7814- 2					0.0000+ 0				5.8018- 3
4.0000- 1 ~ 7.0000- 1	4.3386+ 0	4.3108+ 0		2.7986- 2					0.0000+ 0				5.8018- 3
7.0000- 1 ~ 1.0000+ 0	4.3326+ 0	4.3100+ 0		2.2617- 2					0.0000+ 0				5.8018- 3
1.0000+ 0 ~ 2.0000+ 0	4.3260+ 0	4.3087+ 0		1.7299- 2					0.0000+ 0				5.8018- 3
2.0000+ 0 ~ 4.0000+ 0	4.3183+ 0	4.3058+ 0		1.2532- 2					0.0000+ 0				5.8019- 3
4.0000+ 0 ~ 7.0000+ 0	4.3102+ 0	4.3008+ 0		8.5087- 3					0.0000+ 0				5.8028- 3
7.0000+ 0 ~ 1.0000+ 1	4.3022+ 0	4.2941+ 0		8.0967- 3					0.0000+ 0				5.8051- 3
1.0000+ 1 ~ 2.0000+ 1	4.2655+ 0	4.2786+ 0		8.9347- 3					0.0000+ 0				5.8052- 3
2.0000+ 1 ~ 4.0000+ 1	4.2401+ 0	4.2333+ 0		8.7881- 3					0.0000+ 0				5.8101- 3
4.0000+ 1 ~ 7.0000+ 1	4.1144+ 0	4.1039+ 0		1.0521- 2					0.0000+ 0				5.8234- 3
7.0000+ 1 ~ 1.0000+ 2	3.8397+ 0	3.5884+ 0		6.1298- 2					0.0000+ 0				5.8344- 3
1.0000+ 2 ~ 2.0000+ 2	3.1342+ 1	1.9362+ 1		1.1980+ 1					0.0000+ 0				5.8880- 3
2.0000+ 2 ~ 4.0000+ 2	4.5883+ 0	4.5854+ 0		8.9000- 4					0.0000+ 0				6.0029- 3
4.0000+ 2 ~ 7.0000+ 2	6.0951+ 0	4.6401+ 0		5.5504- 1					0.0000+ 0				6.3149- 3
7.0000+ 2 ~ 1.0000+ 3	4.8904+ 0	4.5211+ 0		3.8924- 1					0.0000+ 0				6.5718- 3
1.0000+ 3 ~ 2.0000+ 3	1.2960+ 1	1.2406+ 1		5.4469- 1					0.0000+ 0				7.3802- 3
2.0000+ 3 ~ 4.0000+ 3	9.9647+ 0	9.6022+ 0		4.0247- 1					0.0000+ 0				9.6888- 3
4.0000+ 3 ~ 7.0000+ 3	8.5591+ 0	8.2618+ 0		2.9764- 1					0.0000+ 0				1.3730- 2
7.0000+ 3 ~ 1.0000+ 4	7.6250+ 0	7.8911+ 0		2.3392- 1					0.0000+ 0				1.8812- 2
1.0000+ 4 ~ 2.0000+ 4	7.1803+ 0	7.0134+ 0		1.6692- 1					0.0000+ 0				3.0884- 2
2.0000+ 4 ~ 4.0000+ 4	6.6886+ 0	6.5831+ 0		1.0545- 1					0.0000+ 0				5.7886- 2
4.0000+ 4 ~ 7.0000+ 4	6.4698+ 0	6.3977+ 0		7.2171- 2					0.0000+ 0				9.8061- 2
7.0000+ 4 ~ 1.0000+ 5	6.3818+ 0	6.3327+ 0		5.8084- 2					0.0000+ 0				1.4120- 1
1.0000+ 5 ~ 2.0000+ 5	6.3241+ 0	6.2734+ 0		5.0888- 2					4.6043-16				2.1240- 1
2.0000+ 5 ~ 4.0000+ 5	6.3381+ 0	6.2998+ 0		4.4488- 2					1.8017-14				3.0838- 1
4.0000+ 5 ~ 7.0000+ 5	6.3918+ 0	6.3378+ 0		5.4148- 2					4.7788-14				5.7588- 1
7.0000+ 5 ~ 1.0000+ 6	6.3700+ 0	6.3141+ 0		5.4874- 2					1.8101-13				8.8889- 1
1.0000+ 6 ~ 2.0000+ 6	5.9549+ 0	5.5670+ 0	3.0861- 1	7.6841- 2					4.1521-12				4.3700- 1
2.0000+ 6 ~ 4.0000+ 6	4.8612+ 0	3.1748+ 0	1.4379+ 0	4.4354- 2			2.1368-19		5.5357- 9	2.7584-20			5.4802- 1
4.0000+ 6 ~ 7.0000+ 6	3.9270+ 0	1.9805+ 0	1.9539+ 0	1.0898- 2			9.9072- 9		9.999D- 8	1.0820-14			9.3323- 1
7.0000+ 6 ~ 1.0000+ 7	4.2774+ 0	2.4862+ 0	1.8076+ 0	1.8744- 3	1.0698- 3		4.7078- 4		1.378E- 4	1.3364- 9	1.1098-17		7.6768- 1
1.0000+ 7 ~ 2.0000+ 7	4.3762+ 0	2.8612+ 0	4.5349- 1	1.0870- 3	1.1704+ 0	4.9598- 2	2.1620- 2	4.6738- 3	4.9422- 3	4.7638- 3	1.7738- 3	2.5129- 4	8.8488- 1

MATERIAL =5005

CROSS SECTION

^{117}Sn (5005)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.1833+ 1	6.1046+ 0		6.7287+ 0					0.0000+ 0				5.7621- 3
1.0000- 2 ~ 2.0000- 2	7.9788+ 0	6.1043+ 0		2.8745+ 0					0.0000+ 0				5.7621- 3
2.0000- 2 ~ 4.0000- 2	7.1402+ 0	6.1039+ 0		2.0362+ 0					0.0000+ 0				5.7621- 3
4.0000- 2 ~ 7.0000- 2	6.5941+ 0	6.1039+ 0		1.4909+ 0					0.0000+ 0				5.7621- 3
7.0000- 2 ~ 1.0000- 1	6.2968+ 0	6.1026+ 0		1.1933+ 0					0.0000+ 0				5.7621- 3
1.0000- 1 ~ 2.0000- 1	6.0085+ 0	5.1008+ 0		9.0787- 1					0.0000+ 0				5.7621- 3
2.0000- 1 ~ 4.0000- 1	5.7386+ 0	5.0970+ 0		6.4163- 1					0.0000+ 0				5.7621- 3
4.0000- 1 ~ 7.0000- 1	5.5727+ 0	5.0908+ 0		4.8209- 1					0.0000+ 0				5.7621- 3
7.0000- 1 ~ 1.0000+ 0	5.5231+ 0	5.0831+ 0		4.3991- 1					0.0000+ 0				5.7621- 3
1.0000+ 0 ~ 2.0000+ 0	5.8354+ 0	5.0876+ 0		7.6791- 1					0.0000+ 0				5.7621- 3
2.0000+ 0 ~ 4.0000+ 0	5.2236+ 0	5.0396+ 0		1.8992- 1					0.0000+ 0				5.7524- 3
4.0000+ 0 ~ 7.0000+ 0	5.0993+ 0	4.9828+ 0		1.1648- 1					0.0000+ 0				5.7537- 3
7.0000+ 0 ~ 1.0000+ 1	5.0111+ 0	4.9290+ 0		8.2148- 2					0.0000+ 0				5.7548- 3
1.0000+ 1 ~ 2.0000+ 1	4.8888+ 0	4.8310+ 0		5.5734- 2					0.0000+ 0				5.7584- 3
2.0000+ 1 ~ 4.0000+ 1	2.1063+ 1	6.1866+ 0		1.5876+ 1					0.0000+ 0				6.7659- 3
4.0000+ 1 ~ 7.0000+ 1	6.0056+ 0	4.8623+ 0		1.4334- 1					0.0000+ 0				5.7846- 3
7.0000+ 1 ~ 1.0000- 2	4.8579+ 0	4.5881+ 0		6.9187- 2					0.0000+ 0				5.7999- 3
1.0000+ 2 ~ 2.0000+ 2	1.0242+ 1	5.1790+ 0		5.0832+ 0					0.0000+ 0				5.8632- 3
2.0000+ 2 ~ 4.0000+ 2	6.5296+ 0	5.9211+ 0		1.2085+ 0					0.0000+ 0				6.0046- 3
4.0000+ 2 ~ 7.0000+ 2	6.1271+ 0	6.1492+ 0		1.9779+ 0					0.0000+ 0				6.3600- 3
7.0000+ 2 ~ 1.0000+ 3	9.8639+ 0	5.4058+ 0		1.4583+ 0					0.0000+ 0				6.6516- 3
1.0000+ 3 ~ 2.0000+ 3	6.0216+ 0	6.6364+ 0		4.8622- 1					0.0000+ 0				7.5481- 3
2.0000+ 3 ~ 4.0000+ 3	1.0268+ 1	9.0458+ 0		1.2101+ 0					0.0000+ 0				9.8994- 3
4.0000+ 3 ~ 7.0000+ 3	9.1833+ 0	8.2164+ 0		9.4787- 1					0.0000+ 0				1.4356- 2
7.0000+ 3 ~ 1.0000+ 4	8.2347+ 0	7.4850+ 0		7.6971- 1					0.0000+ 0				1.9763- 2
1.0000+ 4 ~ 2.0000+ 4	7.4171+ 0	6.8231+ 0		5.9403- 1					0.0000+ 0				3.2210- 2
2.0000+ 4 ~ 4.0000+ 4	6.7735+ 0	6.3804+ 0		4.1314- 1					0.0000+ 0				6.0119- 2
4.0000+ 4 ~ 7.0000+ 4	6.4811+ 0	6.1918+ 0		2.6931- 1					0.0000+ 0				1.0226- 1
7.0000+ 4 ~ 1.0000+ 5	6.3752+ 0	6.1468+ 0		2.2442- 1					0.0000+ 0				1.4486- 1
1.0000+ 5 ~ 2.0000+ 5	6.3229+ 0	6.0942+ 0	5.9462- 2	1.5824- 1					3.2686-11				2.1881- 1
2.0000+ 5 ~ 4.0000+ 5	6.3368+ 0	5.7365+ 0	4.9655- 1	1.0156- 1					1.3034-10				3.5953- 1
4.0000+ 5 ~ 7.0000+ 5	6.3809+ 0	6.8611+ 0	8.9884- 1	9.3175- 2					3.2834-10				4.1789- 1
7.0000+ 5 ~ 1.0000+ 5	6.3786+ 0	5.6579+ 0	7.3614- 1	8.6477- 2			0.0000+ 0		8.2923-10				4.6300- 1
1.0000+ 6 ~ 2.0000+ 6	5.9584+ 0	4.6640+ 0	1.2067+ 0	6.7112- 2			8.5565-20		1.0904- 8				6.1929- 1
2.0000+ 6 ~ 4.0000+ 6	4.8538+ 0	2.7928+ 0	1.8102+ 0	4.4255- 2			3.0106-19		1.8035- 8				6.1156- 1
4.0000+ 6 ~ 7.0000+ 6	3.9280+ 0	1.9267+ 0	1.9895+ 0	9.8009- 3			1.9008- 5		2.2649- 6	8.3677-16			6.4388- 1
7.0000+ 6 ~ 1.0000+ 7	4.2772+ 0	2.4728+ 0	1.0598+ 0	1.5668- 3	7.4106- 1		4.7468- 4		6.6360- 6	3.3714-11	1.7122-17	8.6119-22	7.6602- 1
1.0000+ 7 ~ 2.0000+ 7	4.3749+ 0	2.6640+ 0	1.5106- 1	1.0613- 3	1.4641+ 0	7.4312- 2	1.5636- 2	2.3866- 3	3.6286- 3	1.8291- 3	5.0410- 3	3.6393- 4	8.6486- 1

MATERIAL =5006

CROSS SECTION

^{118}Sn (5006)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.8960+ 0	4.2218+ 0		6.7422- 1					0.0000+ 0				5.7034- 3
1.0000- 2 ~ 2.0000- 2	4.6098+ 0	4.2217+ 0		2.8809- 1					0.0000+ 0				5.7034- 3
2.0000- 2 ~ 4.0000- 2	4.4264+ 0	4.2217+ 0		2.0365- 1					0.0000+ 0				5.7034- 3
4.0000- 2 ~ 7.0000- 2	4.3712+ 0	4.2217+ 0		1.4958- 1					0.0000+ 0				5.7034- 3
7.0000- 2 ~ 1.0000- 1	4.3413+ 0	4.2216+ 0		1.1976- 1					0.0000+ 0				5.7034- 3
1.0000- 1 ~ 2.0000- 1	4.3124+ 0	4.2215+ 0		9.0917- 2					0.0000+ 0				5.7034- 3
2.0000- 1 ~ 4.0000- 1	4.2864+ 0	4.2212+ 0		6.4204- 2					0.0000+ 0				5.7034- 3
4.0000- 1 ~ 7.0000- 1	4.2678+ 0	4.2207+ 0		4.7105- 2					0.0000+ 0				5.7034- 3
7.0000- 1 ~ 1.0000+ 0	4.2676+ 0	4.2201+ 0		3.7527- 2					0.0000+ 0				5.7034- 3
1.0000+ 0 ~ 2.0000+ 0	4.2472+ 0	4.2188+ 0		2.8408- 2					0.0000+ 0				5.7034- 3
2.0000+ 0 ~ 4.0000+ 0	4.2367+ 0	4.2158+ 0		1.9833- 2					0.0000+ 0				5.7036- 3
4.0000+ 0 ~ 7.0000+ 0	4.2264+ 0	4.2111+ 0		1.4313- 2					0.0000+ 0				5.7041- 3
7.0000+ 0 ~ 1.0000+ 1	4.2187+ 0	4.2065+ 0		1.1249- 2					0.0000+ 0				5.7048- 3
1.0000+ 1 ~ 2.0000+ 1	4.2028+ 0	4.1940+ 0		8.5381- 3					0.0000+ 0				5.7065- 3
2.0000+ 1 ~ 4.0000+ 1	4.1815+ 0	4.1698+ 0		1.1713- 2					0.0000+ 0				5.7111- 3
4.0000+ 1 ~ 7.0000+ 1	6.3132+ 0	4.1406+ 0		2.1728+ 0					0.0000+ 0				5.7239- 3
7.0000+ 1 ~ 1.0000+ 2	4.0957+ 0	4.0920+ 0		3.7669- 3					0.0000+ 0				5.7544- 3
1.0000+ 2 ~ 2.0000+ 2	3.9918+ 0	3.9889+ 0		2.8473- 3					0.0000+ 0				5.7838- 3
2.0000+ 2 ~ 4.0000+ 2	2.2243+ 1	1.8141+ 1		4.1017+ 0					0.0000+ 0				5.8980- 3
4.0000+ 2 ~ 7.0000+ 2	4.2338+ 0	4.2280+ 0		5.7919- 3					0.0000+ 0				6.2069- 3
7.0000+ 2 ~ 1.0000+ 3	1.9314+ 1	1.7777+ 1		1.5371+ 0					0.0000+ 0				6.4588- 3
1.0000+ 3 ~ 2.0000+ 3	6.6120+ 0	6.2118+ 0		4.0016- 1					0.0000+ 0				7.2688- 3
2.0000+ 3 ~ 4.0000+ 3	7.0998+ 0	8.7069+ 0		5.1391- 1					0.0000+ 0				9.4136- 3
4.0000+ 3 ~ 7.0000+ 3	8.2809+ 0	8.0007+ 0		2.0828- 1					0.0000+ 0				1.3631- 2
7.0000+ 3 ~ 1.0000+ 4	8.8954+ 0	8.7466+ 0		1.4870- 1					0.0000+ 0				1.8588- 2
1.0000+ 4 ~ 2.0000+ 4	6.6576+ 0	6.4648+ 0		1.0279- 1					0.0000+ 0				3.0332- 2
2.0000+ 4 ~ 4.0000+ 4	6.3491+ 0	6.2653+ 0		8.8604- 2					0.0000+ 0				5.7282- 2
4.0000+ 4 ~ 7.0000+ 4	6.3109+ 0	6.2866+ 0		4.4441- 2					0.0000+ 0				9.8574- 2
7.0000+ 4 ~ 1.0000+ 5	6.3329+ 0	6.2969+ 0		3.7072- 2					0.0000+ 0				1.4068- 1
1.0000+ 5 ~ 2.0000+ 5	6.3207+ 0	6.2883+ 0		3.2328- 2					1.0101-17				2.1172- 1
2.0000+ 5 ~ 4.0000+ 5	6.3347+ 0	6.3039+ 0		3.0818- 2					4.0406-17				5.0746- 1
4.0000+ 5 ~ 7.0000+ 5	6.3691+ 0	6.3655+ 0		3.5789- 2					1.0525-16				8.7238- 1
7.0000+ 5 ~ 1.0000+ 6	6.3773+ 0	6.3373+ 0		3.9868- 2					3.7874-16				1.9751- 1
1.0000+ 6 ~ 2.0000+ 6	6.9537+ 0	6.6476+ 0	3.6120- 1	4.3191- 2					1.0297-14				4.3644- 1
2.0000+ 6 ~ 4.0000+ 6	4.8610+ 0	3.1847+ 0	1.4828+ 0	2.2786- 2					1.2370-11				8.4981- 1
4.0000+ 6 ~ 7.0000+ 6	3.9287+ 0	1.9511+ 0	1.9711+ 0	9.7139- 3			7.3091-15		1.5921- 7	1.0705-16			6.3628- 1
7.0000+ 6 ~ 1.0000+ 7	4.2770+ 0	2.4726+ 0	1.7939+ 0	6.7184- 4	9.6623- 3		4.1783- 6		6.2669- 6	1.1620-11	3.2986-21		7.6769- 1
1.0000+ 7 ~ 2.0000+ 7	4.3749+ 0	2.6643+ 0	4.3691- 1	1.0263- 3	1.1662+ 0	1.0117- 1	9.9588- 3	1.4500- 3	1.8320- 3	8.1604- 4	1.2236- 3	1.8923- 4	8.6486- 1

MATERIAL =5007 CROSS SECTION ^{119}Sn (5007)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.1439+ 1	4.6761+ 0		6.7629+ 0					0.0000+ 0				6.6664- 3
1.0000- 2 ~ 2.0000- 2	7.6595+ 0	4.6769+ 0		2.8836+ 0					0.0000+ 0				6.6664- 3
2.0000- 2 ~ 4.0000- 2	6.7086+ 0	4.6766+ 0		2.0330+ 0					0.0000+ 0				6.6664- 3
4.0000- 2 ~ 7.0000- 2	6.1821+ 0	4.6750+ 0		1.4871+ 0					0.0000+ 0				6.6664- 3
7.0000- 2 ~ 1.0000- 1	6.8676+ 0	4.6744+ 0		1.1832+ 0					0.0000+ 0				6.6664- 3
1.0000- 1 ~ 2.0000- 1	5.5810+ 0	4.6730+ 0		8.8794- 1					0.0000+ 0				6.6664- 3
2.0000- 1 ~ 4.0000- 1	5.2806+ 0	4.6699+ 0		6.1067- 1					0.0000+ 0				6.6664- 3
4.0000- 1 ~ 7.0000- 1	5.0931+ 0	4.6850+ 0		4.2612- 1					0.0000+ 0				6.6664- 3
7.0000- 1 ~ 1.0000+ 0	4.9836+ 0	4.6694+ 0		3.2412- 1					0.0000+ 0				6.6664- 3
1.0000+ 0 ~ 2.0000+ 0	4.8893+ 0	4.6483+ 0		2.2094- 1					0.0000+ 0				6.6664- 3
2.0000+ 0 ~ 4.0000+ 0	4.7616+ 0	4.6270+ 0		1.2481- 1					0.0000+ 0				6.6665- 3
4.0000+ 0 ~ 7.0000+ 0	5.0571+ 0	4.8005+ 0		4.8668- 1					0.0000+ 0				6.8588- 3
7.0000+ 0 ~ 1.0000+ 1	4.8208+ 0	4.5779+ 0		4.2882- 2					0.0000+ 0				6.6575- 3
1.0000+ 1 ~ 2.0000+ 1	4.5650+ 0	4.5463+ 0		1.8660- 2					0.0000+ 0				6.6606- 3
2.0000+ 1 ~ 4.0000+ 1	4.6196+ 0	4.6144+ 0		5.0594- 3					0.0000+ 0				6.6670- 3
4.0000+ 1 ~ 7.0000+ 1	4.4906+ 0	4.4886+ 0		1.9682- 3					0.0000+ 0				6.6835- 3
7.0000+ 1 ~ 1.0000+ 2	4.5269+ 0	4.4875+ 0		5.8756- 2					0.0000+ 0				6.6972- 3
1.0000+ 2 ~ 2.0000+ 2	5.3817+ 0	4.4879+ 0		8.9384- 1					0.0000+ 0				6.7555- 3
2.0000+ 2 ~ 4.0000+ 2	5.1335+ 0	4.5768+ 0		5.5477- 1					0.0000+ 0				6.8878- 3
4.0000+ 2 ~ 7.0000+ 2	6.4818+ 0	4.6695+ 0		8.1231- 1					0.0000+ 0				0.2261- 3
7.0000+ 2 ~ 1.0000+ 3	8.0223+ 0	7.3821+ 0		6.4012- 1					0.0000+ 0				8.5041- 3
1.0000+ 3 ~ 2.0000+ 3	8.3873+ 0	8.3366+ 0		1.0609+ 0					0.0000+ 0				7.3717- 3
2.0000+ 3 ~ 4.0000+ 3	9.3433+ 0	8.3818+ 0		9.8148- 1					0.0000+ 0				9.6682- 3
4.0000+ 3 ~ 7.0000+ 3	8.0160+ 0	7.2986+ 0		7.1666- 1					0.0000+ 0				1.4009- 2
7.0000+ 3 ~ 1.0000+ 4	7.3413+ 0	6.7847+ 0		5.7554- 1					0.0000+ 0				1.9205- 2
1.0000+ 4 ~ 2.0000+ 4	6.7638+ 0	6.3346+ 0		4.2920- 1					0.0000+ 0				3.1499- 2
2.0000+ 4 ~ 4.0000+ 4	6.3008+ 0	5.8229+ 0	2.2372- 1	2.5479- 1					0.0000+ 0				6.1022- 2
4.0000+ 4 ~ 7.0000+ 4	6.2033+ 0	5.6824+ 0	6.0864- 1	1.3374- 1					0.0000+ 0				1.0860- 1
7.0000+ 4 ~ 1.0000+ 6	6.2906+ 0	5.6704+ 0	6.2802- 1	8.1602- 2					0.0000+ 0				1.5704- 1
1.0000+ 5 ~ 2.0000+ 5	6.3193+ 0	5.5368+ 0	7.1463- 1	6.7626- 2					1.8209-13				2.3990- 1
2.0000+ 5 ~ 4.0000+ 5	6.3334+ 0	5.5294+ 0	7.4945- 1	5.4478- 2					7.2656-13				3.4971- 1
4.0000+ 5 ~ 7.0000+ 5	6.3881+ 0	5.5912+ 0	7.4598- 1	5.1426- 2					1.7479-12				4.2562- 1
7.0000+ 5 ~ 1.0000+ 6	6.3770+ 0	5.5269+ 0	8.0046- 1	4.9676- 2					4.2162-12				4.5628- 1
1.0000+ 6 ~ 2.0000+ 6	6.9588+ 0	4.5830+ 0	1.3429+ 0	3.2626- 2					4.9116-11				5.3077- 1
2.0000+ 6 ~ 4.0000+ 6	4.6545+ 0	2.7466+ 0	1.8799+ 0	1.9916- 2			1.2705-17		2.8273- 8				6.2025- 1
4.0000+ 6 ~ 7.0000+ 6	3.9268+ 0	1.9386+ 0	1.9724+ 0	4.4100- 3	1.0954- 2		2.0032- 7		1.6851- 8	1.7104-17			6.4449- 1
7.0000+ 6 ~ 1.0000+ 7	4.2789+ 0	2.4673+ 0	8.1471- 1	1.1606- 3	1.0008+ 0		5.6079- 6		1.3693- 5	9.6116-13	2.9201-19		7.6795- 1
1.0000+ 7 ~ 2.0000+ 7	4.3747+ 0	2.6772+ 0	1.2924- 1	1.0767- 3	1.4248+ 0	1.2657- 1	7.1884- 3	2.3868- 3	2.2331- 3	5.8741- 4	2.7217- 3	3.8920- 4	8.6465- 1

MATERIAL =5008 CROSS SECTION ^{120}Sn (5008)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	5.7707+ 0	5.9399+ 0		4.3081- 1					0.0000+ 0				6.6063- 3
1.0000- 2 ~ 2.0000- 2	5.6240+ 0	5.9399+ 0		1.8410- 1					0.0000+ 0				6.6063- 3
2.0000- 2 ~ 4.0000- 2	5.4702+ 0	5.9398+ 0		1.3032- 1					0.0000+ 0				6.6063- 3
4.0000- 2 ~ 7.0000- 2	5.4354+ 0	5.9398+ 0		9.5673- 2					0.0000+ 0				6.6063- 3
7.0000- 2 ~ 1.0000- 1	5.4162+ 0	5.9398+ 0		7.6452- 2					0.0000+ 0				6.6063- 3
1.0000- 1 ~ 2.0000- 1	5.3979+ 0	5.9396+ 0		6.6208- 2					0.0000+ 0				6.6063- 3
2.0000- 1 ~ 4.0000- 1	5.3806+ 0	5.9394+ 0		4.1108- 2					0.0000+ 0				6.6063- 3
4.0000- 1 ~ 7.0000- 1	5.3892+ 0	5.9390+ 0		3.0201- 2					0.0000+ 0				6.6063- 3
7.0000- 1 ~ 1.0000+ 0	5.3826+ 0	5.9386+ 0		2.4162- 2					0.0000+ 0				6.6063- 3
1.0000+ 0 ~ 2.0000+ 0	5.3558+ 0	5.9374+ 0		1.8331- 2					0.0000+ 0				6.6063- 3
2.0000+ 0 ~ 4.0000+ 0	5.3479+ 0	5.9360+ 0		1.2906- 2					0.0000+ 0				6.6064- 3
4.0000+ 0 ~ 7.0000+ 0	5.3403+ 0	5.9309+ 0		9.4047- 3					0.0000+ 0				6.6069- 3
7.0000+ 0 ~ 1.0000+ 1	5.3395+ 0	5.9260+ 0		7.4882- 3					0.0000+ 0				6.6095- 3
1.0000+ 1 ~ 2.0000+ 1	5.3213+ 0	5.9158+ 0		5.5742- 3					0.0000+ 0				6.6112- 3
2.0000+ 1 ~ 4.0000+ 1	5.2966+ 0	5.8928+ 0		3.7912- 3					0.0000+ 0				6.6156- 3
4.0000+ 1 ~ 7.0000+ 1	5.3268+ 0	5.8669+ 0		6.9682- 2					0.0000+ 0				6.6280- 3
7.0000+ 1 ~ 1.0000+ 2	5.2195+ 0	5.2171+ 0		2.3733- 3					0.0000+ 0				6.6382- 3
1.0000+ 2 ~ 2.0000+ 2	5.1565+ 0	5.1428+ 0		1.3749- 2					0.0000+ 0				6.6885- 3
2.0000+ 2 ~ 4.0000+ 2	5.1543+ 0	5.0122+ 0		1.4217- 1					0.0000+ 0				6.8000- 3
4.0000+ 2 ~ 7.0000+ 2	5.2160+ 0	4.8760+ 0		3.3901- 1					0.0000+ 0				6.1028- 2
7.0000+ 2 ~ 1.0000+ 3	6.3589+ 0	5.4626+ 0		9.0434- 1					0.0000+ 0				6.3629- 3
1.0000+ 3 ~ 2.0000+ 3	6.1601+ 0	4.1248+ 0		2.3632- 1					0.0000+ 0				7.1488- 3
2.0000+ 3 ~ 4.0000+ 3	5.0446+ 0	4.3197+ 0		1.2498- 1					0.0000+ 0				9.2749- 3
4.0000+ 3 ~ 7.0000+ 3	4.8723+ 0	4.7386+ 0		1.3386- 1					0.0000+ 0				1.3386- 2
7.0000+ 3 ~ 1.0000+ 4	8.1177+ 0	8.0048+ 0		1.1277- 1					0.0000+ 0				1.8388- 2
1.0000+ 4 ~ 2.0000+ 4	6.2413+ 0	5.1812+ 0		8.0116- 2					0.0000+ 0				3.0079- 2
2.0000+ 4 ~ 4.0000+ 4	6.8605+ 0	5.8062+ 0		4.5389- 2					0.0000+ 0				6.6943- 2
4.0000+ 4 ~ 7.0000+ 4	6.6610+ 0	5.8365+ 0		2.4482- 2					0.0000+ 0				8.8217- 2
7.0000+ 4 ~ 1.0000+ 5	8.3063+ 0	6.2831+ 0		2.2262- 2					0.0000+ 0				1.4026- 1
1.0000+ 5 ~ 2.0000+ 5	8.3181+ 0	6.2985+ 0		1.9561- 2					2.4418-20				2.1182- 1
2.0000+ 5 ~ 4.0000+ 5	8.3302+ 0	6.3117+ 0		1.8555- 2					8.7870-20				3.0576- 1
4.0000+ 5 ~ 7.0000+ 5	8.3867+ 0	6.3668+ 0		2.0100- 2					2.8920-19				3.7148- 1
7.0000+ 5 ~ 1.0000+ 6	8.3763+ 0	6.3614+ 0		2.3845- 2					1.0336-18				3.8646- 1
1.0000+ 6 ~ 2.0000+ 6	6.9654+ 0	5.6201+ 0	4.1064- 1	2.3567- 2					3.0035-17				4.4083- 1
2.0000+ 6 ~ 4.0000+ 6	4.8628+ 0	3.1832+ 0	1.4846+ 0	1.2021- 2					4.2238-14				6.8188- 1
4.0000+ 6 ~ 7.0000+ 6	3.8268+ 0	1.9524+ 0	1.9718+ 0	2.1013- 3			2.3326-17		2.3836- 8	1.7867-16			6.3602- 1
7.0000+ 6 ~ 1.0000+ 7	4.2769+ 0	2.4718+ 0	1.7588+ 0	6.1666- 4	4.4979- 2		5.6604- 7		8.9362- 7	1.9909-13			7.6779- 1
1.0000+ 7 ~ 2.0000+ 7	4.3760+ 0	2.6545+ 0	3.6093- 1	1.0099- 3	1.1920+ 0	1.6413- 1	8.4574- 3	6.1773- 4	1.2868- 3	3.3717- 4	9.3729- 4	1.5387- 4	8.6465- 1

MATERIAL =5009 CROSS SECTION ^{122}Sn (5009)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	4.3660+ 0	3.7963+ 0		6.7064- 1									6.5162- 3
1.0000- 2 ~ 2.0000- 2	4.0387+ 0	3.7963+ 0		2.4336- 1									6.5162- 3
2.0000- 2 ~ 4.0000- 2	3.9658+ 0	3.7963+ 0		1.7164- 1									6.5162- 3
4.0000- 2 ~ 7.0000- 2	3.9209+ 0	3.7952+ 0		1.2584- 1									6.5162- 3
7.0000- 2 ~ 1.0000- 1	3.8952+ 0	3.7962+ 0		1.0003- 1									6.5162- 3
1.0000- 1 ~ 2.0000- 1	3.8702+ 0	3.7951+ 0		7.5073- 2									6.5162- 3
2.0000- 1 ~ 4.0000- 1	3.8467+ 0	3.7949+ 0		5.1780- 2									6.5162- 3
4.0000- 1 ~ 7.0000- 1	3.8309+ 0	3.7945+ 0		3.6437- 2									6.5162- 3
7.0000- 1 ~ 1.0000+ 0	3.8218+ 0	3.7941+ 0		2.7772- 2									6.5162- 3
1.0000+ 0 ~ 2.0000+ 0	3.8123+ 0	3.7932+ 0		1.9108- 2									5.5162- 3
2.0000+ 0 ~ 4.0000+ 0	3.8026+ 0	3.7916+ 0		1.1010- 2									5.5163- 3
4.0000+ 0 ~ 7.0000+ 0	3.7958+ 0	3.7895+ 0		8.0658- 3									5.5158- 3
7.0000+ 0 ~ 1.0000+ 1	3.7913+ 0	3.7878+ 0		3.8731- 3									5.5172- 3
1.0000+ 1 ~ 2.0000+ 1	3.7868+ 0	3.7849+ 0		1.9443- 3									5.5191- 3
2.0000+ 1 ~ 4.0000+ 1	3.7821+ 0	3.7811+ 0		9.2626- 4									5.5234- 3
4.0000+ 1 ~ 7.0000+ 1	3.7778+ 0	3.7770+ 0		7.1315- 4									5.5356- 3
7.0000+ 1 ~ 1.0000+ 2	3.7763+ 0	3.7731+ 0		9.2117- 3									5.5457- 3
1.0000+ 2 ~ 2.0000+ 2	4.0645+ 0	3.7659+ 0		2.9850- 1									5.5935- 3
2.0000+ 2 ~ 4.0000+ 2	3.8882+ 0	3.7476+ 0		1.3854- 1									5.7060- 3
4.0000+ 2 ~ 7.0000+ 2	3.7061+ 0	3.7049+ 0		2.4561- 4									6.0066- 3
7.0000+ 2 ~ 1.0000+ 3	3.6318+ 0	3.6314+ 0		3.1099- 4									6.2543- 3
1.0000+ 3 ~ 2.0000+ 3	1.0748+ 1	1.0463+ 1		2.9661- 1									7.0467- 3
2.0000+ 3 ~ 4.0000+ 3	4.6655+ 0	4.3419+ 0		2.1356- 1									9.1804- 3
4.0000+ 3 ~ 7.0000+ 3	8.7308+ 0	8.6796+ 0		1.6131- 1									1.3227- 2
7.0000+ 3 ~ 1.0000+ 4	5.0794+ 0	5.0468+ 0		3.2632- 2									1.8214- 2
1.0000+ 4 ~ 2.0000+ 4	4.6602+ 0	4.5396+ 0		2.0716- 2									2.9914- 2
2.0000+ 4 ~ 4.0000+ 4	5.9098+ 0	5.8915+ 0		1.8270- 2									5.8755- 2
4.0000+ 4 ~ 7.0000+ 4	6.4480+ 0	6.4304+ 0		1.7627- 2									9.8006- 2
7.0000+ 4 ~ 1.0000+ 5	6.3646+ 0	6.3484+ 0		1.6088- 2					0.0000+ 0				1.4002- 1
1.0000+ 5 ~ 2.0000+ 5	6.3194+ 0	6.3002+ 0		1.3183- 2					0.0000+ 0				2.1094- 1
2.0000+ 5 ~ 4.0000+ 5	8.9278+ 0	8.9154+ 0		1.2167- 2					0.0000+ 0				3.0830- 1
4.0000+ 5 ~ 7.0000+ 5	8.9836+ 0	8.9709+ 0		1.2719- 2					0.0000+ 0				3.7009- 1
7.0000+ 5 ~ 1.0000+ 6	6.3738+ 0	6.3603+ 0		1.4863- 2					0.0000+ 0				3.9577- 1
1.0000+ 6 ~ 2.0000+ 6	5.9544+ 0	5.5044+ 0	4.3600- 1	1.2774- 2					7.7080-20				4.4153- 1
2.0000+ 6 ~ 4.0000+ 6	4.5632+ 0	3.2489+ 0	1.4034+ 0	8.5417- 3					8.1693-17				5.3586- 1
4.0000+ 6 ~ 7.0000+ 6	3.9287+ 0	1.9788+ 0	1.9488+ 0	1.6974- 3					7.0625-12	2.7666-20			6.2643- 1
7.0000+ 6 ~ 1.0000+ 7	4.2767+ 0	2.4697+ 0	1.7041+ 0	6.0192- 4	1.0103- 1		8.0678-11		4.6067- 8	1.2427-15			7.5766- 1
1.0000+ 7 ~ 2.0000+ 7	4.3747+ 0	2.6612+ 0	2.6810- 1	1.0010- 3	1.2169+ 0	2.2366- 1	2.7847- 3	3.6844- 4	4.7209- 4	8.4813- 6	3.4613- 4	9.7469- 6	8.5484- 1

MATERIAL =5010 CROSS SECTION ^{123}Sn (5010)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	1.3302+ 1	4.0000+ 0		9.2611+ 0					0.0000+ 0				6.4712- 3
1.0000- 2 ~ 2.0000- 2	8.0019+ 0	4.0000+ 0		3.9631+ 0					0.0000+ 0				6.4712- 3
2.0000- 2 ~ 4.0000- 2	6.8195+ 0	4.0000+ 0		2.7862+ 0					0.0000+ 0				6.4712- 3
4.0000- 2 ~ 7.0000- 2	6.0702+ 0	4.0000+ 0		2.0542+ 0					0.0000+ 0				6.4712- 3
7.0000- 2 ~ 1.0000- 1	5.5668+ 0	4.0000+ 0		1.5431+ 0					0.0000+ 0				6.4712- 3
1.0000- 1 ~ 2.0000- 1	5.2827+ 0	4.0000+ 0		1.2500+ 0					0.0000+ 0				6.4712- 3
2.0000- 1 ~ 4.0000- 1	4.8934+ 0	4.0000+ 0		8.8383- 1					0.0000+ 0				6.4712- 3
4.0000- 1 ~ 7.0000- 1	4.6598+ 0	4.0000+ 0		6.4981- 1					0.0000+ 0				6.4712- 3
7.0000- 1 ~ 1.0000+ 0	4.5290+ 0	4.0000+ 0		5.1962- 1					0.0000+ 0				6.4712- 3
1.0000+ 0 ~ 2.0000+ 0	4.4232+ 0	4.0000+ 0		4.9628- 1					0.0000+ 0				6.4712- 3
2.0000+ 0 ~ 4.0000+ 0	4.2960+ 0	4.0000+ 0		2.7846- 1					0.0000+ 0				6.4714- 3
4.0000+ 0 ~ 7.0000+ 0	4.2133+ 0	4.0000+ 0		2.0637- 1					0.0000+ 0				6.4729- 3
7.0000+ 0 ~ 1.0000+ 1	4.1778+ 0	4.0000+ 0		1.6427- 1					0.0000+ 0				6.4742- 3
1.0000+ 1 ~ 2.0000+ 1	4.1355+ 0	4.0000+ 0		1.2497- 1					0.0000+ 0				6.4780- 3
2.0000+ 1 ~ 4.0000+ 1	6.3962+ 1	2.3457+ 1		3.0626+ 1					0.0000+ 0				6.4880- 3
4.0000+ 1 ~ 7.0000+ 1	4.6458+ 1	2.2418+ 1		2.3040+ 1					0.0000+ 0				6.5086- 3
7.0000+ 1 ~ 1.0000+ 2	9.7359+ 1	2.0284+ 1		1.7075+ 1					0.0000+ 0				6.5218- 3
1.0000+ 2 ~ 2.0000+ 2	2.9443+ 1	1.7820+ 1		1.1623+ 1					0.0000+ 0				6.5607- 3
2.0000+ 2 ~ 4.0000+ 2	2.2032+ 1	1.5038+ 1		6.9988+ 0					0.0000+ 0				6.7314- 3
4.0000+ 2 ~ 7.0000+ 2	1.7292+ 1	1.2664+ 1		4.4287+ 0					0.0000+ 0				8.0016- 3
7.0000+ 2 ~ 1.0000+ 3	1.4874+ 1	1.1485+ 1		3.1887+ 0					0.0000+ 0				8.3874- 3
1.0000+ 3 ~ 2.0000+ 3	1.2187+ 1	1.0010+ 1		2.1769+ 0					0.0000+ 0				7.2924- 3
2.0000+ 3 ~ 4.0000+ 3	9.8207+ 0	8.5208+ 0		1.4001+ 0					0.0000+ 0				9.8628- 3
4.0000+ 3 ~ 7.0000+ 3	8.6272+ 0	7.6353+ 0		9.9166- 1					0.0000+ 0				1.4109- 2
7.0000+ 3 ~ 1.0000+ 4	7.7935+ 0	7.0106+ 0		7.8299- 1					0.0000+ 0				1.9497- 2
1.0000+ 4 ~ 2.0000+ 4	7.1458+ 0	6.5689+ 0		6.7886- 1					0.0000+ 0				3.1868- 2
2.0000+ 4 ~ 4.0000+ 4	6.8844+ 0	6.2789+ 0	5.4998- 5	5.7748- 1					0.0000+ 0				6.8557- 2
4.0000+ 4 ~ 7.0000+ 4	6.4338+ 0	6.1829+ 0	6.0691- 4	2.6039- 1					0.0000+ 0				1.0145- 1
7.0000+ 4 ~ 1.0000+ 5	6.3618+ 0	6.1640+ 0	1.3009- 3	1.8848- 1					0.0000+ 0				1.4384- 1
1.0000+ 5 ~ 2.0000+ 5	6.3108+ 0	6.1703+ 0	4.0612- 3	1.3607- 1					5.4669-20				2.1622- 1
2.0000+ 5 ~ 4.0000+ 5	6.3251+ 0	6.2106+ 0	1.2909- 2	1.0158- 1					2.1835-19				3.1148- 1
4.0000+ 5 ~ 7.0000+ 5	6.3835+ 0	6.2602+ 0	4.5102- 2	8.8160- 2					6.1710-19				3.7884- 1
7.0000+ 5 ~ 1.0000+ 6	6.3734+ 0	6.0400+ 0	2.5462- 1	7.8876- 2					1.1924-18				4.1859- 1
1.0000+ 6 ~ 2.0000+ 6	6.9662+ 0	5.1624+ 0	7.2184- 1	8.9476- 2					1.6820-17				4.7173- 1
2.0000+ 6 ~ 4.0000+ 6	4.8558+ 0	2.8776+ 0	1.7470+ 0	2.4021- 2					1.6014-14				5.8881- 1
4.0000+ 6 ~ 7.0000+ 6	3.9285+ 0	1.9377+ 0	1.8735+ 0	4.3414- 3	1.0794- 1		1.8403-15		5.4031-10				6.4281- 1
7.0000+ 6 ~ 1.0000+ 7	4.2784+ 0	2.4578+ 0	1.4982- 1	1.0706- 3	1.3197+ 0		4.8228- 7		4.6172- 8	2.6864-17			7.6783- 1
1.0000+ 7 ~ 2.0000+ 7	4.3747+ 0	2.6738+ 0	8.1486- 2	1.0783- 3	1.3878+ 0	2.2450- 1	4.4328- 3	1.6347- 4	4.1476- 4	3.8790- 6	8.1703- 4	1.4136- 4	8.6484- 1

MATERIAL =5011 CROSS SECTION ^{124}Sn (5011)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.8197+ 0	4.8999+ 0		4.1984- 1									6.4271- 3
1.0000- 2 ~ 2.0000- 2	4.5792+ 0	4.3999+ 0		1.7027- 1									6.4271- 3
2.0000- 2 ~ 4.0000- 2	4.5266+ 0	4.3999+ 0		1.2672- 1									6.4271- 3
4.0000- 2 ~ 7.0000- 2	4.4929+ 0	4.3998+ 0		9.5038- 2									6.4271- 3
7.0000- 2 ~ 1.0000- 1	4.4740+ 0	4.3998+ 0		7.4164- 2									6.4271- 3
1.0000- 1 ~ 2.0000- 1	4.4558+ 0	4.3997+ 0		5.8138- 2									6.4271- 3
2.0000- 1 ~ 4.0000- 1	4.4388+ 0	4.3996+ 0		3.9278- 2									6.4271- 3
4.0000- 1 ~ 7.0000- 1	4.4278+ 0	4.3992+ 0		2.8413- 2									6.4271- 3
7.0000- 1 ~ 1.0000+ 0	4.4212+ 0	4.3989+ 0		2.2303- 2									6.4271- 3
1.0000+ 0 ~ 2.0000+ 0	4.4145+ 0	4.3981+ 0		1.8362- 2									5.4271- 3
2.0000+ 0 ~ 4.0000+ 0	4.4074+ 0	4.3965+ 0		1.0802- 2									6.4272- 3
4.0000+ 0 ~ 7.0000+ 0	4.4019+ 0	4.3944+ 0		7.4901- 3									6.4277- 3
7.0000+ 0 ~ 1.0000+ 1	4.3983+ 0	4.3923+ 0		6.0627- 3									5.4281- 3
1.0000+ 1 ~ 2.0000+ 1	4.3951+ 0	4.3880+ 0		6.0580- 3									5.4299- 3
2.0000+ 1 ~ 4.0000+ 1	4.3996+ 0	4.3848+ 0		1.4840- 2									6.4343- 3
4.0000+ 1 ~ 7.0000+ 1	2.0306+ 1	4.8466+ 0		1.5460+ 1									6.4464- 3
7.0000+ 1 ~ 1.0000+ 2	4.4491+ 0	4.9618+ 0		8.7298- 2									5.4685- 3
1.0000+ 2 ~ 2.0000+ 2	4.3825+ 0	4.3775+ 0		5.0424- 3									5.5043- 3
2.0000+ 2 ~ 4.0000+ 2	4.3789+ 0	4.3754+ 0		8.9302- 4									5.6165- 3
4.0000+ 2 ~ 7.0000+ 2	4.4102+ 0	4.3744+ 0		3.6810- 2									6.9169- 3
7.0000+ 2 ~ 1.0000+ 3	4.4608+ 0	4.3786+ 0		8.4092- 2									8.1644- 3
1.0000+ 3 ~ 2.0000+ 3	4.3729+ 0	4.3727+ 0		2.3606- 4									6.9662- 3
2.0000+ 3 ~ 4.0000+ 3	7.5645+ 0	7.3712+ 0		1.9328- 1									9.0689- 3
4.0000+ 3 ~ 7.0000+ 3	4.7014+ 0	4.6476+ 0		5.3868- 2									1.3134- 2
7.0000+ 3 ~ 1.0000+ 4	5.4691+ 0	5.4310+ 0		3.8148- 2									1.8120- 2
1.0000+ 4 ~ 2.0000+ 4	6.7298+ 0	6.6948+ 0		3.6056- 2									2.9820- 2
2.0000+ 4 ~ 4.0000+ 4	5.9445+ 0	5.9205+ 0		2.5940- 2									5.6669- 2
4.0000+ 4 ~ 7.0000+ 4	6.1306+ 0	6.1129+ 0		1.7692- 2									9.7921- 2
7.0000+ 4 ~ 1.0000+ 5	6.2824+ 0	6.2673+ 0		1.5156- 2									1.3994- 1
1.0000+ 5 ~ 2.0000+ 5	6.3094+ 0	6.2961+ 0		1.3306- 2									2.1087- 1
2.0000+ 5 ~ 4.0000+ 5	6.3237+ 0	6.3112+ 0		1.2480- 2									3.0851- 1
4.0000+ 5 ~ 7.0000+ 5	6.3807+ 0	6.3679+ 0		1.3336- 2									3.7088- 1
7.0000+ 5 ~ 1.0000+ 6	6.3721+ 0	6.3663+ 0		1.5764- 2									3.9671- 1
1.0000+ 6 ~ 2.0000+ 6	6.9542+ 0	6.4964+ 0	4.4223- 1	1.4437- 2									4.4206- 1
2.0000+ 6 ~ 4.0000+ 6	4.6639+ 0	3.1474+ 0	1.5073+ 0	6.7468- 3					1.0013-19				5.6474- 1
4.0000+ 6 ~ 7.0000+ 6	3.9285+ 0	1.9515+ 0	1.9729+ 0	1.2081- 3					2.6639-15				6.3613- 1
7.0000+ 6 ~ 1.0000+ 7	4.2763+ 0	2.4736+ 0	1.6172+ 0	3.4076- 4	1.8339- 1		3.1947-14		1.3484-10	4.1859-19			7.5776- 1
1.0000+ 7 ~ 2.0000+ 7	4.3746+ 0	2.6694+ 0	2.5603- 1	9.8916- 4	1.1871+ 0	2.6396- 1	6.9877- 3	9.0244- 5	1.6280- 4	1.1513- 5	1.6923- 4	4.8299- 6	8.6484- 1

MATERIAL =5012 CROSS SECTION ^{126}Sn (5012)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.2954+ 0	4.0000+ 0		2.7763- 1									5.3408- 3
1.0000- 2 ~ 2.0000- 2	4.1309+ 0	4.0000+ 0		1.1859- 1									5.3408- 3
2.0000- 2 ~ 4.0000- 2	4.0906+ 0	4.0000+ 0		8.3857- 2									5.3408- 3
4.0000- 2 ~ 7.0000- 2	4.0859+ 0	4.0000+ 0		6.1828- 2									5.3408- 3
7.0000- 2 ~ 1.0000- 1	4.0803+ 0	4.0000+ 0		4.9295- 2									5.3408- 3
1.0000- 1 ~ 2.0000- 1	4.0769+ 0	4.0000+ 0		3.7502- 2									5.3408- 3
2.0000- 1 ~ 4.0000- 1	4.0703+ 0	4.0000+ 0		2.6518- 2									5.3408- 3
4.0000- 1 ~ 7.0000- 1	4.0664+ 0	4.0000+ 0		1.9488- 2									5.3408- 3
7.0000- 1 ~ 1.0000+ 0	4.0619+ 0	4.0000+ 0		1.5588- 2									5.3408- 3
1.0000+ 0 ~ 2.0000+ 0	4.0575+ 0	4.0000+ 0		1.1859- 2									5.3408- 3
2.0000+ 0 ~ 4.0000+ 0	4.0519+ 0	4.0000+ 0		8.3857- 3									5.3408- 3
4.0000+ 0 ~ 7.0000+ 0	4.0471+ 0	4.0000+ 0		6.1828- 3									5.3413- 3
7.0000+ 0 ~ 1.0000+ 1	4.0435+ 0	4.0000+ 0		4.9295- 3									5.3417- 3
1.0000+ 1 ~ 2.0000+ 1	4.0391+ 0	4.0000+ 0		3.7502- 3									5.3435- 3
2.0000+ 1 ~ 4.0000+ 1	4.0336+ 0	4.0000+ 0		2.6518- 3									5.3477- 3
4.0000+ 1 ~ 7.0000+ 1	4.0288+ 0	4.0000+ 0		1.9488- 3									5.3597- 3
7.0000+ 1 ~ 1.0000+ 2	4.0253+ 0	4.0000+ 0		1.5588- 3									5.3698- 3
1.0000+ 2 ~ 2.0000+ 2	4.0209+ 0	4.0000+ 0		1.1859- 3									5.4187- 3
2.0000+ 2 ~ 4.0000+ 2	4.0154+ 0	4.0000+ 0		8.3857- 4									5.5277- 3
4.0000+ 2 ~ 7.0000+ 2	4.0108+ 0	4.0000+ 0		6.1828- 4									5.8249- 3
7.0000+ 2 ~ 1.0000+ 3	4.0071+ 0	4.0000+ 0		4.9295- 4									6.0897- 3
1.0000+ 3 ~ 2.0000+ 3	4.0027+ 0	4.0000+ 0		3.7502- 4									6.8551- 3
2.0000+ 3 ~ 4.0000+ 3	1.0034+ 1	9.9809+ 0		5.2808- 2									8.9645- 3
4.0000+ 3 ~ 7.0000+ 3	8.6149+ 0	8.6820+ 0		3.2869- 2									1.3003- 2
7.0000+ 3 ~ 1.0000+ 4	7.8865+ 0	7.8433+ 0		2.5269- 2									1.7974- 2
1.0000+ 4 ~ 2.0000+ 4	7.2071+ 0	7.1916+ 0		1.5518- 2									2.8854- 2
2.0000+ 4 ~ 4.0000+ 4	6.8925+ 0	6.8821+ 0		1.0206- 2									5.8472- 2
4.0000+ 4 ~ 7.0000+ 4	6.4614+ 0	6.4437+ 0		7.7886- 3									8.7887- 2
7.0000+ 4 ~ 1.0000+ 5	6.3564+ 0	6.3486+ 0		5.7578- 3									1.3888- 1
1.0000+ 5 ~ 2.0000+ 5	6.3068+ 0	6.3009+ 0		5.9081- 3									2.1088- 1
2.0000+ 5 ~ 4.0000+ 5	6.3211+ 0	6.3158+ 0		5.3468- 3									3.0589- 1
4.0000+ 5 ~ 7.0000+ 5	6.3787+ 0	6.3730+ 0		5.8749- 3									3.7031- 1
7.0000+ 5 ~ 1.0000+ 6	6.3706+ 0	6.3641+ 0		6.6634- 3									3.9804- 1
1.0000+ 6 ~ 2.0000+ 6	5.9532+ 0	5.6086+ 0	4.3729- 1	5.8644- 3									4.4086- 1
2.0000+ 6 ~ 4.0000+ 6	4.8572+ 0	3.1591+ 0	1.4848+ 0	2.1978- 3									5.8114- 1
4.0000+ 6 ~ 7.0000+ 6	3.9263+ 0	1.9474+ 0	1.9778+ 0	3.8051- 4					5.0028-19				6.3743- 1
7.0000+ 6 ~ 1.0000+ 7	4.2761+ 0	2.4764+ 0	1.6039+ 0	2.7635- 4	2.9087- 1		1.3782-16		4.3652-14				7.6772- 1
1.0000+ 7 ~ 2.0000+ 7	4.3743+ 0	2.6861+ 0	2.2369- 1	9.8885- 4	1.1468+ 0	3.3673- 1	7.0493- 4	2.9176- 5	4.2444- 5	1.9441- 6	7.7139- 5	3.2712- 6	8.5483- 1

MATERIAL =5101

CROSS SECTION

^{121}Sb (5101)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NF)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	2.2027+ 1	3.6913+ 0		1.8436+ 1			0.0000+ 0		0.0000+ 0				6.6618- 3
1.0000- 2 ~ 2.0000- 2	1.1492+ 1	3.6908+ 0		7.9012+ 0			0.0000+ 0		0.0000+ 0				6.6618- 3
2.0000- 2 ~ 4.0000- 2	9.1978+ 0	3.6901+ 0		5.6077+ 0			0.0000+ 0		0.0000+ 0				6.6618- 3
4.0000- 2 ~ 7.0000- 2	7.7373+ 0	3.6888+ 0		4.1485+ 0			0.0000+ 0		0.0000+ 0				6.6618- 3
7.0000- 2 ~ 1.0000- 1	6.9336+ 0	3.6873+ 0		3.3463+ 0			0.0000+ 0		0.0000+ 0				6.6618- 3
1.0000- 1 ~ 2.0000- 1	8.1749+ 0	3.5839+ 0		2.5905+ 0			0.0000+ 0		0.0000+ 0				6.6618- 3
2.0000- 1 ~ 4.0000- 1	6.4776+ 0	3.5759+ 0		1.9017+ 0			0.0000+ 0		0.0000+ 0				6.6618- 3
4.0000- 1 ~ 7.0000- 1	5.0594+ 0	3.5618+ 0		1.4976+ 0			0.0000+ 0		0.0000+ 0				6.6618- 3
7.0000- 1 ~ 1.0000+ 0	4.0534+ 0	3.5436+ 0		1.3099+ 0			0.0000+ 0		0.0000+ 0				6.6618- 3
1.0000+ 0 ~ 2.0000+ 0	4.7301+ 0	3.4985+ 0		1.2336+ 0			0.0000+ 0		0.0000+ 0				6.6618- 3
2.0000+ 0 ~ 4.0000+ 0	5.1103+ 0	3.3243+ 0		1.7861+ 0			0.0000+ 0		0.0000+ 0				6.6622- 3
4.0000+ 0 ~ 7.0000+ 0	2.4270+ 2	5.2481+ 0		2.3448+ 2			0.0000+ 0		0.0000+ 0				5.5851- 3
7.0000+ 0 ~ 1.0000+ 1	7.9098+ 0	4.5853+ 0		3.6245+ 0			0.0000+ 0		0.0000+ 0				6.5876- 3
1.0000+ 1 ~ 2.0000+ 1	9.9220+ 1	1.2217- 1		6.7002+ 1			0.0000+ 0		0.0000+ 0				6.5736- 3
2.0000+ 1 ~ 4.0000+ 1	2.1626+ 1	5.0866+ 0		1.6540+ 1			0.0000+ 0		0.0000+ 0				6.5864- 3
4.0000+ 1 ~ 7.0000+ 1	7.9463+ 0	4.1102+ 0		3.8362+ 0			0.0000+ 0		0.0000+ 0				6.6148- 3
7.0000+ 1 ~ 1.0000+ 2	2.2399+ 1	5.6906+ 0		1.8848+ 1			0.0000+ 0		0.0000+ 0				6.6381- 3
1.0000+ 2 ~ 2.0000+ 2	1.9187+ 1	6.8280+ 0		1.2359+ 1			0.0000+ 0		0.0000+ 0				5.7295- 3
2.0000+ 2 ~ 4.0000+ 2	8.8724+ 0	4.4458+ 0		2.4288+ 0			0.0000+ 0		0.0000+ 0				6.9054- 3
4.0000+ 2 ~ 7.0000+ 2	1.3167+ 1	7.9179+ 0		5.2492+ 0			0.0000+ 0		0.0000+ 0				6.3323- 3
7.0000+ 2 ~ 1.0000+ 3	1.0442+ 1	8.8259+ 0		9.6162+ 0			0.0000+ 0		0.0000+ 0				6.6812- 3
1.0000+ 3 ~ 2.0000+ 3	7.6204+ 0	5.9370+ 0		1.6833+ 0			0.0000+ 0		0.0000+ 0				7.7006- 3
2.0000+ 3 ~ 4.0000+ 3	8.9838+ 0	4.5292+ 0		2.4344+ 0			0.0000+ 0		0.0000+ 0				1.0292- 2
4.0000+ 3 ~ 7.0000+ 3	8.4941+ 0	4.7592+ 0		1.7349+ 0			0.0000+ 0		0.0000+ 0				1.6105- 2
7.0000+ 3 ~ 1.0000+ 4	8.2710+ 0	4.8786+ 0		1.3941+ 0			0.0000+ 0		0.0000+ 0				2.0893- 2
1.0000+ 4 ~ 2.0000+ 4	6.1184+ 0	5.0339+ 0		1.0845+ 0			0.0000+ 0		0.0000+ 0				3.4079- 2
2.0000+ 4 ~ 4.0000+ 4	6.0935+ 0	5.3190+ 0	2.9702- 5	7.7148- 1			0.0000+ 0		0.0000+ 0				6.2714- 2
4.0000+ 4 ~ 7.0000+ 4	6.2666+ 0	5.6467+ 0	2.1427- 1	4.9609- 1			0.0000+ 0		0.0000+ 0				1.0926- 1
7.0000+ 4 ~ 1.0000+ 5	6.3436+ 0	5.6266+ 0	3.7630- 1	3.4277- 1			0.0000+ 0		0.0000+ 0				1.5704- 1
1.0000+ 5 ~ 2.0000+ 5	6.3142+ 0	5.6867+ 0	4.9366- 1	2.3389- 1			1.8271-21		1.4248-13				2.3762- 1
2.0000+ 5 ~ 4.0000+ 5	6.3284+ 0	5.6045+ 0	5.5473- 1	1.8912- 1			7.9088-21		5.6991-13				3.4790- 1
4.0000+ 5 ~ 7.0000+ 5	6.3891+ 0	5.6238+ 0	6.1469- 1	1.4769- 1			2.9518-20		1.3740-12				4.2068- 1
7.0000+ 5 ~ 1.0000+ 6	6.3748+ 0	5.4661+ 0	7.6267- 1	1.4608- 1			3.6266-19		3.3721-12				4.6995- 1
1.0000+ 6 ~ 2.0000+ 6	6.9548+ 0	4.6386+ 0	1.2000+ 0	1.1488- 1			4.8476-16		4.1804-11				6.2369- 1
2.0000+ 6 ~ 4.0000+ 6	4.6554+ 0	2.7772+ 0	1.8108+ 0	6.3069- 2			4.2660- 9		2.4848- 8	4.8698-20			6.1570- 1
4.0000+ 6 ~ 7.0000+ 6	3.9288+ 0	1.9254+ 0	1.9878+ 0	1.2247- 2			8.6409- 5	8.4449-21	1.0573- 6	1.0594-14	1.9923-15		6.4435- 1
7.0000+ 6 ~ 1.0000+ 7	4.2766+ 0	2.4760+ 0	1.7706+ 0	1.3906- 3	2.7627- 2		6.3162- 4	3.2581-10	1.3656- 4	6.3267-10	1.0090- 7	9.1763-17	7.6787- 1
1.0000+ 7 ~ 2.0000+ 7	4.3748+ 0	2.4607+ 0	3.6801- 1	1.0656- 3	1.4241+ 0	1.0578- 1	6.6267- 3	6.0224- 3	6.2176- 3	9.1126- 4	4.6891- 3	8.6030- 4	6.6484- 1

MATERIAL =5102

CROSS SECTION

^{123}Sb (5102)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NF)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	1.6854+ 1	3.8983+ 0		1.2964+ 1					0.0000+ 0				6.4713- 3
1.0000- 2 ~ 2.0000- 2	9.4362+ 0	3.8989+ 0		6.5303+ 0					0.0000+ 0				6.4713- 3
2.0000- 2 ~ 4.0000- 2	7.6130+ 0	3.8964+ 0		3.9146+ 0					0.0000+ 0				6.4713- 3
4.0000- 2 ~ 7.0000- 2	6.7727+ 0	3.8975+ 0		2.8752+ 0					0.0000+ 0				6.4713- 3
7.0000- 2 ~ 1.0000- 1	6.2004+ 0	3.8964+ 0		2.3040+ 0					0.0000+ 0				6.4713- 3
1.0000- 1 ~ 2.0000- 1	5.6484+ 0	3.8941+ 0		1.7544+ 0					0.0000+ 0				6.4713- 3
2.0000- 1 ~ 4.0000- 1	5.1289+ 0	3.8885+ 0		1.2403+ 0					0.0000+ 0				6.4713- 3
4.0000- 1 ~ 7.0000- 1	4.7841+ 0	3.8795+ 0		9.1460- 1					0.0000+ 0				6.4713- 3
7.0000- 1 ~ 1.0000+ 0	4.6032+ 0	3.8686+ 0		7.3460- 1					0.0000+ 0				6.4713- 3
1.0000+ 0 ~ 2.0000+ 0	4.4123+ 0	3.8445+ 0		5.6784- 1					0.0000+ 0				6.4713- 3
2.0000+ 0 ~ 4.0000+ 0	4.2125+ 0	3.7866+ 0		4.2687- 1					0.0000+ 0				6.4716- 3
4.0000+ 0 ~ 7.0000+ 0	4.0498+ 0	3.6784+ 0		3.7120- 1					0.0000+ 0				6.4753- 3
7.0000+ 0 ~ 1.0000+ 1	3.9256+ 0	3.5181+ 0		4.0943- 1					0.0000+ 0				6.4748- 3
1.0000+ 1 ~ 2.0000+ 1	5.3523+ 0	2.7311+ 0		2.6212+ 0					0.0000+ 0				6.4790- 3
2.0000+ 1 ~ 4.0000+ 1	1.4990+ 2	4.2074+ 1		1.0782+ 2					0.0000+ 0				6.4879- 3
4.0000+ 1 ~ 7.0000+ 1	8.5868+ 0	4.6108+ 0		3.8860+ 0					0.0000+ 0				6.6091- 3
7.0000+ 1 ~ 1.0000+ 2	9.2437+ 0	4.5344+ 0		4.9095+ 0					0.0000+ 0				6.5265- 3
1.0000+ 2 ~ 2.0000+ 2	1.5759+ 1	7.9786+ 0		7.7807+ 0					0.0000+ 0				6.5954- 3
2.0000+ 2 ~ 4.0000+ 2	8.5745+ 0	5.1284+ 0		3.4461+ 0					0.0000+ 0				6.7472- 3
4.0000+ 2 ~ 7.0000+ 2	6.8200+ 0	4.4853+ 0		1.3217+ 0					0.0000+ 0				8.1202- 3
7.0000+ 2 ~ 1.0000+ 3	1.0208+ 1	7.3402+ 0		2.8680+ 0					0.0000+ 0				6.4259- 3
1.0000+ 3 ~ 2.0000+ 3	7.4663+ 0	5.9930+ 0		1.4733+ 0					0.0000+ 0				7.3628- 3
2.0000+ 3 ~ 4.0000+ 3	8.6284+ 0	5.1780+ 0		1.4504+ 0					0.0000+ 0				9.7587- 3
4.0000+ 3 ~ 7.0000+ 3	8.2487+ 0	5.0933+ 0		1.1554+ 0					0.0000+ 0				1.4288- 2
7.0000+ 3 ~ 1.0000+ 4	8.0847+ 0	5.1665+ 0		9.1929- 1					0.0000+ 0				1.9759- 2
1.0000+ 4 ~ 2.0000+ 4	6.9886+ 0	5.3008+ 0		6.8869- 1					0.0000+ 0				3.2288- 2
2.0000+ 4 ~ 4.0000+ 4	6.0287+ 0	5.5667+ 0		4.6200- 1					0.0000+ 0				6.0263- 2
4.0000+ 4 ~ 7.0000+ 4	6.1622+ 0	5.8496+ 0		3.1261- 1					0.0000+ 0				1.0237- 1
7.0000+ 4 ~ 1.0000+ 5	6.2868+ 0	6.0513+ 0		2.3616- 1					0.0000+ 0				1.4480- 1
1.0000+ 5 ~ 2.0000+ 5	6.3106+ 0	6.1084+ 0	3.0146- 2	1.7139- 1					8.8473-17				2.1749- 1
2.0000+ 5 ~ 4.0000+ 5	6.3251+ 0	5.9300+ 0	2.7963- 1	1.1536- 1					3.5389-16				3.2823- 1
4.0000+ 5 ~ 7.0000+ 5	6.3850+ 0	5.8994+ 0	3.8239- 1	1.0118- 1					8.9917-16				4.0076- 1
7.0000+ 5 ~ 1.0000+ 6	6.3730+ 0	5.8064+ 0	4.6381- 1	1.0272- 1			0.0000+ 0		2.4806-15				4.3306- 1
1.0000+ 6 ~ 2.0000+ 6	5.9548+ 0	4.9054+ 0	9.6193- 1	8.5698- 2			1.5903-19		3.5436-14				4.9663- 1
2.0000+ 6 ~ 4.0000+ 6	4.5552+ 0	2.8621+ 0	1.7403+ 0	4.4184- 2			5.2763-13		2.6488-11				5.8865- 1
4.0000+ 6 ~ 7.0000+ 6	3.9205+ 0	1.9332+ 0	1.9892+ 0	9.5734- 3			2.3340- 5		3.4772- 7	2.4692-10	1.2902-18		6.4186- 1
7.0000+ 6 ~ 1.0000+ 7	4.2764+ 0	2.4637+ 0	1.7309+ 0	1.3486- 3	7.8687- 2		2.8167- 4	1.4538-13	2.0001- 6	1.0988-11	9.9525- 9	2.2265-18	7.6781- 1
1.0000+ 7 ~ 2.0000+ 7	4.3747+ 0	2.5582+ 0	3.0526- 1	1.0586- 3	1.2369+ 0	1.5671- 1	4.5057- 3	3.6363- 3	3.6996- 3	5.0000- 4	2.6207- 3	7.4182- 4	8.6484- 1

MATERIAL =5103 CROSS SECTION ^{124}Sb (5103)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.7578+ 1	3.7599+ 0		6.3666+ 1			0.0000+ 0		0.0000+ 0				6.4271- 3
1.0000- 2 ~ 2.0000- 2	2.6768+ 1	3.7599+ 0		2.2928+ 1			0.0000+ 0		0.0000+ 0				6.4271- 3
2.0000- 2 ~ 4.0000- 2	2.0042+ 1	3.7599+ 0		1.6212+ 1			0.0000+ 0		0.0000+ 0				6.4271- 3
4.0000- 2 ~ 7.0000- 2	1.5770+ 1	3.7599+ 0		1.1915+ 1			0.0000+ 0		0.0000+ 0				6.4271- 3
7.0000- 2 ~ 1.0000- 1	1.3325+ 1	3.7599+ 0		9.5307+ 0			0.0000+ 0		0.0000+ 0				6.4271- 3
1.0000- 1 ~ 2.0000- 1	1.1101+ 1	3.7599+ 0		7.2507+ 0			0.0000+ 0		0.0000+ 0				6.4271- 3
2.0000- 1 ~ 4.0000- 1	8.9078+ 0	3.7599+ 0		5.1271+ 0			0.0000+ 0		0.0000+ 0				6.4271- 3
4.0000- 1 ~ 7.0000- 1	7.5414+ 0	3.7599+ 0		3.7880+ 0			0.0000+ 0		0.0000+ 0				6.4271- 3
7.0000- 1 ~ 1.0000+ 0	6.7913+ 0	3.7599+ 0		3.0140+ 0			0.0000+ 0		0.0000+ 0				6.4271- 3
1.0000+ 0 ~ 2.0000+ 0	8.1050+ 0	3.7599+ 0		2.2930+ 0			0.0000+ 0		0.0000+ 0				6.4271- 3
2.0000+ 0 ~ 4.0000+ 0	5.6378+ 1	4.7629+ 0		6.0620+ 1			0.0000+ 0		0.0000+ 0				6.4277- 3
4.0000+ 0 ~ 7.0000+ 0	5.7974+ 1	5.1124+ 0		5.2862+ 1			0.0000+ 0		0.0000+ 0				6.4325- 3
7.0000+ 0 ~ 1.0000+ 1	4.7215+ 1	5.1042+ 0		4.2111+ 1			0.0000+ 0		0.0000+ 0				6.4566- 3
1.0000+ 1 ~ 2.0000+ 1	3.6889+ 1	5.0907+ 0		3.1806+ 1			0.0000+ 0		0.0000+ 0				6.4463- 3
2.0000+ 1 ~ 4.0000+ 1	2.7312+ 1	6.0697+ 0		2.2242+ 1			0.0000+ 0		0.0000+ 0				6.4660- 3
4.0000+ 1 ~ 7.0000+ 1	2.1164+ 1	6.0463+ 0		1.6109+ 1			0.0000+ 0		0.0000+ 0				6.5064- 3
7.0000+ 1 ~ 1.0000+ 2	1.7757+ 1	5.0298+ 0		1.2739+ 1			0.0000+ 0		0.0000+ 0				6.5382- 3
1.0000+ 2 ~ 2.0000+ 2	1.4598+ 1	4.8901+ 0		9.5458+ 0			0.0000+ 0		0.0000+ 0				6.6501- 3
2.0000+ 2 ~ 4.0000+ 2	1.1540+ 1	4.9409+ 0		6.5994+ 0			0.0000+ 0		0.0000+ 0				6.6802- 3
4.0000+ 2 ~ 7.0000+ 2	9.6309+ 0	4.8680+ 0		4.7613+ 0			0.0000+ 0		0.0000+ 0				6.7926- 3
7.0000+ 2 ~ 1.0000+ 3	8.8040+ 0	4.8447+ 0		3.7593+ 0			0.0000+ 0		0.0000+ 0				6.8094- 3
1.0000+ 3 ~ 2.0000+ 3	7.6386+ 0	4.7850+ 0		2.8536+ 0			0.0000+ 0		0.0000+ 0				7.9739- 3
2.0000+ 3 ~ 4.0000+ 3	6.7895+ 0	4.7068+ 0		2.0807+ 0			0.0000+ 0		0.0000+ 0				1.0651- 2
4.0000+ 3 ~ 7.0000+ 3	6.3066+ 0	4.6632+ 0		1.6624+ 0			0.0000+ 0		0.0000+ 0				1.6080- 2
7.0000+ 3 ~ 1.0000+ 4	6.0854+ 0	4.6368+ 0		1.4498+ 0			0.0000+ 0		0.0000+ 0				2.2316- 2
1.0000+ 4 ~ 2.0000+ 4	5.9658+ 0	4.6716+ 0	3.6378- 2	1.2480+ 0			0.0000+ 0		0.0000+ 0				3.6462- 2
2.0000+ 4 ~ 4.0000+ 4	5.9829+ 0	4.8515+ 0	9.3078- 2	1.0189+ 0			0.0000+ 0		0.0000+ 0				6.7635- 2
4.0000+ 4 ~ 7.0000+ 4	6.0924+ 0	5.1398+ 0	1.5344- 1	7.9982- 1			0.0000+ 0		0.0000+ 0				1.1410- 1
7.0000+ 4 ~ 1.0000+ 5	6.2579+ 0	5.3889+ 0	2.3038- 1	6.3947- 1			0.0000+ 0		0.0000+ 0				1.6129- 1
1.0000+ 5 ~ 2.0000+ 5	6.3094+ 0	5.4561+ 0	4.1532- 1	4.3601- 1			2.0996-18		1.2865-14				2.4204- 1
2.0000+ 5 ~ 4.0000+ 5	6.3237+ 0	5.5054+ 0	7.7767- 1	2.5768- 1			9.5979-16		5.1418-14				3.8459- 1
4.0000+ 5 ~ 7.0000+ 5	6.3607+ 0	5.6018+ 0	1.1643+ 0	1.3273- 1			2.9840-17		1.1870-13				4.8420- 1
7.0000+ 5 ~ 1.0000+ 6	6.3721+ 0	4.8419+ 0	1.4418+ 0	8.8176- 2			2.4644-16		2.3146-13				6.1823- 1
1.0000+ 6 ~ 2.0000+ 6	6.9627+ 0	4.1679+ 0	1.7406+ 0	6.2989- 2			2.2048-13		2.2867-12				5.8216- 1
2.0000+ 6 ~ 4.0000+ 6	4.6567+ 0	2.6372+ 0	1.9879+ 0	1.9916- 2			2.9871- 7		1.0867- 9				6.4244- 1
4.0000+ 6 ~ 7.0000+ 6	3.9285+ 0	1.9284+ 0	1.9858+ 0	5.4193- 3	8.5683- 3		1.2191- 5		2.1429- 7	9.3675-18	6.4910-21	6.3445-21	6.4867- 1
7.0000+ 6 ~ 1.0000+ 7	4.2763+ 0	2.4613+ 0	8.2009- 1	1.1036- 3	8.8998- 1		2.0408- 4	6.1817-16	1.0466- 6	1.4027-13	6.3006-10	1.2310-10	7.6784- 1
1.0000+ 7 ~ 2.0000+ 7	4.3746+ 0	2.6766+ 0	1.6877- 1	1.0772- 3	1.3664+ 0	1.6911- 1	3.4276- 3	3.3323- 3	2.8566- 3	1.5094- 4	3.0363- 3	8.7926- 4	8.6404- 1

MATERIAL =5104 CROSS SECTION ^{125}Sb (5104)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.9486+ 1	4.0000+ 0		1.5418+ 1					0.0000+ 0				6.3636- 3
1.0000- 2 ~ 2.0000- 2	1.0660+ 1	4.0000+ 0		6.6885+ 0					0.0000+ 0				6.3636- 3
2.0000- 2 ~ 4.0000- 2	8.6880+ 0	4.0000+ 0		4.6688+ 0					0.0000+ 0				6.3636- 3
4.0000- 2 ~ 7.0000- 2	7.4430+ 0	4.0000+ 0		3.4259+ 0					0.0000+ 0				6.3636- 3
7.0000- 2 ~ 1.0000- 1	6.7682+ 0	4.0000+ 0		2.7367+ 0					0.0000+ 0				6.3636- 3
1.0000- 1 ~ 2.0000- 1	6.1015+ 0	4.0000+ 0		2.0838+ 0					0.0000+ 0				6.3636- 3
2.0000- 1 ~ 4.0000- 1	5.4866+ 0	4.0000+ 0		1.4733+ 0					0.0000+ 0				6.3636- 3
4.0000- 1 ~ 7.0000- 1	5.0939+ 0	4.0000+ 0		1.0828+ 0					0.0000+ 0				6.3636- 3
7.0000- 1 ~ 1.0000+ 0	4.9002+ 0	4.0000+ 0		8.6613- 1					0.0000+ 0				6.3636- 3
1.0000+ 0 ~ 2.0000+ 0	4.7007+ 0	4.0000+ 0		6.6894- 1					0.0000+ 0				6.3636- 3
2.0000+ 0 ~ 4.0000+ 0	4.4782+ 0	4.0000+ 0		4.6696- 1					0.0000+ 0				6.3639- 3
4.0000+ 0 ~ 7.0000+ 0	4.3642+ 0	4.0000+ 0		3.4244- 1					0.0000+ 0				6.3661- 3
7.0000+ 0 ~ 1.0000+ 1	4.2928+ 0	4.0000+ 0		2.7392- 1					0.0000+ 0				6.3679- 3
1.0000+ 1 ~ 2.0000+ 1	2.2524+ 1	6.0884+ 0		1.6455+ 1					0.0000+ 0				6.3928- 3
2.0000+ 1 ~ 4.0000+ 1	2.7344+ 1	7.2741+ 0		2.0070+ 1					0.0000+ 0				6.4029- 3
4.0000+ 1 ~ 7.0000+ 1	2.1274+ 1	7.0869+ 0		1.4176+ 1					0.0000+ 0				6.4266- 3
7.0000+ 1 ~ 1.0000+ 2	1.8009+ 1	6.9742+ 0		1.1055+ 1					0.0000+ 0				6.4469- 3
1.0000+ 2 ~ 2.0000+ 2	1.4823+ 1	6.7619+ 0		8.0416+ 0					0.0000+ 0				6.5204- 3
2.0000+ 2 ~ 4.0000+ 2	1.1818+ 1	6.5104+ 0		5.3075+ 0					0.0000+ 0				6.6823- 3
4.0000+ 2 ~ 7.0000+ 2	9.9216+ 0	6.2687+ 0		3.6628+ 0					0.0000+ 0				6.8736- 3
7.0000+ 2 ~ 1.0000+ 3	8.8830+ 0	6.0765+ 0		2.8075+ 0					0.0000+ 0				6.9037- 3
1.0000+ 3 ~ 2.0000+ 3	7.9124+ 0	6.8633+ 0		2.0681+ 0					0.0000+ 0				7.3618- 3
2.0000+ 3 ~ 4.0000+ 3	7.0801+ 0	5.8078+ 0		1.4623+ 0					0.0000+ 0				9.8211- 3
4.0000+ 3 ~ 7.0000+ 3	6.6661+ 0	5.4462+ 0		1.1188+ 0					0.0000+ 0				1.4449- 2
7.0000+ 3 ~ 1.0000+ 4	6.3341+ 0	5.3857+ 0		9.4659- 1					0.0000+ 0				2.0039- 2
1.0000+ 4 ~ 2.0000+ 4	6.1728+ 0	5.4038+ 0		7.6884- 1					0.0000+ 0				3.2788- 2
2.0000+ 4 ~ 4.0000+ 4	6.1320+ 0	5.6888+ 0		5.8320- 1					0.0000+ 0				6.1127- 2
4.0000+ 4 ~ 7.0000+ 4	6.2004+ 0	5.8010+ 0		3.9939- 1					0.0000+ 0				1.0368- 1
7.0000+ 4 ~ 1.0000+ 5	6.2812+ 0	5.8777+ 0		3.0346- 1					0.0000+ 0				1.4831- 1
1.0000+ 5 ~ 2.0000+ 5	6.3091+ 0	6.0844+ 0		2.2413- 1					1.8096-19				2.1799- 1
2.0000+ 5 ~ 4.0000+ 5	6.3226+ 0	6.1315+ 0	1.7866- 2	1.7331- 1					7.2385-19				3.1808- 1
4.0000+ 5 ~ 7.0000+ 5	6.3614+ 0	6.2911+ 0	2.4594- 1	1.4432- 1					1.9108-18				5.9405- 1
7.0000+ 5 ~ 1.0000+ 6	6.3721+ 0	6.8604+ 0	3.7677- 1	1.4486- 1					6.3731-18				4.2867- 1
1.0000+ 6 ~ 2.0000+ 6	6.9677+ 0	4.9627+ 0	8.6660- 1	1.2907- 1					1.0352-16				4.9029- 1
2.0000+ 6 ~ 4.0000+ 6	4.6620+ 0	2.9295+ 0	1.8350+ 0	9.1841- 2			1.0387-17		5.5767-14				6.9001- 1
4.0000+ 6 ~ 7.0000+ 6	3.9285+ 0	1.9260+ 0	1.9910+ 0	7.7888- 3			7.0472- 8		1.2241- 9	2.0739-19			8.4413- 1
7.0000+ 6 ~ 1.0000+ 7	4.2762+ 0	2.4620+ 0	1.7112+ 0	7.9060- 4	1.0040- 1		3.1488- 6	2.0411-17	1.4689- 8	1.2762-14	3.7463-11	6.6682-20	7.6784- 1
1.0000+ 7 ~ 2.0000+ 7	4.3742+ 0	2.6607+ 0	3.3015- 1	1.0333- 3	1.1668+ 0	2.0360- 1	2.6802- 3	7.2691- 3	3.1360- 3	8.8621- 5	2.6464- 3	4.8832- 4	8.6483- 1

MATERIAL =5201 CROSS SECTION

^{120}Te (5201)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.0900+ 1	3.6400+ 0		7.2168+ 0					0.0000+ 0				6.6082- 3
1.0000- 2 ~ 2.0000- 2	6.7643+ 0	3.6400+ 0		3.0834+ 0					0.0000+ 0				6.6082- 3
2.0000- 2 ~ 4.0000- 2	5.6443+ 0	3.6400+ 0		2.1803+ 0					0.0000+ 0				6.6082- 3
4.0000- 2 ~ 7.0000- 2	5.2658+ 0	3.6400+ 0		1.6023+ 0					0.0000+ 0				6.6082- 3
7.0000- 2 ~ 1.0000- 1	4.9394+ 0	3.6400+ 0		1.2817+ 0					0.0000+ 0				6.6082- 3
1.0000- 1 ~ 2.0000- 1	4.6297+ 0	3.6400+ 0		9.7506- 1					0.0000+ 0				6.6082- 3
2.0000- 1 ~ 4.0000- 1	4.3442+ 0	3.6400+ 0		6.8947- 1					0.0000+ 0				6.6082- 3
4.0000- 1 ~ 7.0000- 1	4.1592+ 0	3.6400+ 0		5.0570- 1					0.0000+ 0				6.6082- 3
7.0000- 1 ~ 1.0000+ 0	4.0660+ 0	3.6400+ 0		4.0630- 1					0.0000+ 0				6.6082- 3
1.0000+ 0 ~ 2.0000+ 0	3.9589+ 0	3.6400+ 0		3.0634- 1					0.0000+ 0				6.6082- 3
2.0000+ 0 ~ 4.0000+ 0	3.8603+ 0	3.6400+ 0		2.1803- 1					0.0000+ 0				6.6083- 3
4.0000+ 0 ~ 7.0000+ 0	3.8172+ 0	3.6400+ 0		1.6023- 1					0.0000+ 0				6.6091- 3
7.0000+ 0 ~ 1.0000+ 1	3.7728+ 0	3.6400+ 0		1.2817- 1					0.0000+ 0				6.6099- 3
1.0000+ 1 ~ 2.0000+ 1	3.7459+ 0	3.6400+ 0		8.7508- 2					0.0000+ 0				6.6122- 3
2.0000+ 1 ~ 4.0000+ 1	3.7172+ 0	3.6400+ 0		6.8947- 2					0.0000+ 0				6.6176- 3
4.0000+ 1 ~ 7.0000+ 1	6.9336+ 0	5.8186+ 0		1.1138+ 0					0.0000+ 0				6.6316- 3
7.0000+ 1 ~ 1.0000+ 2	4.7898+ 1	3.9890+ 1		1.9808+ 1					0.0000+ 0				6.6491- 3
1.0000+ 2 ~ 2.0000+ 2	3.7124+ 1	2.8106+ 1		9.0182+ 0					0.0000+ 0				6.6940- 3
2.0000+ 2 ~ 4.0000+ 2	2.7370+ 1	2.2211+ 1		5.1588+ 0					0.0000+ 0				6.8122- 3
4.0000+ 2 ~ 7.0000+ 2	2.1124+ 1	1.7994+ 1		3.1286+ 0					0.0000+ 0				6.1232- 3
7.0000+ 2 ~ 1.0000+ 3	1.7662+ 1	1.5472+ 1		2.1904+ 0					0.0000+ 0				6.3791- 3
1.0000+ 3 ~ 2.0000+ 3	1.4368+ 1	1.2803+ 1		1.4643+ 0					0.0000+ 0				7.2058- 3
2.0000+ 3 ~ 4.0000+ 3	1.1310+ 1	1.0395+ 1		9.1548- 1					0.0000+ 0				9.4627- 3
4.0000+ 3 ~ 7.0000+ 3	9.3928+ 0	8.7395+ 0		5.5288- 1					0.0000+ 0				1.3890- 2
7.0000+ 3 ~ 1.0000+ 4	8.3494+ 0	7.8205+ 0		5.2918- 1					0.0000+ 0				1.9459- 2
1.0000+ 4 ~ 2.0000+ 4	7.3836+ 0	6.8722+ 0		4.1143- 1					0.0000+ 0				3.2750- 2
2.0000+ 4 ~ 4.0000+ 4	6.5378+ 0	6.2431+ 0		2.9463- 1					0.0000+ 0				8.3725- 2
4.0000+ 4 ~ 7.0000+ 4	6.0380+ 0	5.8223+ 0		2.1666- 1					0.0000+ 0				1.1154- 1
7.0000+ 4 ~ 1.0000+ 5	5.7783+ 0	5.6014+ 0		1.7696- 1					0.0000+ 0				1.6998- 1
1.0000+ 5 ~ 2.0000+ 5	5.6481+ 0	5.4954+ 0		1.5170- 1					2.6327- 7				2.3902- 1
2.0000+ 5 ~ 4.0000+ 5	5.7578+ 0	5.6158+ 0		1.4187- 1					8.8010- 7	2.1878-21			3.3502- 1
4.0000+ 5 ~ 7.0000+ 5	8.1390+ 0	5.9229+ 0	7.9127- 2	1.3690- 1			7.1538-21		1.4890- 6	4.0930-20			3.9064- 1
7.0000+ 5 ~ 1.0000+ 6	6.4874+ 0	6.0380+ 0	4.6742- 1	1.0212- 1			3.7667-20		4.6717- 6	7.0772-19			4.2718- 1
1.0000+ 6 ~ 2.0000+ 6	6.6445+ 0	5.5057+ 0	9.3733- 1	1.0087- 1			6.3867-17		5.6671- 6	1.0016-16			4.9656- 1
2.0000+ 6 ~ 4.0000+ 6	5.4146+ 0	3.8640+ 0	1.6438+ 0	9.2901- 2			9.1441-10		9.4609- 4	8.6904-13			6.0719- 1
4.0000+ 6 ~ 7.0000+ 6	4.1784+ 0	2.2616+ 0	1.8598+ 0	9.8628- 2			1.7067- 9		4.2154- 3	1.9829- 8	2.4547-19		5.9429- 1
7.0000+ 6 ~ 1.0000+ 7	4.3628+ 0	2.6783+ 0	1.7646+ 0	4.0784- 3			6.4639- 3	2.6393-14	7.0002- 3	2.3011- 4	8.2037- 9		6.6997- 1
1.0000+ 7 ~ 2.0000+ 7	4.9266+ 0	3.3666+ 0	6.1143- 1	1.2026- 3	9.6438- 1	1.4527- 2	2.3666- 2	3.2783- 2	1.1638- 2	1.2611- 2	6.1900- 3	6.3841- 4	8.2663- 1

MATERIAL =5202 CROSS SECTION

^{122}Te (5202)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.3208+ 1	2.6911+ 0		1.0617+ 1					0.0000+ 0				6.6162- 3
1.0000- 2 ~ 2.0000- 2	7.1666+ 0	2.6910+ 0		4.4968+ 0					0.0000+ 0				6.6162- 3
2.0000- 2 ~ 4.0000- 2	5.8763+ 0	2.6909+ 0		3.1864+ 0					0.0000+ 0				6.6162- 3
4.0000- 2 ~ 7.0000- 2	5.0272+ 0	2.6907+ 0		2.3365+ 0					0.0000+ 0				6.6162- 3
7.0000- 2 ~ 1.0000- 1	4.6614+ 0	2.6904+ 0		1.8710+ 0					0.0000+ 0				6.6162- 3
1.0000- 1 ~ 2.0000- 1	4.1175+ 0	2.6898+ 0		1.4277+ 0					0.0000+ 0				6.6162- 3
2.0000- 1 ~ 4.0000- 1	3.7004+ 0	2.6886+ 0		1.0118+ 0					0.0000+ 0				6.6162- 3
4.0000- 1 ~ 7.0000- 1	3.4353+ 0	2.6862+ 0		7.4912- 1					0.0000+ 0				6.6162- 3
7.0000- 1 ~ 1.0000+ 0	3.2870+ 0	2.6834+ 0		6.0362- 1					0.0000+ 0				6.6162- 3
1.0000+ 0 ~ 2.0000+ 0	9.1445+ 0	2.6774+ 0		4.6706- 1					0.0000+ 0				6.6162- 3
2.0000+ 0 ~ 4.0000+ 0	3.0067+ 0	2.6631+ 0		3.4360- 1					0.0000+ 0				6.6164- 3
4.0000+ 0 ~ 7.0000+ 0	2.9064+ 0	2.6380+ 0		2.7039- 1					0.0000+ 0				6.6179- 3
7.0000+ 0 ~ 1.0000+ 1	2.8422+ 0	2.6058+ 0		2.3658- 1					0.0000+ 0				6.6182- 3
1.0000+ 1 ~ 2.0000+ 1	2.7451+ 0	2.5250+ 0		2.2016- 1					0.0000+ 0				6.6206- 3
2.0000+ 1 ~ 4.0000+ 1	2.6416+ 0	2.2541+ 0		2.8788- 1					0.0000+ 0				6.6267- 3
4.0000+ 1 ~ 7.0000+ 1	4.8887+ 0	1.2409+ 0		3.6478+ 0					0.0000+ 0				6.6417- 3
7.0000+ 1 ~ 1.0000+ 2	2.6352+ 2	9.0166+ 1		1.6337+ 2					0.0000+ 0				6.6640- 3
1.0000+ 2 ~ 2.0000+ 2	3.7788+ 0	3.7027+ 0		7.7130- 2					0.0000+ 0				6.8075- 3
2.0000+ 2 ~ 4.0000+ 2	2.7937+ 1	2.3472+ 1		4.4652+ 0					0.0000+ 0				6.7304- 3
4.0000+ 2 ~ 7.0000+ 2	3.2124+ 1	2.6766+ 1		5.3576+ 0					0.0000+ 0				6.0602- 3
7.0000+ 2 ~ 1.0000+ 3	1.8751+ 1	1.5442+ 1		3.3089+ 0					0.0000+ 0				6.3132- 3
1.0000+ 3 ~ 2.0000+ 3	9.3317+ 0	7.7702+ 0		1.5615+ 0					0.0000+ 0				7.1567- 3
2.0000+ 3 ~ 4.0000+ 3	9.0398+ 0	8.2158+ 0		8.2402- 1					0.0000+ 0				9.4982- 3
4.0000+ 3 ~ 7.0000+ 3	7.9766+ 0	7.3107+ 0		6.6488- 1					0.0000+ 0				1.3929- 2
7.0000+ 3 ~ 1.0000+ 4	7.8641+ 0	7.2425+ 0		6.4158- 1					0.0000+ 0				1.8544- 2
1.0000+ 4 ~ 2.0000+ 4	7.0737+ 0	6.5712+ 0		5.0246- 1					0.0000+ 0				3.3008- 2
2.0000+ 4 ~ 4.0000+ 4	6.3756+ 0	6.0092+ 0		3.6630- 1					0.0000+ 0				6.4288- 2
4.0000+ 4 ~ 7.0000+ 4	5.9728+ 0	5.7006+ 0		2.7231- 1					0.0000+ 0				1.1245- 1
7.0000+ 4 ~ 1.0000+ 5	5.7579+ 0	5.5446+ 0		2.2332- 1					0.0000+ 0				1.6116- 1
1.0000+ 5 ~ 2.0000+ 5	5.6476+ 0	5.4569+ 0		1.9064- 1					3.0289-10				2.4067- 1
2.0000+ 5 ~ 4.0000+ 5	5.7588+ 0	5.5775+ 0		1.7982- 1					1.2116- 9				3.3714- 1
4.0000+ 5 ~ 7.0000+ 5	8.1369+ 0	5.8837+ 0	7.3674- 2	1.7785- 1					3.1178- 9				3.9283- 1
7.0000+ 5 ~ 1.0000+ 6	6.4970+ 0	6.0153+ 0	4.4176- 1	1.3997- 1					8.6550- 9				4.2886- 1
1.0000+ 6 ~ 2.0000+ 6	6.5443+ 0	5.5226+ 0	8.7096- 1	1.5018- 1					1.6845- 7	1.4404-17			4.9708- 1
2.0000+ 6 ~ 4.0000+ 6	5.4038+ 0	3.5172+ 0	1.8393+ 0	1.2738- 1			1.0388-14		2.5118- 5	8.5021-15			6.1134- 1
4.0000+ 6 ~ 7.0000+ 6	4.1782+ 0	2.2778+ 0	1.8458+ 0	4.9998- 2			2.0427- 5		4.0150- 4	3.2121-10			6.8938- 1
7.0000+ 6 ~ 1.0000+ 7	4.3628+ 0	2.6816+ 0	1.7648+ 0	1.3732- 2			6.8698- 4	7.9869-18	1.3232- 3	1.1866- 6	9.1606-13		8.7000- 1
1.0000+ 7 ~ 2.0000+ 7	4.9263+ 0	3.3600+ 0	4.1474- 1	1.7946- 3	1.0771+ 0	6.0402- 2	1.0133- 2	6.4272- 3	6.4416- 3	3.7945- 3	2.9188- 3	4.0292- 4	8.2864- 1

MATERIAL =5203 CROSS SECTION

^{123}Te (5203)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	1.2704+ 3	6.7294- 1		1.2699+ 3			0.0000+ 0		1.4036- 4				6.4713- 3
1.0000- 2 ~ 2.0000- 2	5.4846+ 2	5.8092- 1		5.4788+ 2			0.0000+ 0		6.0653- 5				6.4713- 3
2.0000- 2 ~ 4.0000- 2	3.9363+ 2	5.9338- 1		3.9293+ 2			0.0000+ 0		4.3428- 5				6.4713- 3
4.0000- 2 ~ 7.0000- 2	2.9492+ 2	6.1534- 1		2.9430+ 2			0.0000+ 0		3.2528- 5				6.4713- 3
7.0000- 2 ~ 1.0000- 1	2.4242+ 2	6.4374- 1		2.4178+ 2			0.0000+ 0		2.6723- 5				6.4713- 3
1.0000- 1 ~ 2.0000- 1	1.9576+ 2	7.1550- 1		1.9507+ 2			0.0000+ 0		2.1561- 5				6.4713- 3
2.0000- 1 ~ 4.0000- 1	1.5935+ 2	9.3796- 1		1.5841+ 2			0.0000+ 0		1.7486- 5				6.4713- 3
4.0000- 1 ~ 7.0000- 1	1.5285+ 2	1.5860+ 0		1.5109+ 2			0.0000+ 0		1.6766- 5				6.4713- 3
7.0000- 1 ~ 1.0000+ 0	1.7820+ 2	3.0789+ 0		1.7612+ 2			0.0000+ 0		1.9872- 5				6.4713- 3
1.0000+ 0 ~ 2.0000+ 0	6.9583+ 2	3.2922+ 1		6.0271+ 2			0.0000+ 0		3.0741- 4				6.4713- 3
2.0000+ 0 ~ 4.0000+ 0	6.4882+ 3	6.0599+ 2		5.8822+ 3			0.0000+ 0		5.2985- 4				6.4717- 3
4.0000+ 0 ~ 7.0000+ 0	3.1941+ 1	1.1062+ 1		2.0876+ 1			0.0000+ 0		2.3459- 6				6.4744- 3
7.0000+ 0 ~ 1.0000+ 1	9.8189+ 0	5.9199+ 0		3.8983+ 0			0.0000+ 0		4.4697- 7				6.4787- 3
1.0000+ 1 ~ 2.0000+ 1	5.9298+ 0	3.9943+ 0		1.9355+ 0			0.0000+ 0		3.0655- 7				6.4827- 3
2.0000+ 1 ~ 4.0000+ 1	1.9739+ 2	7.1238+ 1		1.2616+ 2			0.0000+ 0		1.3556- 5				6.4949- 3
4.0000+ 1 ~ 7.0000+ 1	4.1919+ 0	3.9837+ 0		2.0828- 1			0.0000+ 0		3.2166- 7				6.5227- 3
7.0000+ 1 ~ 1.0000+ 2	1.9231+ 1	5.4589+ 0		1.3774+ 1			0.0000+ 0		1.0794- 6				6.5459- 3
1.0000+ 2 ~ 2.0000+ 2	5.8615+ 1	2.8067+ 1		2.8548+ 1			0.0000+ 0		2.5785- 6				6.6298- 3
2.0000+ 2 ~ 4.0000+ 2	2.9194+ 1	1.7195+ 1		1.1999+ 1			0.0000+ 0		1.2070- 6				6.8108- 3
4.0000+ 2 ~ 7.0000+ 2	2.3615+ 1	1.7067+ 1		6.5484+ 0			0.0000+ 0		7.9577- 7				6.2401- 3
7.0000+ 2 ~ 1.0000+ 3	1.5278+ 1	1.0857+ 1		4.4183+ 0			0.0000+ 0		5.0000- 7				6.5911- 3
1.0000+ 3 ~ 2.0000+ 3	1.2693+ 1	9.1138+ 0		3.4789+ 0			0.0000+ 0		1.0000- 7				7.6304- 3
2.0000+ 3 ~ 4.0000+ 3	1.0157+ 1	7.8938+ 0		2.2429+ 0			0.0000+ 0		1.0000- 7				1.0509- 2
4.0000+ 3 ~ 7.0000+ 3	8.5807+ 0	6.8391+ 0		1.7416+ 0			0.0000+ 0		1.0000- 7				1.5386- 2
7.0000+ 3 ~ 1.0000+ 4	7.7456+ 0	6.3301+ 0		1.4155+ 0			0.0000+ 0		1.0000- 7				2.1817- 2
1.0000+ 4 ~ 2.0000+ 4	6.9824+ 0	5.7575+ 0		1.2348+ 0			0.0000+ 0		1.0000- 7				3.5370- 2
2.0000+ 4 ~ 4.0000+ 4	6.3245+ 0	5.3667+ 0		9.5582- 1			0.0000+ 0		1.0000- 7				7.0280- 2
4.0000+ 4 ~ 7.0000+ 4	5.9504+ 0	5.2079+ 0		7.4263- 1			0.0000+ 0		1.0000- 7				1.2165- 1
7.0000+ 4 ~ 1.0000+ 5	5.7617+ 0	5.1441+ 0		6.1763- 1			0.0000+ 0		1.0000- 7				1.7279- 1
1.0000+ 5 ~ 2.0000+ 5	5.6434+ 0	5.1125+ 0	4.1350- 2	4.8542- 1			1.0935-19		2.0808- 6				2.5627- 1
2.0000+ 5 ~ 4.0000+ 5	5.7509+ 0	5.0709+ 0	3.4317- 1	3.3679- 1			4.3742-19		8.0292- 6				3.7071- 1
4.0000+ 5 ~ 7.0000+ 5	8.1339+ 0	6.2155+ 0	8.6273- 1	2.5511- 1			1.8301-18		1.6700- 5				4.4316- 1
7.0000+ 5 ~ 1.0000+ 6	6.4960+ 0	5.2001+ 0	1.1269+ 0	1.5885- 1			1.5849-17		2.4608- 5				4.8671- 1
1.0000+ 6 ~ 2.0000+ 6	6.5437+ 0	4.8391+ 0	1.5654+ 0	1.1855- 1			1.6817-14		5.2770- 5	1.2052-19			5.6592- 1
2.0000+ 6 ~ 4.0000+ 6	5.4051+ 0	3.9843+ 0	1.9730+ 0	5.8705- 2			1.1315- 7		1.6576- 4	3.5109-18			6.5382- 1
4.0000+ 6 ~ 7.0000+ 6	4.1764+ 0	2.2612+ 0	1.9035+ 0	1.0872- 2			8.0902- 5		3.0473- 4	1.0058-11			5.9966- 1
7.0000+ 6 ~ 1.0000+ 7	4.3624+ 0	2.6815+ 0	1.2016+ 0	1.6431- 3	5.6337- 1		7.2897- 4	3.1776-18	5.3146- 4	1.4627- 7	2.9320-12	1.6002-17	6.6998- 1
1.0000+ 7 ~ 2.0000+ 7	4.9254+ 0	3.3419+ 0	2.1379- 1	1.0848- 3	1.2880+ 0	5.4553- 2	1.1053- 2	2.4303- 3	5.0107- 3	1.4444- 3	4.9028- 3	7.3677- 4	8.2662- 1

MATERIAL =5204 CROSS SECTION

^{124}Te (5204)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	2.4855+ 1	3.7471+ 0		2.1118+ 1					0.0000+ 0				6.4272- 3
1.0000- 2 ~ 2.0000- 2	1.2766+ 1	3.7487+ 0		9.0080+ 0					0.0000+ 0				6.4272- 3
2.0000- 2 ~ 4.0000- 2	1.0101+ 1	3.7482+ 0		6.3663+ 0					0.0000+ 0				6.4272- 3
4.0000- 2 ~ 7.0000- 2	8.9952+ 0	3.7453+ 0		4.6499+ 0					0.0000+ 0				6.4272- 3
7.0000- 2 ~ 1.0000- 1	7.4626+ 0	3.7442+ 0		3.7084+ 0					0.0000+ 0				6.4272- 3
1.0000- 1 ~ 2.0000- 1	6.5317+ 0	3.7418+ 0		2.7899+ 0					0.0000+ 0				6.4272- 3
2.0000- 1 ~ 4.0000- 1	5.6576+ 0	3.7365+ 0		1.9311+ 0					0.0000+ 0				6.4272- 3
4.0000- 1 ~ 7.0000- 1	5.0970+ 0	3.7279+ 0		1.3691+ 0					0.0000+ 0				6.4272- 3
7.0000- 1 ~ 1.0000+ 0	4.7863+ 0	3.7180+ 0		1.0472+ 0					0.0000+ 0				6.4272- 3
1.0000+ 0 ~ 2.0000+ 0	4.4300+ 0	3.6982+ 0		7.3188- 1					0.0000+ 0				6.4272- 3
2.0000+ 0 ~ 4.0000+ 0	4.0868+ 0	3.6666+ 0		4.2816- 1					0.0000+ 0				6.4273- 3
4.0000+ 0 ~ 7.0000+ 0	3.8438+ 0	3.6087+ 0		2.3687- 1					0.0000+ 0				6.4278- 3
7.0000+ 0 ~ 1.0000+ 1	3.7010+ 0	3.5801+ 0		1.4090- 1					0.0000+ 0				6.4284- 3
1.0000+ 1 ~ 2.0000+ 1	3.5818+ 0	3.4949+ 0		8.6898- 2					0.0000+ 0				6.4303- 3
2.0000+ 1 ~ 4.0000+ 1	3.4373+ 0	3.4166+ 0		2.1787- 2					0.0000+ 0				6.4349- 3
4.0000+ 1 ~ 7.0000+ 1	3.3612+ 0	3.3539+ 0		7.2243- 3					0.0000+ 0				6.4471- 3
7.0000+ 1 ~ 1.0000+ 2	3.3171+ 0	3.3157+ 0		3.3701- 3					0.0000+ 0				6.4871- 3
1.0000+ 2 ~ 2.0000+ 2	3.2614+ 0	3.2597+ 0		1.7362- 3					0.0000+ 0				6.5038- 3
2.0000+ 2 ~ 4.0000+ 2	3.2901+ 0	3.1477+ 0		1.4240- 1					0.0000+ 0				6.6156- 3
4.0000+ 2 ~ 7.0000+ 2	7.3682+ 0	4.7424+ 0		2.6158+ 0					0.0000+ 0				6.9087- 3
7.0000+ 2 ~ 1.0000+ 3	7.0191+ 0	5.7897+ 0		1.2294+ 0					0.0000+ 0				6.1819- 3
1.0000+ 3 ~ 2.0000+ 3	2.1462+ 1	2.0231+ 1		1.2506+ 0					0.0000+ 0				6.9468- 3
2.0000+ 3 ~ 4.0000+ 3	9.4115+ 0	8.8908+ 0		5.2073- 1					0.0000+ 0				9.1285- 3
4.0000+ 3 ~ 7.0000+ 3	8.3724+ 0	8.0602+ 0		3.1216- 1					0.0000+ 0				1.3449- 2
7.0000+ 3 ~ 1.0000+ 4	7.2181+ 0	6.8995+ 0		3.1878- 1					0.0000+ 0				1.8859- 2
1.0000+ 4 ~ 2.0000+ 4	6.6244+ 0	6.3848+ 0		2.3983- 1					0.0000+ 0				3.1865- 2
2.0000+ 4 ~ 4.0000+ 4	6.1378+ 0	5.9738+ 0		1.6414- 1					0.0000+ 0				6.2294- 2
4.0000+ 4 ~ 7.0000+ 4	5.8789+ 0	5.7592+ 0		1.1872- 1					0.0000+ 0				1.0958- 1
7.0000+ 4 ~ 1.0000+ 5	5.7608+ 0	5.6511+ 0		9.9409- 2					0.0000+ 0				1.5789- 1
1.0000+ 5 ~ 2.0000+ 5	5.6431+ 0	5.5660+ 0		8.7344- 2					1.3912-12				2.3802- 1
2.0000+ 5 ~ 4.0000+ 5	5.7520+ 0	5.5891+ 0		8.2089- 2					5.5648-12				5.3124- 1
4.0000+ 5 ~ 7.0000+ 5	8.1359+ 0	6.0027+ 0	4.8773- 2	8.5467- 2					1.3828-11				3.8478- 1
7.0000+ 5 ~ 1.0000+ 6	6.4951+ 0	5.9987+ 0	4.3691- 1	5.2800- 2					3.5307-11				4.2247- 1
1.0000+ 6 ~ 2.0000+ 6	5.5477+ 0	5.5616+ 0	9.1867- 1	8.7247- 2					5.0296-10				4.9414- 1
2.0000+ 6 ~ 4.0000+ 6	5.4106+ 0	3.5754+ 0	1.7877+ 0	4.1292- 2			3.6541-16		3.1561- 7	7.6162-17			8.2307- 1
4.0000+ 6 ~ 7.0000+ 6	4.1767+ 0	2.2709+ 0	1.8944+ 0	1.0856- 2			7.4647- 6		3.1590- 5	5.0801-12			5.8725- 1
7.0000+ 6 ~ 1.0000+ 7	4.3622+ 0	2.6902+ 0	1.7497+ 0	3.6219- 3	8.0728- 3		2.6730- 4	4.6688-21	2.2220- 4	2.8319- 7	1.4834-15		6.6882- 1
1.0000+ 7 ~ 2.0000+ 7	4.9266+ 0	3.3310+ 0	3.3160- 1	1.1888- 3	1.1332+ 0	1.0912- 1	1.0266- 2	1.5483- 3	4.1270- 3	9.3048- 4	1.3161- 3	2.6129- 4	8.2652- 1

^{125}Te (5205)

MATERIAL =5205

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	8.6466+ 0	3.8491+ 0		4.7964+ 0			0.0000+ 0		0.0000+ 0				6.3837- 3
1.0000- 2 ~ 2.0000- 2	5.8976+ 0	3.8490+ 0		2.0486+ 0			0.0000+ 0		0.0000+ 0				6.3837- 3
2.0000- 2 ~ 4.0000- 2	5.2965+ 0	3.8489+ 0		1.4476+ 0			0.0000+ 0		0.0000+ 0				6.3837- 3
4.0000- 2 ~ 7.0000- 2	4.9117+ 0	3.8487+ 0		1.0630+ 0			0.0000+ 0		0.0000+ 0				6.3837- 3
7.0000- 2 ~ 1.0000- 1	4.6981+ 0	3.8486+ 0		8.4964- 1			0.0000+ 0		0.0000+ 0				6.3837- 3
1.0000- 1 ~ 2.0000- 1	4.4910+ 0	3.8480+ 0		6.4295- 1			0.0000+ 0		0.0000+ 0				6.3837- 3
2.0000- 1 ~ 4.0000- 1	4.2987+ 0	3.8469+ 0		4.5181- 1			0.0000+ 0		0.0000+ 0				6.3837- 3
4.0000- 1 ~ 7.0000- 1	4.1726+ 0	3.8450+ 0		3.2791- 1			0.0000+ 0		0.0000+ 0				6.3837- 3
7.0000- 1 ~ 1.0000+ 0	4.1018+ 0	3.8427+ 0		2.6906- 1			0.0000+ 0		0.0000+ 0				6.3837- 3
1.0000+ 0 ~ 2.0000+ 0	4.0295+ 0	3.8380+ 0		1.9147- 1			0.0000+ 0		0.0000+ 0				6.3837- 3
2.0000+ 0 ~ 4.0000+ 0	3.9660+ 0	3.8276+ 0		1.2744- 1			0.0000+ 0		0.0000+ 0				6.3839- 3
4.0000+ 0 ~ 7.0000+ 0	3.8970+ 0	3.8115+ 0		8.5701- 2			0.0000+ 0		0.0000+ 0				5.3851- 3
7.0000+ 0 ~ 1.0000+ 1	3.8588+ 0	3.7991+ 0		5.9899- 2			0.0000+ 0		0.0000+ 0				5.3882- 3
1.0000+ 1 ~ 2.0000+ 1	3.8042+ 0	3.7524+ 0		5.1790- 2			0.0000+ 0		0.0000+ 0				5.3996- 3
2.0000+ 1 ~ 4.0000+ 1	7.7022+ 0	3.7669+ 0		3.9353+ 0			0.0000+ 0		0.0000+ 0				5.3967- 3
4.0000+ 1 ~ 7.0000+ 1	3.6814+ 0	3.6664+ 0		1.4996- 2			0.0000+ 0		0.0000+ 0				5.4143- 3
7.0000+ 1 ~ 1.0000+ 2	3.6862+ 0	3.5562+ 0		1.3000- 1			0.0000+ 0		0.0000+ 0				5.4288- 3
1.0000+ 2 ~ 2.0000+ 2	7.6312+ 0	4.5628+ 0		3.0684+ 0			0.0000+ 0		0.0000+ 0				5.4888- 3
2.0000+ 2 ~ 4.0000+ 2	2.0880+ 1	9.5918+ 0		1.1089+ 1			0.0000+ 0		0.0000+ 0				5.8240- 3
4.0000+ 2 ~ 7.0000+ 2	2.6480+ 1	2.2488+ 1		3.9923+ 0			0.0000+ 0		0.0000+ 0				5.9670- 3
7.0000+ 2 ~ 1.0000+ 3	1.0181+ 1	8.6887+ 0		3.5139+ 0			0.0000+ 0		0.0000+ 0				6.2487- 3
1.0000+ 3 ~ 2.0000+ 3	1.0431+ 1	8.2635+ 0		2.1671+ 0			0.0000+ 0		0.0000+ 0				7.1327- 3
2.0000+ 3 ~ 4.0000+ 3	8.5550+ 0	7.3524+ 0		1.2026+ 0			0.0000+ 0		0.0000+ 0				9.4985- 3
4.0000+ 3 ~ 7.0000+ 3	7.1893+ 0	6.2993+ 0		8.8998- 1			0.0000+ 0		0.0000+ 0				1.4110- 2
7.0000+ 3 ~ 1.0000+ 4	6.7115+ 0	5.9060+ 0		8.0558- 1			0.0000+ 0		0.0000+ 0				1.9851- 2
1.0000+ 4 ~ 2.0000+ 4	6.2894+ 0	5.6111+ 0		6.7832- 1			0.0000+ 0		0.0000+ 0				3.3664- 2
2.0000+ 4 ~ 4.0000+ 4	5.9419+ 0	5.4492+ 0	1.0841- 2	4.8130- 1			0.0000+ 0		0.0000+ 0				6.4872- 2
4.0000+ 4 ~ 7.0000+ 4	5.8885+ 0	5.2902+ 0	3.0246- 1	2.9690- 1			0.0000+ 0		0.0000+ 0				1.1907- 1
7.0000+ 4 ~ 1.0000+ 5	5.8167+ 0	5.1728+ 0	4.3656- 1	2.0805- 1			0.0000+ 0		0.0000+ 0				1.7386- 1
1.0000+ 5 ~ 2.0000+ 5	5.6412+ 0	4.9769+ 0	6.1097- 1	1.6306- 1			0.0000+ 0		9.0094- 9				2.6288- 1
2.0000+ 5 ~ 4.0000+ 5	5.7455+ 0	5.0559+ 0	5.5502- 1	1.2451- 1			0.0000+ 0		3.8037- 8				3.7162- 1
4.0000+ 5 ~ 7.0000+ 5	6.1308+ 0	5.2499+ 0	7.9322- 1	8.7764- 2			0.0000+ 0		8.2128- 8				4.3988- 1
7.0000+ 5 ~ 1.0000+ 6	6.4860+ 0	5.2768+ 0	1.1614+ 0	5.6773- 2			0.0000+ 0		1.8631- 7				4.7941- 1
1.0000+ 6 ~ 2.0000+ 6	5.6466+ 0	4.9194+ 0	1.6769+ 0	4.8716- 2			4.7336-18		9.7071- 7				5.6698- 1
2.0000+ 6 ~ 4.0000+ 6	5.4057+ 0	3.3783+ 0	1.9984+ 0	2.2678- 2			7.9725-12		8.5700- 8	3.4092-18			6.9280- 1
4.0000+ 6 ~ 7.0000+ 6	4.1783+ 0	2.2692+ 0	1.9002+ 0	9.8191- 3	2.9831- 3		3.9269- 6		2.2191- 5	1.1999-13			5.9986- 1
7.0000+ 6 ~ 1.0000+ 7	4.3619+ 0	2.6818+ 0	9.3309- 1	1.0884- 3	8.3404- 1		2.3862- 4		8.3186- 5	8.9608-10	1.1299-14	2.5363-18	6.6993- 1
1.0000+ 7 ~ 2.0000+ 7	4.9261+ 0	3.3493+ 0	1.6881- 1	1.0776- 3	1.2810+ 0	8.8660- 2	6.4023- 3	1.8401- 3	3.1438- 3	5.2974- 4	3.5739- 3	5.1557- 4	8.2661- 1

^{126}Te (5206)

MATERIAL =5206

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.8308+ 0	3.6290+ 0		3.2019+ 0					0.0000+ 0				5.3410- 3
1.0000- 2 ~ 2.0000- 2	4.9964+ 0	3.6289+ 0		1.3676+ 0					0.0000+ 0				5.3410- 3
2.0000- 2 ~ 4.0000- 2	4.5960+ 0	3.6288+ 0		9.6624- 1					0.0000+ 0				5.3410- 3
4.0000- 2 ~ 7.0000- 2	4.3380+ 0	3.6288+ 0		7.0942- 1					0.0000+ 0				5.3410- 3
7.0000- 2 ~ 1.0000- 1	4.1963+ 0	3.6283+ 0		5.6696- 1					0.0000+ 0				5.3410- 3
1.0000- 1 ~ 2.0000- 1	4.0571+ 0	3.6278+ 0		4.2930- 1					0.0000+ 0				5.3410- 3
2.0000- 1 ~ 4.0000- 1	3.9282+ 0	3.6266+ 0		3.0167- 1					0.0000+ 0				5.3410- 3
4.0000- 1 ~ 7.0000- 1	3.8435+ 0	3.6248+ 0		2.1869- 1					0.0000+ 0				5.3410- 3
7.0000- 1 ~ 1.0000+ 0	3.7960+ 0	3.6223+ 0		1.7272- 1					0.0000+ 0				5.3410- 3
1.0000+ 0 ~ 2.0000+ 0	3.7450+ 0	3.6174+ 0		1.2781- 1					0.0000+ 0				5.3410- 3
2.0000+ 0 ~ 4.0000+ 0	3.6911+ 0	3.6066+ 0		8.4680- 2					0.0000+ 0				5.3410- 3
4.0000+ 0 ~ 7.0000+ 0	3.6461+ 0	3.5900+ 0		5.5118- 2					0.0000+ 0				5.3416- 3
7.0000+ 0 ~ 1.0000+ 1	3.6129+ 0	3.5719+ 0		4.0325- 2					0.0000+ 0				5.3420- 3
1.0000+ 1 ~ 2.0000+ 1	3.5844+ 0	3.5385+ 0		2.6859- 2					0.0000+ 0				5.3437- 3
2.0000+ 1 ~ 4.0000+ 1	3.4900+ 0	3.4766+ 0		1.4404- 2					0.0000+ 0				5.3477- 3
4.0000+ 1 ~ 7.0000+ 1	3.3926+ 0	3.3826+ 0		9.9769- 3					0.0000+ 0				5.3590- 3
7.0000+ 1 ~ 1.0000+ 2	3.2945+ 0	3.2641+ 0		1.0372- 2					0.0000+ 0				5.3889- 3
1.0000+ 2 ~ 2.0000+ 2	6.9679+ 0	5.5095+ 0		1.4584+ 0					0.0000+ 0				5.4120- 3
2.0000+ 2 ~ 4.0000+ 2	3.1883+ 1	2.5884+ 1		5.7994+ 0					0.0000+ 0				5.6180- 3
4.0000+ 2 ~ 7.0000+ 2	4.1082+ 0	3.9109+ 0		1.9634- 1					0.0000+ 0				6.8044- 3
7.0000+ 2 ~ 1.0000+ 3	3.7768+ 0	3.7764+ 0		3.7697- 4					0.0000+ 0				6.0407- 3
1.0000+ 3 ~ 2.0000+ 3	4.0389+ 0	3.7079+ 0		3.3105- 1					0.0000+ 0				6.8197- 3
2.0000+ 3 ~ 4.0000+ 3	7.2014+ 0	6.8878+ 0		5.1352- 1					0.0000+ 0				8.9687- 3
4.0000+ 3 ~ 7.0000+ 3	5.0872+ 0	4.9269+ 0		1.6038- 1					0.0000+ 0				1.3198- 2
7.0000+ 3 ~ 1.0000+ 4	4.4948+ 0	4.3697+ 0		1.0490- 1					0.0000+ 0				1.8519- 2
1.0000+ 4 ~ 2.0000+ 4	5.6847+ 0	5.4786+ 0		1.0617- 1					0.0000+ 0				3.1331- 2
2.0000+ 4 ~ 4.0000+ 4	5.7022+ 0	5.8201+ 0		5.2010- 2					0.0000+ 0				6.1459- 2
4.0000+ 4 ~ 7.0000+ 4	6.6838+ 0	6.5239+ 0		6.9906- 2					0.0000+ 0				1.0839- 1
7.0000+ 4 ~ 1.0000+ 6	6.6963+ 0	6.6446+ 0		5.1493- 2					0.0000+ 0				1.6816- 1
1.0000+ 6 ~ 2.0000+ 6	6.6399+ 0	6.6949+ 0		4.5068- 2					2.0633-14				2.3413- 1
2.0000+ 6 ~ 4.0000+ 6	5.7488+ 0	5.7085+ 0		4.2059- 2					8.2139-14				3.2873- 1
4.0000+ 6 ~ 7.0000+ 6	8.1328+ 0	8.0789+ 0	5.3893- 3	4.8070- 2					2.1454-13				3.7898- 1
7.0000+ 6 ~ 1.0000+ 6	8.4837+ 0	8.0819+ 0	3.7917- 1	3.2711- 2					8.9101-13				4.1833- 1
1.0000+ 6 ~ 2.0000+ 6	6.6466+ 0	6.6900+ 0	8.2049- 1	3.4671- 2					1.3626-11				4.8236- 1
2.0000+ 6 ~ 4.0000+ 6	5.4229+ 0	3.7101+ 0	1.6600+ 0	2.5014- 2					1.0184- 8	1.0456-18			6.0424- 1
4.0000+ 6 ~ 7.0000+ 6	4.1768+ 0	2.2804+ 0	1.8090+ 0	8.6812- 3			2.7668-11		8.2708- 8	8.2882-14			5.9489- 1
7.0000+ 6 ~ 1.0000+ 7	4.3617+ 0	2.5898+ 0	1.7193+ 0	1.4695- 3	3.0632- 2		4.4588- 6		5.6257- 6	3.0209- 0	4.8103-18		6.8088- 1
1.0000+ 7 ~ 2.0000+ 7	4.9264+ 0	3.3290+ 0	2.7626- 1	1.0768- 3	1.1302+ 0	1.7604- 1	6.4831- 3	8.3338- 4	3.0154- 3	3.3461- 4	1.3707- 3	1.9886- 4	8.2660- 1

^{127m}Te (5207)

MATERIAL =5207

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.0430+ 4	3.6300+ 0	0.0000+ 0	1.0423+ 4					0.0000+ 0				6.2988- 3
1.0000- 2 ~ 2.0000- 2	4.4562+ 3	3.6300+ 0	0.0000+ 0	4.4538+ 3					0.0000+ 0				6.2988- 3
2.0000- 2 ~ 4.0000- 2	3.1538+ 3	3.6300+ 0	0.0000+ 0	3.1493+ 3					0.0000+ 0				6.2988- 3
4.0000- 2 ~ 7.0000- 2	2.9209+ 3	3.6300+ 0	0.0000+ 0	2.9144+ 3					0.0000+ 0				6.2988- 3
7.0000- 2 ~ 1.0000- 1	1.8682+ 3	3.6300+ 0	0.0000+ 0	1.8613+ 3					0.0000+ 0				6.2988- 3
1.0000- 1 ~ 2.0000- 1	1.4153+ 3	3.6300+ 0	0.0000+ 0	1.4084+ 3					0.0000+ 0				6.2988- 3
2.0000- 1 ~ 4.0000- 1	1.0023+ 3	3.6300+ 0	0.0000+ 0	9.9565+ 2					0.0000+ 0				6.2988- 3
4.0000- 1 ~ 7.0000- 1	7.3780+ 2	3.6300+ 0	0.0000+ 0	7.3185+ 2					0.0000+ 0				6.2988- 3
7.0000- 1 ~ 1.0000+ 0	5.9067+ 2	3.6300+ 0	0.0000+ 0	5.8639+ 2					0.0000+ 0				6.2988- 3
1.0000+ 0 ~ 2.0000+ 0	4.4982+ 2	3.6300+ 0	0.0000+ 0	4.4594+ 2					0.0000+ 0				6.2988- 3
2.0000+ 0 ~ 4.0000+ 0	3.1866+ 2	3.6300+ 0	2.5887- 5	3.1490+ 2					0.0000+ 0				6.2992- 3
4.0000+ 0 ~ 7.0000+ 0	2.0536+ 2	1.1172+ 1	1.7084- 5	1.9420+ 2					0.0000+ 0				6.3021- 3
7.0000+ 0 ~ 1.0000+ 1	1.4493+ 2	1.6416+ 1	9.6596- 5	1.2792+ 2					0.0000+ 0				6.3046- 3
1.0000+ 1 ~ 2.0000+ 1	1.0942+ 2	1.5794+ 1	5.2365- 5	8.3623+ 1					0.0000+ 0				6.3109- 3
2.0000+ 1 ~ 4.0000+ 1	7.7629+ 1	1.6191+ 1	7.4079- 6	6.2399+ 1					0.0000+ 0				6.3236- 3
4.0000+ 1 ~ 7.0000+ 1	5.8125+ 1	1.4583+ 1	1.0062- 4	4.3443+ 1					0.0000+ 0				6.3621- 3
7.0000+ 1 ~ 1.0000+ 2	4.7811+ 1	1.4331+ 1	1.2526- 4	3.3480+ 1					0.0000+ 0				6.3754- 3
1.0000+ 2 ~ 2.0000+ 2	3.7398+ 1	1.3523+ 1	1.6807- 4	2.3873+ 1					0.0000+ 0				6.4000- 3
2.0000+ 2 ~ 4.0000+ 2	2.7581+ 1	1.2283+ 1	2.4566- 4	1.5277+ 1					0.0000+ 0				6.6434- 3
4.0000+ 2 ~ 7.0000+ 2	2.1259+ 1	1.1128+ 1	4.3359- 4	1.0131+ 1					0.0000+ 0				6.0738- 3
7.0000+ 2 ~ 1.0000+ 3	1.7766+ 1	1.0298+ 1	6.7008- 4	7.4895+ 0					0.0000+ 0				6.4256- 3
1.0000+ 3 ~ 2.0000+ 3	1.4431+ 1	9.2947+ 0	8.1937- 4	5.1350+ 0					0.0000+ 0				7.4641- 3
2.0000+ 3 ~ 4.0000+ 3	1.1358+ 1	8.1471+ 0	9.4455- 4	3.2095+ 0					0.0000+ 0				1.0138- 2
4.0000+ 3 ~ 7.0000+ 3	9.4257+ 0	7.2696+ 0	1.1860- 3	2.1649+ 0					0.0000+ 0				1.5194- 2
7.0000+ 3 ~ 1.0000+ 4	8.3752+ 0	6.7055+ 0	1.4588- 3	1.5882+ 0					0.0000+ 0				2.1993- 2
1.0000+ 4 ~ 2.0000+ 4	7.4033+ 0	6.1463+ 0	1.9362- 3	1.2661+ 0					0.0000+ 0				3.5010- 2
2.0000+ 4 ~ 4.0000+ 4	6.5556+ 0	5.5548+ 0	2.8463- 3	8.9812- 1					0.0000+ 0				8.9406- 2
4.0000+ 4 ~ 7.0000+ 4	6.0671+ 0	5.3910+ 0	4.2309- 3	6.5189- 1					0.0000+ 0				1.1979- 1
7.0000+ 4 ~ 1.0000+ 5	5.7989+ 0	5.2663+ 0	5.8870- 3	5.2576- 1					0.0000+ 0				1.6992- 1
1.0000+ 5 ~ 2.0000+ 5	6.6382+ 0	5.2227+ 0	9.7856- 3	4.0486- 1					4.6014-11				2.5014- 1
2.0000+ 5 ~ 4.0000+ 5	5.7405+ 0	5.3346+ 0	1.0858- 1	2.9857- 1					1.8006-10				3.5240- 1
4.0000+ 5 ~ 7.0000+ 5	8.1271+ 0	5.5927+ 0	3.0081- 1	2.3326- 1					4.2419-10				4.1275- 1
7.0000+ 5 ~ 1.0000+ 6	6.4932+ 0	5.7937+ 0	4.9815- 1	2.1062- 1					9.1477-10				4.3745- 1
1.0000+ 6 ~ 2.0000+ 6	6.5444+ 0	5.3100+ 0	1.0596+ 0	1.5070- 1			0.0000+ 0		8.4049- 9				5.1775- 1
2.0000+ 6 ~ 4.0000+ 6	6.4079+ 0	5.4548+ 0	1.9078+ 0	4.3898- 2			1.8789-15		4.4054- 7	2.0239-18			6.4240- 1
4.0000+ 6 ~ 7.0000+ 6	4.1708+ 0	2.2742+ 0	1.8827+ 0	4.2021- 9	1.5520- 2		1.7340- 7		2.7542- 8	4.8029-15			5.9936- 1
7.0000+ 6 ~ 1.0000+ 7	4.3613+ 0	2.6774+ 0	9.0766- 1	1.0482- 3	8.6448- 1		6.8027- 6		2.4121- 6	6.1074-11	7.3013-17	0.8062-20	6.5984- 1
1.0000+ 7 ~ 2.0000+ 7	4.9263+ 0	3.3600+ 0	1.8626- 1	1.0774- 3	1.2240+ 0	1.6361- 1	3.7916- 3	1.0081- 3	2.0416- 3	3.7153- 4	2.5027- 3	6.8256- 4	8.2649- 1

^{128}Te (5208)

MATERIAL =5208

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.7612+ 0	4.0990+ 0		6.6226- 1					0.0000+ 0				6.2674- 3
1.0000- 2 ~ 2.0000- 2	4.3019+ 0	4.0989+ 0		2.8300- 1					0.0000+ 0				6.2674- 3
2.0000- 2 ~ 4.0000- 2	4.2990+ 0	4.0989+ 0		2.0007- 1					0.0000+ 0				6.2674- 3
4.0000- 2 ~ 7.0000- 2	4.2450+ 0	4.0989+ 0		1.4899- 1					0.0000+ 0				6.2674- 3
7.0000- 2 ~ 1.0000- 1	4.2166+ 0	4.0989+ 0		1.1770- 1					0.0000+ 0				6.2674- 3
1.0000- 1 ~ 2.0000- 1	4.1884+ 0	4.0988+ 0		8.9568- 2					0.0000+ 0				6.2674- 3
2.0000- 1 ~ 4.0000- 1	4.1619+ 0	4.0987+ 0		6.3197- 2					0.0000+ 0				6.2674- 3
4.0000- 1 ~ 7.0000- 1	4.1446+ 0	4.0984+ 0		4.5431- 2					0.0000+ 0				6.2674- 3
7.0000- 1 ~ 1.0000+ 0	4.1362+ 0	4.0981+ 0		3.7066- 2					0.0000+ 0				6.2674- 3
1.0000+ 0 ~ 2.0000+ 0	4.1257+ 0	4.0975+ 0		2.8188- 2					0.0000+ 0				6.2674- 3
2.0000+ 0 ~ 4.0000+ 0	4.1169+ 0	4.0961+ 0		1.9826- 2					0.0000+ 0				6.2676- 3
4.0000+ 0 ~ 7.0000+ 0	4.1081+ 0	4.0937+ 0		1.4480- 2					0.0000+ 0				6.2678- 3
7.0000+ 0 ~ 1.0000+ 1	4.1023+ 0	4.0908+ 0		1.1462- 2					0.0000+ 0				6.2683- 3
1.0000+ 1 ~ 2.0000+ 1	4.0933+ 0	4.0848+ 0		8.5474- 3					0.0000+ 0				6.2699- 3
2.0000+ 1 ~ 4.0000+ 1	4.0770+ 0	4.0712+ 0		5.7796- 3					0.0000+ 0				6.2737- 3
4.0000+ 1 ~ 7.0000+ 1	4.0535+ 0	4.0495+ 0		3.9444- 3					0.0000+ 0				6.2740- 3
7.0000+ 1 ~ 1.0000+ 2	4.0281+ 0	4.0252+ 0		2.9004- 3					0.0000+ 0				6.2835- 3
1.0000+ 2 ~ 2.0000+ 2	3.9784+ 0	3.9766+ 0		1.9008- 3					0.0000+ 0				6.3267- 3
2.0000+ 2 ~ 4.0000+ 2	3.8472+ 0	3.8319+ 0		1.5882- 2					0.0000+ 0				6.4209- 3
4.0000+ 2 ~ 7.0000+ 2	6.6063+ 0	6.4601+ 0		1.0451+ 0					0.0000+ 0				6.7119- 3
7.0000+ 2 ~ 1.0000+ 3	4.0068+ 0	3.8526+ 0		1.5399- 1					0.0000+ 0				6.9446- 3
1.0000+ 3 ~ 2.0000+ 3	6.4073+ 0	6.1904+ 0		2.1686- 1					0.0000+ 0				8.7134- 3
2.0000+ 3 ~ 4.0000+ 3	5.2523+ 0	6.1896+ 0		3.2712- 2					0.0000+ 0				8.8240- 3
4.0000+ 3 ~ 7.0000+ 3	3.8773+ 0	3.7880+ 0		8.9303- 2					0.0000+ 0				1.3017- 2
7.0000+ 3 ~ 1.0000+ 4	5.3330+ 0	5.2858+ 0		8.7248- 2					0.0000+ 0				1.6280- 2
1.0000+ 4 ~ 2.0000+ 4	6.7352+ 0	6.6767+ 0		6.9462- 2					0.0000+ 0				3.1008- 2
2.0000+ 4 ~ 4.0000+ 4	5.8513+ 0	5.8124+ 0		3.8932- 2					0.0000+ 0				8.0896- 2
4.0000+ 4 ~ 7.0000+ 4	6.6568+ 0	6.6293+ 0		2.9489- 2					0.0000+ 0				1.0778- 1
7.0000+ 4 ~ 1.0000+ 5	6.6820+ 0	6.6658+ 0		2.5480- 2					0.0000+ 0				1.5637- 1
1.0000+ 5 ~ 2.0000+ 5	6.6379+ 0	6.6159+ 0		2.1896- 2					1.0082-16				2.3708- 1
2.0000+ 5 ~ 4.0000+ 5	5.7464+ 0	5.7281+ 0		2.0285- 2					4.0928-16				3.2736- 1
4.0000+ 5 ~ 7.0000+ 5	8.1310+ 0	8.1082+ 0		2.2840- 2					1.0512-15				3.7711- 1
7.0000+ 5 ~ 1.0000+ 6	6.4928+ 0	6.2131+ 0	2.6060- 1	1.9066- 2					3.3628-16				4.0766- 1
1.0000+ 6 ~ 2.0000+ 6	6.5441+ 0	5.7636+ 0	7.8292- 1	1.6978- 2					6.0968-14				4.7803- 1
2.0000+ 6 ~ 4.0000+ 6	5.4176+ 0	5.7006+ 0	1.6982+ 0	9.0528- 3					4.4494-11	1.4373-20			6.0500- 1
4.0000+ 6 ~ 7.0000+ 6	4.1764+ 0	2.2760+ 0	1.8981+ 0	1.7716- 3			5.1418-14		1.8373- 7	2.3779-16			8.8844- 1
7.0000+ 6 ~ 1.0000+ 7	4.3612+ 0	2.6919+ 0	1.6613+ 0	6.6146- 4	7.6991- 2		7.6199- 6		4.6064- 6	6.3341-11	1.9342-20		8.8982- 1
1.0000+ 7 ~ 2.0000+ 7	4.9260+ 0	3.3325+ 0	2.3662- 1	1.0278- 3	1.0922+ 0	2.6617- 1	3.5482- 3	3.0103- 4	1.5930- 3	1.9644- 4	9.0718- 4	1.7056- 4	8.2649- 1

MATERIAL =5209

CROSS SECTION

^{129m}Te (5209)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.9409+ 3	3.4000+ 0	0.0000+ 0	4.9339+ 3					0.0000+ 0				6.2166- 3
1.0000- 2 ~ 2.0000- 2	2.1126+ 3	3.4000+ 0	0.0000+ 0	2.1083+ 3					0.0000+ 0				6.2166- 3
2.0000- 2 ~ 4.0000- 2	1.4964+ 3	3.4000+ 0	0.0000+ 0	1.4808+ 3					0.0000+ 0				6.2166- 3
4.0000- 2 ~ 7.0000- 2	1.1028+ 3	3.4000+ 0	0.0000+ 0	1.0958+ 3					0.0000+ 0				6.2166- 3
7.0000- 2 ~ 1.0000- 1	8.8441+ 2	3.4000+ 0	0.0000+ 0	8.7636+ 2					0.0000+ 0				6.2166- 3
1.0000- 1 ~ 2.0000- 1	8.7496+ 2	3.4000+ 0	0.0000+ 0	8.8670+ 2					0.0000+ 0				6.2166- 3
2.0000- 1 ~ 4.0000- 1	4.7921+ 2	3.4000+ 0	0.0000+ 0	4.7142+ 2					0.0000+ 0				6.2166- 3
4.0000- 1 ~ 7.0000- 1	3.5345+ 2	3.4000+ 0	0.0000+ 0	3.4945+ 2					0.0000+ 0				6.2166- 3
7.0000- 1 ~ 1.0000+ 0	2.8347+ 2	3.4000+ 0	0.0000+ 0	2.7712+ 2					0.0000+ 0				6.2166- 3
1.0000+ 0 ~ 2.0000+ 0	2.1833+ 2	3.4000+ 0	0.0000+ 0	2.1082+ 2					0.1100+ 0				6.2165- 3
2.0000+ 0 ~ 4.0000+ 0	1.5389+ 2	3.4000+ 0	6.2795- 6	1.4807+ 2					0.0000+ 0				6.2160- 3
4.0000+ 0 ~ 7.0000+ 0	1.1329+ 2	3.4000+ 0	4.1574- 5	1.0955+ 2					0.0000+ 0				6.2192- 3
7.0000+ 0 ~ 1.0000+ 1	1.4025+ 2	1.9617+ 1	7.2592- 5	1.2064+ 2					0.0000+ 0				6.2212- 3
1.0000+ 1 ~ 2.0000+ 1	1.0950+ 2	1.9834+ 1	1.0607- 4	8.9869+ 1					0.0000+ 0				6.2285- 3
2.0000+ 1 ~ 4.0000+ 1	7.7372+ 1	1.8454+ 1	1.4835- 4	6.8908+ 1					0.0000+ 0				6.2373- 3
4.0000+ 1 ~ 7.0000+ 1	5.8054+ 1	1.7602+ 1	2.0672- 4	4.0562+ 1					0.0000+ 0				6.2621- 3
7.0000+ 1 ~ 1.0000+ 2	4.7837+ 1	1.8847+ 1	2.5019- 4	9.0990+ 1					0.0000+ 0				6.2829- 3
1.0000+ 2 ~ 2.0000+ 2	3.7455+ 1	1.5619+ 1	3.3613- 4	2.1838+ 1					0.0000+ 0				5.3591- 3
2.0000+ 2 ~ 4.0000+ 2	2.7823+ 1	1.3877+ 1	4.8670- 4	1.3746+ 1					0.0000+ 0				5.5036- 3
4.0000+ 2 ~ 7.0000+ 2	2.1322+ 1	1.2339+ 1	5.2910- 4	8.9818+ 0					0.0000+ 0				5.7802- 3
7.0000+ 2 ~ 1.0000+ 3	1.7828+ 1	1.1272+ 1	7.8495- 4	6.5545+ 0					0.0000+ 0				6.1855- 3
1.0000+ 3 ~ 2.0000+ 3	1.4491+ 1	1.0031+ 1	1.0427- 3	4.4694+ 0					0.0000+ 0				7.1678- 3
2.0000+ 3 ~ 4.0000+ 3	1.1415+ 1	9.6522+ 0	1.4788- 3	2.7812+ 0					0.0000+ 0				9.7297- 3
4.0000+ 3 ~ 7.0000+ 3	9.4784+ 0	7.6195+ 0	2.0067- 3	1.8669+ 0					0.0000+ 0				1.4603- 2
7.0000+ 3 ~ 1.0000+ 4	8.4254+ 0	6.9696+ 0	2.5450- 3	1.4311+ 0					0.0000+ 0				2.0715- 2
1.0000+ 4 ~ 2.0000+ 4	7.4444+ 0	6.3654+ 0	3.3660- 3	1.0747+ 0					0.0000+ 0				3.6032- 2
2.0000+ 4 ~ 4.0000+ 4	6.5843+ 0	5.8187+ 0	4.5012- 3	7.6110- 1					0.0000+ 0				8.7776- 2
4.0000+ 4 ~ 7.0000+ 4	5.0717+ 0	5.6129+ 0	6.0420- 3	5.6262- 1					0.0000+ 0				1.1721- 1
7.0000+ 4 ~ 1.0000+ 5	5.8018+ 0	5.3677+ 0	7.7670- 3	4.3634- 1					0.0000+ 0				1.5666- 1
1.0000+ 5 ~ 2.0000+ 5	5.6360+ 0	5.2877+ 0	1.1864- 2	3.3676- 1					4.2284-19				2.4693- 1
2.0000+ 5 ~ 4.0000+ 5	5.7370+ 0	5.4444+ 0	2.7763- 2	2.5476- 1					1.8914-12				3.4493- 1
4.0000+ 5 ~ 7.0000+ 5	6.1251+ 0	5.6019+ 0	2.2903- 1	2.1427- 1					3.8015-12				4.0582- 1
7.0000+ 5 ~ 1.0000+ 6	6.4922+ 0	5.8760+ 0	4.1227- 1	2.0396- 1					5.1980-12				4.3037- 1
1.0000+ 6 ~ 2.0000+ 6	6.6493+ 0	5.6708+ 0	7.4233- 1	2.2680- 1					7.9378-11				4.9107- 1
2.0000+ 6 ~ 4.0000+ 6	6.4082+ 0	5.5225+ 0	1.8140+ 0	6.4129- 2			4.3486-19		1.0555- 8				6.3980- 1
4.0000+ 6 ~ 7.0000+ 6	4.1709+ 0	2.2721+ 0	1.8499+ 0	4.6776- 3	5.4505- 2		2.7333- 9		3.0668- 7	8.5230-17			6.9357- 1
7.0000+ 6 ~ 1.0000+ 7	4.3610+ 0	2.5769+ 0	7.1347- 1	8.9976- 4	1.0578+ 0		1.5486- 5		4.6686- 6	1.0928-12	1.1666-18	2.6084-21	6.6982- 1
1.0000+ 7 ~ 2.0000+ 7	4.9262- 0	3.3601+ 0	1.4666- 1	1.0766- 3	1.2168+ 0	2.0411- 1	2.2396- 3	5.8593- 4	1.4570- 3	2.1241- 4	1.6006- 3	4.5920- 4	6.2648- 1

MATERIAL =5210

CROSS SECTION

^{130}Te (5210)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.6718+ 0	3.8369+ 0		8.3685- 1					0.0000+ 0				6.1764- 3
1.0000- 2 ~ 2.0000- 2	4.1930+ 0	3.8359+ 0		3.6710- 1					0.0000+ 0				6.1764- 3
2.0000- 2 ~ 4.0000- 2	4.0866+ 0	3.8358+ 0		2.5281- 1					0.0000+ 0				6.1764- 3
4.0000- 2 ~ 7.0000- 2	4.0210+ 0	3.8358+ 0		1.8524- 1					0.0000+ 0				6.1764- 3
7.0000- 2 ~ 1.0000- 1	3.9838+ 0	3.8367+ 0		1.4810- 1					0.0000+ 0				6.1764- 3
1.0000- 1 ~ 2.0000- 1	3.9482+ 0	3.8366+ 0		1.1287- 1					0.0000+ 0				6.1764- 3
2.0000- 1 ~ 4.0000- 1	3.9144+ 0	3.8351+ 0		7.9307- 2					0.0000+ 0				6.1764- 3
4.0000- 1 ~ 7.0000- 1	3.8925+ 0	3.8345+ 0		5.8011- 2					0.0000+ 0				6.1764- 3
7.0000- 1 ~ 1.0000+ 0	3.8798+ 0	3.8337+ 0		4.6072- 2					0.0000+ 0				6.1764- 3
1.0000+ 0 ~ 2.0000+ 0	3.8667+ 0	3.8321+ 0		3.4589- 2					0.0000+ 0				6.1764- 3
2.0000+ 0 ~ 4.0000+ 0	3.8521+ 0	3.8284+ 0		2.3696- 2					0.0000+ 0				6.1764- 3
4.0000+ 0 ~ 7.0000+ 0	3.8391+ 0	3.8225+ 0		1.6508- 2					0.0000+ 0				6.1769- 3
7.0000+ 0 ~ 1.0000+ 1	3.8289+ 0	3.8159+ 0		1.2458- 2					0.0000+ 0				6.1772- 3
1.0000+ 1 ~ 2.0000+ 1	3.8113+ 0	3.8029+ 0		8.3557- 3					0.0000+ 0				6.1767- 3
2.0000+ 1 ~ 4.0000+ 1	3.7830+ 0	3.7784+ 0		4.5649- 3					0.0000+ 0				6.1826- 3
4.0000+ 1 ~ 7.0000+ 1	3.7511+ 0	3.7488+ 0		2.3109- 3					0.0000+ 0				6.1930- 3
7.0000+ 1 ~ 1.0000+ 2	3.7253+ 0	3.7240+ 0		1.2598- 3					0.0000+ 0				6.2017- 3
1.0000+ 2 ~ 2.0000+ 2	3.6936+ 0	3.6930+ 0		5.4540- 4					0.0000+ 0				6.2443- 3
2.0000+ 2 ~ 4.0000+ 2	3.6598+ 0	3.6594+ 0		1.5479- 4					0.0000+ 0				6.3460- 3
4.0000+ 2 ~ 7.0000+ 2	3.6370+ 0	3.6370+ 0		4.6841- 5					0.0000+ 0				6.6240- 3
7.0000+ 2 ~ 1.0000+ 3	3.6246+ 0	3.6246+ 0		2.8916- 5					0.0000+ 0				6.8044- 3
1.0000+ 3 ~ 2.0000+ 3	3.7490+ 0	3.6661+ 0		9.3868- 2					0.0000+ 0				6.8147- 3
2.0000+ 3 ~ 4.0000+ 3	3.8311+ 0	3.8021+ 0		2.8027- 2					0.0000+ 0				8.7048- 3
4.0000+ 3 ~ 7.0000+ 3	3.8494+ 0	3.8089+ 0		4.0492- 2					0.0000+ 0				1.2885- 2
7.0000+ 3 ~ 1.0000+ 4	3.8385+ 0	3.7950+ 0		4.5807- 2					0.0000+ 0				1.8094- 2
1.0000+ 4 ~ 2.0000+ 4	4.1314+ 0	4.1169+ 0		1.5629- 2					0.0000+ 0				3.0784- 2
2.0000+ 4 ~ 4.0000+ 4	4.9080+ 0	4.8954+ 0		1.2619- 2					0.0000+ 0				6.0654- 2
4.0000+ 4 ~ 7.0000+ 4	5.8328+ 0	5.8211+ 0		1.1488- 2					0.0000+ 0				1.0731- 1
7.0000+ 4 ~ 1.0000+ 5	5.8836+ 0	5.8737+ 0		9.7729- 3					0.0000+ 0				1.5481- 1
1.0000+ 5 ~ 2.0000+ 5	5.8344+ 0	5.8261+ 0		8.2348- 3					9.4202-19				2.3237- 1
2.0000+ 5 ~ 4.0000+ 5	5.7428+ 0	5.7350+ 0		7.8909- 3					3.7891-18				3.5545- 1
4.0000+ 5 ~ 7.0000+ 5	6.1281+ 0	6.1195+ 0		8.5898- 3					1.0027-17				5.7801- 1
7.0000+ 5 ~ 1.0000+ 6	6.4913+ 0	6.3687+ 0	1.2376- 1	8.7024- 3					3.4328-17				3.8786- 1
1.0000+ 6 ~ 2.0000+ 6	6.5456+ 0	6.8358+ 0	7.0328- 1	8.1106- 3					8.3080-16				4.7020- 1
2.0000+ 6 ~ 4.0000+ 6	6.4187+ 0	5.7978+ 0	1.8050+ 0	5.2735- 3					6.8559-15				8.8978- 1
4.0000+ 6 ~ 7.0000+ 6	4.1786+ 0	2.2838+ 0	1.8919+ 0	5.8307- 4			1.8530-17		4.9813- 9	1.1802-16			5.8417- 1
7.0000+ 6 ~ 1.0000+ 7	4.3607+ 0	2.6897+ 0	1.6910+ 0	3.6643- 4	1.6880- 1		8.0246- 7		3.3122- 7	1.3294-12			6.6977- 1
1.0000+ 7 ~ 2.0000+ 7	4.9260+ 0	3.3336+ 0	2.1324- 1	1.0196- 3	1.0676+ 0	3.0406- 1	3.1861- 3	3.5387- 4	6.4408- 4	1.4839- 4	8.3020- 4	1.7086- 4	6.2647- 1

MATERIAL =5301 CROSS SECTION 127 (5301)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.2727+ 1	3.6408+ 0		1.9186+ 1			0.0000+ 0		0.0000+ 0				5.2988- 3
1.0000- 2 ~ 2.0000- 2	1.1739+ 1	3.6404+ 0		8.1988+ 0			0.0000+ 0		0.0000+ 0				5.2988- 3
2.0000- 2 ~ 4.0000- 2	9.3384+ 0	3.6398+ 0		5.7966+ 0			0.0000+ 0		0.0000+ 0				5.2988- 3
4.0000- 2 ~ 7.0000- 2	7.7853+ 0	3.6388+ 0		4.2685+ 0			0.0000+ 0		0.0000+ 0				5.2988- 3
7.0000- 2 ~ 1.0000- 1	6.9476+ 0	3.6375+ 0		3.4100+ 0			0.0000+ 0		0.0000+ 0				5.2988- 3
1.0000- 1 ~ 2.0000- 1	6.1304+ 0	3.6349+ 0		2.5955+ 0			0.0000+ 0		0.0000+ 0				5.2988- 3
2.0000- 1 ~ 4.0000- 1	5.3619+ 0	3.6288+ 0		1.8331+ 0			0.0000+ 0		0.0000+ 0				5.2988- 3
4.0000- 1 ~ 7.0000- 1	4.8665+ 0	3.6165+ 0		1.3479+ 0			0.0000+ 0		0.0000+ 0				5.2988- 3
7.0000- 1 ~ 1.0000+ 0	4.6844+ 0	3.6064+ 0		1.0780+ 0			0.0000+ 0		0.0000+ 0				5.2988- 3
1.0000+ 0 ~ 2.0000+ 0	4.3029+ 0	3.4799+ 0		8.2305- 1			0.0000+ 0		0.0000+ 0				5.2988- 3
2.0000+ 0 ~ 4.0000+ 0	4.0071+ 0	3.4182+ 0		5.8887- 1			0.0000+ 0		0.0000+ 0				5.2992- 3
4.0000+ 0 ~ 7.0000+ 0	3.7694+ 0	3.3132+ 0		4.5020- 1			0.0000+ 0		0.0000+ 0				5.3015- 3
7.0000+ 0 ~ 1.0000+ 1	3.5720+ 0	3.1608+ 0		3.9197- 1			0.0000+ 0		0.0000+ 0				5.3031- 3
1.0000+ 1 ~ 2.0000+ 1	3.7184+ 0	2.7668+ 0		9.5158- 1			0.0000+ 0		0.0000+ 0				5.3080- 3
2.0000+ 1 ~ 4.0000+ 1	2.2741+ 2	8.0705+ 1		1.4670+ 2			0.0000+ 0		0.0000+ 0				5.3181- 3
4.0000+ 1 ~ 7.0000+ 1	4.2693+ 1	1.6257+ 1		2.7336+ 1			0.0000+ 0		0.0000+ 0				5.3416- 3
7.0000+ 1 ~ 1.0000+ 2	4.6939+ 1	1.5734+ 1		3.1205+ 1			0.0000+ 0		0.0000+ 0				5.3806- 3
1.0000+ 2 ~ 2.0000+ 2	3.3511+ 1	1.7540+ 1		1.5971+ 1			0.0000+ 0		0.0000+ 0				5.4342- 3
2.0000+ 2 ~ 4.0000+ 2	2.1414+ 1	1.2883+ 1		8.5311+ 0			0.0000+ 0		0.0000+ 0				5.5246- 3
4.0000+ 2 ~ 7.0000+ 2	1.6104+ 1	9.4368+ 0		6.6676+ 0			0.0000+ 0		0.0000+ 0				5.6841- 3
7.0000+ 2 ~ 1.0000+ 3	1.9928+ 1	1.3869+ 1		6.0385+ 0			0.0000+ 0		0.0000+ 0				6.3031- 3
1.0000+ 3 ~ 2.0000+ 3	1.1076+ 1	8.0715+ 0		3.0040+ 0			0.0000+ 0		0.0000+ 0				7.2891- 3
2.0000+ 3 ~ 4.0000+ 3	8.3043+ 0	6.5505+ 0		1.7540+ 0			0.0000+ 0		0.0000+ 0				9.7961- 3
4.0000+ 3 ~ 7.0000+ 3	9.3086+ 0	7.6263+ 0		1.6824+ 0			0.0000+ 0		0.0000+ 0				1.4644- 2
7.0000+ 3 ~ 1.0000+ 4	7.7039+ 0	6.3749+ 0		1.3290+ 0			0.0000+ 0		0.0000+ 0				2.0824- 2
1.0000+ 4 ~ 2.0000+ 4	6.9570+ 0	5.9696+ 0		9.8743- 1			0.0000+ 0		0.0000+ 0				3.4789- 2
2.0000+ 4 ~ 4.0000+ 4	5.5258+ 0	5.6201+ 0		7.0550- 1			0.0000+ 0		0.0000+ 0				6.7285- 2
4.0000+ 4 ~ 7.0000+ 4	5.9390+ 0	5.4157+ 0	2.4746- 2	4.9866- 1			0.0000+ 0		0.0000+ 0				1.1647- 1
7.0000+ 4 ~ 1.0000+ 5	5.7805+ 0	5.2186+ 0	2.1436- 1	3.4839- 1			0.0000+ 0		0.0000+ 0				1.7102- 1
1.0000+ 5 ~ 2.0000+ 5	5.6382+ 0	5.0608+ 0	3.3960- 1	2.3688- 1			0.0000+ 0		4.0766-13				2.5833- 1
2.0000+ 5 ~ 4.0000+ 5	5.7398+ 0	5.0502+ 0	5.3493- 1	1.5451- 1			0.0000+ 0		1.6302-12				3.7203- 1
4.0000+ 5 ~ 7.0000+ 5	6.1279+ 0	5.2336+ 0	7.7838- 1	1.1555- 1			8.9298-21		5.7504-12				4.4064- 1
7.0000+ 5 ~ 1.0000+ 6	6.4931+ 0	5.3104+ 0	1.1018+ 0	8.0838- 2			3.8381-20		7.8646-12				4.7600- 1
1.0000+ 6 ~ 2.0000+ 6	6.6445+ 0	4.9768+ 0	1.5062+ 0	6.2663- 2			2.5664-17		7.8282-11				5.5081- 1
2.0000+ 6 ~ 4.0000+ 6	5.4075+ 0	3.4076+ 0	1.9849+ 0	2.8808- 2			2.1422-10		3.0492- 8	6.0201-18			8.4757- 1
4.0000+ 6 ~ 7.0000+ 6	4.1768+ 0	2.2842+ 0	1.9063+ 0	5.7431- 3			5.8174- 5		2.8234- 8	3.2208-13	1.4345-17		5.9059- 1
7.0000+ 6 ~ 1.0000+ 7	4.3613+ 0	2.6808+ 0	1.7238+ 0	1.1112- 3	4.4004- 2		8.8618- 4	5.6487-12	4.3251- 6	1.1684- 8	1.5026- 8	1.6568-18	5.8984- 1
1.0000+ 7 ~ 2.0000+ 7	4.9262+ 0	3.0026+ 0	3.2064- 1	1.0640- 3	1.4715+ 0	9.4380- 2	1.6438- 2	1.0611- 2	1.6132- 3	9.0492- 4	4.6171- 3	8.7796- 4	6.2649- 1

MATERIAL =5302 CROSS SECTION 129 (5302)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	9.0393+ 1	6.4786+ 0		8.3916+ 1					0.0000+ 0				5.2188- 3
1.0000- 2 ~ 2.0000- 2	4.2266+ 1	6.4747+ 0		3.5780+ 1					0.0000+ 0				5.2188- 3
2.0000- 2 ~ 4.0000- 2	3.1724+ 1	6.4689+ 0		2.5266+ 1					0.0000+ 0				5.2188- 3
4.0000- 2 ~ 7.0000- 2	2.4693+ 1	6.4593+ 0		1.8439+ 1					0.0000+ 0				5.2188- 3
7.0000- 2 ~ 1.0000- 1	2.1111+ 1	6.4478+ 0		1.4653+ 1					0.0000+ 0				5.2188- 3
1.0000- 1 ~ 2.0000- 1	1.7450+ 1	6.4233+ 0		1.1027+ 1					0.0000+ 0				5.2188- 3
2.0000- 1 ~ 4.0000- 1	1.3942+ 1	6.3682+ 0		7.5739+ 0					0.0000+ 0				5.2188- 3
4.0000- 1 ~ 7.0000- 1	1.1594+ 1	6.2804+ 0		5.3140+ 0					0.0000+ 0				5.2188- 3
7.0000- 1 ~ 1.0000+ 0	1.0206+ 1	6.1814+ 0		4.0251+ 0					0.0000+ 0				5.2188- 3
1.0000+ 0 ~ 2.0000+ 0	8.7283+ 0	5.9693+ 0		2.7390+ 0					0.0000+ 0				5.2188- 3
2.0000+ 0 ~ 4.0000+ 0	7.1660+ 0	5.6308+ 0		1.5344+ 0					0.0000+ 0				5.2188- 3
4.0000+ 0 ~ 7.0000+ 0	6.0056+ 0	5.2055+ 0		8.0203- 1					0.0000+ 0				5.2184- 3
7.0000+ 0 ~ 1.0000+ 1	5.3066+ 0	4.8544+ 0		4.6219- 1					0.0000+ 0				5.2187- 3
1.0000+ 1 ~ 2.0000+ 1	4.8297+ 0	4.4248+ 0		2.0812- 1					0.0000+ 0				5.2235- 3
2.0000+ 1 ~ 4.0000+ 1	4.0287+ 0	3.9576+ 0		6.9040- 2					0.0000+ 0				5.2316- 3
4.0000+ 1 ~ 7.0000+ 1	4.5691+ 0	3.4874+ 0		1.0816+ 0					0.0000+ 0				5.2509- 3
7.0000+ 1 ~ 1.0000+ 2	1.9843+ 1	5.6970+ 0		1.3948+ 1					0.0000+ 0				5.2669- 3
1.0000+ 2 ~ 2.0000+ 2	1.5982+ 1	6.3493+ 0		9.6127+ 0					0.0000+ 0				5.3307- 3
2.0000+ 2 ~ 4.0000+ 2	4.8880+ 0	3.5548+ 0		1.3112+ 0					0.0000+ 0				5.4729- 3
4.0000+ 2 ~ 7.0000+ 2	1.2454+ 1	7.3464+ 0		5.1008+ 0					0.0000+ 0				5.8288- 3
7.0000+ 2 ~ 1.0000+ 3	7.4903+ 0	5.2377+ 0		2.2526+ 0					0.0000+ 0				6.1204- 3
1.0000+ 3 ~ 2.0000+ 3	8.9124+ 0	6.7058+ 0		2.2066+ 0					0.0000+ 0				7.0934- 3
2.0000+ 3 ~ 4.0000+ 3	7.0482+ 0	5.7485+ 0		1.3017+ 0					0.0000+ 0				8.4348- 3
4.0000+ 3 ~ 7.0000+ 3	6.8983+ 0	5.8286+ 0		1.0697+ 0					0.0000+ 0				1.4092- 2
7.0000+ 3 ~ 1.0000+ 4	6.6556+ 0	5.6774+ 0		8.7820- 1					0.0000+ 0				1.9874- 2
1.0000+ 4 ~ 2.0000+ 4	6.9617+ 0	5.2983+ 0		5.6638- 1					0.0000+ 0				3.3810- 2
2.0000+ 4 ~ 4.0000+ 4	5.8349+ 0	5.2738+ 0	7.5983- 2	4.8381- 1					0.0000+ 0				6.8100- 2
4.0000+ 4 ~ 7.0000+ 4	5.5303+ 0	4.9885+ 0	2.3035- 1	3.1402- 1					0.0000+ 0				1.1702- 1
7.0000+ 4 ~ 1.0000+ 5	6.5418+ 0	5.0267+ 0	2.8066- 1	2.3502- 1					0.0000+ 0				1.8949- 1
1.0000+ 5 ~ 2.0000+ 5	5.6360+ 0	5.1426+ 0	3.1691- 1	1.7807- 1					1.3054-14				2.8384- 1
2.0000+ 5 ~ 4.0000+ 5	5.7459+ 0	5.2620+ 0	3.5815- 1	1.3224- 1					8.2217-14				3.8846- 1
4.0000+ 5 ~ 7.0000+ 5	6.1261+ 0	5.5458+ 0	4.7069- 1	1.1200- 1					1.2384-13				4.1587- 1
7.0000+ 5 ~ 1.0000+ 6	6.4924+ 0	5.8805+ 0	6.3133- 1	8.0517- 2					2.6812-13				4.3908- 1
1.0000+ 6 ~ 2.0000+ 6	5.6486+ 0	5.1217+ 0	1.3654+ 0	6.0983- 2			1.0640-20		2.1947-12				5.3621- 1
2.0000+ 6 ~ 4.0000+ 6	5.4082+ 0	3.4481+ 0	1.9299+ 0	2.4231- 2			2.9188-14		1.3371- 9	8.1338-19			8.4191- 1
4.0000+ 6 ~ 7.0000+ 6	4.1768+ 0	2.2867+ 0	1.9079+ 0	3.7606- 3			2.4448- 6		7.6404- 7	1.0009-14	1.0004-18		8.8979- 1
7.0000+ 6 ~ 1.0000+ 7	4.3611+ 0	2.6711+ 0	1.6906+ 0	7.8850- 4	8.8792- 2		1.0864- 4	1.6460-14	2.7309- 6	1.4880- 9	6.4360-10	6.3801-18	6.8881- 1
1.0000+ 7 ~ 2.0000+ 7	4.0262+ 0	3.1935+ 0	3.1273- 1	1.0493- 3	1.2697- 0	1.2842- 1	3.8700- 3	7.3818- 3	2.3692- 3	6.0698- 4	4.0423- 3	8.8612- 4	8.2848- 1

MATERIAL =5303 CROSS SECTION ^{131}I (5303)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.6176+ 2	3.6000+ 0		2.4670+ 2					0.0000+ 0				6.1368- 3
1.0000- 2 ~ 2.0000- 2	1.0957+ 2	3.6000+ 0		1.0542+ 2					0.0000+ 0				6.1368- 3
2.0000- 2 ~ 4.0000- 2	7.8305+ 1	3.6000+ 0		7.4540+ 1					0.0000+ 0				6.1368- 3
4.0000- 2 ~ 7.0000- 2	5.8708+ 1	3.6000+ 0		5.4780+ 1					0.0000+ 0				6.1368- 3
7.0000- 2 ~ 1.0000- 1	4.7675+ 1	3.6000+ 0		4.3817+ 1					0.0000+ 0				6.1368- 3
1.0000- 1 ~ 2.0000- 1	3.7005+ 1	3.6000+ 0		3.3335+ 1					0.0000+ 0				6.1368- 3
2.0000- 1 ~ 4.0000- 1	2.7216+ 1	3.6000+ 0		2.3671+ 1					0.0000+ 0				6.1368- 3
4.0000- 1 ~ 7.0000- 1	2.0988+ 1	3.6000+ 0		1.7322+ 1					0.0000+ 0				6.1368- 3
7.0000- 1 ~ 1.0000+ 0	1.7480+ 1	3.6000+ 0		1.3866+ 1					0.0000+ 0				6.1368- 3
1.0000+ 0 ~ 2.0000+ 0	1.4191+ 1	3.6000+ 0		1.0541+ 1					0.0000+ 0				6.1368- 3
2.0000+ 0 ~ 4.0000+ 0	1.1098+ 1	3.6000+ 0		7.4636+ 0					0.0000+ 0				6.1370- 3
4.0000+ 0 ~ 7.0000+ 0	9.1049+ 0	3.6000+ 0		5.4776+ 0					0.0000+ 0				6.1379- 3
7.0000+ 0 ~ 1.0000+ 1	8.0283+ 0	3.6000+ 0		4.3814+ 0					0.0000+ 0				6.1367- 3
1.0000+ 1 ~ 2.0000+ 1	6.8801+ 0	3.6000+ 0		3.3339+ 0					0.0000+ 0				6.1415- 3
2.0000+ 1 ~ 4.0000+ 1	3.9370+ 1	2.2620+ 1		1.6738+ 1					0.0000+ 0				6.1470- 3
4.0000+ 1 ~ 7.0000+ 1	6.8890+ 1	3.6393+ 1		2.2666+ 1					0.0000+ 0				6.1616- 3
7.0000+ 1 ~ 1.0000+ 2	4.8024+ 1	3.1711+ 1		1.6319+ 1					0.0000+ 0				5.1737- 3
1.0000+ 2 ~ 2.0000+ 2	3.7445+ 1	2.6882+ 1		1.0782+ 1					0.0000+ 0				5.2262- 3
2.0000+ 2 ~ 4.0000+ 2	2.7609+ 1	2.1378+ 1		6.2331+ 0					0.0000+ 0				5.3471- 3
4.0000+ 2 ~ 7.0000+ 2	2.1308+ 1	1.7498+ 1		3.8098+ 0					0.0000+ 0				5.6624- 3
7.0000+ 2 ~ 1.0000+ 3	1.7814+ 1	1.5143+ 1		2.6716+ 0					0.0000+ 0				5.9219- 3
1.0000+ 3 ~ 2.0000+ 3	1.4480+ 1	1.2716+ 1		1.7648+ 0					0.0000+ 0				6.7643- 3
2.0000+ 3 ~ 4.0000+ 3	1.1404+ 1	1.0919+ 1		1.0846+ 0					0.0000+ 0				9.0068- 3
4.0000+ 3 ~ 7.0000+ 3	9.4676+ 0	8.7283+ 0		7.3933- 1					0.0000+ 0				1.3435- 2
7.0000+ 3 ~ 1.0000+ 4	8.4131+ 0	7.8424+ 0		5.7085- 1					0.0000+ 0				1.6605- 2
1.0000+ 4 ~ 2.0000+ 4	7.4286+ 0	7.0149+ 0		4.1365- 1					0.0000+ 0				3.2140- 2
2.0000+ 4 ~ 4.0000+ 4	6.5708+ 0	6.3013+ 0		2.6855- 1					0.0000+ 0				8.2625- 2
4.0000+ 4 ~ 7.0000+ 4	6.0634+ 0	5.8812+ 0		1.8223- 1					0.0000+ 0				1.1021- 1
7.0000+ 4 ~ 1.0000+ 5	5.7931+ 0	5.6631+ 0		1.4001- 1					0.0000+ 0				1.5822- 1
1.0000+ 5 ~ 2.0000+ 5	5.6341+ 0	5.4906+ 0	4.1279- 2	1.0209- 1					3.4563-16				2.3032- 1
2.0000+ 5 ~ 4.0000+ 5	5.7424+ 0	5.4309+ 0	2.4391- 1	8.7769- 2					1.3626-15				3.4471- 1
4.0000+ 5 ~ 7.0000+ 5	8.1276+ 0	5.7152+ 0	3.5594- 1	5.8810- 2					9.2108-15				4.0262- 1
7.0000+ 5 ~ 1.0000+ 6	6.4916+ 0	5.8195+ 0	5.2600- 1	4.6897- 2					5.9130-15				4.3439- 1
1.0000+ 6 ~ 2.0000+ 6	6.6477+ 0	5.2147+ 0	1.3046+ 0	2.7524- 2					7.1261-14				5.2658- 1
2.0000+ 6 ~ 4.0000+ 6	5.4084+ 0	3.4532+ 0	1.9338+ 0	8.9324- 3			7.8517-16		3.7818-11	1.5040-20			6.3986- 1
4.0000+ 6 ~ 7.0000+ 6	4.1787+ 0	2.2670+ 0	1.9078+ 0	1.7959- 3			5.0427- 8		9.9322- 8	1.3857-15			5.9853- 1
7.0000+ 6 ~ 1.0000+ 7	4.3609+ 0	2.5686+ 0	1.5646+ 0	6.1286- 4	1.3696- 1		2.3191- 5	2.2033-17	7.9579- 8	2.5347-11	1.5836-11	2.8113-20	6.6881- 1
1.0000+ 7 ~ 2.0000+ 7	4.9260+ 0	3.0310+ 0	2.9626- 1	1.0444- 3	1.4049+ 0	1.7829- 1	2.2809- 3	4.1388- 3	1.6642- 3	3.1824- 4	3.6831- 3	9.2333- 4	8.2548- 1

MATERIAL =5401 CROSS SECTION ^{124}Xe (5401)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.0903+ 2	1.0111+ 2		6.0793+ 2			0.0000+ 0		0.0000+ 0				6.4271- 3
1.0000- 2 ~ 2.0000- 2	3.1867+ 2	1.0103+ 2		2.1764+ 2			0.0000+ 0		0.0000+ 0				6.4271- 3
2.0000- 2 ~ 4.0000- 2	2.6639+ 2	1.0093+ 2		1.6441+ 2			0.0000+ 0		0.0000+ 0				6.4271- 3
4.0000- 2 ~ 7.0000- 2	2.1481+ 2	1.0075+ 2		1.1406+ 2			0.0000+ 0		0.0000+ 0				6.4271- 3
7.0000- 2 ~ 1.0000- 1	1.9267+ 2	1.0063+ 2		9.2043+ 1			0.0000+ 0		0.0000+ 0				6.4271- 3
1.0000- 1 ~ 2.0000- 1	1.7119+ 2	1.0005+ 2		7.1135+ 1			0.0000+ 0		0.0000+ 0				6.4271- 3
2.0000- 1 ~ 4.0000- 1	1.5106+ 2	9.8923+ 1		5.2141+ 1			0.0000+ 0		0.0000+ 0				6.4271- 3
4.0000- 1 ~ 7.0000- 1	1.3793+ 2	9.6956+ 1		4.0977+ 1			0.0000+ 0		0.0000+ 0				6.4271- 3
7.0000- 1 ~ 1.0000+ 0	1.3022+ 2	9.4438+ 1		3.6779+ 1			0.0000+ 0		0.0000+ 0				6.4271- 3
1.0000+ 0 ~ 2.0000+ 0	1.2220+ 2	8.8077+ 1		3.4120+ 1			0.0000+ 0		0.0000+ 0				6.4271- 3
2.0000+ 0 ~ 4.0000+ 0	1.2659+ 2	8.4409+ 1		6.2180+ 1			0.0000+ 0		0.0000+ 0				6.4276- 3
4.0000+ 0 ~ 7.0000+ 0	5.3885+ 3	4.6802+ 2		2.8825+ 3			0.0000+ 0		0.0000+ 0				6.4310- 3
7.0000+ 0 ~ 1.0000+ 1	4.5704+ 3	1.3175+ 3		3.2531+ 3			0.0000+ 0		0.0000+ 0				6.4339- 3
1.0000+ 1 ~ 2.0000+ 1	4.8090+ 2	3.1168+ 2		1.7922+ 2			0.0000+ 0		0.0000+ 0				6.4413- 3
2.0000+ 1 ~ 4.0000+ 1	1.1609+ 2	1.1474+ 2		1.3498+ 0			0.0000+ 0		0.0000+ 0				6.4667- 3
4.0000+ 1 ~ 7.0000+ 1	8.4086+ 1	8.3607+ 1		4.7909- 1			0.0000+ 0		0.0000+ 0				6.4876- 3
7.0000+ 1 ~ 1.0000+ 2	8.4041+ 1	8.3789+ 1		2.5315- 1			0.0000+ 0		0.0000+ 0				6.5159- 3
1.0000+ 2 ~ 2.0000+ 2	4.2374+ 1	4.2254+ 1		1.2025- 1			0.0000+ 0		0.0000+ 0				6.6076- 3
2.0000+ 2 ~ 4.0000+ 2	4.9095+ 1	9.5402+ 1		1.3694+ 1			0.0000+ 0		0.0000+ 0				6.8055- 3
4.0000+ 2 ~ 7.0000+ 2	2.1113+ 1	1.0100+ 1		1.1013+ 1			0.0000+ 0		0.0000+ 0				6.2642- 3
7.0000+ 2 ~ 1.0000+ 3	1.7654+ 1	0.4631+ 0		8.1913+ 0			0.0000+ 0		0.0000+ 0				6.5307- 3
1.0000+ 3 ~ 2.0000+ 3	1.4361+ 1	8.6658+ 0		5.6863+ 0			0.0000+ 0		0.0000+ 0				7.7280- 3
2.0000+ 3 ~ 4.0000+ 3	1.1308+ 1	7.7172+ 0		3.5908+ 0			0.0000+ 0		0.0000+ 0				1.0501- 2
4.0000+ 3 ~ 7.0000+ 3	9.3944+ 0	6.9532+ 0		2.4411+ 0			0.0000+ 0		0.0000+ 0				1.5723- 2
7.0000+ 3 ~ 1.0000+ 4	8.3533+ 0	6.4575+ 0		1.8959+ 0			0.0000+ 0		0.0000+ 0				2.2107- 2
1.0000+ 4 ~ 2.0000+ 4	7.3904+ 0	5.9313+ 0		1.4591+ 0			0.0000+ 0		0.0000+ 0				3.7226- 2
2.0000+ 4 ~ 4.0000+ 4	6.5485+ 0	5.4348+ 0		1.1136+ 0			0.0000+ 0		0.0000+ 0				7.2148- 2
4.0000+ 4 ~ 7.0000+ 4	5.9527+ 0	5.1612+ 0		9.0146- 1			0.0000+ 0		0.0000+ 0				1.2624- 1
7.0000+ 4 ~ 1.0000+ 5	5.7967+ 0	5.0192+ 0		7.7865- 1			0.0000+ 0		0.0000+ 0				1.7807- 1
1.0000+ 5 ~ 2.0000+ 5	5.5431+ 0	4.9843+ 0		5.5841- 1			2.6342-10		2.0438- 7				2.8274- 1
2.0000+ 5 ~ 4.0000+ 5	5.7464+ 0	5.1407+ 0	8.9150- 3	5.9570- 1			1.0657-18		8.1746- 7				3.5881- 1
4.0000+ 5 ~ 7.0000+ 5	6.1333+ 0	5.3478+ 0	2.5704- 1	5.2848- 1			5.0733-18		2.0424- 6	3.0708-18			4.3128- 1
7.0000+ 5 ~ 1.0000+ 6	5.4964+ 0	5.4991+ 0	4.4990- 1	5.4636- 1			5.8868-17		5.6061- 8	1.8122-17			4.8029- 1
1.0000+ 6 ~ 2.0000+ 6	5.6464+ 0	5.1300+ 0	8.3049- 1	5.8658- 1			1.0958-13		4.4942- 6	1.7536-10			5.3468- 1
2.0000+ 6 ~ 4.0000+ 6	5.4207+ 0	3.4892+ 0	1.2639+ 0	8.3757- 1			1.1939- 0		7.8202- 4	7.4203-14			8.3781- 1
4.0000+ 6 ~ 7.0000+ 6	4.1787+ 0	2.2648+ 0	1.8177+ 0	2.6382- 1			5.9204- 5		4.1749- 5	1.4688- 9	1.5285-18		6.8897- 1
7.0000+ 6 ~ 1.0000+ 7	4.3622+ 0	2.5729+ 0	1.6807+ 0	8.8883- 2			1.3021- 2	2.9967-13	8.2221- 3	1.3349- 5	1.1399- 8		6.6996- 1
1.0000+ 7 ~ 2.0000+ 7	4.9265+ 0	3.2290+ 0	5.9445- 1	4.6808- 3	9.1468- 1	6.6198- 3	3.2306- 2	1.9441- 2	1.4779- 2	3.0847- 3	4.0491- 3	3.7933- 4	8.2682- 1

MATERIAL =5402 CROSS SECTION ^{126}Xe (5402)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.0669+ 1	7.4538+ 0		1.3216+ 1					0.0000+ 0				6.3409- 3
1.0000- 2 ~ 2.0000- 2	1.3100+ 1	7.4533+ 0		5.6464+ 0					0.0000+ 0				6.3409- 3
2.0000- 2 ~ 4.0000- 2	1.1446+ 1	7.4526+ 0		3.9930+ 0					0.0000+ 0				6.3409- 3
4.0000- 2 ~ 7.0000- 2	1.0387+ 1	7.4515+ 0		2.9353+ 0					0.0000+ 0				6.3409- 3
7.0000- 2 ~ 1.0000- 1	9.7973+ 0	7.4501+ 0		2.3471+ 0					0.0000+ 0				6.3409- 3
1.0000- 1 ~ 2.0000- 1	9.2273+ 0	7.4472+ 0		1.7801+ 0					0.0000+ 0				6.3409- 3
2.0000- 1 ~ 4.0000- 1	8.6971+ 0	7.4404+ 0		1.2566+ 0					0.0000+ 0				6.3409- 3
4.0000- 1 ~ 7.0000- 1	8.3493+ 0	7.4292+ 0		9.2009- 1					0.0000+ 0				6.3409- 3
7.0000- 1 ~ 1.0000+ 0	8.1493+ 0	7.4168+ 0		7.3360- 1					0.0000+ 0				6.3409- 3
1.0000+ 0 ~ 2.0000+ 0	7.9398+ 0	7.3871+ 0		5.5247- 1					0.0000+ 0				6.3409- 3
2.0000+ 0 ~ 4.0000+ 0	7.7048+ 0	7.3224+ 0		3.8236- 1					0.0000+ 0				6.3412- 3
4.0000+ 0 ~ 7.0000+ 0	7.4907+ 0	7.2195+ 0		2.7139- 1					0.0000+ 0				6.3429- 3
7.0000+ 0 ~ 1.0000+ 1	7.3193+ 0	7.1023+ 0		2.0805- 1					0.0000+ 0				6.3444- 3
1.0000+ 1 ~ 2.0000+ 1	7.0219+ 0	6.8746+ 0		1.4671- 1					0.0000+ 0				6.3485- 3
2.0000+ 1 ~ 4.0000+ 1	6.6322+ 0	6.4432+ 0		8.9040- 2					0.0000+ 0				6.3571- 3
4.0000+ 1 ~ 7.0000+ 1	6.2726+ 0	5.9176+ 0		5.4887- 2					0.0000+ 0				6.3776- 3
7.0000+ 1 ~ 1.0000+ 2	5.5115+ 0	5.4720+ 0		3.9270- 2					0.0000+ 0				6.3944- 3
1.0000+ 2 ~ 2.0000+ 2	4.9006+ 0	4.8887+ 0		3.1988- 2					0.0000+ 0				6.4611- 3
2.0000+ 2 ~ 4.0000+ 2	3.8413+ 0	3.7420+ 0		9.9212- 2					0.0000+ 0				6.6066- 3
4.0000+ 2 ~ 7.0000+ 2	4.5130+ 1	2.6267+ 1		1.8863+ 1					0.0000+ 0				6.9743- 3
7.0000+ 2 ~ 1.0000+ 3	1.7774+ 1	1.2609- 1		5.1648+ 0					0.0000+ 0				8.2741- 3
1.0000+ 3 ~ 2.0000+ 3	1.4438+ 1	1.0871+ 1		3.4672+ 0					0.0000+ 0				7.1978- 3
2.0000+ 3 ~ 4.0000+ 3	1.1384+ 1	9.2317+ 0		2.1328+ 0					0.0000+ 0				9.8425- 3
4.0000+ 3 ~ 7.0000+ 3	9.4310+ 0	7.9610+ 0		1.4600+ 0					0.0000+ 0				1.4394- 2
7.0000+ 3 ~ 1.0000+ 4	8.3795+ 0	7.2386+ 0		1.1409+ 0					0.0000+ 0				2.0277- 2
1.0000+ 4 ~ 2.0000+ 4	7.4066+ 0	6.6163+ 0		8.9137- 1					0.0000+ 0				3.4380- 2
2.0000+ 4 ~ 4.0000+ 4	6.5587+ 0	5.8810+ 0		6.7570- 1					0.0000+ 0				8.7084- 2
4.0000+ 4 ~ 7.0000+ 4	6.0556+ 0	5.5274+ 0		5.2812- 1					0.0000+ 0				1.1702- 1
7.0000+ 4 ~ 1.0000+ 5	5.7950+ 0	5.3634+ 0		4.4156- 1					0.0000+ 0				1.6714- 1
1.0000+ 5 ~ 2.0000+ 5	5.6399+ 0	5.2659+ 0		3.7277- 1					1.0293- 9				2.4828- 1
2.0000+ 5 ~ 4.0000+ 5	5.7424+ 0	5.3930+ 0	4.7080- 4	3.4808- 1					4.0930- 9				3.4851- 1
4.0000+ 5 ~ 7.0000+ 5	8.1295+ 0	5.5582+ 0	2.8320- 1	2.8862- 1					1.0307- 8				4.1489- 1
7.0000+ 5 ~ 1.0000+ 6	6.4942+ 0	5.6833+ 0	5.2509- 1	2.5488- 1			0.0000+ 0		2.8917- 8				4.4617- 1
1.0000+ 6 ~ 2.0000+ 6	6.6466+ 0	5.2717+ 0	9.7823- 1	2.9631- 1			1.8227-18		4.0694- 7	2.8186-18			5.2042- 1
2.0000+ 6 ~ 4.0000+ 6	6.4295+ 0	3.5628+ 0	1.4978+ 0	3.5509- 1			2.6212-11		3.5716- 5	2.6951-15			8.2843- 1
4.0000+ 6 ~ 7.0000+ 6	4.1768+ 0	2.2724+ 0	1.7387+ 0	1.8480- 1			3.9881- 4		5.0597- 4	6.8819-11			5.9898- 1
7.0000+ 6 ~ 1.0000+ 7	4.3617+ 0	2.6793+ 0	1.7218+ 0	4.6264- 2			3.0860- 3	6.8828-17	1.5003- 3	1.6364- 6	1.8086-11		6.6988- 1
1.0000+ 7 ~ 2.0000+ 7	4.9254+ 0	3.1667+ 0	6.2264- 1	3.3113- 3	1.1734+ 0	2.1138- 2	1.9291- 2	3.8650- 3	6.6644- 3	2.4611- 3	2.6169- 3	3.3239- 4	8.2650- 1

MATERIAL =5403 CROSS SECTION ^{128}Xe (5403)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	3.6822+ 1	1.1068+ 1		2.4766+ 1					0.0000+ 0				6.2674- 3
1.0000- 2 ~ 2.0000- 2	2.1636+ 1	1.1065+ 1		1.0581+ 1					0.0000+ 0				6.2674- 3
2.0000- 2 ~ 4.0000- 2	1.8636+ 1	1.1063+ 1		7.4834+ 0					0.0000+ 0				6.2674- 3
4.0000- 2 ~ 7.0000- 2	1.6551+ 1	1.1050+ 1		5.5010+ 0					0.0000+ 0				6.2674- 3
7.0000- 2 ~ 1.0000- 1	1.5443+ 1	1.1047+ 1		4.3967+ 0					0.0000+ 0				6.2674- 3
1.0000- 1 ~ 2.0000- 1	1.4375+ 1	1.1040+ 1		3.3350+ 0					0.0000+ 0				6.2674- 3
2.0000- 1 ~ 4.0000- 1	1.3376+ 1	1.1023+ 1		2.3518+ 0					0.0000+ 0				6.2674- 3
4.0000- 1 ~ 7.0000- 1	1.2718+ 1	1.0995+ 1		1.7210+ 0					0.0000+ 0				6.2674- 3
7.0000- 1 ~ 1.0000+ 0	1.2332+ 1	1.0962+ 1		1.3696+ 0					0.0000+ 0				6.2674- 3
1.0000+ 0 ~ 2.0000+ 0	1.1921+ 1	1.0892+ 1		1.0291+ 0					0.0000+ 0				6.2674- 3
2.0000+ 0 ~ 4.0000+ 0	1.1441+ 1	1.0733+ 1		7.0794- 1					0.0000+ 0				6.2676- 3
4.0000+ 0 ~ 7.0000+ 0	1.0978+ 1	1.0481+ 1		4.9729- 1					0.0000+ 0				6.2684- 3
7.0000+ 0 ~ 1.0000+ 1	1.0572+ 1	1.0196+ 1		3.7624- 1					0.0000+ 0				6.2701- 3
1.0000+ 1 ~ 2.0000+ 1	9.9021+ 0	9.6448+ 0		2.5742- 1					0.0000+ 0				6.2814- 3
2.0000+ 1 ~ 4.0000+ 1	8.7599+ 0	8.6142+ 0		1.4570- 1					0.0000+ 0				6.3687- 3
4.0000+ 1 ~ 7.0000+ 1	7.4522+ 0	7.3741+ 0		7.8097- 2					0.0000+ 0				6.2805- 3
7.0000+ 1 ~ 1.0000+ 2	6.5747+ 0	6.3282+ 0		4.6544- 2					0.0000+ 0				6.3016- 3
1.0000+ 2 ~ 2.0000+ 2	4.7227+ 0	4.6694+ 0		3.3294- 2					0.0000+ 0				6.3422- 3
2.0000+ 2 ~ 4.0000+ 2	3.6444+ 1	2.9097+ 1		6.3463+ 0					0.0000+ 0				6.4881- 3
4.0000+ 2 ~ 7.0000+ 2	8.1006+ 0	5.9532+ 0		2.1374+ 0					0.0000+ 0				6.7679- 3
7.0000+ 2 ~ 1.0000+ 3	7.8323+ 1	7.5045+ 1		1.2778+ 0					0.0000+ 0				8.0210- 3
1.0000+ 3 ~ 2.0000+ 3	9.6603+ 0	8.7390+ 0		8.1135- 1					0.0000+ 0				8.8416- 3
2.0000+ 3 ~ 4.0000+ 3	1.1952+ 1	1.0449+ 1		9.0279- 1					0.0000+ 0				9.0742- 3
4.0000+ 3 ~ 7.0000+ 3	9.4198+ 0	8.7769+ 0		6.4398- 1					0.0000+ 0				1.3488- 2
7.0000+ 3 ~ 1.0000+ 4	8.3694+ 0	7.8481+ 0		5.2127- 1					0.0000+ 0				1.9013- 2
1.0000+ 4 ~ 2.0000+ 4	7.3987+ 0	6.9928+ 0		4.0666- 1					0.0000+ 0				3.2279- 2
2.0000+ 4 ~ 4.0000+ 4	6.5508+ 0	6.2597+ 0		2.9111- 1					0.0000+ 0				8.3182- 2
4.0000+ 4 ~ 7.0000+ 4	6.0617+ 0	5.8360+ 0		2.1968- 1					0.0000+ 0				1.1088- 1
7.0000+ 4 ~ 1.0000+ 5	5.7828+ 0	5.6170+ 0		1.7691- 1					0.0000+ 0				1.6940- 1
1.0000+ 5 ~ 2.0000+ 5	5.6379+ 0	5.4868+ 0		1.5207- 1					1.4566-11				2.3847- 1
2.0000+ 5 ~ 4.0000+ 5	5.7496+ 0	5.5892+ 0		1.4496- 1					5.8220-11				3.3812- 1
4.0000+ 5 ~ 7.0000+ 5	6.1278+ 0	5.7875+ 0	2.4856- 1	1.1212- 1					1.4822-10				3.9997- 1
7.0000+ 5 ~ 1.0000+ 5	6.4928+ 0	6.0490+ 0	5.4428- 1	9.9667- 2					4.3608-10				4.3243- 1
1.0000+ 6 ~ 2.0000+ 6	6.6472+ 0	5.4148+ 0	1.0348+ 0	9.7394- 2					7.2852- 9	9.1142-21			5.0888- 1
2.0000+ 6 ~ 4.0000+ 6	5.4241+ 0	3.6972+ 0	1.7298+ 0	9.0597- 2			1.4710-14		2.0210- 8	6.1084-18			6.2150- 1
4.0000+ 6 ~ 7.0000+ 6	4.1765+ 0	2.2748+ 0	1.8715+ 0	2.8775- 2			4.9068- 6		7.1892- 5	1.2081-11			6.8824- 1
7.0000+ 6 ~ 1.0000+ 7	4.3612+ 0	2.6811+ 0	1.7628+ 0	4.4366- 3	6.7092- 4		1.7212- 3	6.3205-19	3.2564- 4	3.7397- 7	1.4603-13		8.8883- 1
1.0000+ 7 ~ 2.0000+ 7	4.9260+ 0	3.1992+ 0	4.2533- 1	1.2060- 3	1.1641+ 0	7.2066- 2	2.9282- 2	2.3300- 3	6.3619- 3	2.5337- 3	2.2486- 3	2.7417- 4	8.2849- 1

MATERIAL =5404 CROSS SECTION

^{129}Xe (5404)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	8.5954+ 1	2.1053+ 1		6.4912+ 1			0.0000+ 0		0.0000+ 0				6.2166- 3
1.0000- 2 ~ 2.0000- 2	4.8801+ 1	2.1046+ 1		2.7756+ 1			0.0000+ 0		0.0000+ 0				6.2166- 3
2.0000- 2 ~ 4.0000- 2	4.0713+ 1	2.1035+ 1		1.9677+ 1			0.0000+ 0		0.0000+ 0				6.2166- 3
4.0000- 2 ~ 7.0000- 2	3.6457+ 1	2.1018+ 1		1.4439+ 1			0.0000+ 0		0.0000+ 0				6.2166- 3
7.0000- 2 ~ 1.0000- 1	3.2573+ 1	2.0997+ 1		1.1576+ 1			0.0000+ 0		0.0000+ 0				6.2166- 3
1.0000- 1 ~ 2.0000- 1	2.9799+ 1	2.0952+ 1		8.8469+ 0			0.0000+ 0		0.0000+ 0				6.2166- 3
2.0000- 1 ~ 4.0000- 1	2.7147+ 1	2.0849+ 1		6.2978+ 0			0.0000+ 0		0.0000+ 0				6.2166- 3
4.0000- 1 ~ 7.0000- 1	2.5380+ 1	2.0678+ 1		4.7022+ 0			0.0000+ 0		0.0000+ 0				6.2166- 3
7.0000- 1 ~ 1.0000+ 0	2.4311+ 1	2.0475+ 1		3.8368+ 0			0.0000+ 0		0.0000+ 0				6.2166- 3
1.0000+ 0 ~ 2.0000+ 0	2.3123+ 1	2.0049+ 1		3.0799+ 0			0.0000+ 0		0.0000+ 0				6.2166- 3
2.0000+ 0 ~ 4.0000+ 0	2.1712+ 1	1.9077+ 1		2.6352+ 0			0.0000+ 0		0.0000+ 0				6.2168- 3
4.0000+ 0 ~ 7.0000+ 0	2.1451+ 1	1.7461+ 1		4.0002+ 0			0.0000+ 0		0.0000+ 0				6.2180- 3
7.0000+ 0 ~ 1.0000+ 1	6.4424+ 2	4.7399+ 1		5.9884+ 2			0.0000+ 0		0.0000+ 0				6.2191- 3
1.0000+ 1 ~ 2.0000+ 1	2.2483+ 1	1.6011+ 1		6.4720+ 0			0.0000+ 0		0.0000+ 0				6.2223- 3
2.0000+ 1 ~ 4.0000+ 1	1.1370+ 1	1.1103+ 1		2.6799- 1			0.0000+ 0		0.0000+ 0				6.2292- 3
4.0000+ 1 ~ 7.0000+ 1	7.6310+ 0	7.4670+ 0		1.6387- 1			0.0000+ 0		0.0000+ 0				6.2466- 3
7.0000+ 1 ~ 1.0000+ 2	1.0601+ 2	4.5947+ 1		6.0053+ 1			0.0000+ 0		0.0000+ 0				6.2606- 3
1.0000+ 2 ~ 2.0000+ 2	5.8158+ 1	3.5384+ 1		2.2794+ 1			0.0000+ 0		0.0000+ 0				6.3196- 3
2.0000+ 2 ~ 4.0000+ 2	1.2828+ 1	7.0428+ 0		5.7834+ 0			0.0000+ 0		0.0000+ 0				5.4529- 3
4.0000+ 2 ~ 7.0000+ 2	3.3543+ 1	2.4423+ 1		8.1198+ 0			0.0000+ 0		0.0000+ 0				5.7919- 3
7.0000+ 2 ~ 1.0000+ 3	1.5384+ 1	1.3008+ 1		2.3754+ 0			0.0000+ 0		0.0000+ 0				8.0704- 3
1.0000+ 3 ~ 2.0000+ 3	1.2722+ 1	9.4648+ 0		3.2573+ 0			0.0000+ 0		0.0000+ 0				6.9464- 3
2.0000+ 3 ~ 4.0000+ 3	1.2699+ 1	9.9426+ 0		2.9568+ 0			0.0000+ 0		0.0000+ 0				9.2928- 3
4.0000+ 3 ~ 7.0000+ 3	9.4764+ 0	8.3704+ 0		1.1060+ 0			0.0000+ 0		0.0000+ 0				1.3879- 2
7.0000+ 3 ~ 1.0000+ 4	8.4209+ 0	7.5519+ 0		8.8901- 1			0.0000+ 0		0.0000+ 0				1.9590- 2
1.0000+ 4 ~ 2.0000+ 4	7.4413+ 0	6.7762+ 0		6.6611- 1			0.0000+ 0		0.0000+ 0				3.3242- 2
2.0000+ 4 ~ 4.0000+ 4	8.6745+ 0	8.1004+ 0	5.7982- 8	4.7407- 1			0.0000+ 0		0.0000+ 0				8.4556- 2
4.0000+ 4 ~ 7.0000+ 4	6.0628+ 0	5.6021+ 0	2.6427- 1	2.9778- 1			0.0000+ 0		0.0000+ 0				1.1766- 1
7.0000+ 4 ~ 1.0000+ 5	5.7735+ 0	5.1663+ 0	4.1630- 1	2.0293- 1			0.0000+ 0		0.0000+ 0				1.7276- 1
1.0000+ 5 ~ 2.0000+ 5	5.5360+ 0	4.9868+ 0	5.0266- 1	1.4721- 1			1.2427-20		3.6827- 8				2.6191- 1
2.0000+ 5 ~ 4.0000+ 5	5.7370+ 0	5.0266+ 0	5.9830- 1	1.1184- 1			4.9709-20		1.4731- 7				3.7539- 1
4.0000+ 5 ~ 7.0000+ 5	8.1251+ 0	5.0776+ 0	9.8437- 1	6.2848- 2			1.8369-19		3.3126- 7				4.5379- 1
7.0000+ 5 ~ 1.0000+ 6	6.4927+ 0	5.1344+ 0	1.3167+ 0	4.1686- 2			1.7119-18		6.3669- 7				4.9179- 1
1.0000+ 6 ~ 2.0000+ 6	6.5431+ 0	4.8169+ 0	1.6943+ 0	3.1394- 2			1.6419-16		2.2080- 8				6.6821- 1
2.0000+ 6 ~ 4.0000+ 6	5.4083+ 0	3.3652+ 0	2.0199+ 0	1.5744- 2			9.1642- 9		1.3522- 5	2.2392-17			8.5465- 1
4.0000+ 6 ~ 7.0000+ 6	4.1769+ 0	2.2615+ 0	1.9120+ 0	9.0804- 3			3.9641- 5		4.0057- 5	6.0304-13			6.9857- 1
7.0000+ 6 ~ 1.0000+ 7	4.3610+ 0	2.6888+ 0	1.2626+ 0	1.1091- 3	4.7691- 1		4.4363- 4	1.2559-19	1.6032- 4	6.6089- 9	7.1023-13	4.8213-18	8.6882- 1
1.0000+ 7 ~ 2.0000+ 7	4.9262+ 0	3.3474+ 0	2.6646- 1	1.0801- 3	1.2260+ 0	6.3547- 2	8.4306- 3	2.6607- 3	4.0512- 3	6.6264- 4	4.4296- 3	7.3933- 4	8.2648- 1

MATERIAL =5405 CROSS SECTION

^{130}Xe (5405)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	9.4948+ 1	1.4484+ 1		8.0464+ 1					0.0000+ 0				6.1786- 3
1.0000- 2 ~ 2.0000- 2	4.8867+ 1	1.4483+ 1		3.4383+ 1					0.0000+ 0				6.1785- 3
2.0000- 2 ~ 4.0000- 2	3.8786+ 1	1.4483+ 1		2.4313+ 1					0.0000+ 0				6.1785- 3
4.0000- 2 ~ 7.0000- 2	3.2567+ 1	1.4482+ 1		1.7875+ 1					0.0000+ 0				6.1785- 3
7.0000- 2 ~ 1.0000- 1	2.8786+ 1	1.4481+ 1		1.4308+ 1					0.0000+ 0				6.1785- 3
1.0000- 1 ~ 2.0000- 1	2.5352+ 1	1.4478+ 1		1.0854+ 1					0.0000+ 0				6.1785- 3
2.0000- 1 ~ 4.0000- 1	2.2146+ 1	1.4472+ 1		7.6751+ 0					0.0000+ 0				6.1785- 3
4.0000- 1 ~ 7.0000- 1	2.0093+ 1	1.4462+ 1		5.6300+ 0					0.0000+ 0				6.1785- 3
7.0000- 1 ~ 1.0000+ 0	1.8958+ 1	1.4460+ 1		4.6064+ 0					0.0000+ 0				6.1785- 3
1.0000+ 0 ~ 2.0000+ 0	1.7839+ 1	1.4424+ 1		3.4141+ 0					0.0000+ 0				6.1785- 3
2.0000+ 0 ~ 4.0000+ 0	1.6762+ 1	1.4365+ 1		2.3969+ 0					0.0000+ 0				6.1788- 3
4.0000+ 0 ~ 7.0000+ 0	1.6009+ 1	1.4288+ 1		1.7402+ 0					0.0000+ 0				6.1774- 3
7.0000+ 0 ~ 1.0000+ 1	1.5524+ 1	1.4154+ 1		1.3705+ 0					0.0000+ 0				6.1781- 3
1.0000+ 1 ~ 2.0000+ 1	1.4828+ 1	1.3913+ 1		1.0128+ 0					0.0000+ 0				6.1804- 3
2.0000+ 1 ~ 4.0000+ 1	1.4061+ 1	1.3392+ 1		6.6696- 1					0.0000+ 0				6.1856- 3
4.0000+ 1 ~ 7.0000+ 1	1.3054+ 1	1.2615+ 1		4.3951- 1					0.0000+ 0				6.1981- 3
7.0000+ 1 ~ 1.0000+ 2	1.2112+ 1	1.1602+ 1		5.0985- 1					0.0000+ 0				6.2103- 3
1.0000+ 2 ~ 2.0000+ 2	1.0601+ 1	1.0413+ 1		1.8763- 1					0.0000+ 0				6.2602- 3
2.0000+ 2 ~ 4.0000+ 2	8.1313+ 0	8.0417+ 0		8.9817- 2					0.0000+ 0				6.3782- 3
4.0000+ 2 ~ 7.0000+ 2	3.0366+ 1	2.4467+ 1		5.8876+ 0					0.0000+ 0				6.6623- 3
7.0000+ 2 ~ 1.0000+ 3	7.4187+ 0	6.7947+ 0		6.2396- 1					0.0000+ 0				8.9344- 3
1.0000+ 3 ~ 2.0000+ 3	1.2832+ 1	1.1767+ 1		1.0763+ 0					0.0000+ 0				8.7507- 3
2.0000+ 3 ~ 4.0000+ 3	1.4430+ 1	1.2898+ 1		1.7314+ 0					0.0000+ 0				9.9743- 3
4.0000+ 3 ~ 7.0000+ 3	9.4708+ 0	8.8492+ 0		6.2167- 1					0.0000+ 0				1.3373- 2
7.0000+ 3 ~ 1.0000+ 4	8.4159+ 0	7.9122+ 0		5.0370- 1					0.0000+ 0				1.8880- 2
1.0000+ 4 ~ 2.0000+ 4	7.4378+ 0	7.0481+ 0		3.9148- 1					0.0000+ 0				3.2110- 2
2.0000+ 4 ~ 4.0000+ 4	6.5771+ 0	6.2978+ 0		2.7942- 1					0.0000+ 0				6.2956- 2
4.0000+ 4 ~ 7.0000+ 4	6.0636+ 0	5.5591+ 0		2.0461- 1					0.0000+ 0				1.1088- 1
7.0000+ 4 ~ 1.0000+ 5	5.7926+ 0	5.5244+ 0		1.6842- 1					0.0000+ 0				1.5905- 1
1.0000+ 5 ~ 2.0000+ 5	5.6344+ 0	5.4886+ 0		1.4571- 1					1.5781-13				2.3804- 1
2.0000+ 5 ~ 4.0000+ 5	5.7428+ 0	5.6044+ 0		1.3821- 1					8.3123-13				3.3388- 1
4.0000+ 5 ~ 7.0000+ 5	8.1278+ 0	5.8924+ 0	1.0221- 1	1.9245- 1					1.5975-12				5.8082- 1
7.0000+ 5 ~ 1.0000+ 6	6.4910+ 0	5.9120+ 0	4.7738- 1	1.0171- 1					4.6266-12				4.2764- 1
1.0000+ 6 ~ 2.0000+ 6	6.6471+ 0	5.5127+ 0	9.2662- 1	1.0644- 1					8.5831-11				4.9788- 1
2.0000+ 6 ~ 4.0000+ 6	5.4084+ 0	3.8117+ 0	1.6994+ 0	8.5335- 2			2.5838-18		3.6167- 8	1.4499-17			9.1482- 1
4.0000+ 6 ~ 7.0000+ 6	4.1768+ 0	2.2783+ 0	1.8716+ 0	2.7802- 2			4.1126- 6		7.3654- 5	7.5604-13			5.8593- 1
7.0000+ 6 ~ 1.0000+ 7	4.3607+ 0	2.6944+ 0	1.7274+ 0	6.3066- 3	2.1832- 2		2.2284- 4	3.1390-21	8.1011- 5	2.4820- 8	1.8103-16		8.6872- 1
1.0000+ 7 ~ 2.0000+ 7	4.9260+ 0	3.1603+ 0	3.1493- 1	1.2433- 3	1.3217+ 0	1.1352- 1	1.1861- 2	1.8470- 3	3.5846- 3	2.5888- 3	2.1826- 3	3.1291- 4	8.2847- 1

MATERIAL =5406

CROSS SECTION

^{131}Xe (5406)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.8652+ 2	2.4026+ 1		2.6260+ 2					0.0000+ 0				6.1369- 3
1.0000- 2 ~ 2.0000- 2	1.3633+ 2	2.4026+ 1		1.1231+ 2					0.0000+ 0				6.1369- 3
2.0000- 2 ~ 4.0000- 2	1.0369+ 2	2.4026+ 1		7.9553+ 1					0.0000+ 0				6.1369- 3
4.0000- 2 ~ 7.0000- 2	8.2692+ 1	2.4028+ 1		5.8686+ 1					0.0000+ 0				6.1369- 3
7.0000- 2 ~ 1.0000- 1	7.1114+ 1	2.4027+ 1		4.7087+ 1					0.0000+ 0				6.1369- 3
1.0000- 1 ~ 2.0000- 1	6.0018+ 1	2.4029+ 1		3.5988+ 1					0.0000+ 0				6.1369- 3
2.0000- 1 ~ 4.0000- 1	4.9814+ 1	2.4038+ 1		2.5876+ 1					0.0000+ 0				6.1369- 3
4.0000- 1 ~ 7.0000- 1	4.3813+ 1	2.4059+ 1		1.9559+ 1					0.0000+ 0				6.1369- 3
7.0000- 1 ~ 1.0000+ 0	4.0312+ 1	2.4099+ 1		1.6214+ 1					0.0000+ 0				6.1369- 3
1.0000+ 0 ~ 2.0000+ 0	3.7687+ 1	2.4249+ 1		1.3317+ 1					0.0000+ 0				6.1369- 3
2.0000+ 0 ~ 4.0000+ 0	3.6624+ 1	2.5029+ 1		1.1696+ 1					0.0000+ 0				6.1370- 3
4.0000+ 0 ~ 7.0000+ 0	4.2217+ 1	2.8787+ 1		1.3430+ 1					0.0000+ 0				6.1382- 3
7.0000+ 0 ~ 1.0000+ 1	7.0009+ 1	4.5854+ 1		2.4156+ 1					0.0000+ 0				6.1392- 3
1.0000+ 1 ~ 2.0000+ 1	5.8421+ 3	2.6703+ 3		1.1719+ 3					0.0000+ 0				6.1422- 3
2.0000+ 1 ~ 4.0000+ 1	3.5481+ 1	3.1940+ 1		3.6404+ 0					0.0000+ 0				6.1487- 3
4.0000+ 1 ~ 7.0000+ 1	3.6664+ 1	1.7610+ 1		1.9073+ 1					0.0000+ 0				6.1660- 3
7.0000+ 1 ~ 1.0000+ 2	2.4210+ 1	1.2558+ 1		1.1655+ 1					0.0000+ 0				6.1784- 3
1.0000+ 2 ~ 2.0000+ 2	1.8391+ 1	1.0142+ 1		8.2485+ 0					0.0000+ 0				6.2351- 3
2.0000+ 2 ~ 4.0000+ 2	2.0081+ 1	1.4624+ 1		5.4574+ 0					0.0000+ 0				6.3837- 3
4.0000+ 2 ~ 7.0000+ 2	2.5304+ 1	2.0790+ 1		4.5143+ 0					0.0000+ 0				6.6030- 3
7.0000+ 2 ~ 1.0000+ 3	1.6309+ 1	1.2698+ 1		3.6129+ 0					0.0000+ 0				5.9650- 3
1.0000+ 3 ~ 2.0000+ 3	1.0541+ 1	8.4378+ 0		2.1077+ 0					0.0000+ 0				6.8241- 3
2.0000+ 3 ~ 4.0000+ 3	9.6898+ 0	8.3011+ 0		1.3887+ 0					0.0000+ 0				9.1330- 3
4.0000+ 3 ~ 7.0000+ 3	8.2180+ 0	7.2725+ 0		9.4546- 1					0.0000+ 0				1.3653- 2
7.0000+ 3 ~ 1.0000+ 4	7.4835+ 0	6.7384+ 0		7.4515- 1					0.0000+ 0				1.9278- 2
1.0000+ 4 ~ 2.0000+ 4	6.8067+ 0	6.2617+ 0		5.6494- 1					0.0000+ 0				3.2706- 2
2.0000+ 4 ~ 4.0000+ 4	6.2375+ 0	5.8815+ 0		3.7594- 1					0.0000+ 0				6.3814- 2
4.0000+ 4 ~ 7.0000+ 4	5.9168+ 0	5.6664+ 0		2.6142- 1					0.0000+ 0				1.1166- 1
7.0000+ 4 ~ 1.0000+ 5	5.7518+ 0	5.5165+ 0	3.7225- 2	1.9926- 1					0.0000+ 0				1.6110- 1
1.0000+ 5 ~ 2.0000+ 5	5.5331+ 0	5.3041+ 0	1.8313- 1	1.4548- 1					2.4137- 9				2.4636- 1
2.0000+ 5 ~ 4.0000+ 5	5.7352+ 0	5.3499+ 0	2.7992- 1	1.0526- 1			0.0000+ 0		6.0721- 9				5.5082- 1
4.0000+ 5 ~ 7.0000+ 5	6.1255+ 0	5.4781+ 0	5.9488- 1	8.4884- 2			0.0000+ 0		7.8998- 9				4.2052- 1
7.0000+ 5 ~ 1.0000+ 6	6.4916+ 0	5.5261+ 0	9.2285- 1	4.2698- 2			0.0000+ 0		1.6139- 8				4.5714- 1
1.0000+ 6 ~ 2.0000+ 6	5.5432+ 0	5.1129+ 0	1.3965+ 0	3.3906- 2			3.4553-18		1.2169- 7				5.3616- 1
2.0000+ 6 ~ 4.0000+ 6	5.4084+ 0	3.4504+ 0	1.9370+ 0	1.8327- 2			8.5188-12		2.4226- 8	1.7448-18			6.4158- 1
4.0000+ 6 ~ 7.0000+ 6	4.1787+ 0	2.2751+ 0	1.8955+ 0	9.8114- 3	2.3129- 3		9.8089- 9		1.4673- 5	9.5122-14			5.9858- 1
7.0000+ 6 ~ 1.0000+ 7	4.3497+ 0	2.6766+ 0	8.8042- 1	1.1237- 3	8.9078- 1		2.2308- 4		6.6407- 5	1.0473- 9	3.4160-15	7.4436-18	6.8982- 1
1.0000+ 7 ~ 2.0000+ 7	4.9260+ 0	3.3506+ 0	1.3986- 1	1.0802- 3	1.3172+ 0	9.9058- 2	6.9693- 3	1.8684- 3	2.6912- 3	9.6473- 4	3.6842- 3	7.6481- 4	8.2648- 1

MATERIAL =5407

CROSS SECTION

^{132}Xe (5407)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.6424+ 0	3.1499+ 0		1.3925+ 0					0.0000+ 0				6.0980- 3
1.0000- 2 ~ 2.0000- 2	3.7460+ 0	3.1499+ 0		5.9507- 1					0.0000+ 0				6.0980- 3
2.0000- 2 ~ 4.0000- 2	3.6706+ 0	3.1498+ 0		4.2072- 1					0.0000+ 0				6.0980- 3
4.0000- 2 ~ 7.0000- 2	3.4568+ 0	3.1499+ 0		3.0695- 1					0.0000+ 0				6.0980- 3
7.0000- 2 ~ 1.0000- 1	3.3973+ 0	3.1498+ 0		2.4749- 1					0.0000+ 0				6.0980- 3
1.0000- 1 ~ 2.0000- 1	3.3382+ 0	3.1498+ 0		1.8840- 1					0.0000+ 0				6.0980- 3
2.0000- 1 ~ 4.0000- 1	3.2827+ 0	3.1496+ 0		1.3305- 1					0.0000+ 0				6.0980- 3
4.0000- 1 ~ 7.0000- 1	3.2472+ 0	3.1495+ 0		9.7832- 2					0.0000+ 0				6.0980- 3
7.0000- 1 ~ 1.0000+ 0	3.2272+ 0	3.1490+ 0		7.8213- 2					0.0000+ 0				6.0980- 3
1.0000+ 0 ~ 2.0000+ 0	3.2079+ 0	3.1483+ 0		5.9808- 2					0.0000+ 0				6.0980- 3
2.0000+ 0 ~ 4.0000+ 0	3.1889+ 0	3.1467+ 0		4.2234- 2					0.0000+ 0				6.0980- 3
4.0000+ 0 ~ 7.0000+ 0	3.1762+ 0	3.1440+ 0		3.1158- 2					0.0000+ 0				6.0985- 3
7.0000+ 0 ~ 1.0000+ 1	3.1869+ 0	3.1408+ 0		2.5052- 2					0.0000+ 0				6.0989- 3
1.0000+ 1 ~ 2.0000+ 1	3.1559+ 0	3.1341+ 0		1.9240- 2					0.0000+ 0				6.1005- 3
2.0000+ 1 ~ 4.0000+ 1	3.1327+ 0	3.1187+ 0		1.3997- 2					0.0000+ 0				6.1043- 3
4.0000+ 1 ~ 7.0000+ 1	3.1043+ 0	3.0934+ 0		1.0906- 2					0.0000+ 0				6.1162- 3
7.0000+ 1 ~ 1.0000+ 2	3.0724+ 0	3.0629+ 0		9.5008- 3					0.0000+ 0				6.1241- 3
1.0000+ 2 ~ 2.0000+ 2	2.9986+ 0	2.9898+ 0		8.0281- 3					0.0000+ 0				6.1672- 3
2.0000+ 2 ~ 4.0000+ 2	2.7479+ 0	2.7344+ 0		1.3548- 2					0.0000+ 0				6.2704- 3
4.0000+ 2 ~ 7.0000+ 2	5.1698+ 1	4.4034+ 1		7.5647+ 0					0.0000+ 0				6.6519- 3
7.0000+ 2 ~ 1.0000+ 3	5.5178+ 0	5.4721+ 0		4.5562- 2					0.0000+ 0				6.7842- 3
1.0000+ 3 ~ 2.0000+ 3	3.8153+ 0	3.8132+ 0		2.0584- 3					0.0000+ 0				8.5520- 3
2.0000+ 3 ~ 4.0000+ 3	5.1788+ 0	4.4790+ 0		6.9957- 1					0.0000+ 0				8.8806- 3
4.0000+ 3 ~ 7.0000+ 3	8.6169+ 0	8.5062+ 0		1.1071- 1					0.0000+ 0				1.2881- 2
7.0000+ 3 ~ 1.0000+ 4	8.4078+ 0	8.3078+ 0		9.9578- 2					0.0000+ 0				1.8110- 2
1.0000+ 4 ~ 2.0000+ 4	7.4262+ 0	7.3656+ 0		6.0656- 2					0.0000+ 0				3.0828- 2
2.0000+ 4 ~ 4.0000+ 4	6.5881+ 0	6.5228+ 0		4.5242- 2					0.0000+ 0				8.0797- 2
4.0000+ 4 ~ 7.0000+ 4	6.0606+ 0	6.0267+ 0		3.3920- 2					0.0000+ 0				1.0767- 1
7.0000+ 4 ~ 1.0000+ 5	5.7910+ 0	5.7619+ 0		2.9132- 2					0.0000+ 0				1.5519- 1
1.0000+ 5 ~ 2.0000+ 5	5.6323+ 0	5.6073+ 0		2.4986- 2					3.8268-15				2.3280- 1
2.0000+ 5 ~ 4.0000+ 5	5.7401+ 0	5.7178+ 0		2.2550- 2					1.4515-14				3.3717- 1
4.0000+ 5 ~ 7.0000+ 5	6.1262+ 0	6.0941+ 0	8.0923- 3	2.5982- 2					3.7857-14				5.7748- 1
7.0000+ 5 ~ 1.0000+ 6	6.4900+ 0	6.0912+ 0	3.8376- 1	1.6166- 2					1.1856-13				4.1488- 1
1.0000+ 6 ~ 2.0000+ 6	6.6463+ 0	6.6747+ 0	8.6777- 1	1.3368- 2					2.1391-12				4.8384- 1
2.0000+ 6 ~ 4.0000+ 6	5.4298+ 0	3.7337+ 0	1.6811+ 0	8.2271- 3			2.1618-21		1.3007- 9	6.3463-19			8.0084- 1
4.0000+ 6 ~ 7.0000+ 6	4.1786+ 0	2.2876+ 0	1.8869+ 0	2.2299- 3			4.0609-11		1.1884- 8	1.0576-15			5.9334- 1
7.0000+ 6 ~ 1.0000+ 7	4.3604+ 0	2.6974+ 0	1.6951+ 0	7.2291- 4	5.6647- 2		2.9263- 5		2.1882- 6	2.8823- 9	2.2686-17		6.8969- 1
1.0000+ 7 ~ 2.0000+ 7	4.9248+ 0	3.3362+ 0	2.8367- 1	1.0624- 3	1.1367+ 0	1.6619- 1	4.2088- 3	1.3602- 3	2.4498- 3	2.3084- 3	1.9538- 3	3.0146- 4	8.2847- 1

MATERIAL =5408 CROSS SECTION ^{133}Xe (5408)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.9323+ 2	3.6000+ 0		6.8690+ 2					0.0000+ 0				6.0695- 3
1.0000- 2 ~ 2.0000- 2	2.5477+ 2	3.6000+ 0		2.5036+ 2					0.0000+ 0				6.0695- 3
2.0000- 2 ~ 4.0000- 2	1.8086+ 2	3.6000+ 0		1.7703+ 2					0.0000+ 0				6.0595- 3
4.0000- 2 ~ 7.0000- 2	1.3415+ 2	3.6000+ 0		1.3010+ 2					0.0000+ 0				6.0595- 3
7.0000- 2 ~ 1.0000- 1	1.0807+ 2	3.6000+ 0		1.0407+ 2					0.0000+ 0				6.0595- 3
1.0000- 1 ~ 2.0000- 1	8.2924+ 1	3.6000+ 0		7.9170+ 1					0.0000+ 0				6.0595- 3
2.0000- 1 ~ 4.0000- 1	6.0904+ 1	3.6000+ 0		5.6981+ 1					0.0000+ 0				6.0595- 3
4.0000- 1 ~ 7.0000- 1	4.5192+ 1	3.6000+ 0		4.1141+ 1					0.0000+ 0				6.0595- 3
7.0000- 1 ~ 1.0000+ 0	3.6787+ 1	3.6000+ 0		3.2908+ 1					0.0000+ 0				6.0595- 3
1.0000+ 0 ~ 2.0000+ 0	2.8710+ 1	3.6000+ 0		2.5035+ 1					0.0000+ 0				6.0595- 3
2.0000+ 0 ~ 4.0000+ 0	2.1364+ 1	3.6000+ 0		1.7702+ 1					0.0000+ 0				6.0595- 3
4.0000+ 0 ~ 7.0000+ 0	1.6680+ 1	3.6000+ 0		1.3009+ 1					0.0000+ 0				6.0805- 3
7.0000+ 0 ~ 1.0000+ 1	1.4002+ 1	3.6000+ 0		1.0406+ 1					0.0000+ 0				5.0608- 3
1.0000+ 1 ~ 2.0000+ 1	1.1574+ 1	3.6000+ 0		7.9165+ 0					0.0000+ 0				5.0626- 3
2.0000+ 1 ~ 4.0000+ 1	9.2339+ 0	3.6000+ 0		5.6978+ 0					0.0000+ 0				6.0679- 3
4.0000+ 1 ~ 7.0000+ 1	7.7669+ 0	3.6000+ 0		4.1138+ 0					0.0000+ 0				6.0795- 3
7.0000+ 1 ~ 1.0000+ 2	3.4509+ 1	2.7851+ 1		6.6539+ 0					0.0000+ 0				5.0897- 3
1.0000+ 2 ~ 2.0000+ 2	3.9434+ 1	3.3650+ 1		5.5844+ 0					0.0000+ 0				5.1363- 3
2.0000+ 2 ~ 4.0000+ 2	2.8962+ 1	2.5858+ 1		3.1066+ 0					0.0000+ 0				5.2460- 3
4.0000+ 2 ~ 7.0000+ 2	2.2269+ 1	2.0429+ 1		1.8597+ 0					0.0000+ 0				5.5401- 3
7.0000+ 2 ~ 1.0000+ 3	1.8561+ 1	1.7284+ 1		1.2975+ 0					0.0000+ 0				5.7625- 3
1.0000+ 3 ~ 2.0000+ 3	1.5041+ 1	1.4176+ 1		8.6683- 1					0.0000+ 0				6.6764- 3
2.0000+ 3 ~ 4.0000+ 3	1.1774+ 1	1.1227+ 1		5.4687- 1					0.0000+ 0				8.7414- 3
4.0000+ 3 ~ 7.0000+ 3	9.7139+ 0	9.3366+ 0		3.7837- 1					0.0000+ 0				1.3026- 2
7.0000+ 3 ~ 1.0000+ 4	8.5910+ 0	8.3011+ 0		2.8992- 1					0.0000+ 0				1.8986- 2
1.0000+ 4 ~ 2.0000+ 4	7.5415+ 0	7.3373+ 0		2.0423- 1					0.0000+ 0				3.1274- 2
2.0000+ 4 ~ 4.0000+ 4	8.8209+ 0	8.4928+ 0		1.2828- 1					0.0000+ 0				8.1476- 2
4.0000+ 4 ~ 7.0000+ 4	6.0725+ 0	5.9866+ 0		8.5894- 2					0.0000+ 0				1.0844- 1
7.0000+ 4 ~ 1.0000+ 5	5.7786+ 0	5.7126+ 0		5.7028- 2					0.0000+ 0				1.5518- 1
1.0000+ 5 ~ 2.0000+ 5	5.6312+ 0	5.5706+ 0		5.2496- 2					2.9263-12				2.3403- 1
2.0000+ 5 ~ 4.0000+ 5	5.7381+ 0	5.6213+ 0	7.9835- 2	3.7607- 2					1.1706-11				3.3301- 1
4.0000+ 5 ~ 7.0000+ 5	8.1248+ 0	5.7870+ 0	3.3320- 1	2.5089- 2					2.7048-11				3.9869- 1
7.0000+ 5 ~ 1.0000+ 6	5.4901+ 0	5.7071+ 0	7.5786- 1	1.5038- 2					6.7236-11				4.4249- 1
1.0000+ 6 ~ 2.0000+ 6	5.6491+ 0	5.1886+ 0	1.3500+ 0	1.0092- 2			0.0000+ 0		5.6761-10				6.2871- 1
2.0000+ 6 ~ 4.0000+ 6	5.4097+ 0	3.4729+ 0	1.9185+ 0	5.7445- 3			4.2258-16		8.8181- 8	2.1954-19			6.3828- 1
4.0000+ 6 ~ 7.0000+ 6	4.1788+ 0	2.2845+ 0	1.8758+ 0	1.4787- 3	1.4737- 2		2.4555- 7		1.3228- 6	9.4987-15			5.9791- 1
7.0000+ 6 ~ 1.0000+ 7	4.3603+ 0	2.6814+ 0	7.9113- 1	8.9861- 4	9.7308- 1		6.3301- 5		1.3594- 5	1.3111-10	4.6900-17	1.7606-19	6.5973- 1
1.0000+ 7 ~ 2.0000+ 7	4.9249+ 0	3.3670+ 0	1.3492- 1	1.0791- 3	1.2976+ 0	1.2237- 1	2.9262- 3	1.8308- 3	1.7916- 3	9.2725- 4	3.4073- 3	8.1891- 4	8.2546- 1

MATERIAL =5409 CROSS SECTION ^{134}Xe (5409)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.5406+ 0	3.7201+ 0		8.2037- 1					0.0000+ 0				6.0218- 3
1.0000- 2 ~ 2.0000- 2	4.0706+ 0	3.7201+ 0		3.5060- 1					0.0000+ 0				6.0218- 3
2.0000- 2 ~ 4.0000- 2	3.9880+ 0	3.7201+ 0		2.4796- 1					0.0000+ 0				6.0218- 3
4.0000- 2 ~ 7.0000- 2	3.9025+ 0	3.7200+ 0		1.8229- 1					0.0000+ 0				6.0218- 3
7.0000- 2 ~ 1.0000- 1	3.8654+ 0	3.7199+ 0		1.4561- 1					0.0000+ 0				6.0218- 3
1.0000- 1 ~ 2.0000- 1	3.8309+ 0	3.7198+ 0		1.1052- 1					0.0000+ 0				6.0218- 3
2.0000- 1 ~ 4.0000- 1	3.7873+ 0	3.7194+ 0		7.7892- 2					0.0000+ 0				6.0218- 3
4.0000- 1 ~ 7.0000- 1	3.7758+ 0	3.7187+ 0		5.7015- 2					0.0000+ 0				6.0218- 3
7.0000- 1 ~ 1.0000+ 0	3.7634+ 0	3.7180+ 0		4.6377- 2					0.0000+ 0				6.0218- 3
1.0000+ 0 ~ 2.0000+ 0	3.7505+ 0	3.7164+ 0		3.4089- 2					0.0000+ 0				6.0218- 3
2.0000+ 0 ~ 4.0000+ 0	3.7381+ 0	3.7127+ 0		2.3460- 2					0.0000+ 0				6.0219- 3
4.0000+ 0 ~ 7.0000+ 0	3.7239+ 0	3.7088+ 0		1.8452- 2					0.0000+ 0				6.0223- 3
7.0000+ 0 ~ 1.0000+ 1	3.7125+ 0	3.7001+ 0		1.2489- 2					0.0000+ 0				6.0228- 3
1.0000+ 1 ~ 2.0000+ 1	3.6954+ 0	3.6868+ 0		8.5208- 3					0.0000+ 0				6.0242- 3
2.0000+ 1 ~ 4.0000+ 1	3.6662+ 0	3.6614+ 0		4.8030- 3					0.0000+ 0				6.0279- 3
4.0000+ 1 ~ 7.0000+ 1	3.6323+ 0	3.6298+ 0		2.5527- 3					0.0000+ 0				6.0365- 3
7.0000+ 1 ~ 1.0000+ 2	3.6042+ 0	3.6027+ 0		1.4704- 3					0.0000+ 0				6.0473- 3
1.0000+ 2 ~ 2.0000+ 2	3.5882+ 0	3.5875+ 0		7.0479- 4					0.0000+ 0				6.0699- 3
2.0000+ 2 ~ 4.0000+ 2	3.5274+ 0	3.5272+ 0		2.7812- 4					0.0000+ 0				6.1018- 3
4.0000+ 2 ~ 7.0000+ 2	3.4958+ 0	3.4964+ 0		2.0034- 4					0.0000+ 0				6.4707- 3
7.0000+ 2 ~ 1.0000+ 3	3.4535+ 0	3.4071+ 0		4.6336- 2					0.0000+ 0				5.7008- 3
1.0000+ 3 ~ 2.0000+ 3	3.5636+ 0	3.4990+ 0		1.6466- 1					0.0000+ 0				6.4821- 3
2.0000+ 3 ~ 4.0000+ 3	3.7969+ 0	3.6189+ 0		1.7880- 1					0.0000+ 0				8.5542- 3
4.0000+ 3 ~ 7.0000+ 3	4.0129+ 0	3.9266+ 0		8.4371- 2					0.0000+ 0				1.2717- 2
7.0000+ 3 ~ 1.0000+ 4	3.9841+ 0	3.8890+ 0		9.5138- 2					0.0000+ 0				1.7940- 2
1.0000+ 4 ~ 2.0000+ 4	7.2776+ 0	7.2440+ 0		3.3580- 2					0.0000+ 0				3.0319- 2
2.0000+ 4 ~ 4.0000+ 4	8.5837+ 0	8.5404+ 0		2.9289- 2					0.0000+ 0				6.0514- 2
4.0000+ 4 ~ 7.0000+ 4	6.0580+ 0	6.0402+ 0		1.7858- 2					0.0000+ 0				1.1719- 1
7.0000+ 4 ~ 1.0000+ 5	5.7898+ 0	5.7744+ 0		1.5339- 2					0.0000+ 0				1.5472- 1
1.0000+ 5 ~ 2.0000+ 5	5.6309+ 0	5.6178+ 0		1.3086- 2					6.8739-17				2.3232- 1
2.0000+ 5 ~ 4.0000+ 5	5.7386+ 0	5.7266+ 0		1.2000- 2					2.7496-18				3.2848- 1
4.0000+ 5 ~ 7.0000+ 5	8.1249+ 0	8.1115+ 0		1.3421- 2					7.1858-18				3.7598- 1
7.0000+ 5 ~ 1.0000+ 6	6.4896+ 0	6.3603+ 0	1.1620- 1	1.3991- 2					2.2902-15				3.9741- 1
1.0000+ 6 ~ 2.0000+ 6	6.6467+ 0	6.6466+ 0	6.6843- 1	1.0374- 2					6.4499-14				4.6916- 1
2.0000+ 6 ~ 4.0000+ 6	5.4221+ 0	3.8370+ 0	1.5712+ 0	6.5908- 3					4.0141-11	3.6602-20			5.8443- 1
4.0000+ 6 ~ 7.0000+ 6	4.1768+ 0	2.2989+ 0	1.8765+ 0	1.8092- 3			8.8947-14		1.2272- 7	4.7054-15			6.9078- 1
7.0000+ 6 ~ 1.0000+ 7	4.3602+ 0	2.5915+ 0	1.6206+ 0	7.0001- 4	1.3724- 1		7.1072- 6		4.9134- 6	9.6419-11	2.1241-19		6.6971- 1
1.0000+ 7 ~ 2.0000+ 7	4.9244+ 0	3.3379+ 0	2.2846- 1	1.0661- 3	1.1406+ 0	2.0694- 1	2.9909- 3	1.0265- 3	1.7420- 3	1.2188- 3	1.9830- 3	2.9827- 4	8.2648- 1

MATERIAL =5410

CROSS SECTION

^{135}Xe (5410)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.9471+ 6	2.1139+ 6		6.7367+ 6					0.0000+ 0				4.9846- 3
1.0000- 2 ~ 2.0000- 2	3.1774+ 6	2.4861+ 6		2.9209+ 6					0.0000+ 0				4.9846- 3
2.0000- 2 ~ 4.0000- 2	2.9840+ 6	3.2238+ 6		2.6716+ 6					0.0000+ 0				4.9846- 3
4.0000- 2 ~ 7.0000- 2	3.9118+ 6	4.8620+ 5		2.8436+ 6					0.0000+ 0				4.9845- 3
7.0000- 2 ~ 1.0000- 1	3.2402+ 6	6.5061+ 6		2.6966+ 6					0.0000+ 0				4.9846- 3
1.0000- 1 ~ 2.0000- 1	1.2758+ 6	2.8124+ 5		1.0146+ 6					0.0000+ 0				4.9845- 3
2.0000- 1 ~ 4.0000- 1	1.6674+ 6	4.4669+ 4		1.2208+ 6					0.0000+ 0				4.9846- 3
4.0000- 1 ~ 7.0000- 1	2.7987+ 4	9.5379+ 3		1.8449+ 4					0.0000+ 0				4.9845- 3
7.0000- 1 ~ 1.0000+ 0	8.6047+ 3	3.4202+ 3		6.0845+ 3					0.0000+ 0				4.9846- 3
1.0000+ 0 ~ 2.0000+ 0	2.4408+ 3	1.1495+ 3		1.2913+ 3					0.0000+ 0				4.9845- 3
2.0000+ 0 ~ 4.0000+ 0	5.1036+ 2	2.9821+ 2		2.1416+ 2					0.0000+ 0				4.9846- 3
4.0000+ 0 ~ 7.0000+ 0	1.3931+ 2	9.6297+ 1		4.3014+ 1					0.0000+ 0				4.9851- 3
7.0000+ 0 ~ 1.0000+ 1	5.9374+ 1	4.5989+ 1		1.3385+ 1					0.0000+ 0				4.9855- 3
1.0000+ 1 ~ 2.0000+ 1	2.5508+ 1	2.1870+ 1		3.6383+ 0					0.0000+ 0				4.9873- 3
2.0000+ 1 ~ 4.0000+ 1	1.0970+ 1	1.0331+ 1		6.3910- 1					0.0000+ 0				4.9913- 3
4.0000+ 1 ~ 7.0000+ 1	6.7336+ 0	6.6017+ 0		1.3186- 1					0.0000+ 0				5.0027- 3
7.0000+ 1 ~ 1.0000+ 2	5.9749+ 0	5.9334+ 0		4.1527- 2					0.0000+ 0				5.0120- 3
1.0000+ 2 ~ 2.0000+ 2	7.5660+ 0	7.3294+ 0		2.3652- 1					0.0000+ 0				5.0563- 3
2.0000+ 2 ~ 4.0000+ 2	2.8944+ 1	2.7934+ 1		1.6095+ 0					0.0000+ 0				5.1615- 3
4.0000+ 2 ~ 7.0000+ 2	2.2249+ 1	2.1284+ 1		9.6603- 1					0.0000+ 0				5.4470- 3
7.0000+ 2 ~ 1.0000+ 3	1.8554+ 1	1.7870+ 1		6.8455- 1					0.0000+ 0				5.5825- 3
1.0000+ 3 ~ 2.0000+ 3	1.6017+ 1	1.4649+ 1		1.4638- 1					0.0000+ 0				6.4680- 3
2.0000+ 3 ~ 4.0000+ 3	1.1754+ 1	1.1451+ 1		3.0319- 1					0.0000+ 0				8.5659- 3
4.0000+ 3 ~ 7.0000+ 3	9.6951+ 0	9.4980+ 0		2.0708- 1					0.0000+ 0				1.2798- 2
7.0000+ 3 ~ 1.0000+ 4	8.5717+ 0	8.4172+ 0		1.5447- 1					0.0000+ 0				1.8081- 2
1.0000+ 4 ~ 2.0000+ 4	7.6227+ 0	7.4177+ 0		1.0501- 1					0.0000+ 0				3.0831- 2
2.0000+ 4 ~ 4.0000+ 4	6.8055+ 0	6.5409+ 0		8.4577- 2					0.0000+ 0				6.0850- 2
4.0000+ 4 ~ 7.0000+ 4	6.0583+ 0	6.0146+ 0		4.3650- 2					0.0000+ 0				1.0760- 1
7.0000+ 4 ~ 1.0000+ 6	5.7668+ 0	5.7316+ 0		3.4379- 2					0.0000+ 0				1.6520- 1
1.0000+ 6 ~ 2.0000+ 6	5.5290+ 0	5.5023+ 0		2.6613- 2					2.9182-14				2.3285- 1
2.0000+ 5 ~ 4.0000+ 5	5.7361+ 0	5.8757+ 0	4.0218- 2	2.0702- 2					1.1673-13				3.2944- 1
4.0000+ 5 ~ 7.0000+ 5	8.1228+ 0	6.9015+ 0	2.0477- 1	1.8987- 2					2.9463-13				3.6938- 1
7.0000+ 5 ~ 1.0000+ 6	6.4885+ 0	6.1390+ 0	3.3674- 1	1.2875- 2					8.4604-13				4.1134- 1
1.0000+ 6 ~ 2.0000+ 6	6.5603+ 0	6.7332+ 0	8.0660- 1	1.0333- 2					1.0777-11				4.7962- 1
2.0000+ 6 ~ 4.0000+ 6	5.4177+ 0	3.6354+ 0	1.7647+ 0	4.8597- 3			5.5787-20		3.3408- 9				6.1368- 1
4.0000+ 6 ~ 7.0000+ 6	4.1770+ 0	2.2872+ 0	1.8752+ 0	9.8284- 4	1.3379- 2		1.3828- 9		2.2688- 7	2.2338-16			6.9899- 1
7.0000+ 6 ~ 1.0000+ 7	4.3498+ 0	2.5805+ 0	8.2386- 1	8.0366- 4	8.4174- 1		9.0438- 6		7.2177- 6	4.1166-12	3.3893-19	3.2613-21	6.6870- 1
1.0000+ 7 ~ 2.0000+ 7	4.9249+ 0	3.3605+ 0	1.4283- 1	1.0771- 3	1.2633+ 0	1.6800- 1	1.8920- 3	6.7807- 4	2.7909- 3	4.6904- 4	2.4852- 3	8.2813- 4	8.2646- 1

MATERIAL =6411

CROSS SECTION

^{136}Xe (5411)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.8923+ 0	6.0877+ 0		8.0461- 1					0.0000+ 0				4.9478- 3
1.0000- 2 ~ 2.0000- 2	6.4315+ 0	6.0877+ 0		3.4383- 1					0.0000+ 0				4.9478- 3
2.0000- 2 ~ 4.0000- 2	6.3310+ 0	6.0876+ 0		2.4341- 1					0.0000+ 0				4.9478- 3
4.0000- 2 ~ 7.0000- 2	6.2681+ 0	6.0876+ 0		1.7850- 1					0.0000+ 0				4.9478- 3
7.0000- 2 ~ 1.0000- 1	6.2303+ 0	6.0876+ 0		1.4281- 1					0.0000+ 0				4.9478- 3
1.0000- 1 ~ 2.0000- 1	6.1981+ 0	6.0874+ 0		1.0872- 1					0.0000+ 0				4.9478- 3
2.0000- 1 ~ 4.0000- 1	6.1639+ 0	6.0871+ 0		7.6786- 2					0.0000+ 0				4.9478- 3
4.0000- 1 ~ 7.0000- 1	6.1430+ 0	6.0868+ 0		5.8425- 2					0.0000+ 0				4.9478- 3
7.0000- 1 ~ 1.0000+ 0	6.1311+ 0	6.0860+ 0		4.5131- 2					0.0000+ 0				4.9478- 3
1.0000+ 0 ~ 2.0000+ 0	6.1188+ 0	6.0848+ 0		3.4288- 2					0.0000+ 0				4.9478- 3
2.0000+ 0 ~ 4.0000+ 0	6.1067+ 0	6.0816+ 0		2.4147- 2					0.0000+ 0				4.9479- 3
4.0000+ 0 ~ 7.0000+ 0	6.0941+ 0	6.0765+ 0		1.7824- 2					0.0000+ 0				4.9483- 3
7.0000+ 0 ~ 1.0000+ 1	6.0844+ 0	6.0704+ 0		1.4020- 2					0.0000+ 0				4.9488- 3
1.0000+ 1 ~ 2.0000+ 1	6.0690+ 0	6.0575+ 0		1.0499- 2					0.0000+ 0				4.9501- 3
2.0000+ 1 ~ 4.0000+ 1	6.0357+ 0	6.0286+ 0		7.1717- 3					0.0000+ 0				4.9537- 3
4.0000+ 1 ~ 7.0000+ 1	6.9874+ 0	6.9826+ 0		4.9777- 3					0.0000+ 0				4.9640- 3
7.0000+ 1 ~ 1.0000+ 2	5.9344+ 0	5.9307+ 0		3.7177- 3					0.0000+ 0				4.9728- 3
1.0000+ 2 ~ 2.0000+ 2	5.8338+ 0	5.8313+ 0		2.4802- 3					0.0000+ 0				5.0143- 3
2.0000+ 2 ~ 4.0000+ 2	5.6493+ 0	5.6480+ 0		1.3290- 3					0.0000+ 0				5.1144- 3
4.0000+ 2 ~ 7.0000+ 2	5.4340+ 0	5.4333+ 0		6.6674- 4					0.0000+ 0				5.3892- 3
7.0000+ 2 ~ 1.0000+ 3	5.2811+ 0	5.2807+ 0		3.5171- 4					0.0000+ 0				5.6180- 3
1.0000+ 3 ~ 2.0000+ 3	6.0527+ 0	6.0526+ 0		1.7234- 4					0.0000+ 0				8.3885- 3
2.0000+ 3 ~ 4.0000+ 3	5.9241+ 0	5.9241+ 0		2.9017- 2					0.0000+ 0				8.4415- 3
4.0000+ 3 ~ 7.0000+ 3	4.6986+ 0	4.6986+ 0		1.1680- 6					0.0000+ 0				1.2078- 2
7.0000+ 3 ~ 1.0000+ 4	4.6263+ 0	4.6263+ 0		4.5121- 6					0.0000+ 0				1.7779- 2
1.0000+ 4 ~ 2.0000+ 4	6.1182+ 0	6.1186+ 0		7.1957- 4					0.0000+ 0				3.0403- 2
2.0000+ 4 ~ 4.0000+ 4	4.6276+ 0	4.6271+ 0		7.1651- 4					0.0000+ 0				6.0208- 2
4.0000+ 4 ~ 7.0000+ 4	8.2894+ 0	8.2626+ 0		8.8849- 4					0.0000+ 0				1.0877- 1
7.0000+ 4 ~ 1.0000+ 6	4.6472+ 0	4.6466+ 0		6.6669- 4					0.0000+ 0				1.8420- 1
1.0000+ 6 ~ 2.0000+ 6	4.4288+ 0	4.4287+ 0		1.2721- 4					1.3627-18				2.3187- 1
2.0000+ 5 ~ 4.0000+ 5	4.9809+ 0	4.9807+ 0		1.9107- 4					8.4108-18				3.2884- 1
4.0000+ 6 ~ 7.0000+ 6	5.7971+ 0	5.7965+ 0		5.5881- 4					1.4108-17				3.7489- 1
7.0000+ 6 ~ 1.0000+ 6	6.4877+ 0	6.4869+ 0		8.4269- 4					4.8388-17				3.8826- 1
1.0000+ 6 ~ 2.0000+ 6	6.5474+ 0	6.2428+ 0	3.0309- 1	8.7466- 4					1.1744-16				4.4008- 1
2.0000+ 6 ~ 4.0000+ 6	5.4324+ 0	3.9940+ 0	1.4853+ 0	2.9115- 4					8.8087-15				5.7316- 1
4.0000+ 6 ~ 7.0000+ 6	4.1768+ 0	2.5037+ 0	1.6718+ 0	7.7992- 5			2.7770-19		8.8922- 9				6.8927- 1
7.0000+ 6 ~ 1.0000+ 7	4.3498+ 0	2.6006+ 0	1.4637+ 0	7.4810- 5	3.8323- 1		2.2394-14		7.4604- 7	2.4641-12	8.2078-21		8.8861- 1
1.0000+ 7 ~ 2.0000+ 7	4.9247+ 0	3.0615+ 0	2.0934- 1	8.6966- 4	1.4014+ 0	2.6891- 1	8.9213- 4	3.9667- 4	1.1707- 3	2.8912- 4	1.4393- 3	3.9760- 4	8.2844- 1

MATERIAL =5501 CROSS SECTION ^{133}Cs (5501)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	9.3709+ 1	4.2977+ 0		8.9411+ 1			0.0000+ 0		0.0000+ 0				6.0596- 3
1.0000- 2 ~ 2.0000- 2	4.2678+ 1	4.2960+ 0		3.8282+ 1			0.0000+ 0		0.0000+ 0				
2.0000- 2 ~ 4.0000- 2	3.1428+ 1	4.2935+ 0		2.7134+ 1			0.0000+ 0		0.0000+ 0				6.0596- 3
4.0000- 2 ~ 7.0000- 2	2.4312+ 1	4.2859+ 0		2.0029+ 1			0.0000+ 0		0.0000+ 0				6.0596- 3
7.0000- 2 ~ 1.0000- 1	2.0400+ 1	4.2843+ 0		1.6116+ 1			0.0000+ 0		0.0000+ 0				6.0596- 3
1.0000- 1 ~ 2.0000- 1	1.6684+ 1	4.2734+ 0		1.2410+ 1			0.0000+ 0		0.0000+ 0				6.0596- 3
2.0000- 1 ~ 4.0000- 1	1.3248+ 1	4.2478+ 0		9.0001+ 0			0.0000+ 0		0.0000+ 0				6.0596- 3
4.0000- 1 ~ 7.0000- 1	1.1166+ 1	4.2045+ 0		6.9814+ 0			0.0000+ 0		0.0000+ 0				6.0596- 3
7.0000- 1 ~ 1.0000+ 0	1.0111+ 1	4.1608+ 0		5.9600+ 0			0.0000+ 0		0.0000+ 0				6.0596- 3
1.0000+ 0 ~ 2.0000+ 0	9.4681+ 0	4.0241+ 0		5.4420+ 0			0.0000+ 0		0.0000+ 0				6.0596- 3
2.0000+ 0 ~ 4.0000+ 0	1.1652+ 1	3.6473+ 0		8.0044+ 0			0.0000+ 0		0.0000+ 0				6.0596- 3
4.0000+ 0 ~ 7.0000+ 0	6.1662+ 2	3.2408+ 0		5.8342+ 2			0.0000+ 0		0.0000+ 0				6.0596- 3
7.0000+ 0 ~ 1.0000+ 1	1.5537+ 1	5.8118+ 0		9.7255+ 0			0.0000+ 0		0.0000+ 0				6.0596- 3
1.0000+ 1 ~ 2.0000+ 1	5.2196+ 0	4.0355+ 0		1.1840+ 0			0.0000+ 0		0.0000+ 0				5.0824- 3
2.0000+ 1 ~ 4.0000+ 1	3.2646+ 1	6.0816+ 0		2.7466+ 1			0.0000+ 0		0.0000+ 0				6.0608- 3
4.0000+ 1 ~ 7.0000+ 1	3.1902+ 1	8.0824+ 0		2.3620+ 1			0.0000+ 0		0.0000+ 0				6.0819- 3
7.0000+ 1 ~ 1.0000+ 2	2.5482+ 1	5.2398+ 0		2.0242+ 1			0.0000+ 0		0.0000+ 0				5.0922- 3
1.0000+ 2 ~ 2.0000+ 2	3.1870+ 1	1.5598+ 1		1.8279+ 1			0.0000+ 0		0.0000+ 0				5.1982- 3
2.0000+ 2 ~ 4.0000+ 2	4.2249+ 1	2.8428+ 1		1.3815+ 1			0.0000+ 0		0.0000+ 0				5.2369- 3
4.0000+ 2 ~ 7.0000+ 2	1.4440+ 1	8.6019+ 0		6.8379+ 0			0.0000+ 0		0.0000+ 0				5.4843- 3
7.0000+ 2 ~ 1.0000+ 3	1.1358+ 1	7.4913+ 0		3.8447+ 0			0.0000+ 0		0.0000+ 0				5.7063- 3
1.0000+ 3 ~ 2.0000+ 3	8.1281+ 0	6.6096+ 0		2.5186+ 0			0.0000+ 0		0.0000+ 0				6.3864- 3
2.0000+ 3 ~ 4.0000+ 3	9.5152+ 0	9.2255+ 0		1.6897+ 0			0.0000+ 0		0.0000+ 0				6.2447- 3
4.0000+ 3 ~ 7.0000+ 3	1.0494+ 1	9.2381+ 0		1.2563+ 0			0.0000+ 0		0.0000+ 0				1.1969- 2
7.0000+ 3 ~ 1.0000+ 4	7.7280+ 0	6.6619+ 0		1.0661+ 0			0.0000+ 0		0.0000+ 0				1.6702- 2
1.0000+ 4 ~ 2.0000+ 4	7.0337+ 0	6.2678+ 0		7.7687- 1			0.0000+ 0		0.0000+ 0				2.0383- 2
2.0000+ 4 ~ 4.0000+ 4	6.4378+ 0	5.9075+ 0		5.3030- 1			0.0000+ 0		0.0000+ 0				5.6437- 2
4.0000+ 4 ~ 7.0000+ 4	6.0879+ 0	5.7124+ 0		3.7564- 1			0.0000+ 0		0.0000+ 0				1.0091- 1
7.0000+ 4 ~ 1.0000+ 5	5.9080+ 0	5.5738+ 0	4.8302- 2	2.8601- 1			0.0000+ 0		0.0000+ 0				1.4788- 1
1.0000+ 5 ~ 2.0000+ 5	5.6709+ 0	5.2269+ 0	2.4768- 1	1.9647- 1			0.0000+ 0		7.3770-13				2.3183- 1
2.0000+ 5 ~ 4.0000+ 5	5.6704+ 0	5.0798+ 0	4.5722- 1	1.3357- 1			0.0000+ 0		2.9509-12				3.4054- 1
4.0000+ 5 ~ 7.0000+ 5	5.8694+ 0	5.3227+ 0	8.4207- 1	1.0479- 1			8.6479-20		6.7264-12				4.0260- 1
7.0000+ 5 ~ 1.0000+ 6	6.5094+ 0	6.3063+ 0	1.1406+ 0	6.2707- 2			3.4902-19		1.3642-11				4.5603- 1
1.0000+ 6 ~ 2.0000+ 6	6.6502+ 0	4.8631+ 0	1.7497+ 0	3.5691- 2			2.0511-16		1.1646-10				5.6622- 1
2.0000+ 6 ~ 4.0000+ 6	5.5474+ 0	3.3817+ 0	2.1411+ 0	1.6320- 2			1.2903- 8		3.2136- 8	4.7143-17			6.8039- 1
4.0000+ 6 ~ 7.0000+ 6	4.3725+ 0	2.2319+ 0	2.1388+ 0	9.1139- 3			3.9399- 5		2.1689- 8	1.1185-12	4.2528-17		6.6508- 1
7.0000+ 6 ~ 1.0000+ 7	4.4771+ 0	2.3916+ 0	2.0326+ 0	6.6871- 4	5.0608- 2		6.9037- 4	8.9237-12	3.7697- 6	2.2373- 8	1.6129- 8	1.6780-17	7.4046- 1
1.0000+ 7 ~ 2.0000+ 7	4.8166+ 0	2.7724+ 0	5.2666- 1	1.0669- 3	1.3776+ 0	1.1242- 1	9.9369- 3	6.3276- 3	1.8496- 3	9.9466- 4	5.8815- 3	1.1386- 3	8.7363- 1

MATERIAL =5502 CROSS SECTION ^{134}Cs (5502)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.5623+ 2	2.2686+ 1		4.3354+ 2			0.0000+ 0		0.0000+ 0				6.0217- 3
1.0000- 2 ~ 2.0000- 2	2.0764+ 2	2.2664+ 1		1.8497+ 2			0.0000+ 0		0.0000+ 0				6.0217- 3
2.0000- 2 ~ 4.0000- 2	1.5316+ 2	2.2633+ 1		1.3061+ 2			0.0000+ 0		0.0000+ 0				6.0217- 3
4.0000- 2 ~ 7.0000- 2	1.1817+ 2	2.2580+ 1		9.5594+ 1			0.0000+ 0		0.0000+ 0				6.0217- 3
7.0000- 2 ~ 1.0000- 1	9.8706+ 1	2.2518+ 1		7.6188+ 1			0.0000+ 0		0.0000+ 0				6.0217- 3
1.0000- 1 ~ 2.0000- 1	7.9762+ 1	2.2384+ 1		5.7378+ 1			0.0000+ 0		0.0000+ 0				6.0217- 3
2.0000- 1 ~ 4.0000- 1	6.1650+ 1	2.2081+ 1		3.9769+ 1			0.0000+ 0		0.0000+ 0				6.0217- 3
4.0000- 1 ~ 7.0000- 1	4.9841+ 1	2.1595+ 1		2.8247+ 1			0.0000+ 0		0.0000+ 0				6.0217- 3
7.0000- 1 ~ 1.0000+ 0	4.2738+ 1	2.1039+ 1		2.1699+ 1			0.0000+ 0		0.0000+ 0				6.0217- 3
1.0000+ 0 ~ 2.0000+ 0	3.5184+ 1	1.9844+ 1		1.5240+ 1			0.0000+ 0		0.0000+ 0				6.0217- 3
2.0000+ 0 ~ 4.0000+ 0	2.6869+ 1	1.7633+ 1		9.0261+ 0			0.0000+ 0		0.0000+ 0				6.0217- 3
4.0000+ 0 ~ 7.0000+ 0	2.0329+ 1	1.5212+ 1		5.1170+ 0			0.0000+ 0		0.0000+ 0				6.0217- 3
7.0000+ 0 ~ 1.0000+ 1	1.8264+ 1	1.2975+ 1		3.2089+ 0			0.0000+ 0		0.0000+ 0				6.0217- 3
1.0000+ 1 ~ 2.0000+ 1	2.2884+ 1	1.0380+ 1		1.2494- 1			0.0000+ 0		0.0000+ 0				6.0261- 3
2.0000+ 1 ~ 4.0000+ 1	9.2166+ 0	7.4228+ 0		1.7938+ 0			0.0000+ 0		0.0000+ 0				6.0416- 3
4.0000+ 1 ~ 7.0000+ 1	9.6606+ 0	6.8692+ 0		3.7014+ 0			0.0000+ 0		0.0000+ 0				6.0648- 3
7.0000+ 1 ~ 1.0000+ 2	5.0092+ 0	4.9343+ 0		7.4699- 2			0.0000+ 0		0.0000+ 0				6.0634- 3
1.0000+ 2 ~ 2.0000+ 2	1.7528+ 1	6.6457+ 0		1.0882+ 1			0.0000+ 0		0.0000+ 0				5.1512- 3
2.0000+ 2 ~ 4.0000+ 2	3.7700+ 1	1.3078+ 1		2.4622+ 1			0.0000+ 0		0.0000+ 0				6.2958- 3
4.0000+ 2 ~ 7.0000+ 2	2.8887+ 1	1.2196+ 1		1.6492+ 1			0.0000+ 0		0.0000+ 0				6.6357- 3
7.0000+ 2 ~ 1.0000+ 3	2.3683+ 1	1.1461+ 1		1.2222+ 1			0.0000+ 0		0.0000+ 0				6.9157- 3
1.0000+ 3 ~ 2.0000+ 3	1.8883+ 1	1.0477+ 1		8.4161+ 0			0.0000+ 0		0.0000+ 0				6.7384- 3
2.0000+ 3 ~ 4.0000+ 3	1.4469+ 1	9.2372+ 0		6.2219+ 0			0.0000+ 0		0.0000+ 0				8.8810- 3
4.0000+ 3 ~ 7.0000+ 3	1.1546+ 1	8.2070+ 0		3.4377+ 0			0.0000+ 0		0.0000+ 0				1.3002- 2
7.0000+ 3 ~ 1.0000+ 4	1.0099+ 1	7.6200+ 0		2.5728+ 0			0.0000+ 0		0.0000+ 0				1.8135- 2
1.0000+ 4 ~ 2.0000+ 4	8.5854+ 0	6.6025+ 0	2.3878- 1	1.7638+ 0			0.0000+ 0		0.0000+ 0				3.1224- 2
2.0000+ 4 ~ 4.0000+ 4	7.2845+ 0	5.7588+ 0	3.6294- 1	1.1828+ 0			0.0000+ 0		0.0000+ 0				8.2882- 2
4.0000+ 4 ~ 7.0000+ 4	6.4229+ 0	5.2221+ 0	3.7036- 1	8.3071- 1			0.0000+ 0		0.0000+ 0				1.1190- 1
7.0000+ 4 ~ 1.0000+ 5	5.9378+ 0	4.8136+ 0	6.1260- 1	8.1229- 1			0.0000+ 0		0.0000+ 0				1.6676- 1
1.0000+ 5 ~ 2.0000+ 5	5.6336+ 0	4.5926+ 0	6.1102- 1	4.2913- 1			2.8117-16		1.9460-10				2.5692- 1
2.0000+ 5 ~ 4.0000+ 5	5.8102+ 0	4.2209+ 0	1.2022+ 0	1.8680- 1			1.1247-15		7.7800-10				3.9992- 1
4.0000+ 5 ~ 7.0000+ 5	6.0288+ 0	4.3713+ 0	1.5670+ 0	8.8684- 2			9.9141-15		1.7295- 9				4.7828- 1
7.0000+ 5 ~ 1.0000+ 6	6.5009+ 0	4.6091+ 0	1.8338+ 0	5.8026- 2			3.0580-14		3.1810- 9				5.1528- 1
1.0000+ 6 ~ 2.0000+ 6	6.5906+ 0	4.6600+ 0	2.1037+ 0	3.6632- 2			2.2896-11		2.3766- 8				6.0545- 1
2.0000+ 6 ~ 4.0000+ 6	5.5970+ 0	3.3568+ 0	2.2217+ 0	1.4881- 2			1.2487- 8		5.4817- 7	3.6002-18			6.9534- 1
4.0000+ 6 ~ 7.0000+ 6	4.3944+ 0	2.2458+ 0	2.1456+ 0	9.1019- 3			2.1646- 5		5.5683- 6	2.0061-13	6.5882-18	1.1924-20	6.8717- 1
7.0000+ 6 ~ 1.0000+ 7	4.4646+ 0	2.3857+ 0	1.2622+ 0	1.1668- 3	7.9411- 1		5.0588- 4	6.4596-14	6.4767- 6	1.1311- 9	6.0291- 9	1.8460-10	7.3931- 1
1.0000+ 7 ~ 2.0000+ 7	4.8234+ 0	2.7966+ 0	3.1089- 1	1.0634- 3	1.5966+ 0	9.2682- 2	3.6424- 3	6.4790- 3	2.0666- 3	1.2286- 3	9.1737- 3	2.3632- 3	8.7369- 1

MATERIAL =5503

CROSS SECTION

^{135}Cs (5503)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	3.1792+ 1	4.8606+ 0		2.6941+ 1					0.0000+ 0				4.9845- 3
1.0000- 2 ~ 2.0000- 2	1.6360+ 1	4.8602+ 0		1.1510+ 1					0.0000+ 0				4.9845- 3
2.0000- 2 ~ 4.0000- 2	1.2984+ 1	4.8498+ 0		8.1343+ 0					0.0000+ 0				4.9845- 3
4.0000- 2 ~ 7.0000- 2	1.0818+ 1	4.8488+ 0		5.9697+ 0					0.0000+ 0				4.9845- 3
7.0000- 2 ~ 1.0000- 1	9.6265+ 0	4.8474+ 0		4.7792+ 0					0.0000+ 0				4.9845- 3
1.0000- 1 ~ 2.0000- 1	8.4783+ 0	4.8447+ 0		3.6316+ 0					0.0000+ 0				4.9845- 3
2.0000- 1 ~ 4.0000- 1	7.3933+ 0	4.8385+ 0		2.5547+ 0					0.0000+ 0				4.9845- 3
4.0000- 1 ~ 7.0000- 1	6.6949+ 0	4.8284+ 0		1.8665+ 0					0.0000+ 0				4.9845- 3
7.0000- 1 ~ 1.0000+ 0	6.2974+ 0	4.8164+ 0		1.4810+ 0					0.0000+ 0				4.9846- 3
1.0000+ 0 ~ 2.0000+ 0	5.9022+ 0	4.7907+ 0		1.1115+ 0					0.0000+ 0				4.9846- 3
2.0000+ 0 ~ 4.0000+ 0	5.4967+ 0	4.7333+ 0		7.6238- 1					0.0000+ 0				4.9845- 3
4.0000+ 0 ~ 7.0000+ 0	5.1808+ 0	4.6425+ 0		5.3806- 1					0.0000+ 0				4.9845- 3
7.0000+ 0 ~ 1.0000+ 1	4.9558+ 0	4.5395+ 0		4.1632- 1					0.0000+ 0				4.9845- 3
1.0000+ 1 ~ 2.0000+ 1	4.6572+ 0	4.3267+ 0		3.3044- 1					0.0000+ 0				4.9860- 3
2.0000+ 1 ~ 4.0000+ 1	6.1706+ 0	3.6082+ 0		1.6623+ 0					0.0000+ 0				4.9893- 3
4.0000+ 1 ~ 7.0000+ 1	7.6748+ 1	2.0871+ 1		5.6877+ 1					0.0000+ 0				4.9972- 3
7.0000+ 1 ~ 1.0000+ 2	2.9812+ 1	2.3970+ 1		5.8418+ 0					0.0000+ 0				5.0095- 3
1.0000+ 2 ~ 2.0000+ 2	5.5182+ 1	4.5039+ 1		1.0149+ 1					0.0000+ 0				5.0333- 3
2.0000+ 2 ~ 4.0000+ 2	4.0100+ 1	3.4454+ 1		5.6463+ 0					0.0000+ 0				5.1043- 3
4.0000+ 2 ~ 7.0000+ 2	3.0410+ 1	2.7079+ 1		3.3319+ 0					0.0000+ 0				5.2979- 3
7.0000+ 2 ~ 1.0000+ 3	2.5070+ 1	2.2782+ 1		2.2877+ 0					0.0000+ 0				5.4576- 3
1.0000+ 3 ~ 2.0000+ 3	1.9937+ 1	1.8464+ 1		1.4727+ 0					0.0000+ 0				5.9863- 3
2.0000+ 3 ~ 4.0000+ 3	1.5177+ 1	1.4300+ 1		8.7885- 1					0.0000+ 0				7.5181- 3
4.0000+ 3 ~ 7.0000+ 3	1.2149+ 1	1.1557+ 1		5.8213- 1					0.0000+ 0				1.0559- 2
7.0000+ 3 ~ 1.0000+ 4	1.0478+ 1	1.0058+ 1		4.4171- 1					0.0000+ 0				1.4720- 2
1.0000+ 4 ~ 2.0000+ 4	8.8843+ 0	8.5695+ 0		3.1466- 1					0.0000+ 0				2.4879- 2
2.0000+ 4 ~ 4.0000+ 4	7.4314+ 0	7.2289+ 0		2.0250- 1					0.0000+ 0				5.0942- 2
4.0000+ 4 ~ 7.0000+ 4	6.5129+ 0	6.3761+ 0		1.3786- 1					0.0000+ 0				9.1734- 2
7.0000+ 4 ~ 1.0000+ 5	5.8973+ 0	5.8901+ 0		1.0712- 1					0.0000+ 0				1.3617- 1
1.0000+ 5 ~ 2.0000+ 5	5.6142+ 0	5.5330+ 0		8.1060- 2					1.6591-14				2.0818- 1
2.0000+ 5 ~ 4.0000+ 5	5.5679+ 0	5.3986+ 0	1.1292- 1	5.8304- 2					8.6213-14				3.0446- 1
4.0000+ 5 ~ 7.0000+ 5	5.5980+ 0	5.5980+ 0	3.5222- 1	4.2850- 2			0.0000+ 0		1.4122-13				3.8803- 1
7.0000+ 5 ~ 1.0000+ 6	5.4971+ 0	5.0086+ 0	6.4943- 1	3.9304- 2			0.0000+ 0		3.2226-13				4.0416- 1
1.0000+ 6 ~ 2.0000+ 6	6.7303+ 0	5.4104+ 0	1.2910+ 0	2.7706- 2			8.8800-20		3.1812-12				6.1986- 1
2.0000+ 6 ~ 4.0000+ 6	5.6502+ 0	3.6118+ 0	2.0251+ 0	9.8432- 3			1.9594-13		1.2571- 9	2.0928-18			6.6243- 1
4.0000+ 6 ~ 7.0000+ 6	4.4165+ 0	2.2761+ 0	2.1393+ 0	2.1088- 3			1.9622- 8		8.4697- 7	1.6385-19	1.3509-19		8.8508- 1
7.0000+ 6 ~ 1.0000+ 7	4.4748+ 0	2.3787+ 0	2.0009+ 0	8.7882- 4	9.2782- 2		8.7476- 5	2.1638-14	2.0587- 6	3.2239- 9	3.1446- 9	3.7116-18	7.3821- 1
1.0000+ 7 ~ 2.0000+ 7	4.8476+ 0	2.7969+ 0	4.3779- 1	1.0705- 3	1.4492+ 0	1.4109- 1	2.7861- 3	8.6300- 3	1.7523- 3	1.6793- 3	5.7882- 3	1.1874- 3	8.7363- 1

MATERIAL =5504

CROSS SECTION

^{136}Cs (5504)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.3737+ 1	3.5000+ 0		4.0088+ 1			0.0000+ 0		0.0000+ 0				4.9478- 3
1.0000- 2 ~ 2.0000- 2	2.0702+ 1	3.5000+ 0		1.7130+ 1			0.0000+ 0		0.0000+ 0				4.9478- 3
2.0000- 2 ~ 4.0000- 2	1.6656+ 1	3.5000+ 0		1.2113+ 1			0.0000+ 0		0.0000+ 0				4.9478- 3
4.0000- 2 ~ 7.0000- 2	1.2455+ 1	3.5000+ 0		8.9018+ 0			0.0000+ 0		0.0000+ 0				4.9478- 3
7.0000- 2 ~ 1.0000- 1	1.0671+ 1	3.5000+ 0		7.1205+ 0			0.0000+ 0		0.0000+ 0				4.9478- 3
1.0000- 1 ~ 2.0000- 1	8.9485+ 0	3.5000+ 0		5.4171+ 0			0.0000+ 0		0.0000+ 0				4.9478- 3
2.0000- 1 ~ 4.0000- 1	7.3672+ 0	3.5000+ 0		3.8306+ 0			0.0000+ 0		0.0000+ 0				4.9478- 3
4.0000- 1 ~ 7.0000- 1	6.3477+ 0	3.5000+ 0		2.8151+ 0			0.0000+ 0		0.0000+ 0				4.9478- 3
7.0000- 1 ~ 1.0000+ 0	5.7633+ 0	3.5000+ 0		2.2617+ 0			0.0000+ 0		0.0000+ 0				4.9478- 3
1.0000+ 0 ~ 2.0000+ 0	5.2343+ 0	3.5000+ 0		1.7131+ 0			0.0000+ 0		0.0000+ 0				4.9478- 3
2.0000+ 0 ~ 4.0000+ 0	4.7276+ 0	3.5000+ 0		1.2113+ 0			0.0000+ 0		0.0000+ 0				4.9478- 3
4.0000+ 0 ~ 7.0000+ 0	4.3991+ 0	3.5000+ 0		8.9022- 1			0.0000+ 0		0.0000+ 0				4.9478- 3
7.0000+ 0 ~ 1.0000+ 1	4.2254+ 0	3.5000+ 0		7.1208- 1			0.0000+ 0		0.0000+ 0				4.9478- 3
1.0000+ 1 ~ 2.0000+ 1	4.0460+ 0	3.5000+ 0		5.4173- 1			0.0000+ 0		0.0000+ 0				4.9492- 3
2.0000+ 1 ~ 4.0000+ 1	6.5944+ 1	4.5611+ 1		2.0330+ 1			0.0000+ 0		0.0000+ 0				4.9524- 3
4.0000+ 1 ~ 7.0000+ 1	9.3486+ 1	6.7768+ 1		2.5720+ 1			0.0000+ 0		0.0000+ 0				4.9597- 3
7.0000+ 1 ~ 1.0000+ 2	7.5887+ 1	5.7596+ 1		1.8070+ 1			0.0000+ 0		0.0000+ 0				4.9857- 3
1.0000+ 2 ~ 2.0000+ 2	5.8497+ 1	4.5890+ 1		1.1807+ 1			0.0000+ 0		0.0000+ 0				4.9936- 3
2.0000+ 2 ~ 4.0000+ 2	4.2412+ 1	3.5929+ 1		6.4831+ 0			0.0000+ 0		0.0000+ 0				5.0600- 3
4.0000+ 2 ~ 7.0000+ 2	3.2078+ 1	2.8247+ 1		3.8303+ 0			0.0000+ 0		0.0000+ 0				5.2413- 3
7.0000+ 2 ~ 1.0000+ 3	2.6348+ 1	2.3727+ 1		2.6189+ 0			0.0000+ 0		0.0000+ 0				5.3909- 3
1.0000+ 3 ~ 2.0000+ 3	2.0904+ 1	1.9221+ 1		1.6836+ 0			0.0000+ 0		0.0000+ 0				5.8969- 3
2.0000+ 3 ~ 4.0000+ 3	1.6828+ 1	1.4834+ 1		9.9117- 1			0.0000+ 0		0.0000+ 0				7.3317- 3
4.0000+ 3 ~ 7.0000+ 3	1.2694+ 1	1.1943+ 1		6.5100- 1			0.0000+ 0		0.0000+ 0				1.0309- 2
7.0000+ 3 ~ 1.0000+ 4	1.0809+ 1	1.0317+ 1		4.9228- 1			0.0000+ 0		0.0000+ 0				1.4177- 2
1.0000+ 4 ~ 2.0000+ 4	8.1066+ 0	8.7656+ 0		3.5102- 1			0.0000+ 0		0.0000+ 0				2.4026- 2
2.0000+ 4 ~ 4.0000+ 4	7.5528+ 0	7.3259+ 0		2.2590- 1			0.0000+ 0		0.0000+ 0				4.6584- 2
4.0000+ 4 ~ 7.0000+ 4	6.6734+ 0	6.4166+ 0	2.7004- 3	1.5416- 1			0.0000+ 0		0.0000+ 0				8.9006- 2
7.0000+ 4 ~ 1.0000+ 5	6.0340+ 0	5.9026+ 0	1.3392- 2	1.1816- 1			0.0000+ 0		0.0000+ 0				1.3194- 1
1.0000+ 5 ~ 2.0000+ 5	5.6996+ 0	5.4621+ 0	6.1195- 2	8.5823- 2			6.9717-21		8.7274-13				2.0608- 1
2.0000+ 5 ~ 4.0000+ 5	5.5383+ 0	5.3000+ 0	1.8079- 1	5.5509- 2			2.3687-20		3.4910-12				3.0145- 1
4.0000+ 5 ~ 7.0000+ 5	5.5723+ 0	5.4581+ 0	4.7898- 1	3.8180- 2			8.8845-20		7.8807-12				3.8882- 1
7.0000+ 5 ~ 1.0000+ 6	5.4966+ 0	5.6843+ 0	6.8723- 1	2.5216- 2			1.7572-19		1.6163-11				4.1436- 1
1.0000+ 6 ~ 2.0000+ 6	5.7706+ 0	5.1271+ 0	1.5295+ 0	1.2875- 2			6.6066-16		1.1928-10				5.4413- 1
2.0000+ 6 ~ 4.0000+ 6	5.6997+ 0	3.5224+ 0	2.1644+ 0	5.3372- 3			5.4885- 8		1.4068- 8	2.2168-19			6.8588- 1
4.0000+ 6 ~ 7.0000+ 6	4.4389+ 0	2.2698+ 0	2.1537+ 0	7.1299- 4	5.6083- 4		9.1292- 8		8.7142- 7	1.4731-14	1.3920-21		8.8831- 1
7.0000+ 6 ~ 1.0000+ 7	4.4769+ 0	2.3809+ 0	1.1915+ 0	9.4746- 4	8.9868- 1		7.3668- 6	3.3174-16	2.2183- 6	1.2563-10	3.7268-10	5.7484-12	7.3731- 1
1.0000+ 7 ~ 2.0000+ 7	4.8631+ 0	2.8184+ 0	2.6161- 1	1.0796- 3	1.6334+ 0	1.2828- 1	2.1086- 3	4.8874- 3	1.3302- 3	1.2221- 3	7.6663- 3	1.8944- 3	8.7347- 1

MATERIAL =5505 CROSS SECTION ^{137}Cs (5505)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.0123+ 0	3.6721+ 0		3.4022- 1					0.0000+ 0				4.9117- 3
1.0000- 2 ~ 2.0000- 2	3.8176+ 0	3.6721+ 0		1.4638- 1					0.0000+ 0				4.9117- 3
2.0000- 2 ~ 4.0000- 2	3.7748+ 0	3.6721+ 0		1.0281- 1					0.0000+ 0				4.9117- 3
4.0000- 2 ~ 7.0000- 2	3.7477+ 0	3.6721+ 0		7.5595- 2					0.0000+ 0				4.9117- 3
7.0000- 2 ~ 1.0000- 1	3.7326+ 0	3.6721+ 0		6.0496- 2					0.0000+ 0				4.9117- 3
1.0000- 1 ~ 2.0000- 1	3.7179+ 0	3.6720+ 0		4.5902- 2					0.0000+ 0				4.9117- 3
2.0000- 1 ~ 4.0000- 1	3.7044+ 0	3.6720+ 0		3.2470- 2					0.0000+ 0				4.9117- 3
4.0000- 1 ~ 7.0000- 1	3.6957+ 0	3.6719+ 0		2.3832- 2					0.0000+ 0				4.9117- 3
7.0000- 1 ~ 1.0000+ 0	3.6908+ 0	3.6717+ 0		1.9077- 2					0.0000+ 0				4.9117- 3
1.0000+ 0 ~ 2.0000+ 0	3.6859+ 0	3.6715+ 0		1.4471- 2					0.0000+ 0				4.9117- 3
2.0000+ 0 ~ 4.0000+ 0	3.6810+ 0	3.6708+ 0		1.0186- 2					0.0000+ 0				4.9117- 3
4.0000+ 0 ~ 7.0000+ 0	3.6772+ 0	3.6698+ 0		7.4255- 3					0.0000+ 0				4.9117- 3
7.0000+ 0 ~ 1.0000+ 1	3.6744+ 0	3.6686+ 0		5.8772- 3					0.0000+ 0				4.9117- 3
1.0000+ 1 ~ 2.0000+ 1	3.6703+ 0	3.6659+ 0		4.3682- 3					0.0000+ 0				4.9126- 3
2.0000+ 1 ~ 4.0000+ 1	3.6630+ 0	3.6601+ 0		2.9691- 3					0.0000+ 0				4.9140- 3
4.0000+ 1 ~ 7.0000+ 1	3.6529+ 0	3.6509+ 0		2.0368- 3					0.0000+ 0				4.9203- 3
7.0000+ 1 ~ 1.0000+ 2	3.6421+ 0	3.6406+ 0		1.5058- 3					0.0000+ 0				4.9249- 3
1.0000+ 2 ~ 2.0000+ 2	3.6219+ 0	3.6209+ 0		1.0150- 3					0.0000+ 0				4.9477- 3
2.0000+ 2 ~ 4.0000+ 2	3.5819+ 0	3.5813+ 0		6.4159- 4					0.0000+ 0				5.0094- 3
4.0000+ 2 ~ 7.0000+ 2	3.6011+ 0	3.6002+ 0		9.0363- 4					0.0000+ 0				5.1502- 3
7.0000+ 2 ~ 1.0000+ 3	9.0293+ 0	7.9305+ 0		1.0894+ 0					0.0000+ 0				5.2898- 3
1.0000+ 3 ~ 2.0000+ 3	1.0808+ 1	1.0741+ 1		6.7037- 2					0.0000+ 0				6.7382- 3
2.0000+ 3 ~ 4.0000+ 3	1.7212+ 1	1.7098+ 1		1.1847- 1					0.0000+ 0				7.0264- 3
4.0000+ 3 ~ 7.0000+ 3	1.3664+ 1	1.3489+ 1		7.4967- 2					0.0000+ 0				9.7312- 3
7.0000+ 3 ~ 1.0000+ 4	1.1548+ 1	1.1482+ 1		5.3655- 2					0.0000+ 0				1.3274- 2
1.0000+ 4 ~ 2.0000+ 4	9.1130+ 0	9.6776+ 0		3.6470- 2					0.0000+ 0				2.2414- 2
2.0000+ 4 ~ 4.0000+ 4	7.6434+ 0	7.8216+ 0		2.1945- 2					0.0000+ 0				4.5807- 2
4.0000+ 4 ~ 7.0000+ 4	6.7134+ 0	6.6987+ 0		1.4671- 2					0.0000+ 0				8.4289- 2
7.0000+ 4 ~ 1.0000+ 6	6.0779+ 0	6.0670+ 0		1.0916- 2					0.0000+ 0				1.2662- 1
1.0000+ 6 ~ 2.0000+ 6	5.6940+ 0	5.6861+ 0		7.8386- 3					2.7696-16				1.9600- 1
2.0000+ 6 ~ 4.0000+ 6	5.4972+ 0	5.4919+ 0		5.0842- 3					1.1078-15				2.8314- 1
4.0000+ 6 ~ 7.0000+ 6	5.9409+ 0	5.8072+ 0	1.2880- 1	5.2308- 3					2.7281-15				3.3807- 1
7.0000+ 6 ~ 1.0000+ 6	6.4998+ 0	6.1668+ 0	3.2688- 1	5.2360- 3					7.2030-16				3.7008- 1
1.0000+ 6 ~ 2.0000+ 6	6.8122+ 0	6.0933+ 0	7.1238- 1	6.4292- 3					8.6807-14				4.6842- 1
2.0000+ 6 ~ 4.0000+ 6	5.7686+ 0	4.0987+ 0	1.6537+ 0	5.5111- 3					5.3965-11	4.2802-20			6.1442- 1
4.0000+ 6 ~ 7.0000+ 6	4.4617+ 0	2.3184+ 0	2.1449+ 0	3.5878- 4			1.0236-15		8.8443- 8	7.0460-15			8.8826- 1
7.0000+ 6 ~ 1.0000+ 7	4.4764+ 0	2.3649+ 0	1.8616+ 0	1.4766- 4	2.2840- 1		1.0930- 7	4.3721-18	6.4222- 6	7.6243-11	4.9633-11	1.0020 18	7.3637- 1
1.0000+ 7 ~ 2.0000+ 7	4.8777+ 0	2.8076+ 0	3.0863- 1	9.1624- 4	1.4603+ 0	2.1734- 1	2.0603 3	2.5229- 3	1.2209- 3	8.7004- 4	4.6712- 3	1.3634 3	8.7338- 1

MATERIAL =5601 CROSS SECTION ^{130}Ba (5601)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	3.8087+ 1	3.1270+ 0		3.4940+ 1			0.0000+ 0		0.0000+ 0				6.1764- 3
1.0000- 2 ~ 2.0000- 2	1.8059+ 1	3.1264+ 0		1.4932+ 1			0.0000+ 0		0.0000+ 0				6.1764- 3
2.0000- 2 ~ 4.0000- 2	1.3684+ 1	3.1266+ 0		1.0568+ 1			0.0000+ 0		0.0000+ 0				6.1764- 3
4.0000- 2 ~ 7.0000- 2	1.0682+ 1	3.1240+ 0		7.7663+ 0			0.0000+ 0		0.0000+ 0				6.1764- 3
7.0000- 2 ~ 1.0000- 1	9.3360+ 0	3.1222+ 0		6.2128+ 0			0.0000+ 0		0.0000+ 0				6.1764- 3
1.0000- 1 ~ 2.0000- 1	7.8401+ 0	3.1184+ 0		4.7217+ 0			0.0000+ 0		0.0000+ 0				6.1764- 3
2.0000- 1 ~ 4.0000- 1	6.4610+ 0	3.1096+ 0		3.3414+ 0			0.0000+ 0		0.0000+ 0				6.1764- 3
4.0000- 1 ~ 7.0000- 1	5.5550+ 0	3.0948+ 0		2.4603+ 0			0.0000+ 0		0.0000+ 0				6.1764- 3
7.0000- 1 ~ 1.0000+ 0	5.0462+ 0	3.0771+ 0		1.9692+ 0			0.0000+ 0		0.0000+ 0				6.1764- 3
1.0000+ 0 ~ 2.0000+ 0	4.5433+ 0	3.0386+ 0		1.5047+ 0			0.0000+ 0		0.0000+ 0				6.1764- 3
2.0000+ 0 ~ 4.0000+ 0	4.0246+ 0	2.9499+ 0		1.0749+ 0			0.0000+ 0		0.0000+ 0				6.1776- 3
4.0000+ 0 ~ 7.0000+ 0	3.5097+ 0	2.8011+ 0		8.0681- 1			0.0000+ 0		0.0000+ 0				6.1857- 3
7.0000+ 0 ~ 1.0000+ 1	3.2914+ 0	2.8201+ 0		8.7124- 1			0.0000+ 0		0.0000+ 0				6.1426- 3
1.0000+ 1 ~ 2.0000+ 1	2.7697+ 0	2.2074+ 0		5.8222- 1			0.0000+ 0		0.0000+ 0				5.2092- 3
2.0000+ 1 ~ 4.0000+ 1	2.0049+ 0	1.0166+ 0		9.8926- 1			0.0000+ 0		0.0000+ 0				6.2410- 3
4.0000+ 1 ~ 7.0000+ 1	4.8443+ 2	2.4869+ 2		2.3684+ 2			0.0000+ 0		0.0000+ 0				6.3008- 3
7.0000+ 1 ~ 1.0000+ 2	5.5228+ 0	6.0328+ 0		4.9002- 1			0.0000+ 0		0.0000+ 0				5.3657- 3
1.0000+ 2 ~ 2.0000+ 2	1.4596+ 2	1.1103+ 2		3.4930+ 1			0.0000+ 0		0.0000+ 0				5.5488- 3
2.0000+ 2 ~ 4.0000+ 2	8.9800+ 1	8.1802+ 1		7.7986+ 0			0.0000+ 0		0.0000+ 0				5.9258- 3
4.0000+ 2 ~ 7.0000+ 2	1.2670+ 1	9.1119+ 0		3.5686+ 0			0.0000+ 0		0.0000+ 0				5.7623- 3
7.0000+ 2 ~ 1.0000+ 3	1.5074+ 1	1.0518+ 1		4.5586+ 0			0.0000+ 0		0.0000+ 0				7.4242- 3
1.0000+ 3 ~ 2.0000+ 3	1.7782+ 1	1.4941+ 1		2.8402+ 0			0.0000+ 0		0.0000+ 0				9.2641- 3
2.0000+ 3 ~ 4.0000+ 3	1.1871+ 1	9.9281+ 0		1.9428+ 0			0.0000+ 0		0.0000+ 0				1.3732- 2
4.0000+ 3 ~ 7.0000+ 3	1.0091+ 1	8.5452+ 0		1.5468+ 0			0.0000+ 0		0.0000+ 0				2.1715- 2
7.0000+ 3 ~ 1.0000+ 4	8.8407+ 0	7.4353+ 0		1.2044+ 0			0.0000+ 0		0.0000+ 0				3.1148- 2
1.0000+ 4 ~ 2.0000+ 4	7.2686+ 0	6.3406+ 0		9.2783- 1			0.0000+ 0		0.0000+ 0				6.2661- 2
2.0000+ 4 ~ 4.0000+ 4	6.0052+ 0	5.2958+ 0		7.0959- 1			0.0000+ 0		0.0000+ 0				1.0006- 1
4.0000+ 4 ~ 7.0000+ 4	5.2039+ 0	4.6236+ 0		5.8033- 1			0.0000+ 0		0.0000+ 0				1.6950- 1
7.0000+ 4 ~ 1.0000+ 6	4.7696+ 0	4.2629+ 0		5.0666- 1			0.0000+ 0		0.0000+ 0				2.3805- 1
1.0000+ 6 ~ 2.0000+ 6	4.6976+ 0	4.2607+ 0		4.3630- 1			7.1164-21		1.3841- 8				3.3238- 1
2.0000+ 6 ~ 4.0000+ 6	5.1710+ 0	4.7562+ 0	5.5302- 3	4.0926- 1			2.8486-20		5.5362- 9				4.2783- 1
4.0000+ 6 ~ 7.0000+ 6	5.9715+ 0	5.9886+ 0	2.0710- 1	3.9828- 1			1.3007-19		1.4015- 7	1.4411-18			4.5022- 1
7.0000+ 6 ~ 1.0000+ 6	6.6936+ 0	6.6084+ 0	4.4210- 1	4.4318- 1			2.0562-18		4.2208- 7	1.3876-17			4.3901- 1
1.0000+ 6 ~ 2.0000+ 6	7.2729+ 0	6.6673+ 0	1.0615+ 0	5.4406- 1			4.7111-16		4.6664- 6	4.1260-16			6.0274- 1
2.0000+ 6 ~ 4.0000+ 6	6.0234+ 0	3.6419+ 0	1.7367+ 0	6.2340- 1			4.4195- 5		9.9404- 5	1.8399-15			6.3002- 1
4.0000+ 6 ~ 7.0000+ 6	4.5138+ 0	2.0883+ 0	1.9072+ 0	5.1041- 1			2.0502- 3		8.9655- 4	2.7028- 9	7.0278-19		8.1883- 1
7.0000+ 6 ~ 1.0000+ 7	4.6126+ 0	2.1662+ 0	2.0786+ 0	2.6542- 1			8.6607- 3	3.8248-14	2.8199- 3	3.2463- 6	8.2383- 0		7.1308- 1
1.0000+ 7 ~ 2.0000+ 7	5.0022+ 0	2.6406+ 0	1.1380+ 0	2.8663- 2	1.1060+ 0	1.6066- 2	2.2608- 2	1.6231- 2	8.8654- 3	2.0640- 2	5.3376- 3	4.7883- 4	8.7822- 1

MATERIAL =5602 CROSS SECTION

^{132}Ba (5602)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.4946+ 1	3.3000+ 0		2.1686+ 1					0.0000+ 0				6.0979- 3
1.0000- 2 ~ 2.0000- 2	1.2684+ 1	3.3000+ 0		9.2239+ 0					0.0000+ 0				6.0979- 3
2.0000- 2 ~ 4.0000- 2	9.8620+ 0	3.3000+ 0		5.5222+ 0					0.0000+ 0				6.0979- 3
4.0000- 2 ~ 7.0000- 2	8.1293+ 0	3.3000+ 0		4.7952+ 0					0.0000+ 0				6.0979- 3
7.0000- 2 ~ 1.0000- 1	7.1688+ 0	3.3000+ 0		3.8340+ 0					0.0000+ 0				6.0979- 3
1.0000- 1 ~ 2.0000- 1	6.2451+ 0	3.3000+ 0		2.9167+ 0					0.0000+ 0				6.0979- 3
2.0000- 1 ~ 4.0000- 1	5.3947+ 0	3.3000+ 0		2.0624+ 0					0.0000+ 0				6.0979- 3
4.0000- 1 ~ 7.0000- 1	4.8311+ 0	3.3000+ 0		1.5167+ 0					0.0000+ 0				6.0979- 3
7.0000- 1 ~ 1.0000+ 0	4.5381+ 0	3.3000+ 0		1.2123+ 0					0.0000+ 0				6.0979- 3
1.0000+ 0 ~ 2.0000+ 0	4.2345+ 0	3.3000+ 0		9.2291- 1					0.0000+ 0				5.0979- 3
2.0000+ 0 ~ 4.0000+ 0	3.9621+ 0	3.3000+ 0		6.6216- 1					0.0000+ 0				6.0986- 3
4.0000+ 0 ~ 7.0000+ 0	3.7909+ 0	3.3000+ 0		4.7927- 1					0.0000+ 0				5.1030- 3
7.0000+ 0 ~ 1.0000+ 1	3.6861+ 0	3.3000+ 0		3.8398- 1					0.0000+ 0				5.1089- 3
1.0000+ 1 ~ 2.0000+ 1	3.5180+ 0	3.3000+ 0		2.9185- 1					0.0000+ 0				5.1188- 3
2.0000+ 1 ~ 4.0000+ 1	3.6297+ 0	3.3000+ 0		2.0622- 1					0.0000+ 0				6.1360- 3
4.0000+ 1 ~ 7.0000+ 1	6.1701+ 0	3.8367+ 0		1.3247+ 0					0.0000+ 0				6.1822- 3
7.0000+ 1 ~ 1.0000+ 2	2.6676+ 1	1.0941+ 1		1.5795+ 1					0.0000+ 0				5.2793- 3
1.0000+ 2 ~ 2.0000+ 2	2.1119+ 1	1.0030+ 1		1.1088+ 1					0.0000+ 0				5.3558- 3
2.0000+ 2 ~ 4.0000+ 2	1.6004+ 1	9.0327+ 0		6.9710+ 0					0.0000+ 0				6.8457- 3
4.0000+ 2 ~ 7.0000+ 2	1.2725+ 1	8.1734+ 0		4.5527+ 0					0.0000+ 0				6.3226- 3
7.0000+ 2 ~ 1.0000+ 3	1.0909+ 1	7.5881+ 0		3.3231+ 0					0.0000+ 0				6.6754- 3
1.0000+ 3 ~ 2.0000+ 3	8.1746+ 0	6.9124+ 0		2.2622+ 0					0.0000+ 0				8.4721- 3
2.0000+ 3 ~ 4.0000+ 3	7.5761+ 0	8.1697+ 0		1.4084+ 0					0.0000+ 0				1.2486- 2
4.0000+ 3 ~ 7.0000+ 3	6.5703+ 0	6.6143+ 0		9.6603- 1					0.0000+ 0				1.9876- 2
7.0000+ 3 ~ 1.0000+ 4	5.0226+ 0	5.2739+ 0		7.4872- 1					0.0000+ 0				2.8738- 2
1.0000+ 4 ~ 2.0000+ 4	5.5139+ 0	4.8310+ 0		6.8288- 1					0.0000+ 0				4.9067- 2
2.0000+ 4 ~ 4.0000+ 4	5.0647+ 0	4.6193+ 0		4.4545- 1					0.0000+ 0				9.4550- 2
4.0000+ 4 ~ 7.0000+ 4	4.7919+ 0	4.4363+ 0		3.6601- 1					0.0000+ 0				1.6089- 1
7.0000+ 4 ~ 1.0000+ 6	4.6407+ 0	4.9380+ 0		3.0272- 1					0.0000+ 0				2.2491- 1
1.0000+ 5 ~ 2.0000+ 5	4.6936+ 0	4.4376+ 0		2.5666- 1					5.9766-10				3.1904- 1
2.0000+ 5 ~ 4.0000+ 5	5.1719+ 0	4.9252+ 0		2.4875- 1					2.3907- 9				4.1147- 1
4.0000+ 5 ~ 7.0000+ 5	5.8699+ 0	5.5952+ 0	1.3419- 1	2.4291- 1					6.0852- 9				4.3446- 1
7.0000+ 5 ~ 1.0000+ 6	6.6924+ 0	6.0487+ 0	3.8668- 1	2.4727- 1			0.0000+ 0		1.7931- 8				4.2667- 1
1.0000+ 6 ~ 2.0000+ 6	7.2737+ 0	6.9866+ 0	1.0160+ 0	3.0164- 1			3.6106-18		2.7837- 7	3.4720-17			4.8809- 1
2.0000+ 6 ~ 4.0000+ 6	8.0340+ 0	7.8544+ 0	1.8888+ 0	2.9078- 1			8.9375-12		1.6975- 5	1.0656-14			6.2528- 1
4.0000+ 6 ~ 7.0000+ 6	4.6135+ 0	2.2188+ 0	2.0922+ 0	2.0071- 1			1.8017- 4		2.6157- 4	1.9776-10			8.1819- 1
7.0000+ 6 ~ 1.0000+ 7	4.6122+ 0	2.2402+ 0	2.1776+ 0	9.0871- 2			1.8666- 3	4.8403-17	9.2570- 4	3.8064- 6	1.6197-11		7.1392- 1
1.0000+ 7 ~ 2.0000+ 7	5.0018+ 0	2.6966+ 0	9.1486- 1	7.5319- 3	1.3008+ 0	4.5679- 2	1.3746- 2	4.6816- 3	4.6848- 3	6.6897- 3	3.5792- 3	4.2768- 4	8.7822- 1

MATERIAL =5603 CROSS SECTION

^{134}Ba (5603)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	9.6226+ 0	3.4267+ 0		8.1958+ 0					0.0000+ 0				6.0218- 3
1.0000- 2 ~ 2.0000- 2	6.0740+ 0	3.4266+ 0		2.6474+ 0					0.0000+ 0				6.0218- 3
2.0000- 2 ~ 4.0000- 2	5.2991+ 0	3.4264+ 0		1.8717+ 0					0.0000+ 0				6.0218- 3
4.0000- 2 ~ 7.0000- 2	4.8017+ 0	3.4261+ 0		1.3757+ 0					0.0000+ 0				6.0218- 3
7.0000- 2 ~ 1.0000- 1	4.5264+ 0	3.4256+ 0		1.1008+ 0					0.0000+ 0				6.0218- 3
1.0000- 1 ~ 2.0000- 1	4.2802+ 0	3.4248+ 0		8.5539- 1					0.0000+ 0				6.0218- 3
2.0000- 1 ~ 4.0000- 1	4.0130+ 0	3.4227+ 0		5.9030- 1					0.0000+ 0				6.0218- 3
4.0000- 1 ~ 7.0000- 1	3.8519+ 0	3.4194+ 0		4.3258- 1					0.0000+ 0				6.0218- 3
7.0000- 1 ~ 1.0000+ 0	3.7608+ 0	3.4169+ 0		3.4649- 1					0.0000+ 0				6.0218- 3
1.0000+ 0 ~ 2.0000+ 0	3.6878+ 0	3.4088+ 0		2.6118- 1					0.0000+ 0				6.0218- 3
2.0000+ 0 ~ 4.0000+ 0	3.6591+ 0	3.3867+ 0		1.8238- 1					0.0000+ 0				6.0222- 3
4.0000+ 0 ~ 7.0000+ 0	3.4854+ 0	3.3539+ 0		1.3152- 1					0.0000+ 0				6.0245- 3
7.0000+ 0 ~ 1.0000+ 1	3.4182+ 0	3.3152+ 0		1.0306- 1					0.0000+ 0				6.0265- 3
1.0000+ 1 ~ 2.0000+ 1	3.3062+ 0	3.2325+ 0		7.6695- 2					0.0000+ 0				5.0326- 3
2.0000+ 1 ~ 4.0000+ 1	3.0929+ 0	3.0366+ 0		5.6331- 2					0.0000+ 0				5.0456- 3
4.0000+ 1 ~ 7.0000+ 1	2.5595+ 0	2.5017+ 0		5.7850- 2					0.0000+ 0				5.0776- 3
7.0000+ 1 ~ 1.0000+ 2	3.1177+ 0	1.7077+ 0		1.4100+ 0					0.0000+ 0				6.1037- 3
1.0000+ 2 ~ 2.0000+ 2	6.4999+ 1	4.4149+ 1		2.0850+ 1					0.0000+ 0				5.2102- 3
2.0000+ 2 ~ 4.0000+ 2	3.5461+ 0	3.3575+ 0		1.8864- 1					0.0000+ 0				5.4464- 3
4.0000+ 2 ~ 7.0000+ 2	4.4406+ 0	3.4923+ 0		9.4818- 1					0.0000+ 0				6.0309- 3
7.0000+ 2 ~ 1.0000+ 3	3.6077+ 0	3.2087+ 0		5.9892- 1					0.0000+ 0				6.8102- 3
1.0000+ 3 ~ 2.0000+ 3	6.5661+ 0	5.8359+ 0		7.3021- 1					0.0000+ 0				7.8582- 3
2.0000+ 3 ~ 4.0000+ 3	7.9099+ 0	7.5271+ 0		3.7889- 1					0.0000+ 0				1.1098- 2
4.0000+ 3 ~ 7.0000+ 3	8.1893+ 0	7.8049+ 0		3.8436- 1					0.0000+ 0				1.8712- 2
7.0000+ 3 ~ 1.0000+ 4	8.4278+ 0	8.0898+ 0		3.3797- 1					0.0000+ 0				2.7193- 2
1.0000+ 4 ~ 2.0000+ 4	5.7077+ 0	5.3731+ 0		3.3462- 1					0.0000+ 0				4.8732- 2
2.0000+ 4 ~ 4.0000+ 4	5.1368+ 0	4.8987+ 0		2.3784- 1					0.0000+ 0				9.0394- 2
4.0000+ 4 ~ 7.0000+ 4	4.8066+ 0	4.6269+ 0		1.7966- 1					0.0000+ 0				1.6489- 1
7.0000+ 4 ~ 1.0000+ 6	4.6238+ 0	4.4741+ 0		1.4978- 1					0.0000+ 0				2.1764- 1
1.0000+ 5 ~ 2.0000+ 5	4.6916+ 0	4.5605+ 0		1.3096- 1					1.5807-11				3.1040- 1
2.0000+ 5 ~ 4.0000+ 5	5.1712+ 0	5.0494+ 0		1.2777- 1					6.7229-11				4.0120- 1
4.0000+ 5 ~ 7.0000+ 5	5.9691+ 0	5.8001+ 0	3.0807- 2	1.3840- 1					1.7198-10				4.2018- 1
7.0000+ 5 ~ 1.0000+ 6	6.6921+ 0	6.2416+ 0	3.2682- 1	1.2491- 1					5.1636-10				4.1486- 1
1.0000+ 6 ~ 2.0000+ 6	7.2762+ 0	6.2043+ 0	9.1716- 1	1.5463- 1					9.4021- 9	6.2805-18			4.7943- 1
2.0000+ 6 ~ 4.0000+ 6	8.0648+ 0	4.0511+ 0	1.8572+ 0	1.4617- 1			7.5120-15		2.0120- 6	1.3770-18			8.1223- 1
4.0000+ 6 ~ 7.0000+ 6	4.5138+ 0	2.2840+ 0	2.1639+ 0	7.9431- 2			1.9269- 5		8.0749- 6	2.5088-11			8.1440- 1
7.0000+ 6 ~ 1.0000+ 7	4.6120+ 0	2.2800+ 0	2.2086+ 0	1.9780- 2	2.6373- 3		6.3099- 4	4.4817-18	2.6231- 4	6.3398- 7	2.7974-13		7.1307- 1
1.0000+ 7 ~ 2.0000+ 7	5.0017+ 0	2.7174+ 0	8.8187- 1	2.1412- 3	1.2828+ 0	9.6931- 2	8.3689- 3	2.6184- 3	3.8054- 3	1.6486- 3	3.3404- 3	3.7083- 4	8.7822- 1

^{135}Ba (5604)

MATERIAL =5604

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.9894+ 1	1.8280+ 0		1.8068+ 1			0.0000+ 0		0.0000+ 0				4.9845- 3
1.0000- 2 ~ 2.0000- 2	9.5497+ 0	1.8277+ 0		7.7210+ 0			0.0000+ 0		0.0000+ 0				4.9845- 3
2.0000- 2 ~ 4.0000- 2	7.2870+ 0	1.8273+ 0		5.4596+ 0			0.0000+ 0		0.0000+ 0				4.9845- 3
4.0000- 2 ~ 7.0000- 2	5.8400+ 0	1.8267+ 0		4.0133+ 0			0.0000+ 0		0.0000+ 0				4.9845- 3
7.0000- 2 ~ 1.0000- 1	6.0385+ 0	1.8259+ 0		3.2129+ 0			0.0000+ 0		0.0000+ 0				4.9845- 3
1.0000- 1 ~ 2.0000- 1	4.2685+ 0	1.8242+ 0		2.4429+ 0			0.0000+ 0		0.0000+ 0				4.9845- 3
2.0000- 1 ~ 4.0000- 1	3.6497+ 0	1.8203+ 0		1.7294+ 0			0.0000+ 0		0.0000+ 0				4.9845- 3
4.0000- 1 ~ 7.0000- 1	3.0675+ 0	1.8138+ 0		1.2737+ 0			0.0000+ 0		0.0000+ 0				4.9845- 3
7.0000- 1 ~ 1.0000+ 0	2.8276+ 0	1.8060+ 0		1.0215+ 0			0.0000+ 0		0.0000+ 0				4.9845- 3
1.0000+ 0 ~ 2.0000+ 0	2.5721+ 0	1.7888+ 0		7.8329- 1			0.0000+ 0		0.0000+ 0				4.9845- 3
2.0000+ 0 ~ 4.0000+ 0	2.3160+ 0	1.7486+ 0		5.5749- 1			0.0000+ 0		0.0000+ 0				4.9863- 3
4.0000+ 0 ~ 7.0000+ 0	2.1241+ 0	1.6779+ 0		4.4618- 1			0.0000+ 0		0.0000+ 0				4.9904- 3
7.0000+ 0 ~ 1.0000+ 1	1.9929+ 0	1.5846+ 0		4.0772- 1			0.0000+ 0		0.0000+ 0				4.9947- 3
1.0000+ 1 ~ 2.0000+ 1	2.0136+ 0	1.2860+ 0		7.2765- 1			0.0000+ 0		0.0000+ 0				5.0059- 3
2.0000+ 1 ~ 4.0000+ 1	9.8033+ 1	2.6708+ 1		7.2326+ 1			0.0000+ 0		0.0000+ 0				5.0279- 3
4.0000+ 1 ~ 7.0000+ 1	1.4980+ 0	1.1694+ 0		3.2867- 1			0.0000+ 0		0.0000+ 0				5.0774- 3
7.0000+ 1 ~ 1.0000+ 2	2.9022+ 2	1.2266+ 2		1.0756+ 2			0.0000+ 0		0.0000+ 0				5.1177- 3
1.0000+ 2 ~ 2.0000+ 2	3.0937+ 1	1.8056+ 1		1.2881+ 1			0.0000+ 0		0.0000+ 0				5.2832- 3
2.0000+ 2 ~ 4.0000+ 2	2.5483+ 1	1.5988+ 1		8.4747+ 0			0.0000+ 0		0.0000+ 0				5.5693- 3
4.0000+ 2 ~ 7.0000+ 2	1.8188+ 1	1.2491+ 1		5.5967+ 0			0.0000+ 0		0.0000+ 0				6.2741- 3
7.0000+ 2 ~ 1.0000+ 3	2.0719+ 1	1.6518+ 1		4.2015+ 0			0.0000+ 0		0.0000+ 0				6.8491- 3
1.0000+ 3 ~ 2.0000+ 3	1.5611+ 1	1.1558+ 1		4.0535+ 0			0.0000+ 0		0.0000+ 0				8.4906- 3
2.0000+ 3 ~ 4.0000+ 3	1.5183+ 1	1.6428+ 1		2.7551+ 0			0.0000+ 0		0.0000+ 0				1.2586- 2
4.0000+ 3 ~ 7.0000+ 3	1.3988+ 1	1.2666+ 1		1.3232+ 0			0.0000+ 0		0.0000+ 0				2.0065- 2
7.0000+ 3 ~ 1.0000+ 4	7.5072+ 0	6.5322+ 0		9.7495- 1			0.0000+ 0		0.0000+ 0				2.8995- 2
1.0000+ 4 ~ 2.0000+ 4	6.7768+ 0	6.0709+ 0		7.0590- 1			0.0000+ 0		0.0000+ 0				4.9341- 2
2.0000+ 4 ~ 4.0000+ 4	6.1880+ 0	5.6810+ 0		5.0709- 1			0.0000+ 0		0.0000+ 0				9.4370- 2
4.0000+ 4 ~ 7.0000+ 4	6.2469+ 0	4.8928+ 0		3.5402- 1			0.0000+ 0		0.0000+ 0				1.6016- 1
7.0000+ 4 ~ 1.0000+ 5	4.7928+ 0	4.5137+ 0		2.7911- 1			0.0000+ 0		0.0000+ 0				2.2348- 1
1.0000+ 5 ~ 2.0000+ 5	4.6885+ 0	4.4697+ 0		2.1830- 1			6.4062-21		2.0543- 8				3.1625- 1
2.0000+ 5 ~ 4.0000+ 5	5.1883+ 0	4.9294+ 0	6.1321- 2	1.7586- 1			2.5625-20		8.2172- 8				4.1043- 1
4.0000+ 5 ~ 7.0000+ 5	5.9858+ 0	5.5909+ 0	2.3224- 1	1.4300- 1			1.0109-19		1.9292- 7				4.3607- 1
7.0000+ 5 ~ 1.0000+ 6	6.5916+ 0	6.0653+ 0	5.1518- 1	1.1832- 1			1.1317-18		4.3167- 7				4.3069- 1
1.0000+ 6 ~ 2.0000+ 6	7.2727+ 0	6.0119+ 0	1.1564+ 0	1.0417- 1			1.4021-15		1.9115- 6				5.0167- 1
2.0000+ 6 ~ 4.0000+ 6	8.0259+ 0	4.0435+ 0	1.9148+ 0	4.9265- 2			6.9330- 9		1.2678- 5	1.8413-16			5.3620- 1
4.0000+ 6 ~ 7.0000+ 6	4.5138+ 0	2.4582+ 0	2.0451+ 0	9.1480- 3			3.8375- 5		4.2898- 5	1.8311-12			5.1668- 1
7.0000+ 6 ~ 1.0000+ 7	4.6117+ 0	2.4444+ 0	1.5798+ 0	1.6080- 3	4.8310- 1		3.8113- 4	1.1044-19	1.0631- 4	1.0662- 8	7.6196-13	5.9338-16	7.1399- 1
1.0000+ 7 ~ 2.0000+ 7	6.0015+ 0	2.8423+ 0	5.4976- 1	1.0876- 3	1.6112+ 0	7.7984- 2	6.1253- 3	2.0057- 3	2.9626- 3	8.9794- 4	5.4689- 3	1.0316- 3	8.7821- 1

^{136}Ba (5605)

MATERIAL =5605

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	3.8027+ 0	2.5644+ 0		1.2382+ 0					0.0000+ 0				4.9479- 3
1.0000- 2 ~ 2.0000- 2	3.0936+ 0	2.5644+ 0		5.2911- 1					0.0000+ 0				4.9479- 3
2.0000- 2 ~ 4.0000- 2	2.9386+ 0	2.5644+ 0		3.7418- 1					0.0000+ 0				4.9479- 3
4.0000- 2 ~ 7.0000- 2	2.8394+ 0	2.5649+ 0		2.7512- 1					0.0000+ 0				4.9479- 3
7.0000- 2 ~ 1.0000- 1	2.7844+ 0	2.5642+ 0		2.2011- 1					0.0000+ 0				4.9479- 3
1.0000- 1 ~ 2.0000- 1	2.7311+ 0	2.5841+ 0		1.6699- 1					0.0000+ 0				4.9479- 3
2.0000- 1 ~ 4.0000- 1	2.6818+ 0	2.5638+ 0		1.1805- 1					0.0000+ 0				4.9479- 3
4.0000- 1 ~ 7.0000- 1	2.6499+ 0	2.5633+ 0		8.8590- 2					0.0000+ 0				4.9479- 3
7.0000- 1 ~ 1.0000+ 0	2.6320+ 0	2.5627+ 0		6.9231- 2					0.0000+ 0				4.9479- 3
1.0000+ 0 ~ 2.0000+ 0	2.6139+ 0	2.5616+ 0		5.2409- 2					0.0000+ 0				4.9479- 3
2.0000+ 0 ~ 4.0000+ 0	2.5952+ 0	2.5585+ 0		3.6708- 2					0.0000+ 0				4.9481- 3
4.0000+ 0 ~ 7.0000+ 0	2.5602+ 0	2.5537+ 0		2.6550- 2					0.0000+ 0				4.9493- 3
7.0000+ 0 ~ 1.0000+ 1	2.5888+ 0	2.5480+ 0		2.0808- 2					0.0000+ 0				4.9503- 3
1.0000+ 1 ~ 2.0000+ 1	2.5513+ 0	2.5361+ 0		1.5244- 2					0.0000+ 0				4.9541- 3
2.0000+ 1 ~ 4.0000+ 1	2.6204+ 0	2.5106+ 0		9.8998- 3					0.0000+ 0				4.9629- 3
4.0000+ 1 ~ 7.0000+ 1	2.4788+ 0	2.4724+ 0		8.3842- 3					0.0000+ 0				4.9865- 3
7.0000+ 1 ~ 1.0000+ 2	2.4370+ 0	2.4326+ 0		4.4641- 3					0.0000+ 0				5.0080- 3
1.0000+ 2 ~ 2.0000+ 2	2.3849+ 0	2.3821+ 0		2.8088- 3					0.0000+ 0				5.0940- 3
2.0000+ 2 ~ 4.0000+ 2	2.2225+ 0	2.2204+ 0		2.1111- 3					0.0000+ 0				5.2966- 3
4.0000+ 2 ~ 7.0000+ 2	6.3635+ 0	4.4285+ 0		1.9348+ 0					0.0000+ 0				5.8232- 3
7.0000+ 2 ~ 1.0000+ 3	2.1168+ 0	2.1148+ 0		7.3742- 4					0.0000+ 0				6.2564- 3
1.0000+ 3 ~ 2.0000+ 3	1.0663+ 0	1.7286+ 0		1.3687- 1					0.0000+ 0				7.6093- 3
2.0000+ 3 ~ 4.0000+ 3	1.1599+ 1	1.1349+ 1		2.4977- 1					0.0000+ 0				1.1159- 2
4.0000+ 3 ~ 7.0000+ 3	7.0497+ 0	6.8132+ 0		2.3644- 1					0.0000+ 0				1.7878- 2
7.0000+ 3 ~ 1.0000+ 4	3.2192+ 1	3.2083+ 1		1.0984- 1					0.0000+ 0				2.6028- 2
1.0000+ 4 ~ 2.0000+ 4	6.8667+ 0	6.6718		6.4870- 2					0.0000+ 0				4.4873- 2
2.0000+ 4 ~ 4.0000+ 4	4.7735+ 0	4.7129+ 0		5.3573- 2					0.0000+ 0				8.7314- 2
4.0000+ 4 ~ 7.0000+ 4	4.7706+ 0	4.7204+ 0		5.0243- 2					0.0000+ 0				1.6069- 1
7.0000+ 4 ~ 1.0000+ 5	4.6132+ 0	4.6706+ 0		4.2592- 2					0.0000+ 0				2.1240- 1
1.0000+ 5 ~ 2.0000+ 5	4.5868+ 0	4.6487+ 0		3.8092- 2					3.1489-13				3.0420- 1
2.0000+ 5 ~ 4.0000+ 5	5.1664+ 0	5.1303+ 0		3.6130- 2					1.2696-12				3.9394- 1
4.0000+ 5 ~ 7.0000+ 5	5.9666+ 0	5.9246+ 0		4.1167- 2					3.2012-12				4.1082- 1
7.0000+ 5 ~ 1.0000+ 6	6.6911+ 0	6.6408+ 0	1.0466- 1	4.6839- 2					9.4081-12				3.9804- 1
1.0000+ 6 ~ 2.0000+ 6	7.2761+ 0	6.6540+ 0	6.7486- 1	4.7372- 2					1.5967-10				4.6466- 1
2.0000+ 6 ~ 4.0000+ 6	6.0564+ 0	4.2519+ 0	1.7605+ 0	2.6700- 2			1.2647-17		8.4543- 8	4.0876-17			6.9931- 1
4.0000+ 6 ~ 7.0000+ 6	4.5199+ 0	2.5787+ 0	2.1276+ 0	7.4717- 3			3.7495- 7		8.8407- 8	1.2495-12			8.1577- 1
7.0000+ 6 ~ 1.0000+ 7	4.6116+ 0	2.3674+ 0	2.1262+ 0	1.7363- 3	2.5667- 2		1.4521- 4	1.2900-20	5.5262- 6	2.6889- 8	6.2419-15		7.1368- 1
1.0000+ 7 ~ 2.0000+ 7	6.0014+ 0	2.7706+ 0	7.1548- 1	1.1060- 3	1.3600+ 0	1.9726- 1	6.8267- 3	1.8494- 3	2.6226- 3	1.0319- 3	2.8812- 3	4.3261- 4	8.7821- 1

^{137}Ba (5606)

CROSS SECTION

MATERIAL =5606

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.9741+ 1	3.8629+ 0		1.6878+ 1					0.0000+ 0				4.9117- 3
1.0000- 2 ~ 2.0000- 2	1.0542+ 1	3.8624+ 0		6.7796+ 0					0.0000+ 0				4.9117- 3
2.0000- 2 ~ 4.0000- 2	8.6542+ 0	3.8616+ 0		4.7926+ 0					0.0000+ 0				4.9117- 3
4.0000- 2 ~ 7.0000- 2	7.9788+ 0	3.8605+ 0		9.5198+ 0					0.0000+ 0				4.9117- 3
7.0000- 2 ~ 1.0000- 1	6.6617+ 0	3.8587+ 0		2.8030+ 0					0.0000+ 0				4.9117- 3
1.0000- 1 ~ 2.0000- 1	5.9775+ 0	3.8553+ 0		2.1222+ 0					0.0000+ 0				4.9117- 3
2.0000- 1 ~ 4.0000- 1	5.3308+ 0	3.8476+ 0		1.4834+ 0					0.0000+ 0				4.9117- 3
4.0000- 1 ~ 7.0000- 1	4.8057+ 0	3.8347+ 0		1.0710+ 0					0.0000+ 0				4.9117- 3
7.0000- 1 ~ 1.0000+ 0	4.6584+ 0	3.8196+ 0		8.3868- 1					0.0000+ 0				4.9117- 3
1.0000+ 0 ~ 2.0000+ 0	4.3983+ 0	3.7887+ 0		6.0980- 1					0.0000+ 0				4.9117- 3
2.0000+ 0 ~ 4.0000+ 0	4.1117+ 0	3.7229+ 0		3.8876- 1					0.0000+ 0				4.9119- 3
4.0000+ 0 ~ 7.0000+ 0	3.8720+ 0	3.6264+ 0		2.4359- 1					0.0000+ 0				4.9135- 3
7.0000+ 0 ~ 1.0000+ 1	3.6961+ 0	3.5398+ 0		1.6249- 1					0.0000+ 0				4.9144- 3
1.0000+ 1 ~ 2.0000+ 1	3.4757+ 0	3.3829+ 0		9.0797- 2					0.0000+ 0				4.9165- 3
2.0000+ 1 ~ 4.0000+ 1	3.2062+ 0	3.1698+ 0		3.6409- 2					0.0000+ 0				4.9278- 3
4.0000+ 1 ~ 7.0000+ 1	2.9986+ 0	2.8847+ 0		1.3863- 2					0.0000+ 0				4.9625- 3
7.0000+ 1 ~ 1.0000+ 2	2.8684+ 0	2.8617+ 0		8.7580- 3					0.0000+ 0				4.9729- 3
1.0000+ 2 ~ 2.0000+ 2	2.7541+ 0	2.7077+ 0		4.6374- 2					0.0000+ 0				5.0833- 3
2.0000+ 2 ~ 4.0000+ 2	2.2034+ 0	2.1693+ 0		1.5115- 2					0.0000+ 0				5.2701- 3
4.0000+ 2 ~ 7.0000+ 2	2.6275+ 1	2.3215+ 1		3.0603+ 0					0.0000+ 0				6.8039- 3
7.0000+ 2 ~ 1.0000+ 3	2.9929+ 0	2.6914+ 0		1.4685- 3					0.0000+ 0				8.2428- 3
1.0000+ 3 ~ 2.0000+ 3	8.3468+ 0	7.6241+ 0		8.2152- 1					0.0000+ 0				7.6054- 3
2.0000+ 3 ~ 4.0000+ 3	1.1198+ 1	1.0843+ 1		3.5202- 1					0.0000+ 0				1.1172- 2
4.0000+ 3 ~ 7.0000+ 3	6.3553+ 0	6.1565+ 0		1.9969- 1					0.0000+ 0				1.7906- 2
7.0000+ 3 ~ 1.0000+ 4	7.0140+ 0	6.8994+ 0		1.1488- 1					0.0000+ 0				2.6057- 2
1.0000+ 4 ~ 2.0000+ 4	6.8680+ 0	6.7810+ 0		8.6936- 2					0.0000+ 0				4.4889- 2
2.0000+ 4 ~ 4.0000+ 4	4.9679+ 0	4.9097+ 0		5.8215- 2					0.0000+ 0				8.7272- 2
4.0000+ 4 ~ 7.0000+ 4	6.3220+ 0	6.2718+ 0		5.0204- 2					0.0000+ 0				1.5042- 1
7.0000+ 4 ~ 1.0000+ 5	4.8069+ 0	4.7680+ 0		3.7802- 2					0.0000+ 0				2.1207- 1
1.0000+ 5 ~ 2.0000+ 5	4.6865+ 0	4.6683+ 0		2.8243- 2					7.5588-11				3.0367- 1
2.0000+ 5 ~ 4.0000+ 5	5.1657+ 0	5.1180+ 0	2.7751- 2	2.2180- 2					9.9224-10				3.9504- 1
4.0000+ 5 ~ 7.0000+ 5	5.9858+ 0	5.8252+ 0	1.2088- 1	2.0029- 2			0.0000+ 0		7.5357-10				4.1790- 1
7.0000+ 5 ~ 1.0000+ 6	6.6910+ 0	6.4521+ 0	2.2267- 1	1.5457- 2			0.0000+ 0		2.1774- 9				4.0430- 1
1.0000+ 6 ~ 2.0000+ 6	7.2767+ 0	6.6890+ 0	5.7119- 1	1.6471- 2			3.4612-19		3.1969- 8				4.6080- 1
2.0000+ 6 ~ 4.0000+ 6	8.0447+ 0	4.4354+ 0	1.5949+ 0	9.9318- 3			5.6381-13		1.0225- 6	5.0199-18			5.9156- 1
4.0000+ 6 ~ 7.0000+ 6	4.5159+ 0	2.4783+ 0	2.0334+ 0	1.7520- 3			9.0276- 8		7.0452- 6	1.5725-19			6.1442- 1
7.0000+ 6 ~ 1.0000+ 7	4.6116+ 0	2.4392+ 0	1.3672+ 0	1.0162- 3	7.0167- 1		8.7680- 6		9.5169- 6	6.2606-10	1.7784-14	3.2692-18	7.1403- 1
1.0000+ 7 ~ 2.0000+ 7	5.0014+ 0	2.8436+ 0	4.5859- 1	1.0814- 3	1.5936+ 0	8.9252- 2	3.7120- 3	2.1469- 3	1.9489- 3	7.0873- 4	5.3715- 3	1.0426- 3	8.7822- 1

^{138}Ba (5607)

CROSS SECTION

MATERIAL =5607

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.6631+ 0	6.4420+ 0		1.1111+ 0					0.0000+ 0				4.8761- 3
1.0000- 2 ~ 2.0000- 2	6.9169+ 0	6.4420+ 0		4.7480- 1					0.0000+ 0				4.8761- 3
2.0000- 2 ~ 4.0000- 2	6.7783+ 0	6.4420+ 0		3.3831- 1					0.0000+ 0				4.8761- 3
4.0000- 2 ~ 7.0000- 2	6.8865+ 0	6.4420+ 0		2.4650- 1					0.0000+ 0				4.8761- 3
7.0000- 2 ~ 1.0000- 1	6.6392+ 0	6.4419+ 0		1.9726- 1					0.0000+ 0				4.8761- 3
1.0000- 1 ~ 2.0000- 1	6.5922+ 0	6.4419+ 0		1.5027- 1					0.0000+ 0				4.8761- 3
2.0000- 1 ~ 4.0000- 1	6.5479+ 0	6.4418+ 0		1.0609- 1					0.0000+ 0				4.8761- 3
4.0000- 1 ~ 7.0000- 1	6.5187+ 0	6.4417+ 0		7.8029- 2					0.0000+ 0				4.8761- 3
7.0000- 1 ~ 1.0000+ 0	6.5038+ 0	6.4416+ 0		6.2349- 2					0.0000+ 0				4.8761- 3
1.0000+ 0 ~ 2.0000+ 0	6.4885+ 0	6.4411+ 0		4.7480- 2					0.0000+ 0				4.8761- 3
2.0000+ 0 ~ 4.0000+ 0	6.4737+ 0	6.4401+ 0		3.3646- 2					0.0000+ 0				4.8763- 3
4.0000+ 0 ~ 7.0000+ 0	6.4632+ 0	6.4368+ 0		2.4522- 2					0.0000+ 0				4.8771- 3
7.0000+ 0 ~ 1.0000+ 1	6.4565+ 0	6.4367+ 0		1.9704- 2					0.0000+ 0				4.8779- 3
1.0000+ 1 ~ 2.0000+ 1	6.4477+ 0	6.4327+ 0		1.4947- 2					0.0000+ 0				4.8811- 3
2.0000+ 1 ~ 4.0000+ 1	6.4341+ 0	6.4235+ 0		1.0520- 2					0.0000+ 0				4.8886- 3
4.0000+ 1 ~ 7.0000+ 1	6.4150+ 0	6.4083+ 0		7.5735- 3					0.0000+ 0				4.9099- 3
7.0000+ 1 ~ 1.0000+ 2	6.3983+ 0	6.3902+ 0		6.0715- 3					0.0000+ 0				4.9275- 3
1.0000+ 2 ~ 2.0000+ 2	6.3563+ 0	6.3518+ 0		4.5339- 3					0.0000+ 0				5.0100- 3
2.0000+ 2 ~ 4.0000+ 2	6.2898+ 0	6.2885+ 0		3.0648- 3					0.0000+ 0				5.2024- 3
4.0000+ 2 ~ 7.0000+ 2	6.1369+ 0	6.1335+ 0		2.0934- 3					0.0000+ 0				5.7098- 3
7.0000+ 2 ~ 1.0000+ 3	4.9893+ 0	4.9877+ 0		1.5311- 3					0.0000+ 0				6.1272- 3
1.0000+ 3 ~ 2.0000+ 3	4.7195+ 0	4.7185+ 0		8.8897- 4					0.0000+ 0				7.4405- 3
2.0000+ 3 ~ 4.0000+ 3	4.2499+ 0	4.2494+ 0		4.9884- 4					0.0000+ 0				1.0899- 2
4.0000+ 3 ~ 7.0000+ 3	3.7216+ 0	3.7157+ 0		4.9648- 3					0.0000+ 0				1.7470- 2
7.0000+ 3 ~ 1.0000+ 4	5.9290+ 0	5.9166+ 0		1.2378- 2					0.0000+ 0				2.5480- 2
1.0000+ 4 ~ 2.0000+ 4	3.0863+ 0	3.0822+ 0		4.1290- 3					0.0000+ 0				4.4054- 2
2.0000+ 4 ~ 4.0000+ 4	3.7740+ 0	3.7708+ 0		3.1586- 3					0.0000+ 0				8.6197- 1
4.0000+ 4 ~ 7.0000+ 4	4.7300+ 0	4.7269+ 0		4.1469- 3					0.0000+ 0				1.4301- 1
7.0000+ 4 ~ 1.0000+ 5	3.4442+ 0	3.4414+ 0		2.7435- 3					0.0000+ 0				2.1049- 1
1.0000+ 5 ~ 2.0000+ 5	4.6834+ 0	4.6809+ 0		2.5446- 3					1.3095-14				3.0181- 1
2.0000+ 5 ~ 4.0000+ 5	5.1830+ 0	5.1805+ 0		2.5174- 3					4.0378-14				3.9125- 1
4.0000+ 5 ~ 7.0000+ 5	5.9835+ 0	5.9809+ 0		2.5285- 3					1.0340-13				4.0788- 1
7.0000+ 5 ~ 1.0000+ 6	6.6902+ 0	6.6864+ 0		3.8270- 3					3.1171-13				3.8999- 1
1.0000+ 6 ~ 2.0000+ 6	7.2773+ 0	7.1035+ 0	1.6823- 1	5.9012- 3					8.4992-12				4.2364- 1
2.0000+ 6 ~ 4.0000+ 6	5.0678+ 0	4.5952+ 0	1.4540+ 0	2.2832- 3					4.7021- 9	1.7403-18			5.7139- 1
4.0000+ 6 ~ 7.0000+ 6	4.5140+ 0	2.4391+ 0	2.0786+ 0	1.0896- 3			1.7656-18		2.2742- 8	1.5882-13			8.0807- 1
7.0000+ 6 ~ 1.0000+ 7	4.6112+ 0	2.3727+ 0	2.0466+ 0	1.1636- 3	9.0432- 2		1.4662- 7		4.3466- 6	3.1378- 9	1.3927-18		7.1381- 1
1.0000+ 7 ~ 2.0000+ 7	5.0012+ 0	2.8026+ 0	5.4273- 1	1.7807- 3	1.4068+ 0	2.3563- 1	4.9390- 3	5.7785- 4	2.8011- 3	1.6860- 3	1.5926- 3	3.0708- 4	8.7821- 1

MATERIAL =5608 CROSS SECTION ^{140}Ba (5608)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	8.2699+ 0	3.3000+ 0		4.9339+ 0					0.0000+ 0	0.0000+ 0			4.8062- 3
1.0000- 2 ~ 2.0000- 2	5.4398+ 0	3.3000+ 0		2.1083+ 0					0.0000+ 0	0.0000+ 0			
2.0000- 2 ~ 4.0000- 2	4.8065+ 0	3.3000+ 0		1.4905+ 0					0.0000+ 0	0.0000+ 0			4.8062- 3
4.0000- 2 ~ 7.0000- 2	4.4049+ 0	3.3000+ 0		1.0958+ 0					0.0000+ 0	0.0000+ 0			4.8062- 3
7.0000- 2 ~ 1.0000- 1	4.1901+ 0	3.3000+ 0		8.7636- 1					0.0000+ 0	0.0000+ 0			4.8062- 3
1.0000- 1 ~ 2.0000- 1	3.9806+ 0	3.3000+ 0		6.6671- 1					0.0000+ 0	0.0000+ 0			4.8062- 3
2.0000- 1 ~ 4.0000- 1	3.8046+ 0	3.3000+ 0		4.7144- 1					0.0000+ 0	0.0000+ 0			4.8062- 3
4.0000- 1 ~ 7.0000- 1	3.6511+ 0	3.3000+ 0		3.4646- 1					0.0000+ 0	0.0000+ 0			4.8062- 3
7.0000- 1 ~ 1.0000+ 0	3.5847+ 0	3.3000+ 0		2.7713- 1					0.0000+ 0	0.0000+ 0			4.8062- 3
1.0000+ 0 ~ 2.0000+ 0	3.5284+ 0	3.3000+ 0		2.1083- 1					0.0000+ 0	0.0000+ 0			4.8062- 3
2.0000+ 0 ~ 4.0000+ 0	3.4664+ 0	3.3000+ 0		1.4908- 1					0.0000+ 0	0.0000+ 0			4.8064- 3
4.0000+ 0 ~ 7.0000+ 0	3.4152+ 0	3.3000+ 0		1.0958- 1					0.0000+ 0	0.0000+ 0			4.8072- 3
7.0000+ 0 ~ 1.0000+ 1	3.3950+ 0	3.3000+ 0		8.7638- 2					0.0000+ 0	0.0000+ 0			4.8080- 3
1.0000+ 1 ~ 2.0000+ 1	3.3888+ 0	3.3000+ 0		6.6672- 2					0.0000+ 0	0.0000+ 0			4.8111- 3
2.0000+ 1 ~ 4.0000+ 1	3.3548+ 0	3.3000+ 0		4.7145- 2					0.0000+ 0	0.0000+ 0			4.8187- 3
4.0000+ 1 ~ 7.0000+ 1	3.3496+ 0	3.3000+ 0		3.4647- 2					0.0000+ 0	0.0000+ 0			4.8390- 3
7.0000+ 1 ~ 1.0000+ 2	3.3457+ 0	3.3000+ 0		2.7714- 2					0.0000+ 0	0.0000+ 0			4.8574- 3
1.0000+ 2 ~ 2.0000+ 2	3.3410+ 0	3.3000+ 0		2.1084- 2					0.0000+ 0	0.0000+ 0			4.9397- 3
2.0000+ 2 ~ 4.0000+ 2	3.3350+ 0	3.3000+ 0		1.4909- 2					0.0000+ 0	0.0000+ 0			5.1315- 3
4.0000+ 2 ~ 7.0000+ 2	3.3298+ 0	3.3000+ 0		1.0966- 2					0.0000+ 0	0.0000+ 0			5.5376- 3
7.0000+ 2 ~ 1.0000+ 3	3.3260+ 0	3.3000+ 0		8.7640- 3					0.0000+ 0	0.0000+ 0			6.0541- 3
1.0000+ 3 ~ 2.0000+ 3	3.3213+ 0	3.3000+ 0		6.6674- 3					0.0000+ 0	0.0000+ 0			7.3649- 3
2.0000+ 3 ~ 4.0000+ 3	3.3154+ 0	3.3000+ 0		4.7148- 3					0.0000+ 0	0.0000+ 0			1.0819- 2
4.0000+ 3 ~ 7.0000+ 3	3.3102+ 0	3.3000+ 0		3.4648- 3					0.0000+ 0	0.0000+ 0			1.7382- 2
7.0000+ 3 ~ 1.0000+ 4	3.3084+ 0	3.3000+ 0		2.7714- 3					0.0000+ 0	0.0000+ 0			2.5373- 2
1.0000+ 4 ~ 2.0000+ 4	4.6701+ 0	4.6669+ 0		3.7172- 3					0.0000+ 0	0.0000+ 0			4.3966- 2
2.0000+ 4 ~ 4.0000+ 4	5.0721+ 0	5.0685+ 0		3.8234- 3					0.0000+ 0	0.0000+ 0			8.8012- 2
4.0000+ 4 ~ 7.0000+ 4	4.7869+ 0	4.7863+ 0		2.6954- 3					0.0000+ 0	0.0000+ 0			1.4867- 1
7.0000+ 4 ~ 1.0000+ 5	4.6319+ 0	4.6296+ 0		2.2782- 3					0.0000+ 0	0.0000+ 0			2.1031- 1
1.0000+ 5 ~ 2.0000+ 5	4.6812+ 0	4.6793+ 0		1.8849- 3					9.8360-14	3.1840-19			3.0166- 1
2.0000+ 5 ~ 4.0000+ 5	5.1808+ 0	5.1590+ 0		1.7769- 3					3.9544-13	1.2796-18			3.9104- 1
4.0000+ 5 ~ 7.0000+ 5	5.9816+ 0	5.9277+ 0	3.2185- 2	1.7619- 3					1.0049-12	3.4673-18			4.1025- 1
7.0000+ 5 ~ 1.0000+ 6	6.6900+ 0	6.3770+ 0	3.1240- 1	8.4892- 4					3.0016-12	1.2790-17			4.0837- 1
1.0000+ 6 ~ 2.0000+ 6	7.2803+ 0	6.4872+ 0	7.9217- 1	5.3738- 4					5.3843-11	2.4527-19			
2.0000+ 6 ~ 4.0000+ 6	6.0300+ 0	4.2905+ 0	1.7202+ 0	3.9498- 4					2.1131- 8	9.4820-11			4.6492- 1
4.0000+ 6 ~ 7.0000+ 6	4.5142+ 0	2.5012+ 0	1.9946+ 0	1.9422- 4	1.5428- 2		8.8028-21		2.2649- 8	7.4128- 7			6.0521- 1
7.0000+ 6 ~ 1.0000+ 7	4.5111+ 0	2.4428+ 0	8.5729- 1	1.8902- 4	1.1978+ 0		6.5086-10		2.6820- 6	1.4797- 5	4.4293-20	2.9104-18	6.1256- 1
1.0000+ 7 ~ 2.0000+ 7	5.0012+ 0	2.8433+ 0	1.1910- 1	9.6830- 4	1.0208+ 0	1.0036+ 0	3.4948- 3	5.4894- 4	6.8348- 4	4.2674- 3	2.3994- 3	1.5824- 3	8.7821- 1

MATERIAL =5701 CROSS SECTION ^{138}La (5701)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	1.8914+ 2	1.2996+ 1		1.7614+ 2			0.0000+ 0		0.0000+ 0				4.8761- 3
1.0000- 2 ~ 2.0000- 2	8.8367+ 1	1.2986+ 1		7.5381+ 1			0.0000+ 0		0.0000+ 0				
2.0000- 2 ~ 4.0000- 2	6.6372+ 1	1.2973+ 1		5.3399+ 1			0.0000+ 0		0.0000+ 0				4.8761- 3
4.0000- 2 ~ 7.0000- 2	5.2321+ 1	1.2951+ 1		3.9370+ 1			0.0000+ 0		0.0000+ 0				4.8761- 3
7.0000- 2 ~ 1.0000- 1	4.4576+ 1	1.2926+ 1		3.1661+ 1			0.0000+ 0		0.0000+ 0				4.8761- 3
1.0000- 1 ~ 2.0000- 1	3.7148+ 1	1.2886+ 1		2.4277+ 1			0.0000+ 0		0.0000+ 0				4.8761- 3
2.0000- 1 ~ 4.0000- 1	3.0367+ 1	1.2738+ 1		1.7619+ 1			0.0000+ 0		0.0000+ 0				4.8761- 3
4.0000- 1 ~ 7.0000- 1	2.6242+ 1	1.2522+ 1		1.3718+ 1			0.0000+ 0		0.0000+ 0				4.8761- 3
7.0000- 1 ~ 1.0000+ 0	2.4368+ 1	1.2262+ 1		1.2098+ 1			0.0000+ 0		0.0000+ 0				4.8761- 3
1.0000+ 0 ~ 2.0000+ 0	2.5879+ 1	1.1881+ 1		1.4212+ 1			0.0000+ 0		0.0000+ 0				4.8761- 3
2.0000+ 0 ~ 4.0000+ 0	4.5260+ 2	1.7855+ 1		4.3475+ 2			0.0000+ 0		0.0000+ 0				4.8768- 3
4.0000+ 0 ~ 7.0000+ 0	1.5106+ 1	1.0665+ 1		4.4416+ 0			0.0000+ 0		0.0000+ 0				4.8819- 3
7.0000+ 0 ~ 1.0000+ 1	1.0696+ 1	9.2399+ 0		1.4816+ 0			0.0000+ 0		0.0000+ 0				4.8857- 3
1.0000+ 1 ~ 2.0000+ 1	8.4940+ 0	7.2406+ 0		1.2532+ 0			0.0000+ 0		0.0000+ 0				4.8966- 3
2.0000+ 1 ~ 4.0000+ 1	2.6876+ 1	7.0334+ 0		1.9646+ 1			0.0000+ 0		0.0000+ 0				4.9166- 3
4.0000+ 1 ~ 7.0000+ 1	2.0961+ 1	7.0292+ 0		1.3928+ 1			0.0000+ 0		0.0000+ 0				4.9564- 3
7.0000+ 1 ~ 1.0000+ 2	1.8714+ 1	6.5004+ 0		1.2414+ 1			0.0000+ 0		0.0000+ 0				5.0091- 3
1.0000+ 2 ~ 2.0000+ 2	1.1550+ 1	6.3233+ 0		5.2269+ 0			0.0000+ 0		0.0000+ 0				5.1590- 3
2.0000+ 2 ~ 4.0000+ 2	8.2188+ 1	4.9040+ 1		1.3147+ 1			0.0000+ 0		0.0000+ 0				5.4788- 3
4.0000+ 2 ~ 7.0000+ 2	1.1707+ 1	8.0661+ 0		3.6409+ 0			0.0000+ 0		0.0000+ 0				6.2167- 3
7.0000+ 2 ~ 1.0000+ 3	1.0144+ 1	7.4925+ 0		2.6516+ 0			0.0000+ 0		0.0000+ 0				6.6181- 3
1.0000+ 3 ~ 2.0000+ 3	9.6542+ 0	8.8454+ 0		1.0089+ 0			0.0000+ 0		0.0000+ 0				8.5439- 3
2.0000+ 3 ~ 4.0000+ 3	7.2653+ 0	6.1488+ 0		1.1365+ 0			0.0000+ 0		0.0000+ 0				1.2841- 2
4.0000+ 3 ~ 7.0000+ 3	6.4291+ 0	5.6452+ 0		7.8291- 1			0.0000+ 0		0.0000+ 0				2.0636- 2
7.0000+ 3 ~ 1.0000+ 4	5.9865+ 0	5.3520+ 0		6.1448- 1			0.0000+ 0		0.0000+ 0				2.9869- 2
1.0000+ 4 ~ 2.0000+ 4	5.5416+ 0	5.0768+ 0		4.5686- 1			0.0000+ 0		0.0000+ 0				5.0574- 2
2.0000+ 4 ~ 4.0000+ 4	5.1731+ 0	4.8492+ 0		3.2488- 1			0.0000+ 0		0.0000+ 0				9.8719- 2
4.0000+ 4 ~ 7.0000+ 4	4.9680+ 0	4.7285+ 0		2.3033- 1			0.0000+ 0		0.0000+ 0				1.8089- 1
7.0000+ 4 ~ 1.0000+ 5	4.8387+ 0	4.6636+ 0	9.7062- 3	1.7627- 1			0.0000+ 0		0.0000+ 0				2.2370- 1
1.0000+ 5 ~ 2.0000+ 5	4.9140+ 0	4.7394+ 0	4.9716- 2	1.2480- 1			2.0360-13		3.0850- 9				3.1818- 1
2.0000+ 5 ~ 4.0000+ 5	5.3903+ 0	5.1489+ 0	1.8929- 1	6.3389- 2			8.1440-13		1.2340- 8				4.1898- 1
4.0000+ 5 ~ 7.0000+ 5	6.1362+ 0	5.7264+ 0	3.4692- 1	8.2792- 2			2.8435-12		2.7487- 8				4.8121- 1
7.0000+ 5 ~ 1.0000+ 6	6.7313+ 0	6.0898+ 0	6.9810- 1	5.1612- 2			2.2602-11		6.0942- 8				4.4729- 1
1.0000+ 6 ~ 2.0000+ 6	7.0901+ 0	6.7524+ 0	1.3110+ 0	2.6774- 2			1.7409- 8		2.5245- 7				5.1564- 1
2.0000+ 6 ~ 4.0000+ 6	5.8763+ 0	3.8536+ 0	2.0040+ 0	7.5374- 3			2.9400- 6		2.8313- 5	6.8417-17			6.3788- 1
4.0000+ 6 ~ 7.0000+ 6	4.4598+ 0	2.4080+ 0	2.0488+ 0	1.5226- 3			1.0381- 4		1.9919- 6	2.0502-12	6.5441-17	2.8962-20	6.1870- 1
7.0000+ 6 ~ 1.0000+ 7	4.5103+ 0	2.4667+ 0	1.6341+ 0	1.0717- 3	4.1644- 1		4.3634- 4	7.6424-12	4.4599- 4	6.8517- 9	3.2842- 8	5.5529-10	7.1575- 1
1.0000+ 7 ~ 2.0000+ 7	4.9769+ 0	2.8408+ 0	3.5689- 1	1.0840- 3	1.6943+ 0	5.3317- 2	4.8142- 3	7.8201- 3	2.4209- 3	1.2323- 3	1.0077- 2	2.2372- 3	8.7818- 1

^{139}La (5702)

CROSS SECTION

MATERIAL =5702

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	3.8123+ 1	1.0492+ 1		2.7630+ 1					0.0000+ 0				4.8410- 3
1.0000- 2 ~ 2.0000- 2	2.2297+ 1	1.0492+ 1		1.1806+ 1					0.0000+ 0				4.8410- 3
2.0000- 2 ~ 4.0000- 2	1.8836+ 1	1.0492+ 1		8.3463+ 0					0.0000+ 0				4.8410- 3
4.0000- 2 ~ 7.0000- 2	1.6617+ 1	1.0486+ 1		6.1281+ 0					0.0000+ 0				4.8410- 3
7.0000- 2 ~ 1.0000- 1	1.5393+ 1	1.0486+ 1		4.9068+ 0					0.0000+ 0				4.8410- 3
1.0000- 1 ~ 2.0000- 1	1.4206+ 1	1.0482+ 1		3.7246+ 0					0.0000+ 0				4.8410- 3
2.0000- 1 ~ 4.0000- 1	1.3103+ 1	1.0470+ 1		2.6324+ 0					0.0000+ 0				4.8410- 3
4.0000- 1 ~ 7.0000- 1	1.2473+ 1	1.0462+ 1		2.0210+ 0					0.0000+ 0				4.8410- 3
7.0000- 1 ~ 1.0000+ 0	1.2525+ 1	1.0430+ 1		2.0944+ 0					0.0000+ 0				4.8410- 3
1.0000+ 0 ~ 2.0000+ 0	1.1543+ 1	1.0383+ 1		1.1600+ 0					0.0000+ 0				4.8410- 3
2.0000+ 0 ~ 4.0000+ 0	1.1076+ 1	1.0276+ 1		7.9862- 1					0.0000+ 0				4.8412- 3
4.0000+ 0 ~ 7.0000+ 0	1.0671+ 1	1.0105+ 1		5.6664- 1					0.0000+ 0				4.8425- 3
7.0000+ 0 ~ 1.0000+ 1	1.0342+ 1	9.9076+ 0		4.3480- 1					0.0000+ 0				4.8456- 3
1.0000+ 1 ~ 2.0000+ 1	9.8160+ 0	9.5146+ 0		3.0448- 1					0.0000+ 0				4.8477- 3
2.0000+ 1 ~ 4.0000+ 1	8.9083+ 0	8.7270+ 0		1.8129- 1					0.0000+ 0				4.8573- 3
4.0000+ 1 ~ 7.0000+ 1	7.6474+ 0	7.3617+ 0		1.9570- 1					0.0000+ 0				4.8831- 3
7.0000+ 1 ~ 1.0000+ 2	3.6973+ 1	1.9805+ 1		1.7168+ 1					0.0000+ 0				4.9049- 3
1.0000+ 2 ~ 2.0000+ 2	8.3208+ 0	8.2922+ 0		2.8548- 2					0.0000+ 0				4.9995- 3
2.0000+ 2 ~ 4.0000+ 2	5.0751+ 0	5.0520+ 0		2.3075- 2					0.0000+ 0				5.2176- 3
4.0000+ 2 ~ 7.0000+ 2	4.6572+ 0	4.4367+ 0		2.2147- 1					0.0000+ 0				5.7001- 3
7.0000+ 2 ~ 1.0000+ 3	4.0779+ 0	3.7566+ 0		3.2138- 1					0.0000+ 0				6.2426- 3
1.0000+ 3 ~ 2.0000+ 3	6.7737+ 0	6.6004+ 0		1.7328- 1					0.0000+ 0				7.6702- 3
2.0000+ 3 ~ 4.0000+ 3	1.6486+ 1	1.6280+ 1		2.0508- 1					0.0000+ 0				1.1975- 2
4.0000+ 3 ~ 7.0000+ 3	7.1892+ 0	7.0829+ 0		1.0626- 1					0.0000+ 0				1.6308- 2
7.0000+ 3 ~ 1.0000+ 4	6.5208+ 0	6.4311+ 0		8.9809- 2					0.0000+ 0				2.6656- 2
1.0000+ 4 ~ 2.0000+ 4	6.6808+ 0	6.6390+ 0		4.1608- 2					0.0000+ 0				4.6812- 2
2.0000+ 4 ~ 4.0000+ 4	8.0153+ 0	5.9855+ 0		2.9831- 2					0.0000+ 0				8.8865- 2
4.0000+ 4 ~ 7.0000+ 4	6.0976+ 0	6.0717+ 0		2.6738- 2					0.0000+ 0				1.6216- 1
7.0000+ 4 ~ 1.0000+ 6	4.7779+ 0	4.7681+ 0		1.9768- 2					0.0000+ 0				2.1368- 1
1.0000+ 5 ~ 2.0000+ 6	4.7942+ 0	4.7578+ 0	1.1782- 2	1.4629- 2					1.4938-12				3.0832- 1
2.0000+ 5 ~ 4.0000+ 5	5.2776+ 0	5.1376+ 0	1.3126- 1	9.6829- 3					8.9750-12				4.0539- 1
4.0000+ 5 ~ 7.0000+ 5	8.0449+ 0	5.8296+ 0	2.0797- 1	8.6147- 3					1.4199-11				4.2912- 1
7.0000+ 5 ~ 1.0000+ 6	6.7066+ 0	6.4121+ 0	2.8436- 1	8.1664- 3					3.3084-11				4.1636- 1
1.0000+ 6 ~ 2.0000+ 6	7.1872+ 0	6.4916+ 0	6.8607- 1	9.0973- 3					3.4668-10				4.6091- 1
2.0000+ 6 ~ 4.0000+ 6	5.9534+ 0	4.1761+ 0	1.7624+ 0	9.2290- 3			6.6631-18		6.9242- 8	6.3675-17			8.0936- 1
4.0000+ 6 ~ 7.0000+ 6	4.4870+ 0	2.4457+ 0	2.0392+ 0	8.3425- 4			8.4768- 8		4.7132- 6	1.4928-12	9.6820-17		8.1472- 1
7.0000+ 6 ~ 1.0000+ 7	4.5104+ 0	2.4428+ 0	1.9967+ 0	3.2616- 4	6.9227- 2		2.0901- 6	3.1297-12	7.6038- 6	2.1926- 8	4.9666- 8	1.2616-16	7.1476- 1
1.0000+ 7 ~ 2.0000+ 7	4.9892+ 0	2.8292+ 0	4.7623- 1	9.9917- 4	1.6696+ 0	9.1910- 2	6.1349- 3	1.6260- 2	2.7663- 3	1.6266- 3	6.2301- 3	1.1706- 3	8.7658- 1

^{140}Ce (5801)

CROSS SECTION

MATERIAL =5801

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.6739+ 0	2.8171+ 0		1.7668+ 0					0.0000+ 0				4.8064- 3
1.0000- 2 ~ 2.0000- 2	3.5676+ 0	2.8170+ 0		7.6048- 1					0.0000+ 0				4.8064- 3
2.0000- 2 ~ 4.0000- 2	3.3486+ 0	2.8169+ 0		5.3160- 1					0.0000+ 0				4.8064- 3
4.0000- 2 ~ 7.0000- 2	3.2059+ 0	2.8168+ 0		3.8914- 1					0.0000+ 0				4.8064- 3
7.0000- 2 ~ 1.0000- 1	3.1280+ 0	2.8166+ 0		3.1139- 1					0.0000+ 0				4.8064- 3
1.0000- 1 ~ 2.0000- 1	3.0528+ 0	2.8162+ 0		2.3658- 1					0.0000+ 0				4.8064- 3
2.0000- 1 ~ 4.0000- 1	2.9815+ 0	2.8153+ 0		1.6631- 1					0.0000+ 0				4.8064- 3
4.0000- 1 ~ 7.0000- 1	2.9351+ 0	2.8139+ 0		1.2132- 1					0.0000+ 0				4.8064- 3
7.0000- 1 ~ 1.0000+ 0	2.9080+ 0	2.8119+ 0		9.6069- 2					0.0000+ 0				4.8064- 3
1.0000+ 0 ~ 2.0000+ 0	2.8798+ 0	2.8060+ 0		7.1787- 2					0.0000+ 0				4.8064- 3
2.0000+ 0 ~ 4.0000+ 0	2.8479+ 0	2.7993+ 0		4.8596- 2					0.0000+ 0				4.8066- 3
4.0000+ 0 ~ 7.0000+ 0	2.8100+ 0	2.7857+ 0		3.5264- 2					0.0000+ 0				4.8074- 3
7.0000+ 0 ~ 1.0000+ 1	2.7950+ 0	2.7708+ 0		2.4384- 2					0.0000+ 0				4.8082- 3
1.0000+ 1 ~ 2.0000+ 1	2.7561+ 0	2.7423+ 0		1.5832- 2					0.0000+ 0				4.8114- 3
2.0000+ 1 ~ 4.0000+ 1	2.6999+ 0	2.6919+ 0		8.0496- 3					0.0000+ 0				4.8189- 3
4.0000+ 1 ~ 7.0000+ 1	2.6303+ 0	2.6366+ 0		3.7490- 3					0.0000+ 0				4.8402- 3
7.0000+ 1 ~ 1.0000+ 2	2.5999+ 0	2.5919+ 0		1.9268- 3					0.0000+ 0				4.8578- 3
1.0000+ 2 ~ 2.0000+ 2	2.5409+ 0	2.5402+ 0		7.9324- 4					0.0000+ 0				4.9401- 3
2.0000+ 2 ~ 4.0000+ 2	2.4843+ 0	2.4840+ 0		2.3250- 4					0.0000+ 0				5.1922- 3
4.0000+ 2 ~ 7.0000+ 2	2.4398+ 0	2.4398+ 0		8.4713- 5					0.0000+ 0				5.6380- 3
7.0000+ 2 ~ 1.0000+ 3	2.4054+ 0	2.4053+ 0		4.8788- 5					0.0000+ 0				6.0555- 3
1.0000+ 3 ~ 2.0000+ 3	2.3366+ 0	2.3366+ 0		3.6746- 5					0.0000+ 0				7.3672- 3
2.0000+ 3 ~ 4.0000+ 3	2.7048+ 0	2.6788+ 0		2.6181- 2					0.0000+ 0				1.0621- 2
4.0000+ 3 ~ 7.0000+ 3	2.1565+ 0	2.1462+ 0		1.0471- 2					0.0000+ 0				1.7386- 2
7.0000+ 3 ~ 1.0000+ 4	1.0131+ 1	1.0121+ 1		9.4100- 3					0.0000+ 0				2.6370- 2
1.0000+ 4 ~ 2.0000+ 4	4.5943+ 0	4.6838+ 0		1.0786- 2					0.0000+ 0				4.3967- 2
2.0000+ 4 ~ 4.0000+ 4	9.7781+ 0	9.7702+ 0		7.9700- 3					0.0000+ 0				8.8010- 2
4.0000+ 4 ~ 7.0000+ 4	6.9659+ 0	6.9607+ 0		6.2617- 3					0.0000+ 0				1.4889- 1
7.0000+ 4 ~ 1.0000+ 5	4.8703+ 0	4.8665+ 0		3.8345- 3					0.0000+ 0				2.1036- 1
1.0000+ 5 ~ 2.0000+ 5	4.4133+ 0	4.4093+ 0		4.0066- 3					4.9410-12				3.0171- 1
2.0000+ 5 ~ 4.0000+ 5	5.1569+ 0	5.1530+ 0		3.8945- 3					1.9784-11				3.8110- 1
4.0000+ 5 ~ 7.0000+ 5	6.9589+ 0	6.9542+ 0		4.7157- 3					4.9744-11				4.0789- 1
7.0000+ 5 ~ 1.0000+ 6	6.6893+ 0	6.6832+ 0		6.0842- 3					1.4147-10				3.8984- 1
1.0000+ 6 ~ 2.0000+ 6	7.2620+ 0	7.1811+ 0	9.1136- 2	8.6710- 3					2.8283- 9	1.3339-10			4.1933- 1
2.0000+ 6 ~ 4.0000+ 6	6.0005+ 0	4.8528+ 0	1.4110+ 0	4.7127- 3					4.8002- 7	8.1362-16			5.8587- 1
4.0000+ 6 ~ 7.0000+ 6	4.5149+ 0	2.4215+ 0	2.0925+ 0	1.0922- 3			1.9802-11		1.7731- 5	1.2800-11			8.0987- 1
7.0000+ 6 ~ 1.0000+ 7	4.6109+ 0	2.3672+ 0	2.1391+ 0	4.5616- 4	1.3962- 2		4.4088- 6	4.2902-10	1.4013- 4	2.3861- 7	4.7287-13		7.1381- 1
1.0000+ 7 ~ 2.0000+ 7	6.0004+ 0	2.7471+ 0	5.8276- 1	1.0264- 3	1.5578+ 0	7.6147- 2	9.2987- 3	2.8903- 3	6.3882- 3	3.4171- 3	3.4806- 3	4.9102- 4	8.7819- 1

^{141}Ce (5802)

MATERIAL =5802

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	9.2286+ 1	2.9624+ 0		8.9993+ 1					0.0000+ 0				4.7722- 3
1.0000- 2 ~ 2.0000- 2	4.0819+ 1	2.3506+ 0		3.8468+ 1					0.0000+ 0				4.7722- 3
2.0000- 2 ~ 4.0000- 2	2.8694+ 1	2.3478+ 0		2.7247+ 1					0.0000+ 0				4.7722- 3
4.0000- 2 ~ 7.0000- 2	2.2424+ 1	2.3431+ 0		2.0081+ 1					0.0000+ 0				4.7722- 3
7.0000- 2 ~ 1.0000- 1	1.8440+ 1	2.3376+ 0		1.6102+ 1					0.0000+ 0				4.7722- 3
1.0000- 1 ~ 2.0000- 1	1.4825+ 1	2.3254+ 0		1.2300+ 1					0.0000+ 0				4.7722- 3
2.0000- 1 ~ 4.0000- 1	1.1128+ 1	2.2974+ 0		8.6302+ 0					0.0000+ 0				4.7722- 3
4.0000- 1 ~ 7.0000- 1	8.9324+ 0	2.2605+ 0		6.6821+ 0					0.0000+ 0				4.7722- 3
7.0000- 1 ~ 1.0000+ 0	7.7686+ 0	2.1931+ 0		5.5754+ 0					0.0000+ 0				4.7722- 3
1.0000+ 0 ~ 2.0000+ 0	6.6201+ 0	2.0840+ 0		4.7561+ 0					0.0000+ 0				4.7722- 3
2.0000+ 0 ~ 4.0000+ 0	5.9597+ 0	1.7225+ 0		6.2372+ 0					0.0000+ 0				4.7726- 3
4.0000+ 0 ~ 7.0000+ 0	4.3754+ 1	2.9451+ 0		4.0809+ 1					0.0000+ 0				4.7754- 3
7.0000+ 0 ~ 1.0000+ 1	1.0191+ 3	1.2368+ 2		8.9598+ 2					0.0000+ 0				4.7777- 3
1.0000+ 1 ~ 2.0000+ 1	5.1145+ 1	6.3540+ 0		4.4792+ 1					0.0000+ 0				4.7844- 3
2.0000+ 1 ~ 4.0000+ 1	7.4369+ 1	1.0563+ 1		6.3796+ 1					0.0000+ 0				4.7983- 3
4.0000+ 1 ~ 7.0000+ 1	2.7267+ 0	2.4929+ 0		2.3377+ 1					0.0000+ 0				4.8316- 3
7.0000+ 1 ~ 1.0000+ 2	1.2751+ 2	7.2828+ 1		5.4884+ 1					0.0000+ 0				4.8588- 3
1.0000+ 2 ~ 2.0000+ 2	3.2845+ 0	3.2580+ 0		2.6332- 2					0.0000+ 0				4.9859- 3
2.0000+ 2 ~ 4.0000+ 2	3.6182+ 1	2.9838+ 1		6.3247+ 0					0.0000+ 0				5.2005- 3
4.0000+ 2 ~ 7.0000+ 2	1.3478+ 1	9.7774+ 0		3.7009+ 0					0.0000+ 0				6.7727- 3
7.0000+ 2 ~ 1.0000+ 3	1.1485+ 1	8.8391+ 0		2.6438+ 0					0.0000+ 0				8.2413- 3
1.0000+ 3 ~ 2.0000+ 3	8.5766+ 0	7.8151+ 0		1.7615+ 0					0.0000+ 0				7.6470- 3
2.0000+ 3 ~ 4.0000+ 3	7.8165+ 0	6.7452+ 0		1.0713+ 0					0.0000+ 0				1.1271- 2
4.0000+ 3 ~ 7.0000+ 3	6.7054+ 0	5.9696+ 0		7.1583- 1					0.0000+ 0				1.6000- 2
7.0000+ 3 ~ 1.0000+ 4	6.0977+ 0	5.5477+ 0		5.6008- 1					0.0000+ 0				2.6336- 2
1.0000+ 4 ~ 2.0000+ 4	5.5265+ 0	5.1181+ 0		4.0739- 1					0.0000+ 0				4.6443- 2
2.0000+ 4 ~ 4.0000+ 4	5.0180+ 0	4.7338+ 0		2.8018- 1					0.0000+ 0				8.8362- 2
4.0000+ 4 ~ 7.0000+ 4	4.7057+ 0	4.5072+ 0		1.9844- 1					0.0000+ 0				1.6214- 1
7.0000+ 4 ~ 1.0000+ 5	4.5298+ 0	4.3743+ 0		1.5550- 1					0.0000+ 0				2.1426- 1
1.0000+ 5 ~ 2.0000+ 5	4.5527+ 0	4.4418+ 0		1.2076- 1					1.4752- 6	1.3687-20			3.0612- 1
2.0000+ 5 ~ 4.0000+ 5	5.0397+ 0	4.9431+ 0		9.8542- 2					5.9007- 6	9.0455-20			3.9593- 1
4.0000+ 5 ~ 7.0000+ 5	5.8779+ 0	5.7878+ 0	9.9581- 4	8.9315- 2					1.2772- 5	1.0091-18			4.0848- 1
7.0000+ 5 ~ 1.0000+ 6	6.6827+ 0	6.6426+ 0	4.8027- 2	9.2237- 2					2.1312- 5	1.1821-16			3.8886- 1
1.0000+ 6 ~ 2.0000+ 6	7.3906+ 0	6.8916+ 0	4.0120- 1	9.7667- 2					4.9726- 5	3.5281-16			4.4298- 1
2.0000+ 6 ~ 4.0000+ 6	6.1361+ 0	4.4091+ 0	1.6756+ 0	3.8718- 2			4.4128-18		1.0413- 4	2.4310-13			5.1255- 1
4.0000+ 6 ~ 7.0000+ 6	4.5439+ 0	2.6084+ 0	1.8053+ 0	5.9108- 3	2.2132- 1		2.9363- 8		1.0612- 4	2.8925-10			6.1919- 1
7.0000+ 6 ~ 1.0000+ 7	4.5118+ 0	2.4139+ 0	4.6367- 1	8.1236- 4	1.6324+ 0		3.1846- 6	1.9830-20	1.6036- 4	6.0584- 7	1.6073-13	1.6246-11	7.1324- 1
1.0000+ 7 ~ 2.0000+ 7	5.0130+ 0	2.8562+ 0	1.3567- 1	1.0749- 3	1.7604+ 0	2.4863- 1	6.8012- 3	3.1908- 3	1.9088- 3	1.9020- 3	6.0047- 3	2.3743- 3	8.7769- 1

^{142}Ce (5803)

MATERIAL =5803

CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	3.7208+ 0	6.1460- 1		3.1062- 0					0.0000+ 0	0.0000+ 0			4.7386- 3
1.0000- 2 ~ 2.0000- 2	1.9419+ 0	6.1467- 1		1.3274+ 0					0.0000+ 0	0.0000+ 0			4.7386- 3
2.0000- 2 ~ 4.0000- 2	1.6661+ 0	6.1461- 1		9.4064- 1					0.0000+ 0	0.0000+ 0			4.7386- 3
4.0000- 2 ~ 7.0000- 2	1.3095+ 0	6.1449- 1		6.6908- 1					0.0000+ 0	0.0000+ 0			4.7386- 3
7.0000- 2 ~ 1.0000- 1	1.1661+ 0	6.1433- 1		5.6181- 1					0.0000+ 0	0.0000+ 0			4.7386- 3
1.0000- 1 ~ 2.0000- 1	1.0342+ 0	6.1410- 1		4.2007- 1					0.0000+ 0	0.0000+ 0			4.7386- 3
2.0000- 1 ~ 4.0000- 1	9.1014- 1	6.1369- 1		2.9666- 1					0.0000+ 0	0.0000+ 0			4.7386- 3
4.0000- 1 ~ 7.0000- 1	8.3065- 1	6.1274- 1		2.1791- 1					0.0000+ 0	0.0000+ 0			4.7386- 3
7.0000- 1 ~ 1.0000+ 0	7.8677- 1	6.1171- 1		1.7406- 1					0.0000+ 0	0.0000+ 0			4.7386- 3
1.0000+ 0 ~ 2.0000+ 0	7.4182- 1	6.0950- 1		1.3242- 1					0.0000+ 0	0.0000+ 0			4.7386- 3
2.0000+ 0 ~ 4.0000+ 0	6.9786- 1	6.0442- 1		9.3427- 2					0.0000+ 0	0.0000+ 0			4.7386- 3
4.0000+ 0 ~ 7.0000+ 0	6.6444- 1	5.9802- 1		6.8421- 2					0.0000+ 0	0.0000+ 0			4.7386- 3
7.0000+ 0 ~ 1.0000+ 1	6.4058- 1	5.8604- 1		5.4515- 2					0.0000+ 0	0.0000+ 0			4.7386- 3
1.0000+ 1 ~ 2.0000+ 1	6.0597- 1	5.6469- 1		4.1076- 2					0.0000+ 0	0.0000+ 0			4.7416- 3
2.0000+ 1 ~ 4.0000+ 1	5.4566- 1	5.1816- 1		2.8493- 2					0.0000+ 0	0.0000+ 0			4.7487- 3
4.0000+ 1 ~ 7.0000+ 1	4.6646- 1	4.4607- 1		2.0380- 2					0.0000+ 0	0.0000+ 0			4.7662- 3
7.0000+ 1 ~ 1.0000+ 2	3.8371- 1	3.8781- 1		1.5905- 2					0.0000+ 0	0.0000+ 0			4.7808- 3
1.0000+ 2 ~ 2.0000+ 2	2.4116- 1	2.2930- 1		1.1882- 2					0.0000+ 0	0.0000+ 0			4.8490- 3
2.0000+ 2 ~ 4.0000+ 2	5.0164- 2	4.1199- 2		8.9651- 3					0.0000+ 0	0.0000+ 0			5.0102- 3
4.0000+ 2 ~ 7.0000+ 2	4.0937- 1	3.9933- 1		1.0049- 2					0.0000+ 0	0.0000+ 0			6.4426- 3
7.0000+ 2 ~ 1.0000+ 3	8.3076+ 0	8.2846+ 0		2.2926- 2					0.0000+ 0	0.0000+ 0			8.7988- 3
1.0000+ 3 ~ 2.0000+ 3	2.2407+ 2	2.2366+ 2		4.0308- 1					0.0000+ 0	0.0000+ 0			8.9466- 3
2.0000+ 3 ~ 4.0000+ 3	3.8216+ 1	3.8115+ 1		1.0182- 1					0.0000+ 0	0.0000+ 0			1.0032- 2
4.0000+ 3 ~ 7.0000+ 3	7.6896+ 0	7.6070+ 0		8.2436- 2					0.0000+ 0	0.0000+ 0			1.6025- 2
7.0000+ 3 ~ 1.0000+ 4	7.5178+ 0	7.4803+ 0		3.7498- 2					0.0000+ 0	0.0000+ 0			2.3428- 2
1.0000+ 4 ~ 2.0000+ 4	7.3900+ 0	7.3642+ 0		2.5807- 2					0.0000+ 0	0.0000+ 0			4.0990- 2
2.0000+ 4 ~ 4.0000+ 4	1.0349+ 1	1.0331+ 1		1.8348- 2					0.0000+ 0	0.0000+ 0			8.1538- 2
4.0000+ 4 ~ 7.0000+ 4	4.9210+ 0	4.9044+ 0		1.8688- 2					0.0000+ 0	0.0000+ 0			1.4320- 1
7.0000+ 4 ~ 1.0000+ 5	4.6016+ 0	4.4871+ 0		1.4366- 2					0.0000+ 0	0.0000+ 0			2.0412- 1
1.0000+ 5 ~ 2.0000+ 5	4.4527+ 0	4.4406+ 0		1.2193- 2					1.3147-10	9.8026-17			2.9618- 1
2.0000+ 5 ~ 4.0000+ 5	4.9266+ 0	4.9152+ 0		1.1398- 2					5.2588-10	3.9211-16			3.8211- 1
4.0000+ 5 ~ 7.0000+ 5	5.8027+ 0	5.7718+ 0	1.7930- 2	1.5054- 2					1.3201- 9	1.0239-15			3.9379- 1
7.0000+ 5 ~ 1.0000+ 6	6.6869+ 0	6.3268+ 0	3.6230- 1	9.3181- 3					3.7204- 9	3.2946-15			3.8840- 1
1.0000+ 6 ~ 2.0000+ 6	7.4891+ 0	6.6297+ 0	9.5081- 1	8.5940- 3					5.6604- 8	4.1066-12			4.6331- 1
2.0000+ 6 ~ 4.0000+ 6	6.2182+ 0	4.3326+ 0	1.8701+ 0	6.3803- 3					2.8965- 8	8.1030-10			6.1886- 1
4.0000+ 6 ~ 7.0000+ 6	4.5721+ 0	2.4050+ 0	2.1654+ 0	1.5188- 3			6.3589-15		4.1928- 8	4.1927- 8			8.1788- 1
7.0000+ 6 ~ 1.0000+ 7	4.6131+ 0	2.4892+ 0	1.2886+ 0	3.9476- 4	7.6131- 1		4.0294- 6		2.4349- 4	2.4462- 4	3.0007-10	4.7062-18	7.1287- 1
1.0000+ 7 ~ 2.0000+ 7	5.0246+ 0	2.7672+ 0	2.3776- 1	1.0081- 3	1.5931+ 0	3.9983- 1	7.6179- 3	2.1818- 3	2.8812- 3	1.7733- 2	3.3760- 3	1.1447- 3	8.7717- 1

MATERIAL =5804 CROSS SECTION ^{144}Ce (5804)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.8903+ 0	2.7800+ 0		3.0837+ 0					0.0000+ 0	0.0000+ 0			4.6726- 3
1.0000- 2 ~ 2.0000- 2	4.1195+ 0	2.7800+ 0		1.3177+ 0					0.0000+ 0	0.0000+ 0			4.6726- 3
2.0000- 2 ~ 4.0000- 2	3.7234+ 0	2.7800+ 0		9.3176- 1					0.0000+ 0	0.0000+ 0			4.6726- 3
4.0000- 2 ~ 7.0000- 2	3.4740+ 0	2.7800+ 0		6.9475- 1					0.0000+ 0	0.0000+ 0			4.6726- 3
7.0000- 2 ~ 1.0000- 1	3.3368+ 0	2.7800+ 0		5.4772- 1					0.0000+ 0	0.0000+ 0			4.6726- 3
1.0000- 1 ~ 2.0000- 1	3.2034+ 0	2.7800+ 0		4.1889- 1					0.0000+ 0	0.0000+ 0			4.6726- 3
2.0000- 1 ~ 4.0000- 1	3.0858+ 0	2.7800+ 0		2.9464- 1					0.0000+ 0	0.0000+ 0			4.6726- 3
4.0000- 1 ~ 7.0000- 1	3.0159+ 0	2.7800+ 0		2.1654- 1					0.0000+ 0	0.0000+ 0			4.6726- 3
7.0000- 1 ~ 1.0000+ 0	2.9646+ 0	2.7800+ 0		1.7320- 1					0.0000+ 0	0.0000+ 0			4.6726- 3
1.0000+ 0 ~ 2.0000+ 0	2.9214+ 0	2.7800+ 0		1.3177- 1					0.0000+ 0	0.0000+ 0			4.6726- 3
2.0000+ 0 ~ 4.0000+ 0	2.8871+ 0	2.7800+ 0		9.3174- 2					0.0000+ 0	0.0000+ 0			4.6726- 3
4.0000+ 0 ~ 7.0000+ 0	2.8764+ 0	2.7800+ 0		6.8474- 2					0.0000+ 0	0.0000+ 0			4.6726- 3
7.0000+ 0 ~ 1.0000+ 1	2.8815+ 0	2.7800+ 0		5.4771- 2					0.0000+ 0	0.0000+ 0			4.6726- 3
1.0000+ 1 ~ 2.0000+ 1	2.8450+ 0	2.7800+ 0		4.1888- 2					0.0000+ 0	0.0000+ 0			4.6748- 3
2.0000+ 1 ~ 4.0000+ 1	2.8200+ 0	2.7800+ 0		2.9464- 2					0.0000+ 0	0.0000+ 0			4.6804- 3
4.0000+ 1 ~ 7.0000+ 1	2.8041+ 1	2.7018+ 1		1.0220- 0					0.0000+ 0	0.0000+ 0			4.6942- 3
7.0000+ 1 ~ 1.0000+ 2	3.4859+ 1	9.3555+ 1		1.1058- 0					0.0000+ 0	0.0000+ 0			4.7056- 3
1.0000+ 2 ~ 2.0000+ 2	2.7092+ 1	2.6418+ 1		6.7375- 1					0.0000+ 0	0.0000+ 0			4.7604- 3
2.0000+ 2 ~ 4.0000+ 2	2.0050+ 1	1.9881+ 1		3.6869- 1					0.0000+ 0	0.0000+ 0			4.8913- 3
4.0000+ 2 ~ 7.0000+ 2	1.6666+ 1	1.6328+ 1		2.2794- 1					0.0000+ 0	0.0000+ 0			5.2484- 3
7.0000+ 2 ~ 1.0000+ 3	1.3055+ 1	1.2891+ 1		1.6756- 1					0.0000+ 0	0.0000+ 0			5.5431- 3
1.0000+ 3 ~ 2.0000+ 3	1.0671+ 1	1.0548+ 1		1.2270- 1					0.0000+ 0	0.0000+ 0			6.5161- 3
2.0000+ 3 ~ 4.0000+ 3	8.4700+ 0	8.3898+ 0		8.8190- 2					0.0000+ 0	0.0000+ 0			9.1691- 3
4.0000+ 3 ~ 7.0590+ 3	7.0590+ 0	6.9972+ 0		6.1769- 2					0.0000+ 0	0.0000+ 0			1.4611- 2
7.0000+ 3 ~ 1.0000+ 4	6.2899+ 0	6.2420+ 0		4.7261- 2					0.0000+ 0	0.0000+ 0			2.1205- 2
1.0000+ 4 ~ 2.0000+ 4	5.6616+ 0	5.6293+ 0		3.3372- 2					0.0000+ 0	0.0000+ 0			3.7471- 2
2.0000+ 4 ~ 4.0000+ 4	4.9049+ 0	4.8820+ 0		2.2876- 2					0.0000+ 0	0.0000+ 0			7.5963- 2
4.0000+ 4 ~ 7.0000+ 4	4.4981+ 0	4.4792+ 0		1.7986- 2					0.0000+ 0	0.0000+ 0			1.3577- 1
7.0000+ 4 ~ 1.0000+ 6	4.2803+ 0	4.2627+ 0		1.6829- 2					0.0000+ 0	0.0000+ 0			1.9661- 1
1.0000+ 5 ~ 2.0000+ 5	4.2470+ 0	4.2339+ 0		1.3132- 2					1.0696-11	1.0897-19			2.8670- 1
2.0000+ 5 ~ 4.0000+ 5	4.7038+ 0	4.6917+ 0		1.2098- 2					4.2765-11	7.5687-19			5.7124- 1
4.0000+ 5 ~ 7.0000+ 5	5.6735+ 0	5.4095+ 0	2.6694- 1	7.4828- 3					1.0741-10	2.0798-18			9.9082- 1
7.0000+ 5 ~ 1.0000+ 6	6.7321+ 0	6.1989+ 0	5.2698- 1	6.5672- 3					3.0260-10	7.8411-18			3.6162- 1
1.0000+ 6 ~ 2.0000+ 6	7.7018+ 0	6.6149+ 0	1.0806+ 0	6.3718- 3					4.2298- 9	4.7818-14			4.7766- 1
2.0000+ 6 ~ 4.0000+ 6	6.3270+ 0	4.4516+ 0	1.8199+ 0	4.7162- 3					4.9502- 7	1.2010-11			8.3243- 1
4.0000+ 6 ~ 7.0000+ 6	4.8312+ 0	2.5742+ 0	2.0545+ 0	1.3410- 3			8.1025-19		1.1987- 5	8.8358- 8			8.2236- 1
7.0000+ 6 ~ 1.0000+ 7	4.5172+ 0	2.4285+ 0	1.0316+ 0	3.4121- 4	1.0528+ 0		4.4343- 8		4.6567- 5	2.2864- 8	1.2870-18	8.6773-19	7.1163- 1
1.0000+ 7 ~ 2.0000+ 7	5.0466+ 0	2.8636+ 0	1.0186- 1	9.8919- 4	1.1588+ 0	9.2080- 1	4.3392- 3	5.2462- 4	9.2112- 4	1.1974- 3	1.8741- 3	1.3667- 3	8.7611- 1

MATERIAL =5901 CROSS SECTION ^{141}Pr (5901)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,F)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.4291+ 1	2.8702+ 0		4.1361+ 1			0.0000+ 0		0.0000+ 0				4.7722- 3
1.0000- 2 ~ 2.0000- 2	2.0532+ 1	2.8690+ 0		1.7663+ 1			0.0000+ 0		0.0000+ 0				4.7722- 3
2.0000- 2 ~ 4.0000- 2	1.5344+ 1	2.8672+ 0		1.2476+ 1			0.0000+ 0		0.0000+ 0				4.7722- 3
4.0000- 2 ~ 7.0000- 2	1.2019+ 1	2.8641+ 0		9.1484+ 0			0.0000+ 0		0.0000+ 0				4.7722- 3
7.0000- 2 ~ 1.0000- 1	1.0176+ 1	2.8606+ 0		7.3160+ 0			0.0000+ 0		0.0000+ 0				4.7722- 3
1.0000- 1 ~ 2.0000- 1	8.3995+ 0	2.8527+ 0		5.5468+ 0			0.0000+ 0		0.0000+ 0				4.7722- 3
2.0000- 1 ~ 4.0000- 1	6.7168+ 0	2.8348+ 0		3.8810+ 0			0.0000+ 0		0.0000+ 0				4.7722- 3
4.0000- 1 ~ 7.0000- 1	5.6160+ 0	2.8058+ 0		2.8105+ 0			0.0000+ 0		0.0000+ 0				4.7722- 3
7.0000- 1 ~ 1.0000+ 0	4.9769+ 0	2.7712+ 0		2.2067+ 0			0.0000+ 0		0.0000+ 0				4.7722- 3
1.0000+ 0 ~ 2.0000+ 0	4.3192+ 0	2.7002+ 0		1.6190+ 0			0.0000+ 0		0.0000+ 0				4.7722- 3
2.0000+ 0 ~ 4.0000+ 0	3.6046+ 0	2.6506+ 0		1.0541+ 0			0.0000+ 0		0.0000+ 0				4.7722- 3
4.0000+ 0 ~ 7.0000+ 0	3.0156+ 0	2.5368+ 0		6.7873- 1			0.0000+ 0		0.0000+ 0				4.7722- 3
7.0000+ 0 ~ 1.0000+ 1	2.5948+ 0	2.1256+ 0		4.6898- 1			0.0000+ 0		0.0000+ 0				4.7722- 3
1.0000+ 1 ~ 2.0000+ 1	2.0744+ 0	1.7956+ 0		2.7871- 1			0.0000+ 0		0.0000+ 0				4.7730- 3
2.0000+ 1 ~ 4.0000+ 1	1.4716+ 0	1.3424+ 0		1.2937- 1			0.0000+ 0		0.0000+ 0				4.7749- 3
4.0000+ 1 ~ 7.0000+ 1	1.0163+ 0	9.6022- 1		6.8067- 2			0.0000+ 0		0.0000+ 0				4.7796- 3
7.0000+ 1 ~ 1.0000+ 2	8.2377+ 0	1.1966+ 0		5.0419+ 0			0.0000+ 0		0.0000+ 0				4.7832- 3
1.0000+ 2 ~ 2.0000+ 2	1.6559+ 0	1.4883+ 0		1.8766- 1			0.0000+ 0		0.0000+ 0				4.8017- 3
2.0000+ 2 ~ 4.0000+ 2	1.4760+ 2	1.3571+ 2		1.1798+ 1			0.0000+ 0		0.0000+ 0				4.8486- 3
4.0000+ 2 ~ 7.0000+ 2	4.2812+ 1	4.0827+ 1		1.9861+ 0			0.0000+ 0		0.0000+ 0				4.9736- 3
7.0000+ 2 ~ 1.0000+ 3	9.2859+ 1	9.0869+ 1		1.9894+ 0			0.0000+ 0		0.0000+ 0				5.0782- 3
1.0000+ 3 ~ 2.0000+ 3	1.8660+ 1	1.7873+ 1		5.8673- 1			0.0000+ 0		0.0000+ 0				5.4438- 3
2.0000+ 3 ~ 4.0000+ 3	3.1564+ 1	3.0955+ 1		6.0868- 1			0.0000+ 0		0.0000+ 0				6.5053- 3
4.0000+ 3 ~ 7.0000+ 3	6.6867+ 1	6.5487+ 1		3.8031- 1			0.0000+ 0		0.0000+ 0				8.7878- 3
7.0000+ 3 ~ 1.0000+ 4	1.7886+ 1	1.7397+ 1		2.8763- 1			0.0000+ 0		0.0000+ 0				1.1788- 2
1.0000+ 4 ~ 2.0000+ 4	9.1131+ 0	8.9316+ 0		1.8181- 1			0.0000+ 0		0.0000+ 0				1.9630- 2
2.0000+ 4 ~ 4.0000+ 4	7.3127+ 0	7.1979+ 0		1.1472- 1			0.0000+ 0		0.0000+ 0				3.8987- 2
4.0000+ 4 ~ 7.0000+ 4	5.4067+ 0	5.3277+ 0		7.7966- 2			0.0000+ 0		0.0000+ 0				7.4801- 2
7.0000+ 4 ~ 1.0000+ 5	6.9007+ 0	6.8398+ 0		6.0872- 2			0.0000+ 0		0.0000+ 0				1.1203- 1
1.0000+ 5 ~ 2.0000+ 5	6.4114+ 0	6.2628+ 0	1.1442- 1	4.3365- 2			0.0000+ 0		7.2220-10				1.8182- 1
2.0000+ 5 ~ 4.0000+ 5	5.2465+ 0	4.7869+ 0	4.3331- 1	2.6579- 2			0.0000+ 0		2.8888- 9				2.7936- 1
4.0000+ 5 ~ 7.0000+ 5	5.7071+ 0	4.0789+ 0	6.0772- 1	2.1817- 2			8.7878-21		6.8500- 8				3.2878- 1
7.0000+ 5 ~ 1.0000+ 6	6.3978+ 0	5.6050+ 0	7.7009- 1	2.2871- 2			4.6136-20		1.3875- 8				3.8711- 1
1.0000+ 6 ~ 2.0000+ 6	7.0099+ 0	5.6984+ 0	1.2892+ 0	2.3388- 2			2.6203-17		9.3470- 8	1.2708-17			4.8088- 1
2.0000+ 6 ~ 4.0000+ 6	6.0722+ 0	3.9748+ 0	2.0035+ 0	6.5785- 3			1.3075-10		2.6701- 6	8.3735-15			8.8075- 1
4.0000+ 6 ~ 7.0000+ 6	4.8027+ 0	2.5328+ 0	2.0880+ 0	1.3259- 3			2.0138- 5	1.0418-17	5.6455- 5	5.1759-11	9.3708-19		8.8841- 1
7.0000+ 6 ~ 1.0000+ 7	4.4693+ 0	2.6277+ 0	1.9173+ 0	5.7261- 4	1.2448- 2		5.2803- 4	1.0860- 7	2.3431- 4	9.4433- 7	4.1087- 7	8.4444-16	8.4944- 1
1.0000+ 7 ~ 2.0000+ 7	4.9081+ 0	2.9523+ 0	3.4863- 1	1.0473- 3	1.5364+ 0	3.1658- 2	8.4156- 3	1.4486- 2	2.8693- 3	2.8081- 3	7.2760- 3	8.7706- 4	8.1847- 1

^{143}Pr (5902)

MATERIAL =5902 — CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.8161+ 2	2.9000+ 0		2.7763+ 2					0.0000+ 0	0.0000+ 0			4.7063- 3
1.0000- 2 ~ 2.0000- 2	1.2194+ 2	2.9000+ 0		1.1869+ 2					0.0000+ 0	0.0000+ 0			4.7063- 3
2.0000- 2 ~ 4.0000- 2	8.5649+ 1	2.9000+ 0		8.3857+ 1					0.0000+ 0	0.0000+ 0			4.7063- 3
4.0000- 2 ~ 7.0000- 2	8.4848+ 1	2.9000+ 0		8.1828+ 1					0.0000+ 0	0.0000+ 0			4.7059- 3
7.0000- 2 ~ 1.0000- 1	6.2230+ 1	2.9000+ 0		4.9296+ 1					0.0000+ 0	0.0000+ 0			4.7063- 3
1.0000- 1 ~ 2.0000- 1	4.0522+ 1	2.9000+ 0		9.7502+ 1					0.0000+ 0	0.0000+ 0			4.7063- 3
2.0000- 1 ~ 4.0000- 1	2.9475+ 1	2.9000+ 0		2.6616+ 1					0.0000+ 0	0.0000+ 0			4.7063- 3
4.0000- 1 ~ 7.0000- 1	2.2507+ 1	2.9000+ 0		1.9488+ 1					0.0000+ 0	0.0000+ 0			4.7055- 3
7.0000- 1 ~ 1.0000+ 0	1.8566+ 1	2.9000+ 0		1.5688+ 1					0.0000+ 0	0.0000+ 0			4.7063- 3
1.0000+ 0 ~ 2.0000+ 0	1.4893+ 1	2.9000+ 0		1.1869+ 1					0.0000+ 0	0.0000+ 0			4.7053- 3
2.0000+ 0 ~ 4.0000+ 0	1.1363+ 1	2.9000+ 0		8.3858+ 0					0.0000+ 0	0.0000+ 0			4.7063- 3
4.0000+ 0 ~ 7.0000+ 0	4.1259+ 2	3.0832+ 2		1.0457+ 2					0.0000+ 0	0.0000+ 0			4.7053- 3
7.0000+ 0 ~ 1.0000+ 1	3.3119+ 2	2.5810+ 2		7.9088+ 1					0.0000+ 0	0.0000+ 0			4.7059- 3
1.0000+ 1 ~ 2.0000+ 1	2.5089+ 2	2.0479+ 2		4.6158+ 1					0.0000+ 0	0.0000+ 0			4.7060- 3
2.0000+ 1 ~ 4.0000+ 1	1.7697+ 2	1.5173+ 2		2.5238+ 1					0.0000+ 0	0.0000+ 0			4.7076- 3
4.0000+ 1 ~ 7.0000+ 1	1.3118+ 2	1.1644+ 2		1.4737+ 1					0.0000+ 0	0.0000+ 0			4.7114- 3
7.0000+ 1 ~ 1.0000+ 2	1.0617+ 2	9.6196+ 1		9.9738+ 0					0.0000+ 0	0.0000+ 0			4.7145- 3
1.0000+ 2 ~ 2.0000+ 2	8.1645+ 1	7.5476+ 1		6.1697+ 0					0.0000+ 0	0.0000+ 0			4.7300- 3
2.0000+ 2 ~ 4.0000+ 2	5.6508+ 1	5.5195+ 1		9.3131+ 0					0.0000+ 0	0.0000+ 0			4.7681- 3
4.0000+ 2 ~ 7.0000+ 2	4.3689+ 1	4.1776+ 1		1.9146+ 0					0.0000+ 0	0.0000+ 0			4.8757- 3
7.0000+ 2 ~ 1.0000+ 3	3.5450+ 1	3.4150+ 1		1.3000+ 0					0.0000+ 0	0.0000+ 0			4.9548- 3
1.0000+ 3 ~ 2.0000+ 3	2.7608+ 1	2.6767+ 1		8.4061- 1					0.0000+ 0	0.0000+ 0			5.2774- 3
2.0000+ 3 ~ 4.0000+ 3	2.0312+ 1	1.9805+ 1		5.0780- 1					0.0000+ 0	0.0000+ 0			6.1934- 3
4.0000+ 3 ~ 7.0000+ 3	1.5660+ 1	1.5312+ 1		3.3794- 1					0.0000+ 0	0.0000+ 0			8.1648- 3
7.0000+ 3 ~ 1.0000+ 4	1.3071+ 1	1.2817+ 1		2.5354- 1					0.0000+ 0	0.0000+ 0			1.0798- 2
1.0000+ 4 ~ 2.0000+ 4	1.0606+ 1	1.0430+ 1		1.7629- 1					0.0000+ 0	0.0000+ 0			1.7805- 2
2.0000+ 4 ~ 4.0000+ 4	8.3421+ 0	8.2315+ 0		1.1062- 1					0.0000+ 0	0.0000+ 0			3.6251- 2
4.0000+ 4 ~ 7.0000+ 4	6.8416+ 0	6.7321+ 0	3.6988- 2	7.2719- 2					0.0000+ 0	0.0000+ 0			6.8201- 2
7.0000+ 4 ~ 1.0000+ 5	6.0676+ 0	6.7263+ 0	2.9136- 1	6.0744- 2					0.0000+ 0	0.0000+ 0			1.0828- 1
1.0000+ 5 ~ 2.0000+ 5	5.4501+ 0	5.0495+ 0	3.5486- 1	3.5240- 2					1.6579- 8	8.0525-11			1.7683- 1
2.0000+ 5 ~ 4.0000+ 5	5.2028+ 0	4.7489+ 0	4.2936- 1	2.4701- 2					8.5315- 8	9.2210-10			2.8356- 1
4.0000+ 5 ~ 7.0000+ 5	5.7027+ 0	4.9961+ 0	8.8768- 1	2.0521- 2					1.5757- 7	5.4061-10			3.1669- 1
7.0000+ 5 ~ 1.0000+ 6	6.4568+ 0	5.3763+ 0	1.0716+ 0	1.8913- 2			0.0000+ 0		2.9930- 7	7.5172-10			3.6181- 1
1.0000+ 6 ~ 2.0000+ 6	7.1140+ 0	6.5456+ 0	1.5497+ 0	1.8113- 2			2.2546-20		1.1486- 6	9.9020-10			4.9891- 1
2.0000+ 6 ~ 4.0000+ 6	8.1851+ 0	4.0048+ 0	2.1479+ 0	4.1976- 3			3.5532-14		1.1847- 5	8.0994- 9			5.9286- 1
4.0000+ 6 ~ 7.0000+ 6	4.5877+ 0	2.4865+ 0	2.0805+ 0	8.0352- 4			1.7121- 8	9.3589-21	8.4018- 5	2.3375- 5	5.0961-16	1.1191-19	6.8100- 1
7.0000+ 6 ~ 1.0000+ 7	4.1784+ 0	2.2380+ 0	1.2658+ 0	4.4682- 4	6.6868- 1		1.1030- 4	6.6654-11	3.0248- 4	6.4396- 4	4.4133- 6	7.4110-10	6.4945- 1
1.0000+ 7 ~ 2.0000+ 7	4.7625+ 0	2.9793+ 0	1.7414- 1	1.0405- 3	1.1289+ 0	4.3472- 1	4.8927- 3	8.7172- 3	1.8840- 3	7.9319- 3	6.1703- 3	2.6334- 3	8.1669- 1

^{142}Nd (6001)

MATERIAL =6001 — CROSS SECTION

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.3971+ 1	6.4117+ 0		6.8660+ 1					0.0000+ 0				4.7386- 3
1.0000- 2 ~ 2.0000- 2	3.0436+ 1	6.4117+ 0		2.6024+ 1					0.0000+ 0				4.7386- 3
2.0000- 2 ~ 4.0000- 2	2.3108+ 1	6.4116+ 0		1.7698+ 1					0.0000+ 0				4.7386- 3
4.0000- 2 ~ 7.0000- 2	1.8424+ 1	6.4115+ 0		1.3012+ 1					0.0000+ 0				4.7386- 3
7.0000- 2 ~ 1.0000- 1	1.5625+ 1	6.4114+ 0		1.0414+ 1					0.0000+ 0				4.7386- 3
1.0000- 1 ~ 2.0000- 1	1.9313+ 1	6.4111+ 0		7.9029+ 0					0.0000+ 0				4.7386- 3
2.0000- 1 ~ 4.0000- 1	1.1001+ 1	6.4104+ 0		6.6811+ 0					0.0000+ 0				4.7386- 3
4.0000- 1 ~ 7.0000- 1	9.5140+ 0	5.4093+ 0		4.1047+ 0					0.0000+ 0				4.7386- 3
7.0000- 1 ~ 1.0000+ 0	8.5961+ 0	5.4079+ 0		3.2872+ 0					0.0000+ 0				4.7386- 3
1.0000+ 0 ~ 2.0000+ 0	7.9004+ 0	5.4050+ 0		2.4955+ 0					0.0000+ 0				4.7386- 3
2.0000+ 0 ~ 4.0000+ 0	7.1678+ 0	6.3982+ 0		1.7696+ 0					0.0000+ 0				4.7386- 3
4.0000+ 0 ~ 7.0000+ 0	6.5756+ 0	5.3871+ 0		1.2867+ 0					0.0000+ 0				4.7386- 3
7.0000+ 0 ~ 1.0000+ 1	6.3980+ 0	5.3798+ 0		1.0222+ 0					0.0000+ 0				4.7386- 3
1.0000+ 1 ~ 2.0000+ 1	6.1141+ 0	5.3459+ 0		7.6877- 1					0.0000+ 0				4.7386- 3
2.0000+ 1 ~ 4.0000+ 1	5.8096+ 0	5.2812+ 0		5.2831- 1					0.0000+ 0				4.7391- 3
4.0000+ 1 ~ 7.0000+ 1	5.5486+ 0	5.1790+ 0		3.7046- 1					0.0000+ 0				4.7429- 3
7.0000+ 1 ~ 1.0000+ 2	5.3425+ 0	5.0832+ 0		2.7999- 1					0.0000+ 0				4.7481- 3
1.0000+ 2 ~ 2.0000+ 2	5.0286+ 0	4.6380+ 0		1.9057- 1					0.0000+ 0				4.7598- 3
2.0000+ 2 ~ 4.0000+ 2	4.8847+ 0	4.4143+ 0		2.5041- 1					0.0000+ 0				4.7931- 3
4.0000+ 2 ~ 7.0000+ 2	3.8766+ 0	3.8901+ 0		8.5772- 2					0.0000+ 0				4.8683- 3
7.0000+ 2 ~ 1.0000+ 3	3.4923+ 0	3.4363+ 0		5.5912- 2					0.0000+ 0				4.9871- 3
1.0000+ 3 ~ 2.0000+ 3	2.8393+ 0	2.7426+ 0		9.6738- 2					0.0000+ 0				5.2464- 3
2.0000+ 3 ~ 4.0000+ 3	1.1020+ 1	1.0889+ 1		1.3127- 1					0.0000+ 0				6.0702- 3
4.0000+ 3 ~ 7.0000+ 3	6.3839+ 0	6.2677+ 0		1.0620- 1					0.0000+ 0				7.8577- 3
7.0000+ 3 ~ 1.0000+ 4	4.1898+ 0	4.1316+ 0		5.7841- 2					0.0000+ 0				1.0281- 2
1.0000+ 4 ~ 2.0000+ 4	8.4193+ 0	8.3719+ 0		4.7375- 2					0.0000+ 0				1.8728- 2
2.0000+ 4 ~ 4.0000+ 4	8.8711+ 0	8.8151+ 0		5.5934- 2					0.0000+ 0				3.4004- 2
4.0000+ 4 ~ 7.0000+ 4	8.5379+ 0	8.6857+ 0		4.8559- 2					0.0000+ 0				6.4416- 2
7.0000+ 4 ~ 1.0000+ 5	8.0136+ 0	5.9711+ 0		4.2447- 2					0.0000+ 0				9.8081- 2
1.0000+ 5 ~ 2.0000+ 5	5.3704+ 0	5.3341+ 0		3.6316- 2					2.0942- 9				1.6807- 1
2.0000+ 5 ~ 4.0000+ 5	5.1114+ 0	5.0780+ 0		3.3328- 2					8.3789- 9				2.3117- 1
4.0000+ 5 ~ 7.0000+ 5	5.8507+ 0	5.8115+ 0		3.9188- 2					2.0424- 8				2.8416- 1
7.0000+ 5 ~ 1.0000+ 6	6.5316+ 0	5.4798+ 0		6.2047- 2					5.3552- 8				2.8721- 1
1.0000+ 6 ~ 2.0000+ 6	7.3270+ 0	7.0573+ 0	1.8763- 1	8.2042- 2					7.2173- 7	4.8282-17			3.9769- 1
2.0000+ 6 ~ 4.0000+ 6	6.5979+ 0	4.8313+ 0	1.7187+ 0	2.8696- 2			3.5325-15		2.0719- 6	4.5690-14			8.2489- 1
4.0000+ 6 ~ 7.0000+ 6	4.8597+ 0	2.4859+ 0	2.1497+ 0	2.0805- 2			9.7770- 8		2.2928- 4	9.3800-10	1.4728-19		8.4669- 1
7.0000+ 6 ~ 1.0000+ 7	4.2214+ 0	2.1308+ 0	2.0786+ 0	9.5872- 3			9.0711- 4	3.7850-14	6.9814- 4	4.7891- 8	4.1648- 9		8.3182- 1
1.0000+ 7 ~ 2.0000+ 7	4.7694+ 0	2.8775+ 0	5.3263- 1	3.3198- 3	1.2956+ 0	1.8692- 2	1.1942- 2	1.4960- 2	5.8348- 3	4.3560- 3	3.4447- 3	3.2770- 4	8.1038- 1

MATERIAL =8002 CROSS SECTION ^{143}Nd (6002)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.1070+ 3	7.8822+ 1		1.0281+ 3					6.4160- 2	1.0963-24			4.7064- 3
1.0000- 2 ~ 2.0000- 2	5.1630+ 2	7.8669+ 1		4.3772+ 2					2.3059- 2	3.2869-24			4.7064- 3
2.0000- 2 ~ 4.0000- 2	3.8626+ 2	7.8167+ 1		3.0807+ 2					1.6228- 2	6.6760-24			4.7064- 3
4.0000- 2 ~ 7.0000- 2	3.0224+ 2	7.7522+ 1		2.2471+ 2					1.1637- 2	1.2056-23			4.7064- 3
7.0000- 2 ~ 1.0000- 1	2.6486+ 2	7.6757+ 1		1.7808+ 2					9.3811- 3	1.8636-23			4.7064- 3
1.0000- 1 ~ 2.0000- 1	2.0759+ 2	7.5143+ 1		1.3244+ 2					6.9764- 3	3.2889-23			4.7064- 3
2.0000- 1 ~ 4.0000- 1	1.6109+ 2	7.1614+ 1		8.9469+ 1					4.6958- 3	6.5760-23			4.7064- 3
4.0000- 1 ~ 7.0000- 1	1.2715+ 2	6.6259+ 1		6.0868+ 1					3.2056- 3	1.2060-22			4.7064- 3
7.0000- 1 ~ 1.0000+ 0	1.0607+ 2	6.0669+ 1		4.4497+ 1					2.3140- 3	1.8638-22			4.7064- 3
1.0000+ 0 ~ 2.0000+ 0	7.9326+ 1	5.0711+ 1		2.8612+ 1					1.5041- 3	3.2891-22			4.7064- 3
2.0000+ 0 ~ 4.0000+ 0	4.9764+ 1	3.6443+ 1		1.4310+ 1					7.5783- 4	6.6782-22			4.7064- 3
4.0000+ 0 ~ 7.0000+ 0	2.8258+ 1	2.1721+ 1		6.5370+ 0					3.3985- 4	1.2060-21			4.7064- 3
7.0000+ 0 ~ 1.0000+ 1	1.6774+ 1	1.3487+ 1		3.3072+ 0					1.7426- 4	1.8638-21			4.7064- 3
1.0000+ 1 ~ 2.0000+ 1	7.9217+ 0	6.5695+ 0		1.3521+ 0					7.0802- 5	3.2891-21			4.7064- 3
2.0000+ 1 ~ 4.0000+ 1	2.4976+ 0	2.0636+ 0		4.3404- 1					2.2931- 5	6.5782-21			4.7069- 3
4.0000+ 1 ~ 7.0000+ 1	5.2007+ 1	1.7868+ 1		3.4137+ 1					1.6673- 3	1.2060-20			4.7100- 3
7.0000+ 1 ~ 1.0000+ 2	4.5799- 1	2.5685- 1		2.0079- 1					1.0868- 5	1.8638-20			4.7135- 3
1.0000+ 2 ~ 2.0000+ 2	4.2217+ 2	3.8257+ 2		3.9603+ 1					1.6083- 3	3.2891-20			4.7273- 3
2.0000+ 2 ~ 4.0000+ 2	1.0612+ 2	9.8040+ 1		8.0841+ 0					8.1054- 4	6.5782-20			4.7602- 3
4.0000+ 2 ~ 7.0000+ 2	6.5863+ 1	6.1327+ 1		6.5365+ 0					1.9752- 4	1.2060-19			4.8522- 3
7.0000+ 2 ~ 1.0000+ 3	2.7853+ 1	2.4623+ 1		3.0299+ 0					1.0932- 4	1.8638-19			4.9283- 3
1.0000+ 3 ~ 2.0000+ 3	3.9356+ 1	3.7314+ 1		2.0422+ 0					9.8217- 5	3.2891-19			5.1945- 3
2.0000+ 3 ~ 4.0000+ 3	2.8115+ 1	2.4956+ 1		1.1584+ 0					4.7121- 5	6.5782-19			5.9783- 3
4.0000+ 3 ~ 7.0000+ 3	1.9107+ 1	1.8259+ 1		8.4828- 1					3.8834- 6	1.2060-18			7.6713- 3
7.0000+ 3 ~ 1.0000+ 4	1.4183+ 1	1.3551+ 1		6.1182- 1					3.8077- 5	1.8638-18			9.9530- 3
1.0000+ 4 ~ 2.0000+ 4	1.1344+ 1	1.0907+ 1		4.3736- 1					3.6192- 6	3.2891-18			1.6116- 2
2.0000+ 4 ~ 4.0000+ 4	8.7514+ 0	8.4844+ 0		2.6693- 1					7.0383- 5	6.5782-18			3.2649- 2
4.0000+ 4 ~ 7.0000+ 4	7.1075+ 0	6.9072+ 0		2.0018- 1					1.2904- 4	1.2060-17			6.1887- 2
7.0000+ 4 ~ 1.0000+ 6	6.1966+ 0	6.0368+ 0		1.5864- 1					1.9942- 4	1.8638-17			9.4424- 2
1.0000+ 6 ~ 2.0000+ 6	6.4166+ 0	6.2919+ 0		1.2392- 1					3.2661- 4	3.1760-17			1.6273- 1
2.0000+ 6 ~ 4.0000+ 6	5.1145+ 0	5.0182+ 0		9.5908- 2			0.0000+ 0		3.4478- 4	6.4705-17			2.2343- 1
4.0000+ 6 ~ 7.0000+ 6	5.8755+ 0	5.5884+ 0		8.8784- 2			0.0000+ 0		3.5246- 4	1.2775-16			2.5558- 1
7.0000+ 6 ~ 1.0000+ 6	6.6990+ 0	6.4324+ 0	7.1864- 2	9.4281- 2			0.0000+ 0		4.6414- 4	1.1718-14			2.8675- 1
1.0000+ 6 ~ 2.0000+ 6	7.3993+ 0	6.6584+ 0	6.4802- 1	9.2099- 2			2.5850-17		5.9826- 4	2.0207-13			4.2874- 1
2.0000+ 6 ~ 4.0000+ 6	6.4228+ 0	4.4140+ 0	1.9511+ 0	2.6414- 2			1.3147-11		7.4545- 4	7.1376-12			6.7506- 1
4.0000+ 6 ~ 7.0000+ 6	4.6939+ 0	2.8209+ 0	2.0122+ 0	2.1434- 3	5.8090- 2		8.9055- 8		4.0839- 4	8.6327- 9	1.6075-21	2.6174-21	8.6755- 1
7.0000+ 6 ~ 1.0000+ 7	4.2270+ 0	2.2680+ 0	7.2600- 1	9.0906- 4	1.2306+ 0	1.3669-17	3.2403- 4	1.9134- 3	6.0813- 4	2.7691- 6	6.0334-10	2.6512-11	8.3216- 1
1.0000+ 7 ~ 2.0000+ 7	4.7737+ 0	3.0002+ 0	1.4879- 1	1.0804- 3	1.4768+ 0	1.2123- 1	1.1661- 2	1.9134- 3	3.6350- 9	1.7603- 3	4.4476- 3	1.3703- 3	8.0911- 1

MATERIAL =8003 CROSS SECTION ^{144}Nd (6003)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.2777+ 1	1.0006+ 0		1.1777+ 1					0.0000+ 0	0.0000+ 0			4.8727- 3
1.0000- 2 ~ 2.0000- 2	6.0324+ 0	1.0007+ 0		5.0317+ 0					0.0000+ 0	0.0000+ 0			4.8727- 3
2.0000- 2 ~ 4.0000- 2	4.5679+ 0	1.0011+ 0		3.5666+ 0					0.0000+ 0	0.0000+ 0			4.8727- 3
4.0000- 2 ~ 7.0000- 2	3.8140+ 0	1.0018+ 0		2.8129+ 0					0.0000+ 0	0.0000+ 0			4.8727- 3
7.0000- 2 ~ 1.0000- 1	3.0933+ 0	1.0026+ 0		2.0907+ 0					0.0000+ 0	0.0000+ 0			4.8727- 3
1.0000- 1 ~ 2.0000- 1	2.5913+ 0	1.0043+ 0		1.5870+ 0					0.0000+ 0	0.0000+ 0			4.8727- 3
2.0000- 1 ~ 4.0000- 1	2.1281+ 0	1.0083+ 0		1.1198+ 0					0.0000+ 0	0.0000+ 0			4.8727- 3
4.0000- 1 ~ 7.0000- 1	1.8354+ 0	1.0149+ 0		8.2046- 1					0.0000+ 0	0.0000+ 0			4.8727- 3
7.0000- 1 ~ 1.0000+ 0	1.6766+ 0	1.0229+ 0		6.5270- 1					0.0000+ 0	0.0000+ 0			4.8727- 3
1.0000+ 0 ~ 2.0000+ 0	1.5327+ 0	1.0402+ 0		4.9248- 1					0.0000+ 0	0.0000+ 0			4.8727- 3
2.0000+ 0 ~ 4.0000+ 0	1.4212+ 0	1.0801+ 0		3.4114- 1					0.0000+ 0	0.0000+ 0			4.8727- 3
4.0000+ 0 ~ 7.0000+ 0	1.3694+ 0	1.1487+ 0		2.4273- 1					0.0000+ 0	0.0000+ 0			4.8727- 3
7.0000+ 0 ~ 1.0000+ 1	1.4136+ 0	1.2267+ 0		1.8696- 1					0.0000+ 0	0.0000+ 0			4.8727- 3
1.0000+ 1 ~ 2.0000+ 1	1.5946+ 0	1.4013+ 0		1.3329- 1					0.0000+ 0	0.0000+ 0			4.8727- 3
2.0000+ 1 ~ 4.0000+ 1	1.9006+ 0	1.8169+ 0		8.4689- 2					0.0000+ 0	0.0000+ 0			4.8739- 3
4.0000+ 1 ~ 7.0000+ 1	2.5321+ 0	2.5742+ 0		5.7830- 2					0.0000+ 0	0.0000+ 0			4.8779- 3
7.0000+ 1 ~ 1.0000+ 2	3.7189+ 0	3.8708+ 0		4.7534- 2					0.0000+ 0	0.0000+ 0			4.8818- 3
1.0000+ 2 ~ 2.0000+ 2	8.0237+ 0	7.9722+ 0		5.1547- 2					0.0000+ 0	0.0000+ 0			4.8981- 3
2.0000+ 2 ~ 4.0000+ 2	8.0088+ 2	7.9834+ 2		2.3397+ 0					0.0000+ 0	0.0000+ 0			4.7369- 3
4.0000+ 2 ~ 7.0000+ 2	6.0009+ 1	4.9860+ 1		1.4828- 1					0.0000+ 0	0.0000+ 0			4.8461- 3
7.0000+ 2 ~ 1.0000+ 3	1.2842+ 1	1.1522+ 1		1.3208+ 0					0.0000+ 0	0.0000+ 0			4.9344- 3
1.0000+ 3 ~ 2.0000+ 3	1.4669+ 2	1.4528+ 2		6.0664- 1					0.0000+ 0	0.0000+ 0			5.2390- 3
2.0000+ 3 ~ 4.0000+ 3	1.9502+ 1	1.9369+ 1		1.1323- 1					0.0000+ 0	0.0000+ 0			8.1028- 3
4.0000+ 3 ~ 7.0000+ 3	2.0928+ 1	2.0814+ 1		1.1398- 1					0.0000+ 0	0.0000+ 0			7.8923- 3
7.0000+ 3 ~ 1.0000+ 4	1.8142+ 1	1.8042+ 1		1.0010- 1					0.0000+ 0	0.0000+ 0			1.0214- 2
1.0000+ 4 ~ 2.0000+ 4	1.7426+ 1	1.7339+ 1		8.6147- 2					0.0000+ 0	0.0000+ 0			1.6142- 2
2.0000+ 4 ~ 4.0000+ 4	1.3556+ 1	1.3485+ 1		7.1198- 2					0.0000+ 0	0.0000+ 0			3.1072- 2
4.0000+ 4 ~ 7.0000+ 4	1.1291+ 1	1.1231+ 1		5.9998- 2					0.0000+ 0	0.0000+ 0			5.6016- 2
7.0000+ 4 ~ 1.0000+ 6	9.9170+ 0	9.8648+ 0		5.2217- 2					0.0000+ 0	0.0000+ 0			9.2749- 2
1.0000+ 6 ~ 2.0000+ 6	8.5273+ 0	8.4840+ 0		4.3211- 2					1.2770- 8	2.8922-15			1.2864- 1
2.0000+ 6 ~ 4.0000+ 6	7.2762+ 0	7.2369+ 0		3.8508- 2					5.1079- 8	1.1589-14			1.8473- 1
4.0000+ 6 ~ 7.0000+ 6	6.7561+ 0	6.7120+ 0		4.4120- 2					1.2919- 7	2.9188-14			2.5205- 1
7.0000+ 6 ~ 1.0000+ 6	6.6623+ 0	6.1154+ 0	5.3307- 1	3.5436- 2					3.0272- 7	8.3447-14			3.3107- 1
1.0000+ 8 ~ 2.0000+ 6	6.7717+ 0	5.5209+ 0	1.2194+ 0	3.1436- 2					1.6057- 6	5.3280-11			4.7841- 1
2.0000+ 6 ~ 4.0000+ 6	6.5230+ 0	4.2623+ 0	2.2432+ 0	1.7435- 2			5.4143-19		1.3509- 5	6.8812- 9			8.8224- 1
4.0000+ 6 ~ 7.0000+ 6	5.5603+ 0	2.9457+ 0	2.6004+ 0	5.9972- 3			3.0045- 9		8.5859- 5	1.2858- 6			7.8421- 1
7.0000+ 6 ~ 1.0000+ 7	4.8628+ 0	2.3123+ 0	2.1762+ 0	8.1499- 4	3.6290- 1		1.2223- 4	7.8360-19	3.9709- 4	7.0310- 4	1.8368-13	1.2201-10	7.7783- 1
1.0000+ 7 ~ 2.0000+ 7	6.0311+ 0	2.5786+ 0	7.8330- 1	1.0772- 3	1.3419+ 0	2.8326- 1	1.3926- 2	3.3603- 3	4.6316- 3	9.2432- 3	7.9140- 3	3.1483- 3	8.6019- 1

MATERIAL =8004 CROSS SECTION

^{145}Nd (6004)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.6309+ 2	1.7408+ 1		1.3668+ 2					2.7410- 4	0.0000+ 0			4.6403- 3
1.0000- 2 ~ 2.0000- 2	7.5371+ 1	1.7398+ 1		5.7973+ 1					1.1711- 4	0.0000+ 0			4.6403- 3
2.0000- 2 ~ 4.0000- 2	5.8428+ 1	1.7383+ 1		4.1046+ 1					8.2810- 5	0.0000+ 0			4.6403- 3
4.0000- 2 ~ 7.0000- 2	4.7445+ 1	1.7358+ 1		3.0087+ 1					6.0789- 5	0.0000+ 0			4.6403- 3
7.0000- 2 ~ 1.0000- 1	4.1392+ 1	1.7327+ 1		2.4064+ 1					4.8596- 5	0.0000+ 0			4.6403- 3
1.0000- 1 ~ 2.0000- 1	9.5584+ 1	1.7282+ 1		1.8322+ 1					3.8988- 5	0.0000+ 0			4.6403- 3
2.0000- 1 ~ 4.0000- 1	3.0049+ 1	1.7113+ 1		1.2836+ 1					2.6010- 5	0.0000+ 0			4.6403- 3
4.0000- 1 ~ 7.0000- 1	2.8400+ 1	1.6870+ 1		8.5303+ 0					1.9189- 5	0.0000+ 0			4.6403- 3
7.0000- 1 ~ 1.0000+ 0	2.4262+ 1	1.6688+ 1		7.6740+ 0					1.6286- 5	0.0000+ 0			4.6403- 3
1.0000+ 0 ~ 2.0000+ 0	2.2108+ 1	1.6019+ 1		6.0946+ 0					1.2182- 5	0.0000+ 0			4.6403- 3
2.0000+ 0 ~ 4.0000+ 0	2.4868+ 1	1.4972+ 1		9.8926+ 0					3.9796- 6	0.0000+ 0			4.6403- 3
4.0000+ 0 ~ 7.0000+ 0	1.5918+ 2	1.4644+ 1		1.4464+ 2					2.3537- 4	0.0000+ 0			4.6403- 3
7.0000+ 0 ~ 1.0000+ 1	1.3119+ 1	1.1319+ 1		1.8009+ 0					3.7584- 6	0.0000+ 0			4.6403- 3
1.0000+ 1 ~ 2.0000+ 1	1.0198+ 1	9.1462+ 0		1.0521+ 0					2.3057- 6	0.0000+ 0			4.6403- 3
2.0000+ 1 ~ 4.0000+ 1	2.2160+ 1	1.9066+ 1		3.0941+ 0					7.2836- 6	0.0000+ 0			4.6413- 3
4.0000+ 1 ~ 7.0000+ 1	5.0061+ 2	4.2981+ 2		7.0796+ 1					1.3436- 4	0.0000+ 0			4.6477- 3
7.0000+ 1 ~ 1.0000+ 2	1.7155+ 1	6.0759+ 0		1.1079+ 1					5.1975- 5	0.0000+ 0			4.6592- 3
1.0000+ 2 ~ 2.0000+ 2	4.0063+ 1	2.3455+ 1		1.6608+ 1					5.1719- 5	0.0000+ 0			4.8731- 3
2.0000+ 2 ~ 4.0000+ 2	9.1205+ 1	2.2971+ 1		8.2335+ 0					3.2795- 6	0.0000+ 0			4.7187- 3
4.0000+ 2 ~ 7.0000+ 2	7.0832+ 1	6.3168+ 1		7.6634+ 0					2.1008- 6	0.0000+ 0			4.8400- 3
7.0000+ 2 ~ 1.0000+ 3	5.4959+ 1	4.8405+ 1		6.5558+ 0					1.3271- 5	0.0000+ 0			4.9400- 3
1.0000+ 3 ~ 2.0000+ 3	3.8064+ 1	3.6071+ 1		3.8924+ 0					7.4803- 6	0.0000+ 0			5.2693- 3
2.0000+ 3 ~ 4.0000+ 3	4.0900+ 1	3.8711+ 1		2.1891+ 0					3.6864- 6	0.0000+ 0			6.1853- 3
4.0000+ 3 ~ 7.0000+ 3	2.3600+ 1	2.2007+ 1		1.6932+ 0					2.9712- 6	0.0000+ 0			8.0568- 3
7.0000+ 3 ~ 1.0000+ 4	2.0185+ 1	1.9050+ 1		1.1352+ 0					2.9712- 6	0.0000+ 0			1.0487- 2
1.0000+ 4 ~ 2.0000+ 4	1.6617+ 1	1.6034+ 1		7.8300- 1					2.9712- 6	0.0000+ 0			1.6587- 2
2.0000+ 4 ~ 4.0000+ 4	1.5570+ 1	1.3049+ 1		5.2147- 1					2.9712- 6	0.0000+ 0			3.1958- 2
4.0000+ 4 ~ 7.0000+ 4	1.1320+ 1	1.0935+ 1	2.3461- 4	3.8379- 1					2.9712- 6	0.0000+ 0			5.7057- 2
7.0000+ 4 ~ 1.0000+ 5	9.8082+ 0	9.3922+ 0	2.2492- 1	2.9212- 1					2.9712- 6	0.0000+ 0			8.6660- 2
1.0000+ 5 ~ 2.0000+ 5	8.5271+ 0	7.9191+ 0	3.9113- 1	2.1643- 1					4.4106- 6	5.3762-12			1.3882- 1
2.0000+ 5 ~ 4.0000+ 5	7.2753+ 0	6.5710+ 0	5.4411- 1	1.5848- 1					8.8212- 8	2.1505-11			2.1459- 1
4.0000+ 5 ~ 7.0000+ 5	8.7521+ 0	6.8684+ 0	7.4752- 1	1.5622- 1					1.4570- 5	4.4073-11			2.8771- 1
7.0000+ 5 ~ 1.0000+ 6	6.8816+ 0	5.3820+ 0	1.1844+ 0	1.0611- 1					1.6665- 5	6.9864-11			3.7465- 1
1.0000+ 6 ~ 2.0000+ 6	6.7710+ 0	4.8029+ 0	1.8997+ 0	5.8063- 2					2.3418- 6	6.5000-11			5.5080- 1
2.0000+ 6 ~ 4.0000+ 6	6.5229+ 0	4.0777+ 0	2.4230+ 0	2.2085- 2			2.2375-15		4.2550- 5	3.8793-10			7.3273- 1
4.0000+ 6 ~ 7.0000+ 6	5.5488+ 0	3.0891+ 0	2.2955+ 0	2.5189- 3	1.8709- 1		3.8469- 7		6.8719- 5	2.4286- 7			7.8734- 1
7.0000+ 6 ~ 1.0000+ 7	4.8635+ 0	2.4260+ 0	6.1313- 1	8.6879- 4	1.8138+ 0		8.1737- 6	6.4913-19	1.9898- 4	1.0861- 6	6.8766-12	4.8830-13	7.7794- 1
1.0000+ 7 ~ 2.0000+ 7	6.0314+ 0	2.7269+ 0	1.6869- 1	1.0800- 3	1.6842+ 0	6.4009- 1	9.3373- 3	1.9710- 3	2.1932- 3	2.1629- 3	3.1978- 3	1.1935- 3	8.6020- 1

MATERIAL =8005 CROSS SECTION

^{146}Nd (6005)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.3827+ 1	9.4963+ 0		4.9311+ 0					0.0000+ 0	0.0000+ 0			4.6085- 3
1.0000- 2 ~ 2.0000- 2	1.1346+ 1	9.4969+ 0		1.8606+ 0					0.0000+ 0	0.0000+ 0			4.6085- 3
2.0000- 2 ~ 4.0000- 2	1.0804+ 1	9.4864+ 0		1.3083+ 0					0.0000+ 0	0.0000+ 0			4.6085- 3
4.0000- 2 ~ 7.0000- 2	1.0455+ 1	9.4948+ 0		9.6091- 1					0.0000+ 0	0.0000+ 0			4.6085- 3
7.0000- 2 ~ 1.0000- 1	1.0263+ 1	9.4936+ 0		7.6936- 1					0.0000+ 0	0.0000+ 0			4.6085- 3
1.0000- 1 ~ 2.0000- 1	1.0075+ 1	9.4914+ 0		5.8409- 1					0.0000+ 0	0.0000+ 0			4.6085- 3
2.0000- 1 ~ 4.0000- 1	9.8989+ 0	9.4863+ 0		4.1258- 1					0.0000+ 0	0.0000+ 0			4.6085- 3
4.0000- 1 ~ 7.0000- 1	9.7807+ 0	9.4779+ 0		3.0278- 1					0.0000+ 0	0.0000+ 0			4.6085- 3
7.0000- 1 ~ 1.0000+ 0	9.7092+ 0	9.4679+ 0		2.4126- 1					0.0000+ 0	0.0000+ 0			4.6085- 3
1.0000+ 0 ~ 2.0000+ 0	9.8290+ 0	9.4489+ 0		1.8270- 1					0.0000+ 0	0.0000+ 0			4.6085- 3
2.0000+ 0 ~ 4.0000+ 0	9.5246+ 0	9.3970+ 0		1.2766- 1					0.0000+ 0	0.0000+ 0			4.6085- 3
4.0000+ 0 ~ 7.0000+ 0	9.4069+ 0	9.3165+ 0		9.1796- 2					0.0000+ 0	0.0000+ 0			4.6085- 3
7.0000+ 0 ~ 1.0000+ 1	9.2942+ 0	9.2227+ 0		7.1650- 2					0.0000+ 0	0.0000+ 0			4.6085- 3
1.0000+ 1 ~ 2.0000+ 1	9.0818+ 0	9.0301+ 0		5.1730- 2					0.0000+ 0	0.0000+ 0			4.6085- 3
2.0000+ 1 ~ 4.0000+ 1	8.6618+ 0	8.8292+ 0		3.2650- 2					0.0000+ 0	0.0000+ 0			4.6092- 3
4.0000+ 1 ~ 7.0000+ 1	8.0878+ 0	8.0576+ 0		2.0260- 2					0.0000+ 0	0.0000+ 0			4.6139- 3
7.0000+ 1 ~ 1.0000+ 2	7.5307+ 0	7.5171+ 0		1.3665- 2					0.0000+ 0	0.0000+ 0			4.6178- 3
1.0000+ 2 ~ 2.0000+ 2	6.5533+ 0	6.6453+ 0		7.9794- 3					0.0000+ 0	0.0000+ 0			4.8343- 3
2.0000+ 2 ~ 4.0000+ 2	7.8755+ 0	6.5001+ 0		1.3754+ 0					0.0000+ 0	0.0000+ 0			4.8735- 3
4.0000+ 2 ~ 7.0000+ 2	3.7946+ 0	3.6886+ 0		1.0580- 1					0.0000+ 0	0.0000+ 0			4.7824- 3
7.0000+ 2 ~ 1.0000+ 3	1.9100+ 1	1.8054+ 1		1.0654+ 0					0.0000+ 0	0.0000+ 0			4.8723- 3
1.0000+ 3 ~ 2.0000+ 3	5.8217+ 1	5.7785+ 1		4.3169- 1					0.0000+ 0	0.0000+ 0			6.1782- 3
2.0000+ 3 ~ 4.0000+ 3	5.5996+ 1	5.5728+ 1		2.8776- 1					0.0000+ 0	0.0000+ 0			8.0456- 3
4.0000+ 3 ~ 7.0000+ 3	2.4981+ 1	2.4784+ 1		1.9880- 1					0.0000+ 0	0.0000+ 0			7.8414- 3
7.0000+ 3 ~ 1.0000+ 4	1.4990+ 1	1.4854+ 1		1.3606- 1					0.0000+ 0	0.0000+ 0			1.0172- 2
1.0000+ 4 ~ 2.0000+ 4	1.6847+ 1	1.6697+ 1		1.6040- 1					0.0000+ 0	0.0000+ 0			1.6120- 2
2.0000+ 4 ~ 4.0000+ 4	1.3616+ 1	1.3500+ 1		1.1594- 1					0.0000+ 0	0.0000+ 0			3.1100- 2
4.0000+ 4 ~ 7.0000+ 4	1.1348+ 1	1.1247+ 1		9.9237- 2					0.0000+ 0	0.0000+ 0			5.6140- 2
7.0000+ 4 ~ 1.0000+ 5	9.8668+ 0	9.8770+ 0		8.9766- 2					0.0000+ 0	0.0000+ 0			8.2888- 2
1.0000+ 5 ~ 2.0000+ 5	8.5278+ 0	8.4499+ 0		7.7906- 2					3.4481-10	9.6882-17			1.3010- 1
2.0000+ 5 ~ 4.0000+ 5	7.2704+ 0	7.2013+ 0		6.9192- 2					1.3792- 9	3.8353-16			1.8844- 1
4.0000+ 5 ~ 7.0000+ 5	6.7495+ 0	6.2594+ 0	4.9807- 1	5.1497- 2					3.2135- 9	4.8118-16			2.7071- 1
7.0000+ 5 ~ 1.0000+ 6	6.6819+ 0	5.7078+ 0	9.3009- 1	4.4110- 2					6.9964- 9	7.6083-13			3.6208- 1
1.0000+ 6 ~ 2.0000+ 6	6.7710+ 0	5.1987+ 0	1.6326+ 0	3.9428- 2					4.6175- 8	6.3466-12			5.0309- 1
2.0000+ 6 ~ 4.0000+ 6	5.5229+ 0	4.0740+ 0	2.4299+ 0	1.6905- 2					9.4829- 7	1.2382-10			7.1518- 1
4.0000+ 6 ~ 7.0000+ 6	5.5504+ 0	2.9007+ 0	2.6436+ 0	5.7987- 3			1.0501-19		8.2782- 8	2.7695- 7			7.8831- 1
7.0000+ 6 ~ 1.0000+ 7	4.8634+ 0	2.2796+ 0	2.0174+ 0	1.7968- 3	6.5360- 1		9.5634- 6	2.8126-21	8.6137- 6	1.9970- 6	3.1428-16	1.8377-17	7.7782- 1
1.0000+ 7 ~ 2.0000+ 7	6.0312+ 0	2.5680+ 0	7.4356- 1	1.2673- 3	1.3636+ 0	3.4668- 1	6.6088- 3	3.2220- 3	2.8169- 3	4.9667- 3	7.6947- 3	2.2830- 3	8.8020- 1

MATERIAL =6006 CROSS SECTION ^{147}Nd (6006)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	1.4260+ 3	7.9805+ 1		1.3462+ 3					0.0000+ 0	0.0000+ 0			4.5771- 3
1.0000- 2 ~ 2.0000- 2	6.5198+ 2	7.9545+ 1		5.7234+ 2					0.0000+ 0	0.0000+ 0			4.5771- 3
2.0000- 2 ~ 4.0000- 2	4.8236+ 2	7.9167+ 1		4.0319+ 2					0.0000+ 0	0.0000+ 0			4.5771- 3
4.0000- 2 ~ 7.0000- 2	3.7118+ 2	7.8518+ 1		2.9264+ 2					0.0000+ 0	0.0000+ 0			4.5771- 3
7.0000- 2 ~ 1.0000- 1	3.0934+ 2	7.7763+ 1		2.3157+ 2					0.0000+ 0	0.0000+ 0			4.5771- 3
1.0000- 1 ~ 2.0000- 1	2.4811+ 2	7.5174+ 1		1.7199+ 2					0.0000+ 0	0.0000+ 0			4.5771- 3
2.0000- 1 ~ 4.0000- 1	1.8796+ 2	7.2718+ 1		1.1523+ 2					0.0000+ 0	0.0000+ 0			4.5771- 3
4.0000- 1 ~ 7.0000- 1	1.4517+ 2	6.7525+ 1		7.7845+ 1					0.0000+ 0	0.0000+ 0			4.5771- 3
7.0000- 1 ~ 1.0000+ 0	1.1807+ 2	6.2052+ 1		5.6018+ 1					0.0000+ 0	0.0000+ 0			4.5771- 3
1.0000+ 0 ~ 2.0000+ 0	8.8167+ 1	5.2700+ 1		3.5467+ 1					0.0000+ 0	0.0000+ 0			4.5771- 3
2.0000+ 0 ~ 4.0000+ 0	6.6457+ 1	3.8098+ 1		1.8361+ 1					0.0000+ 0	0.0000+ 0			4.5771- 3
4.0000+ 0 ~ 7.0000+ 0	1.8711+ 2	2.5857+ 1		1.4026+ 2					0.0000+ 0	0.0000+ 0			4.5771- 3
7.0000+ 0 ~ 1.0000+ 1	2.8988+ 1	1.7330+ 1		1.1658+ 1					0.0000+ 0	0.0000+ 0			4.5771- 3
1.0000+ 1 ~ 2.0000+ 1	2.0208+ 2	2.1798+ 1		1.8028+ 2					0.0000+ 0	0.0000+ 0			4.5771- 3
2.0000+ 1 ~ 4.0000+ 1	3.0719+ 2	9.7263+ 1		2.0994+ 2					0.0000+ 0	0.0000+ 0			4.5763- 3
4.0000+ 1 ~ 7.0000+ 1	1.7096+ 2	6.6766+ 1		1.0419+ 2					0.0000+ 0	0.0000+ 0			4.6672- 3
7.0000+ 1 ~ 1.0000+ 2	1.3894+ 2	6.0810+ 1		7.7591+ 1					0.0000+ 0	0.0000+ 0			4.5947- 3
1.0000+ 2 ~ 2.0000+ 2	1.0704+ 2	5.4054+ 1		5.2988+ 1					0.0000+ 0	0.0000+ 0			4.6193- 3
2.0000+ 2 ~ 4.0000+ 2	7.7958+ 1	4.8079+ 1		3.1880+ 1					0.0000+ 0	0.0000+ 0			4.6755- 3
4.0000+ 2 ~ 7.0000+ 2	5.9254+ 1	3.9333+ 1		1.9921+ 1					0.0000+ 0	0.0000+ 0			4.8117- 3
7.0000+ 2 ~ 1.0000+ 3	4.8847+ 1	3.4784+ 1		1.4062+ 1					0.0000+ 0	0.0000+ 0			4.9252- 3
1.0000+ 3 ~ 2.0000+ 3	3.8849+ 1	2.9708+ 1		9.1409+ 0					0.0000+ 0	0.0000+ 0			5.2863- 3
2.0000+ 3 ~ 4.0000+ 3	2.9622+ 1	2.4179+ 1		5.2423+ 0					0.0000+ 0	0.0000+ 0			6.2886- 3
4.0000+ 3 ~ 7.0000+ 3	2.3611+ 1	2.0306+ 1		3.2048+ 0					0.0000+ 0	0.0000+ 0			8.2368- 3
7.0000+ 3 ~ 1.0000+ 4	2.0128+ 1	1.7880+ 1		2.2658+ 0					0.0000+ 0	0.0000+ 0			1.0748- 2
1.0000+ 4 ~ 2.0000+ 4	1.6787+ 1	1.5266+ 1		1.5316+ 0					0.0000+ 0	0.0000+ 0			1.7065- 2
2.0000+ 4 ~ 4.0000+ 4	1.3587+ 1	1.2574+ 1		9.9287- 1					0.0000+ 0	0.0000+ 0			3.2897- 2
4.0000+ 4 ~ 7.0000+ 4	1.1216+ 1	1.0414+ 1	1.1279- 1	6.8864- 1					0.0000+ 0	0.0000+ 0			5.9861- 2
7.0000+ 4 ~ 1.0000+ 5	9.8869+ 0	8.9302+ 0	4.3772- 1	6.1937- 1					0.0000+ 0	0.0000+ 0			9.0679- 2
1.0000+ 5 ~ 2.0000+ 5	8.5249+ 0	7.4673+ 0	6.9293- 1	3.7317- 1					8.0616- 8	0.0000+ 0			1.4734- 1
2.0000+ 5 ~ 4.0000+ 5	7.2657+ 0	5.9453+ 0	1.0959+ 0	2.2124- 1					3.2246- 7	0.0000+ 0			2.3888- 1
4.0000+ 5 ~ 7.0000+ 5	6.7425+ 0	5.0507+ 0	1.5304+ 0	1.6089- 1					6.4432- 7	0.0000+ 0			3.3323- 1
7.0000+ 5 ~ 1.0000+ 6	6.5613+ 0	4.6672+ 0	1.8876+ 0	1.3633- 1					7.8309- 7	0.0000+ 0			4.3298- 1
1.0000+ 6 ~ 2.0000+ 6	6.7702+ 0	4.4314+ 0	2.2466+ 0	9.1996- 2					1.3186- 6	0.0000+ 0			6.9430- 1
2.0000+ 6 ~ 4.0000+ 6	8.5227+ 0	4.0089+ 0	2.4787+ 0	3.2076- 2			1.8542-19		3.3027- 6	3.0715-11			7.4343- 1
4.0000+ 6 ~ 7.0000+ 6	5.5503+ 0	3.0758+ 0	2.0129+ 0	9.7129- 3	4.5398- 1		9.0408-10		5.5550- 6	7.3891- 9			7.8779- 1
7.0000+ 6 ~ 1.0000+ 7	4.8646+ 0	2.4314+ 0	4.0662- 1	8.4070- 4	2.0164+ 0		1.0936- 6		6.0716- 6	1.0884- 6	1.4662-14	4.2097-14	7.7793- 1
1.0000+ 7 ~ 2.0000+ 7	5.0311+ 0	2.7282+ 0	1.3843- 1	1.0801- 3	1.4360+ 0	7.1492- 1	5.9497- 3	1.0526- 3	1.4426- 3	9.2737- 4	2.9730- 3	1.2431- 3	8.6019- 1

MATERIAL =6007 CROSS SECTION ^{148}Nd (6007)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	1.2218+ 1	4.5057+ 0		7.7122+ 0					0.0000+ 0	0.0000+ 0			4.5481- 3
1.0000- 2 ~ 2.0000- 2	7.8012+ 0	4.5052+ 0		3.2959+ 0					0.0000+ 0	0.0000+ 0			4.5481- 3
2.0000- 2 ~ 4.0000- 2	6.0361+ 0	4.5048+ 0		2.5305+ 0					0.0000+ 0	0.0000+ 0			4.5481- 3
4.0000- 2 ~ 7.0000- 2	5.2164+ 0	4.5035+ 0		1.7129+ 0					0.0000+ 0	0.0000+ 0			4.5481- 3
7.0000- 2 ~ 1.0000- 1	4.8735+ 0	4.5021+ 0		1.3714+ 0					0.0000+ 0	0.0000+ 0			4.5481- 3
1.0000- 1 ~ 2.0000- 1	4.5417+ 0	4.4993+ 0		1.0424+ 0					0.0000+ 0	0.0000+ 0			4.5481- 3
2.0000- 1 ~ 4.0000- 1	4.2306+ 0	4.4926+ 0		7.3786- 1					0.0000+ 0	0.0000+ 0			4.5481- 3
4.0000- 1 ~ 7.0000- 1	4.0246+ 0	4.4818+ 0		5.4324- 1					0.0000+ 0	0.0000+ 0			4.5481- 3
7.0000- 1 ~ 1.0000+ 0	3.9034+ 0	4.4683+ 0		4.3607- 1					0.0000+ 0	0.0000+ 0			4.5481- 3
1.0000+ 0 ~ 2.0000+ 0	3.7719+ 0	4.4395+ 0		3.3242- 1					0.0000+ 0	0.0000+ 0			4.5481- 3
2.0000+ 0 ~ 4.0000+ 0	3.6102+ 0	4.3730+ 0		2.3718- 1					0.0000+ 0	0.0000+ 0			4.5481- 3
4.0000+ 0 ~ 7.0000+ 0	3.4390+ 0	4.2819+ 0		1.7719- 1					0.0000+ 0	0.0000+ 0			4.5481- 3
7.0000+ 0 ~ 1.0000+ 1	3.2724+ 0	4.1281+ 0		1.4437- 1					0.0000+ 0	0.0000+ 0			4.5481- 3
1.0000+ 1 ~ 2.0000+ 1	3.9504+ 0	3.8354+ 0		1.1501- 1					0.0000+ 0	0.0000+ 0			4.5481- 3
2.0000+ 1 ~ 4.0000+ 1	3.2372+ 0	3.1447+ 0		9.2476- 2					0.0000+ 0	0.0000+ 0			4.5488- 3
4.0000+ 1 ~ 7.0000+ 1	2.0326+ 0	1.9406+ 0		9.2060- 2					0.0000+ 0	0.0000+ 0			4.5616- 3
7.0000+ 1 ~ 1.0000+ 2	1.0425+ 0	5.2971- 1		5.1277- 1					0.0000+ 0	0.0000+ 0			4.5554- 3
1.0000+ 2 ~ 2.0000+ 2	4.8802+ 2	4.7589+ 2		1.2134+ 1					0.0000+ 0	0.0000+ 0			4.5719- 3
2.0000+ 2 ~ 4.0000+ 2	2.5077+ 2	2.4543+ 2		5.3425+ 0					0.0000+ 0	0.0000+ 0			4.6111- 3
4.0000+ 2 ~ 7.0000+ 2	1.1609+ 1	1.1369+ 1		1.6047- 1					0.0000+ 0	0.0000+ 0			4.7200- 3
7.0000+ 2 ~ 1.0000+ 3	5.8680+ 1	5.7093+ 1		1.7668+ 0					0.0000+ 0	0.0000+ 0			4.8099- 3
1.0000+ 3 ~ 2.0000+ 3	4.4126+ 1	4.3327+ 1		7.9848- 1					0.0000+ 0	0.0000+ 0			5.1159- 3
2.0000+ 3 ~ 4.0000+ 3	3.8102+ 1	3.7702+ 1		9.9985- 1					0.0000+ 0	0.0000+ 0			5.8854- 3
4.0000+ 3 ~ 7.0000+ 3	2.4050+ 1	2.3813+ 1		2.3710- 1					0.0000+ 0	0.0000+ 0			7.7798- 3
7.0000+ 3 ~ 1.0000+ 4	2.3148+ 1	2.2935+ 1		2.1272- 1					0.0000+ 0	0.0000+ 0			1.0111- 2
1.0000+ 4 ~ 2.0000+ 4	1.6871+ 1	1.6720+ 1		1.5066- 1					0.0000+ 0	0.0000+ 0			1.6060- 2
2.0000+ 4 ~ 4.0000+ 4	1.3617+ 1	1.3501+ 1		1.1676- 1					0.0000+ 0	0.0000+ 0			3.1042- 2
4.0000+ 4 ~ 7.0000+ 4	1.1347+ 1	1.1247+ 1		1.0015- 1					0.0000+ 0	0.0000+ 0			5.6085- 2
7.0000+ 4 ~ 1.0000+ 5	9.9673+ 0	9.8768+ 0		9.0808- 2					0.0000+ 0	0.0000+ 0			8.2034- 2
1.0000+ 5 ~ 2.0000+ 5	8.5281+ 0	8.4492+ 0		7.8928- 2					1.2437-11	4.0448-19			1.3005- 1
2.0000+ 5 ~ 4.0000+ 5	7.2741+ 0	7.1010+ 0	1.0091- 1	8.3718- 2					4.9748-11	1.6160-17			1.9910- 1
4.0000+ 5 ~ 7.0000+ 5	6.7558+ 0	6.9412+ 0	7.7378- 1	9.5906- 2					1.1929-10	1.9526-16			2.8580- 1
7.0000+ 5 ~ 1.0000+ 6	6.6811+ 0	5.4883+ 0	1.1664+ 0	3.4414- 2					2.2711-10	3.2038-14			3.8273- 1
1.0000+ 6 ~ 2.0000+ 6	6.7704+ 0	4.8278+ 0	1.9162+ 0	2.7002- 2					1.3847- 9	2.3422-13			5.3288- 1
2.0000+ 6 ~ 4.0000+ 6	8.5228+ 0	3.9308+ 0	2.5779+ 0	1.4022- 2					7.0306- 9	4.2112-12			7.2463- 1
4.0000+ 6 ~ 7.0000+ 6	5.5509+ 0	2.6075+ 0	2.7401+ 0	2.7012- 3			1.2292-17		1.1161- 8	8.8567- 9			7.8718- 1
7.0000+ 6 ~ 1.0000+ 7	4.8542+ 0	2.2087+ 0	1.9636+ 0	8.4636- 4	6.9226- 1		6.6626- 7		2.4223- 6	6.6229- 7	1.2066-19	3.3297-19	7.7703- 1
1.0000+ 7 ~ 2.0000+ 7	5.0311+ 0	2.4849+ 0	7.8499- 1	1.0436- 3	1.2824+ 0	4.5899- 1	5.0719- 3	9.5627- 4	2.4444- 3	2.7425- 3	4.5603- 3	2.4068- 3	8.5020- 1

^{150}Nd (6008)

CROSS SECTION

MATERIAL =6008

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	8.5116+ 0	4.7798+ 0		3.7318+ 0					0.0000+ 0				4.4863- 3
1.0000- 2 ~ 2.0000- 2	6.3716+ 0	4.7796+ 0		1.6920+ 0					0.0000+ 0				4.4863- 3
2.0000- 2 ~ 4.0000- 2	6.9051+ 0	4.7794+ 0		1.1256+ 0					0.0000+ 0				4.4863- 3
4.0000- 2 ~ 7.0000- 2	5.6006+ 0	4.7791+ 0		8.2156- 1					0.0000+ 0				4.4863- 3
7.0000- 2 ~ 1.0000- 1	5.4337+ 0	4.7787+ 0		6.6600- 1					0.0000+ 0				4.4863- 3
1.0000- 1 ~ 2.0000- 1	5.2719+ 0	4.7778+ 0		4.9404- 1					0.0000+ 0				4.4863- 3
2.0000- 1 ~ 4.0000- 1	5.1172+ 0	4.7769+ 0		3.4140- 1					0.0000+ 0				4.4863- 3
4.0000- 1 ~ 7.0000- 1	5.0149+ 0	4.7726+ 0		2.4224- 1					0.0000+ 0				4.4863- 3
7.0000- 1 ~ 1.0000+ 0	4.9646+ 0	4.7689+ 0		1.8670- 1					0.0000+ 0				4.4863- 3
1.0000+ 0 ~ 2.0000+ 0	4.8921+ 0	4.7614+ 0		1.3071- 1					0.0000+ 0				4.4863- 3
2.0000+ 0 ~ 4.0000+ 0	4.8247+ 0	4.7460+ 0		7.8690- 2					0.0000+ 0				4.4863- 3
4.0000+ 0 ~ 7.0000+ 0	4.7713+ 0	4.7242+ 0		4.7071- 2					0.0000+ 0				4.4863- 3
7.0000+ 0 ~ 1.0000+ 1	4.7336+ 0	4.7021+ 0		3.1548- 2					0.0000+ 0				4.4863- 3
1.0000+ 1 ~ 2.0000+ 1	4.6815+ 0	4.6613+ 0		2.0183- 2					0.0000+ 0				4.4863- 3
2.0000+ 1 ~ 4.0000+ 1	4.5842+ 0	4.5698+ 0		1.4346- 2					0.0000+ 0				4.4860- 3
4.0000+ 1 ~ 7.0000+ 1	4.3176+ 0	4.2842+ 0		3.3369- 2					0.0000+ 0				4.4808- 3
7.0000+ 1 ~ 1.0000+ 2	9.7041+ 1	1.3581+ 1		2.4279+ 1					0.0000+ 0				4.4949- 3
1.0000+ 2 ~ 2.0000+ 2	4.3764+ 0	4.3675+ 0		8.9494- 3					0.0000+ 0				4.5116- 3
2.0000+ 2 ~ 4.0000+ 2	3.2086+ 0	2.8271+ 1		3.9149+ 0					0.0000+ 0				4.5513- 3
4.0000+ 2 ~ 7.0000+ 2	3.3349+ 1	3.1063+ 1		2.2961+ 0					0.0000+ 0				4.6609- 3
7.0000+ 2 ~ 1.0000+ 3	1.2929+ 1	1.1550+ 1		1.3699+ 0					0.0000+ 0				4.7615- 3
1.0000+ 3 ~ 2.0000+ 3	2.6733+ 1	2.5665+ 1		1.1686+ 0					0.0000+ 0				6.0683- 3
2.0000+ 3 ~ 4.0000+ 3	2.5452+ 1	2.4998+ 1		4.5415- 1					0.0000+ 0				5.9256- 3
4.0000+ 3 ~ 7.0000+ 3	1.6713+ 1	1.6395+ 1		3.1704- 1					0.0000+ 0				7.7164- 3
7.0000+ 3 ~ 1.0000+ 4	3.1192+ 1	3.0939+ 1		2.5244- 1					0.0000+ 0				1.0036- 2
1.0000+ 4 ~ 2.0000+ 4	1.7820+ 1	1.7628+ 1		1.9179- 1					0.0000+ 0				1.6940- 2
2.0000+ 4 ~ 4.0000+ 4	1.3410+ 1	1.3254+ 1		1.5588- 1					0.0000+ 0				3.0769- 2
4.0000+ 4 ~ 7.0000+ 4	1.1367+ 1	1.1223+ 1		1.3390- 1					0.0000+ 0				5.5608- 2
7.0000+ 4 ~ 1.0000+ 5	1.0097+ 1	9.9733+ 0		1.2347- 1					0.0000+ 0				9.2001- 2
1.0000+ 5 ~ 2.0000+ 5	8.6762+ 0	8.4206+ 0	1.7484- 1	7.9217- 2					3.6194-13				1.3085- 1
2.0000+ 5 ~ 4.0000+ 5	7.3822+ 0	6.8684+ 0	6.5430- 1	4.0323- 2					1.4158-12	1.2728-18			2.0956- 1
4.0000+ 5 ~ 7.0000+ 5	6.7911+ 0	5.6194+ 0	1.1386+ 0	9.4419- 2					2.6931-12	4.2555-17			2.9254- 1
7.0000+ 5 ~ 1.0000+ 6	6.6839+ 0	5.0263+ 0	1.6243+ 0	3.3327- 2					5.4109-12	2.8126-16			3.0282- 1
1.0000+ 6 ~ 2.0000+ 6	6.7638+ 0	4.5010+ 0	2.2334+ 0	2.9408- 2					3.2640-11	1.7609-15			5.4594- 1
2.0000+ 6 ~ 4.0000+ 6	6.5686+ 0	3.7208+ 0	2.8304+ 0	1.7458- 2					3.5511- 9	8.9737-14			7.3015- 1
4.0000+ 6 ~ 7.0000+ 6	5.6212+ 0	2.6391+ 0	2.9781+ 0	3.9900- 3			8.2880-18		2.7771- 7	2.0085-10			7.8999- 1
7.0000+ 6 ~ 1.0000+ 7	4.8000+ 0	2.0166+ 0	2.3164+ 0	8.8686- 4	5.6669- 1		4.0726- 7		6.6369- 6	4.4944- 8	7.1666-21	5.1799-22	7.7039- 1
1.0000+ 7 ~ 2.0000+ 7	6.0482+ 0	2.4607+ 0	7.9006- 1	1.0668- 3	1.3076+ 0	4.7437- 1	3.2222- 3	1.1137- 3	2.9394- 3	2.0014- 3	3.3039- 3	1.2629- 3	8.6966- 1

^{147}Pm (6101)

CROSS SECTION

MATERIAL =6101

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	5.4384+ 2	2.1216+ 1		5.2262+ 2					0.0000+ 0	0.0000+ 0			4.6771- 3
1.0000- 2 ~ 2.0000- 2	2.4359+ 2	2.1066+ 1		2.2252+ 2					0.0000+ 0	0.0000+ 0			4.6771- 3
2.0000- 2 ~ 4.0000- 2	1.7746+ 2	2.0844+ 1		1.5680+ 2					0.0000+ 0	0.0000+ 0			4.6771- 3
4.0000- 2 ~ 7.0000- 2	1.3486+ 2	2.0487+ 1		1.1417+ 2					0.0000+ 0	0.0000+ 0			4.6771- 3
7.0000- 2 ~ 1.0000- 1	1.1081+ 2	2.0077+ 1		9.0739+ 1					0.0000+ 0	0.0000+ 0			4.6771- 3
1.0000- 1 ~ 2.0000- 1	8.7218+ 1	1.9261+ 1		6.7958+ 1					0.0000+ 0	0.0000+ 0			4.6771- 3
2.0000- 1 ~ 4.0000- 1	6.4796+ 1	1.7671+ 1		4.7124+ 1					0.0000+ 0	0.0000+ 0			4.6771- 3
4.0000- 1 ~ 7.0000- 1	5.0252+ 1	1.5884+ 1		3.4368+ 1					0.0000+ 0	0.0000+ 0			4.6771- 3
7.0000- 1 ~ 1.0000+ 0	4.2743+ 1	1.4039+ 1		2.8705+ 1					0.0000+ 0	0.0000+ 0			4.6771- 3
1.0000+ 0 ~ 2.0000+ 0	3.9171+ 1	1.2482+ 1		2.6689+ 1					0.0000+ 0	0.0000+ 0			4.6771- 3
2.0000+ 0 ~ 4.0000+ 0	7.1236+ 1	1.9649+ 1		5.1586+ 1					0.0000+ 0	0.0000+ 0			4.6771- 3
4.0000+ 0 ~ 7.0000+ 0	4.9245+ 3	1.5052+ 3		3.4193+ 3					0.0000+ 0	0.0000+ 0			4.6771- 3
7.0000+ 0 ~ 1.0000+ 1	1.1619+ 2	4.1881+ 1		7.6309+ 1					0.0000+ 0	0.0000+ 0			4.6771- 3
1.0000+ 1 ~ 2.0000+ 1	7.1305+ 1	1.2180+ 1		5.9115+ 1					0.0000+ 0	0.0000+ 0			4.6771- 3
2.0000+ 1 ~ 4.0000+ 1	1.1691+ 2	2.9626+ 1		8.8288+ 1					0.0000+ 0	0.0000+ 0			4.6779- 3
4.0000+ 1 ~ 7.0000+ 1	1.4607+ 2	6.9148+ 1		8.5926+ 1					0.0000+ 0	0.0000+ 0			4.6836- 3
7.0000+ 1 ~ 1.0000+ 2	9.5857+ 1	3.2144+ 1		6.3713+ 1					0.0000+ 0	0.0000+ 0			4.6884- 3
1.0000+ 2 ~ 2.0000+ 2	1.0629+ 2	5.5679+ 1		5.0617+ 1					0.0000+ 0	0.0000+ 0			4.6050- 3
2.0000+ 2 ~ 4.0000+ 2	7.7375+ 1	4.6351+ 1		3.1024+ 1					0.0000+ 0	0.0000+ 0			4.6423- 3
4.0000+ 2 ~ 7.0000+ 2	6.7420+ 1	3.8069+ 1		1.9331+ 1					0.0000+ 0	0.0000+ 0			4.7411- 3
7.0000+ 2 ~ 1.0000+ 3	4.6339+ 1	3.2798+ 1		1.3598+ 1					0.0000+ 0	0.0000+ 0			4.8223- 3
1.0000+ 3 ~ 2.0000+ 3	3.6709+ 1	2.6889+ 1		8.8198+ 0					0.0000+ 0	0.0000+ 0			6.0941- 3
2.0000+ 3 ~ 4.0000+ 3	2.5848+ 1	2.0774+ 1		5.0745+ 0					0.0000+ 0	0.0000+ 0			6.8897- 3
4.0000+ 3 ~ 7.0000+ 3	1.9667+ 1	1.6431+ 1		3.1266+ 0					0.0000+ 0	0.0000+ 0			7.5161- 3
7.0000+ 3 ~ 1.0000+ 4	1.8088+ 1	1.3833+ 1		2.2358+ 0					0.0000+ 0	0.0000+ 0			8.7196- 3
1.0000+ 4 ~ 2.0000+ 4	1.2730+ 1	1.1190+ 1		1.5396+ 0					0.0000+ 0	0.0000+ 0			1.6632- 2
2.0000+ 4 ~ 4.0000+ 4	9.8590+ 0	8.6374+ 0		1.0158+ 0					0.0000+ 0	0.0000+ 0			3.1597- 2
4.0000+ 4 ~ 7.0000+ 4	7.6994+ 0	6.9630+ 0		7.3642- 1					0.0000+ 0	0.0000+ 0			6.0088- 2
7.0000+ 4 ~ 1.0000+ 6	6.6661+ 0	6.9388+ 0	2.7666- 2	6.8962- 1					0.0000+ 0	0.0000+ 0			9.2306- 2
1.0000+ 5 ~ 2.0000+ 5	6.6904+ 0	4.9689+ 0	2.8431- 1	4.4715- 1					6.0712- 7	1.8255-14			1.5723- 1
2.0000+ 5 ~ 4.0000+ 5	5.2827+ 0	4.5164+ 0	3.6540- 1	3.8090- 1			0.0000+ 0		8.7812- 7	2.4841-12			2.3820- 1
4.0000+ 5 ~ 7.0000+ 5	5.7748+ 0	4.8055+ 0	8.4885- 1	3.2147- 1			0.0000+ 0		7.9592- 7	1.6909-10			2.9067- 1
7.0000+ 5 ~ 1.0000+ 6	6.5386+ 0	6.0440+ 0	1.3367+ 0	2.5946- 1			0.0000+ 0		1.2610- 6	2.1868-10			3.6731- 1
1.0000+ 6 ~ 2.0000+ 6	7.2761+ 0	4.9024+ 0	2.2428+ 0	1.2916- 1			6.3796-18		3.0675- 6	1.4149-10			6.7612- 1
2.0000+ 6 ~ 4.0000+ 6	6.3268+ 0	3.9985+ 0	2.2985+ 0	3.1578- 2			9.6007-12		1.2902- 5	3.8948-10			7.2197- 1
4.0000+ 6 ~ 7.0000+ 6	4.8034+ 0	2.6999+ 0	2.1002+ 0	3.2429- 3			1.9398- 0	8.8008-20	3.6823- 6	4.0080- 7	3.3922-15	1.3977-20	8.6928- 1
7.0000+ 6 ~ 1.0000+ 7	4.6336+ 0	2.6678+ 0	1.4941+ 0	6.1916- 4	4.7000- 1		6.6382- 4	6.2467-10	2.3668- 4	2.7207- 6	7.1607- 9	2.3771-11	8.6047- 1
1.0000+ 7 ~ 2.0000+ 7	5.3668+ 0	3.6518+ 0	2.0022- 1	1.0647- 3	1.1620+ 0	4.3029- 1	8.6883- 3	4.6474- 3	2.3619- 3	1.1349- 3	4.1213- 3	1.3963- 3	8.1288- 1

MATERIAL =8102 CROSS SECTION ^{148}Pm (6102)

ENERGY	*TOTAL	ELAS. IC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.1737+ 3	3.1000+ 0		6.1674+ 3			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
1.0000- 2 ~ 2.0000- 2	2.6392+ 3	3.1000+ 0		2.6364+ 3			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
2.0000- 2 ~ 4.0000- 2	1.8671+ 3	3.1000+ 0		1.8636+ 3			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
4.0000- 2 ~ 7.0000- 2	1.3740+ 3	3.1000+ 0		1.3695+ 3			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
7.0000- 2 ~ 1.0000- 1	1.1001+ 3	3.1000+ 0		1.0964+ 3			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
1.0000- 1 ~ 2.0000- 1	8.3798+ 2	3.1000+ 0		8.3396+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
2.0000- 1 ~ 4.0000- 1	6.9348+ 2	3.1000+ 0		6.8827+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
4.0000- 1 ~ 7.0000- 1	4.3877+ 2	3.1000+ 0		4.3306+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
7.0000- 1 ~ 1.0000+ 0	3.4972+ 2	3.1000+ 0		3.4640+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
1.0000+ 0 ~ 2.0000+ 0	1.0038+ 3	3.8727+ 1		9.6487+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5481- 3
2.0000+ 0 ~ 4.0000+ 0	7.7693+ 2	4.1432+ 1		7.3660+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
4.0000+ 0 ~ 7.0000+ 0	5.7130+ 2	4.0295+ 1		5.3101+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5481- 3
7.0000+ 0 ~ 1.0000+ 1	4.5936+ 2	3.9498+ 1		4.1986+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
1.0000+ 1 ~ 2.0000+ 1	3.4483+ 2	3.8408+ 1		3.0542+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5481- 3
2.0000+ 1 ~ 4.0000+ 1	2.3995+ 2	3.9815+ 1		2.0013+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5471- 3
4.0000+ 1 ~ 7.0000+ 1	1.7770+ 2	4.0207+ 1		1.3760+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5644- 3
7.0000+ 1 ~ 1.0000+ 2	1.4538+ 2	4.0502+ 1		1.0487+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5605- 3
1.0000+ 2 ~ 2.0000+ 2	1.1193+ 2	3.8407+ 1		7.3526+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5800- 3
2.0000+ 2 ~ 4.0000+ 2	7.9887+ 1	3.4044+ 1		4.5843+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.8726- 3
4.0000+ 2 ~ 7.0000+ 2	5.9294+ 1	2.9688+ 1		2.9606+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.7309- 3
7.0000+ 2 ~ 1.0000+ 3	4.7849+ 1	2.6541+ 1		2.1307+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.8196- 3
1.0000+ 3 ~ 2.0000+ 3	3.6879+ 1	2.2681+ 1		1.4198+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			5.1074- 3
2.0000+ 3 ~ 4.0000+ 3	2.6897+ 1	1.8310+ 1		8.3889+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			5.9100- 3
4.0000+ 3 ~ 7.0000+ 3	2.0199+ 1	1.4960+ 1		5.2386+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			7.6809- 3
7.0000+ 3 ~ 1.0000+ 4	1.5599+ 1	1.2647+ 1		3.7468+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			9.7875- 3
1.0000+ 4 ~ 2.0000+ 4	1.3137+ 1	1.0688+ 1		2.5491+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			1.5679- 2
2.0000+ 4 ~ 4.0000+ 4	9.9484+ 0	8.2975+ 0		1.6509+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			3.1573- 2
4.0000+ 4 ~ 7.0000+ 4	7.9166+ 0	6.7166+ 0		1.2001+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			6.9988- 2
7.0000+ 4 ~ 1.0000+ 5	6.7352+ 0	5.6738+ 0	2.4076- 1	9.2208- 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			9.6469- 2
1.0000+ 5 ~ 2.0000+ 5	5.7032+ 0	4.6150+ 0	4.5867- 1	7.0876- 1			7.1686-18		9.3033- 7	0.0000+ 0			1.6272- 1
2.0000+ 5 ~ 4.0000+ 5	5.3213+ 0	3.9729+ 0	8.1783- 1	5.2830- 1			6.6745-18		3.7213- 8	0.0000+ 0			2.8163- 1
4.0000+ 5 ~ 7.0000+ 5	5.5334+ 0	3.8417+ 0	1.6616+ 0	3.3086- 1			9.0268-17		7.4280- 8	0.0000+ 0			3.5422- 1
7.0000+ 5 ~ 1.0000+ 6	6.8842+ 0	4.0703+ 0	2.3917+ 0	2.1347- 1			2.3907-16		9.0842- 6	0.0000+ 0			4.4803- 1
1.0000+ 6 ~ 2.0000+ 6	7.3068+ 0	4.5260+ 0	2.6707+ 0	1.0947- 1			9.6189-14		1.2076- 6	0.0000+ 0			6.2136- 1
2.0000+ 6 ~ 4.0000+ 6	6.3604+ 0	3.9969+ 0	2.3355+ 0	2.7791- 2			5.3198- 8		1.7362- 5	1.3901-10			7.2791- 1
4.0000+ 6 ~ 7.0000+ 6	4.7259+ 0	2.6247+ 0	2.0022+ 0	2.5020- 3	9.5732- 2		2.5459- 6		2.7879- 5	9.0952- 8	8.9659-18	3.8349-15	3.7118- 1
7.0000+ 6 ~ 1.0000+ 7	4.2034+ 0	2.2230+ 0	6.3977- 1	8.5380- 4	1.3388+ 0		1.5297- 4	1.6011-12	1.8885- 4	6.3582- 6	1.6186- 8	5.1207- 9	6.6002- 1
1.0000+ 7 ~ 2.0000+ 7	4.7689+ 0	2.9687+ 0	1.1726- 1	1.0805- 3	1.1646+ 0	4.9763- 1	5.2382- 3	3.0300- 3	1.9008- 3	1.6580- 3	4.0830- 3	1.6724- 3	8.1172- 1

MATERIAL =8103 CROSS SECTION ^{148m}Pm (6103)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.6192+ 4	1.4220+ 1	0.0000+ 0	2.5178+ 4			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
1.0000- 2 ~ 2.0000- 2	1.2297+ 4	1.6414+ 1	0.0000+ 0	1.2280+ 4			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
2.0000- 2 ~ 4.0000- 2	1.0624+ 4	2.0763+ 1	0.0000+ 0	1.0603+ 4			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
4.0000- 2 ~ 7.0000- 2	1.1199+ 4	3.2190+ 1	0.0000+ 0	1.1107+ 4			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5481- 3
7.0000- 2 ~ 1.0000- 1	1.5173+ 4	6.9200+ 1	0.0000+ 0	1.5114+ 4			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
1.0000- 1 ~ 2.0000- 1	4.0699+ 4	2.5954+ 2	0.0000+ 0	4.0440+ 4			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5481- 3
2.0000- 1 ~ 4.0000- 1	7.0814+ 3	7.3274+ 1	0.0000+ 0	7.0081+ 3			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
4.0000- 1 ~ 7.0000- 1	9.8633+ 2	2.9761+ 1	0.0000+ 0	9.5857+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5481- 3
7.0000- 1 ~ 1.0000+ 0	1.5320+ 3	6.0525+ 1	0.0000+ 0	1.5714+ 3			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
1.0000+ 0 ~ 2.0000+ 0	1.2499+ 3	6.8391+ 1	0.0000+ 0	1.1855+ 3			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
2.0000+ 0 ~ 4.0000+ 0	8.8191+ 2	5.6146+ 1	0.0000+ 0	8.2516+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6461- 3
4.0000+ 0 ~ 7.0000+ 0	6.5172+ 2	5.4291+ 1	0.0000+ 0	5.9749+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5481- 3
7.0000+ 0 ~ 1.0000+ 1	5.2845+ 2	5.2696+ 1	0.0000+ 0	4.7355+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5481- 3
1.0000+ 1 ~ 2.0000+ 1	4.0103+ 2	4.8892+ 1	0.0000+ 0	3.5114+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5481- 3
2.0000+ 1 ~ 4.0000+ 1	2.8463+ 2	4.5669+ 1	2.2482- 8	2.3886+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6480- 3
4.0000+ 1 ~ 7.0000+ 1	2.1136+ 2	4.2216+ 1	1.7688- 7	1.6914+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6616- 3
7.0000+ 1 ~ 1.0000+ 2	1.7181+ 2	3.9899+ 1	3.0884- 7	1.3191+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5729- 3
1.0000+ 2 ~ 2.0000+ 2	1.3219+ 2	3.6247+ 1	4.5208- 7	9.5947+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6046- 3
2.0000+ 2 ~ 4.0000+ 2	9.4191+ 1	3.1380+ 1	8.3434- 7	6.2811+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6899- 3
4.0000+ 2 ~ 7.0000+ 2	6.9662+ 1	2.7119+ 1	8.8649- 7	4.2543+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.8246- 3
7.0000+ 2 ~ 1.0000+ 3	5.5915+ 1	2.4171+ 1	1.0806- 6	3.1744+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.9512- 3
1.0000+ 3 ~ 2.0000+ 3	4.2660+ 1	2.0669+ 1	1.4382- 6	2.1981+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			5.3347- 3
2.0000+ 3 ~ 4.0000+ 3	3.0318+ 1	1.6715+ 1	2.0821- 6	1.3605+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			6.3539- 3
4.0000+ 3 ~ 7.0000+ 3	2.2466+ 1	1.3676+ 1	6.1932- 6	8.7694+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			8.3826- 3
7.0000+ 3 ~ 1.0000+ 4	1.8140+ 1	1.1753+ 1	1.8117- 5	6.3866+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			1.0991- 2
1.0000+ 4 ~ 2.0000+ 4	1.4046+ 1	8.6839+ 0	4.5881- 6	4.3619+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			1.7737- 2
2.0000+ 4 ~ 4.0000+ 4	1.0327+ 1	7.5504+ 0	1.7197- 4	2.7768+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			3.5495- 2
4.0000+ 4 ~ 7.0000+ 4	8.0183+ 0	6.0571+ 0	9.6038- 4	1.9569+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			6.6200- 2
7.0000+ 4 ~ 1.0000+ 6	6.8069+ 0	6.2160+ 0	1.3666- 2	1.5783+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			1.0227- 1
1.0000+ 5 ~ 2.0000+ 5	6.7874+ 0	4.4617+ 0	7.4639- 2	1.2601+ 0			2.1886-18		9.3033- 7	0.0000+ 0			1.6667- 1
2.0000+ 5 ~ 4.0000+ 5	5.3215+ 0	4.0092+ 0	3.1604- 1	1.0018+ 0			8.6745-18		3.7213- 8	0.0000+ 0			2.5866- 1
4.0000+ 5 ~ 7.0000+ 5	5.8334+ 0	4.1266+ 0	9.3652- 1	7.7220- 1			3.0268-17		7.4280- 8	0.0000+ 0			3.2885- 1
7.0000+ 5 ~ 1.0000+ 6	6.8842+ 0	4.4057+ 0	1.7323+ 0	6.4609- 1			2.3907-16		9.0842- 6	0.0000+ 0			4.1539- 1
1.0000+ 6 ~ 2.0000+ 6	7.3068+ 0	4.6218+ 0	2.4535+ 0	2.2803- 1			9.6189-14		1.2076- 6	0.0000+ 0			8.0948- 1
2.0000+ 6 ~ 4.0000+ 6	6.3604+ 0	3.9994+ 0	2.3258+ 0	3.2732- 2			5.3198- 8		1.7362- 5	1.3901-10			7.2767- 1
4.0000+ 6 ~ 7.0000+ 6	4.7270+ 0	2.6297+ 0	2.0027+ 0	2.0811- 3	9.5732- 2		2.5459- 6		2.7879- 5	9.0952- 8	8.9659-18	3.8349-15	8.7118- 1
7.0000+ 6 ~ 1.0000+ 7	4.2063+ 0	2.2230+ 0	6.3978- 1	8.4946- 4	1.3308+ 0		1.5297- 4	1.6011-12	1.8885- 4	6.3582- 6	1.6186- 8	5.1207- 9	6.6092- 1
1.0000+ 7 ~ 2.0000+ 7	4.7689+ 0	2.9687+ 0	1.1726- 1	1.0809- 3	1.1646+ 0	4.9763- 1	5.2382- 3	3.0300- 3	1.9008- 3	1.6580- 3	4.0830- 3	1.6724- 3	8.1172- 1

^{149}Pm (6104)

CROSS SECTION

MATERIAL =6104

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	4.9237+ 3	3.2000+ 0		4.3172+ 3					0.0000+ 0	0.0000+ 0			4.5156- 3
1.0000- 2 ~ 2.0000- 2	1.8487+ 3	3.2000+ 0		1.8448+ 3					0.0000+ 0	0.0000+ 0			4.5166- 3
2.0000- 2 ~ 4.0000- 2	1.3084+ 3	3.2000+ 0		1.3044+ 3					0.0000+ 0	0.0000+ 0			4.5166- 3
4.0000- 2 ~ 7.0000- 2	9.6408+ 2	3.2000+ 0		9.5865+ 2					0.0000+ 0	0.0000+ 0			4.5166- 3
7.0000- 2 ~ 1.0000- 1	7.7258+ 2	3.2000+ 0		7.6681+ 2					0.0000+ 0	0.0000+ 0			4.5166- 3
1.0000- 1 ~ 2.0000- 1	5.8925+ 2	3.2000+ 0		5.8336+ 2					0.0000+ 0	0.0000+ 0			4.5166- 3
2.0000- 1 ~ 4.0000- 1	4.1786+ 2	3.2000+ 0		4.1260+ 2					0.0000+ 0	0.0000+ 0			4.5166- 3
4.0000- 1 ~ 7.0000- 1	3.0800+ 2	3.2000+ 0		3.0315+ 2					0.0000+ 0	0.0000+ 0			4.5166- 3
7.0000- 1 ~ 1.0000+ 0	2.4686+ 2	3.2000+ 0		2.4248+ 2					0.0000+ 0	0.0000+ 0			4.5166- 3
1.0000+ 0 ~ 2.0000+ 0	1.8825+ 2	3.2000+ 0		1.8447+ 2					0.0000+ 0	0.0000+ 0			4.5166- 3
2.0000+ 0 ~ 4.0000+ 0	5.9115+ 2	7.3087+ 1		5.1803+ 2					0.0000+ 0	0.0000+ 0			4.5166- 3
4.0000+ 0 ~ 7.0000+ 0	6.0422+ 2	1.0273+ 2		5.0148+ 2					0.0000+ 0	0.0000+ 0			4.5166- 3
7.0000+ 0 ~ 1.0000+ 1	4.8668+ 2	1.0247+ 2		3.8421+ 2					0.0000+ 0	0.0000+ 0			4.5166- 3
1.0000+ 1 ~ 2.0000+ 1	3.6510+ 2	9.6480+ 1		2.6862+ 2					0.0000+ 0	0.0000+ 0			4.5166- 3
2.0000+ 1 ~ 4.0000+ 1	2.5362+ 2	8.6600+ 1		1.6702+ 2					0.0000+ 0	0.0000+ 0			4.6162- 3
4.0000+ 1 ~ 7.0000+ 1	1.0820+ 2	7.8732+ 1		1.0947+ 2					0.0000+ 0	0.0000+ 0			4.6206- 3
7.0000+ 1 ~ 1.0000+ 2	1.5421+ 2	7.3521+ 1		8.0689+ 1					0.0000+ 0	0.0000+ 0			4.5244- 3
1.0000+ 2 ~ 2.0000+ 2	1.1877+ 2	6.4495+ 1		5.4278+ 1					0.0000+ 0	0.0000+ 0			4.5376- 3
2.0000+ 2 ~ 4.0000+ 2	8.4701+ 1	5.2699+ 1		3.2009+ 1					0.0000+ 0	0.0000+ 0			4.5679- 3
4.0000+ 2 ~ 7.0000+ 2	6.2818+ 1	4.3094+ 1		1.9724+ 1					0.0000+ 0	0.0000+ 0			4.6407- 3
7.0000+ 2 ~ 1.0000+ 3	5.0658+ 1	3.6880+ 1		1.3778+ 1					0.0000+ 0	0.0000+ 0			4.7154- 3
1.0000+ 3 ~ 2.0000+ 3	3.9003+ 1	3.0141+ 1		8.8626+ 0					0.0000+ 0	0.0000+ 0			4.9411- 3
2.0000+ 3 ~ 4.0000+ 3	2.8182+ 1	2.3147+ 1		5.0346+ 0					0.0000+ 0	0.0000+ 0			5.5910- 3
4.0000+ 3 ~ 7.0000+ 3	2.1271+ 1	1.8199+ 1		3.0727+ 0					0.0000+ 0	0.0000+ 0			6.9836- 3
7.0000+ 3 ~ 1.0000+ 4	1.7497+ 1	1.5254+ 1		2.1838+ 0					0.0000+ 0	0.0000+ 0			8.8539- 3
1.0000+ 4 ~ 2.0000+ 4	1.3761+ 1	1.2268+ 1		1.4928+ 0					0.0000+ 0	0.0000+ 0			1.3841- 2
2.0000+ 4 ~ 4.0000+ 4	1.0383+ 1	9.3848+ 0		9.7881- 1					0.0000+ 0	0.0000+ 0			2.7848- 2
4.0000+ 4 ~ 7.0000+ 4	8.1967+ 0	7.4856+ 0		7.1019- 1					0.0000+ 0	0.0000+ 0			6.3060- 2
7.0000+ 4 ~ 1.0000+ 5	6.8888+ 0	6.4066+ 0		6.8217- 1					0.0000+ 0	0.0000+ 0			8.1667- 2
1.0000+ 5 ~ 2.0000+ 5	5.8969+ 0	5.2400+ 0	2.0206- 1	4.6293- 1					3.6061- 9	0.0000+ 0			1.3937- 1
2.0000+ 5 ~ 4.0000+ 5	5.3411+ 0	4.2204+ 0	8.4239- 1	2.7800- 1					1.4420- 8	0.0000+ 0			2.3880- 1
4.0000+ 5 ~ 7.0000+ 5	5.8544+ 0	4.0784+ 0	1.8090+ 0	1.8968- 1					3.1414- 8	0.0000+ 0			3.2158- 1
7.0000+ 5 ~ 1.0000+ 6	5.7310+ 0	4.4064+ 0	2.2001+ 0	1.2480- 1					6.3160- 8	0.0000+ 0			4.1116- 1
1.0000+ 6 ~ 2.0000+ 6	7.3328+ 0	4.5942+ 0	2.5722+ 0	6.5276- 2			0.0000+ 0		2.0074- 7	0.0000+ 0			6.0192- 1
2.0000+ 6 ~ 4.0000+ 6	6.9927+ 0	4.0496+ 0	2.3249+ 0	1.8215- 2			1.3875-15		2.1863- 6	7.9598-11			7.2500- 1
4.0000+ 6 ~ 7.0000+ 6	4.7601+ 0	2.6463+ 0	2.1119+ 0	1.9089- 3			7.7577- 8		1.1395- 5	9.3208- 8	9.4914-18		8.7296- 1
7.0000+ 6 ~ 1.0000+ 7	4.2087+ 0	2.2469+ 0	1.9280+ 0	4.6731- 4	6.9318- 1		3.9302- 6	2.3719-12	8.0617- 6	8.6318- 6	6.3270-10	3.3340-12	6.6146- 1
1.0000+ 7 ~ 2.0000+ 7	4.7722+ 0	2.9627+ 0	1.9403- 1	1.0426- 3	1.0386+ 0	6.6783- 1	4.2939- 3	3.7622- 3	1.6812- 3	1.7896- 3	3.9703- 3	1.4772- 3	8.1071- 1

^{144}Sm (6201)

CROSS SECTION

MATERIAL =6201

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.1206+ 1	6.1000+ 0		6.0672+ 0			0.0000+ 0		0.0000+ 0				4.6726- 3
1.0000- 2 ~ 2.0000- 2	8.2999+ 0	6.1000+ 0		2.1610+ 0			0.0000+ 0		0.0000+ 0				4.6726- 3
2.0000- 2 ~ 4.0000- 2	7.6469+ 0	6.1000+ 0		1.5281+ 0			0.0000+ 0		0.0000+ 0				4.6726- 3
4.0000- 2 ~ 7.0000- 2	7.2358+ 0	6.1000+ 0		1.1230+ 0			0.0000+ 0		0.0000+ 0				4.6726- 3
7.0000- 2 ~ 1.0000- 1	7.0146+ 0	6.1000+ 0		8.9828- 1			0.0000+ 0		0.0000+ 0				4.6726- 3
1.0000- 1 ~ 2.0000- 1	6.7958+ 0	6.1000+ 0		6.8339- 1			0.0000+ 0		0.0000+ 0				4.6726- 3
2.0000- 1 ~ 4.0000- 1	6.6206+ 0	6.1000+ 0		4.8329- 1			0.0000+ 0		0.0000+ 0				4.6726- 3
4.0000- 1 ~ 7.0000- 1	6.4834+ 0	6.1000+ 0		3.5514- 1			0.0000+ 0		0.0000+ 0				4.6726- 3
7.0000- 1 ~ 1.0000+ 0	6.3906+ 0	6.1000+ 0		2.8407- 1			0.0000+ 0		0.0000+ 0				4.6726- 3
1.0000+ 0 ~ 2.0000+ 0	6.3446+ 0	6.1000+ 0		2.1811- 1			0.0000+ 0		0.0000+ 0				4.6726- 3
2.0000+ 0 ~ 4.0000+ 0	6.2988+ 0	6.1000+ 0		1.6282- 1			0.0000+ 0		0.0000+ 0				4.6726- 3
4.0000+ 0 ~ 7.0000+ 0	6.2585+ 0	6.1000+ 0		1.1231- 1			0.0000+ 0		0.0000+ 0				4.6726- 3
7.0000+ 0 ~ 1.0000+ 1	6.2298+ 0	6.1000+ 0		8.9899- 2			0.0000+ 0		0.0000+ 0				4.6726- 3
1.0000+ 1 ~ 2.0000+ 1	6.1996+ 0	6.1000+ 0		6.8345- 2			0.0000+ 0		0.0000+ 0				4.6726- 3
2.0000+ 1 ~ 4.0000+ 1	1.1768+ 2	1.1230+ 2		5.3762+ 0			0.0000+ 0		0.0000+ 0				4.6768- 3
4.0000+ 1 ~ 7.0000+ 1	1.8498+ 2	1.7776+ 2		7.2288+ 0			0.0000+ 0		0.0000+ 0				4.6842- 3
7.0000+ 1 ~ 1.0000+ 2	1.4888+ 2	1.4405+ 2		4.8139+ 0			0.0000+ 0		0.0000+ 0				4.6009- 3
1.0000+ 2 ~ 2.0000+ 2	1.1428+ 2	1.1130+ 2		2.9813+ 0			0.0000+ 0		0.0000+ 0				4.7187- 3
2.0000+ 2 ~ 4.0000+ 2	8.2039+ 1	8.0425+ 1		1.6128+ 0			0.0000+ 0		0.0000+ 0				4.7908- 3
4.0000+ 2 ~ 7.0000+ 2	6.1412+ 1	6.0442+ 1		9.6918- 1			0.0000+ 0		0.0000+ 0				4.9863- 3
7.0000+ 2 ~ 1.0000+ 3	5.0015+ 1	4.9317+ 1		6.9804- 1			0.0000+ 0		0.0000+ 0				5.1479- 3
1.0000+ 3 ~ 2.0000+ 3	3.9064+ 1	3.8661+ 1		4.0322- 1			0.0000+ 0		0.0000+ 0				5.6019- 3
2.0000+ 3 ~ 4.0000+ 3	2.8917+ 1	2.8577+ 1		3.4012- 1			0.0000+ 0		0.0000+ 0				7.2147- 3
4.0000+ 3 ~ 7.0000+ 3	2.2374+ 1	2.2127+ 1		2.4783- 1			0.0000+ 0		0.0000+ 0				1.0313- 2
7.0000+ 3 ~ 1.0000+ 4	1.8774+ 1	1.8579+ 1		1.9483- 1			0.0000+ 0		0.0000+ 0				1.4274- 2
1.0000+ 4 ~ 2.0000+ 4	1.6320+ 1	1.6178+ 1		1.4117- 1			0.0000+ 0		0.0000+ 0				2.4118- 2
2.0000+ 4 ~ 4.0000+ 4	1.2128+ 1	1.2031+ 1		9.8495- 2			0.0000+ 0		0.0000+ 0				4.8047- 2
4.0000+ 4 ~ 7.0000+ 4	1.0070+ 1	9.9961+ 0		7.6184- 2			0.0000+ 0		0.0000+ 0				8.6476- 2
7.0000+ 4 ~ 1.0000+ 6	8.8944+ 0	8.8204+ 0		6.5994- 2			0.0000+ 0		0.0000+ 0				1.2696- 1
1.0000+ 6 ~ 2.0000+ 6	8.0616+ 0	7.9938+ 0		5.7787- 2			1.7031-22		9.2167- 7	3.2366-21			1.9316- 1
2.0000+ 6 ~ 4.0000+ 6	7.5157+ 0	7.4819+ 0		5.3798- 2			4.1781-21		1.5944- 6	7.9381-20			2.7834- 1
4.0000+ 6 ~ 7.0000+ 6	7.3653+ 0	7.3021+ 0		6.1197- 2			2.2389-20		2.3022- 6	5.3951-19			3.3884- 1
7.0000+ 6 ~ 1.0000+ 6	7.3408+ 0	7.2624+ 0		7.8364- 2			3.1817-19		4.4851- 6	2.6941-18			3.7646- 1
1.0000+ 6 ~ 2.0000+ 6	7.0082+ 0	6.7446+ 0	1.3893- 1	1.2466- 1			6.4294-16		2.1068- 6	7.7452-16			4.3701- 1
2.0000+ 6 ~ 4.0000+ 6	5.9313+ 0	4.2842+ 0	1.5526+ 0	9.9759- 2			4.9792- 9		2.8550- 4	4.1145-15			6.9087- 1
4.0000+ 6 ~ 7.0000+ 6	4.9871+ 0	2.5879+ 0	2.3936+ 0	5.9382- 2			4.7695- 4		1.1988- 3	1.7175- 9	5.1902-17		7.1944- 1
7.0000+ 6 ~ 1.0000+ 7	4.9327+ 0	2.4728+ 0	2.4476+ 0	5.7230- 3			4.0146- 3	3.5107-11	2.4646- 3	7.6140- 6	6.3800- 8	1.6760-20	8.0416- 1
1.0000+ 7 ~ 2.0000+ 7	5.2681+ 0	2.9934+ 0	8.9260- 1	2.1280- 3	1.2727+ 0	1.0226- 3	1.9949- 2	5.4863- 2	9.3981- 3	6.1026- 3	4.7446- 3	3.8690- 4	8.7903- 1

MATERIAL =6202

CROSS SECTION

^{147}Sm (6202)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	1.8246+ 2	1.0633+ 0		1.8139+ 2			0.0000+ 0		1.8083- 3	0.0000+ 0			4.5771- 3
1.0000- 2 ~ 2.0000- 2	7.8169+ 1	1.0600+ 0		7.7098+ 1			0.0000+ 0		7.6862- 4	0.0000+ 0			4.5771- 3
2.0000- 2 ~ 4.0000- 2	5.5202+ 1	1.0560+ 0		5.4146+ 1			0.0000+ 0		6.3860- 4	0.0000+ 0			4.5771- 3
4.0000- 2 ~ 7.0000- 2	4.0412+ 1	1.0468+ 0		3.9365+ 1			0.0000+ 0		3.9249- 4	0.0000+ 0			4.5771- 3
7.0000- 2 ~ 1.0000- 1	3.2132+ 1	1.0372+ 0		3.1096+ 1			0.0000+ 0		3.0898- 4	0.0000+ 0			4.5771- 3
1.0000- 1 ~ 2.0000- 1	2.4018+ 1	1.0189+ 0		2.3001+ 1			0.0000+ 0		2.2928- 4	0.0000+ 0			4.5771- 3
2.0000- 1 ~ 4.0000- 1	1.6446+ 1	9.7290- 1		1.5472+ 1			0.0000+ 0		1.5357- 4	0.0000+ 0			4.5771- 3
4.0000- 1 ~ 7.0000- 1	1.1610+ 1	9.0559- 1		1.0704+ 1			0.0000+ 0		1.0574- 4	0.0000+ 0			4.5771- 3
7.0000- 1 ~ 1.0000+ 0	9.1416+ 0	8.3079- 1		8.3107+ 0			0.0000+ 0		8.2329- 6	0.0000+ 0			4.5771- 3
1.0000+ 0 ~ 2.0000+ 0	7.9241+ 0	8.6944- 1		7.2546+ 0			0.0000+ 0		7.4890- 5	0.0000+ 0			4.5771- 3
2.0000+ 0 ~ 4.0000+ 0	3.6611+ 2	7.4886+ 0		3.4762+ 2			0.0000+ 0		3.5211- 3	0.0000+ 0			4.5771- 3
4.0000+ 0 ~ 7.0000+ 0	5.9694+ 0	1.1094+ 0		4.8798+ 0			0.0000+ 0		5.2154- 5	0.0000+ 0			4.5771- 3
7.0000+ 0 ~ 1.0000+ 1	3.0844+ 0	7.3794- 1		2.3471+ 0			0.0000+ 0		2.3419- 5	0.0000+ 0			4.5771- 3
1.0000+ 1 ~ 2.0000+ 1	9.0071+ 2	4.4662+ 2		4.5218+ 2			0.0000+ 0		2.1358- 3	0.0000+ 0			4.5771- 3
2.0000+ 1 ~ 4.0000+ 1	4.0990+ 2	1.7154+ 2		2.3835+ 2			0.0000+ 0		2.9233- 3	0.0000+ 0			4.5776- 3
4.0000+ 1 ~ 7.0000+ 1	1.0067+ 2	3.1587+ 1		6.8987+ 1			0.0000+ 0		1.1686- 3	0.0000+ 0			4.5814- 3
7.0000+ 1 ~ 1.0000+ 2	2.4527+ 2	1.5900+ 2		8.6287+ 1			0.0000+ 0		8.2697- 4	0.0000+ 0			4.6046- 3
1.0000+ 2 ~ 2.0000+ 2	1.8899+ 2	1.2893+ 2		6.0058+ 1			0.0000+ 0		5.9732- 4	0.0000+ 0			4.5966- 3
2.0000+ 2 ~ 4.0000+ 2	1.0625+ 2	7.3565+ 1		3.2689+ 1			0.0000+ 0		3.0495- 4	0.0000+ 0			4.6242- 3
4.0000+ 2 ~ 7.0000+ 2	8.7122+ 1	6.3906+ 1		2.3217+ 1			0.0000+ 0		2.3619- 4	0.0000+ 0			4.6994- 3
7.0000+ 2 ~ 1.0000+ 3	8.7810+ 1	7.5808+ 1		1.2001+ 1			0.0000+ 0		1.2667- 4	0.0000+ 0			4.7614- 3
1.0000+ 3 ~ 2.0000+ 3	6.7235+ 1	6.0906+ 1		6.3287+ 0			0.0000+ 0		6.1479- 5	0.0000+ 0			4.8726- 3
2.0000+ 3 ~ 4.0000+ 3	4.2158+ 1	3.7693+ 1		4.5228+ 0			0.0000+ 0		2.9009- 5	0.0000+ 0			5.5784- 3
4.0000+ 3 ~ 7.0000+ 3	3.2298+ 1	2.9671+ 1		2.7244+ 0			0.0000+ 0		1.7053- 5	0.0000+ 0			6.8639- 3
7.0000+ 3 ~ 1.0000+ 4	2.6760+ 1	2.4834+ 1		1.9265+ 0			0.0000+ 0		1.1594- 5	0.0000+ 0			8.5708- 3
1.0000+ 4 ~ 2.0000+ 4	2.1368+ 1	2.0044+ 1		1.3147+ 0			0.0000+ 0		1.0000- 5	0.0000+ 0			1.3106- 2
2.0000+ 4 ~ 4.0000+ 4	1.6234+ 1	1.5370+ 1		8.6427- 1			0.0000+ 0		1.0000- 5	0.0000+ 0			2.5083- 2
4.0000+ 4 ~ 7.0000+ 4	1.2795+ 1	1.2152+ 1		6.3238- 1			0.0000+ 0		1.0000- 5	0.0000+ 0			4.6024- 2
7.0000+ 4 ~ 1.0000+ 5	1.0782+ 1	1.0239+ 1		5.2282- 1			0.0000+ 0		1.0000- 5	0.0000+ 0			6.9080- 2
1.0000+ 5 ~ 2.0000+ 5	8.7114+ 0	8.0611+ 0	2.4190- 1	4.0596- 1			6.6364-21		1.2077- 5	1.0637-10			1.1367- 1
2.0000+ 5 ~ 4.0000+ 5	7.2554+ 0	6.3834+ 0	5.8554- 1	2.8454- 1			2.6542-20		1.8811- 5	4.2649-10			1.8145- 1
4.0000+ 5 ~ 7.0000+ 5	6.9883+ 0	6.6011+ 0	8.6904- 1	2.3549- 1			9.5579-20		2.2484- 5	8.6881-10			2.5584- 1
7.0000+ 5 ~ 1.0000+ 6	7.1434+ 0	6.6816+ 0	1.2651+ 0	1.9646- 1			8.2594-18		2.7725- 5	1.0870- 9			3.5220- 1
1.0000+ 6 ~ 2.0000+ 6	7.2837+ 0	5.0378+ 0	2.1494+ 0	9.5613- 2			4.3706-16		4.1665- 5	8.9018-10			5.5981- 1
2.0000+ 6 ~ 4.0000+ 6	5.5574+ 0	4.0214+ 0	2.5085+ 0	2.2383- 2			6.1781-10		7.3356- 5	9.8185- 9			7.3909- 1
4.0000+ 6 ~ 7.0000+ 6	5.2154+ 0	2.6850+ 0	2.5192+ 0	2.1832- 3	8.3608- 9		1.1329- 5		1.3276- 4	1.8032- 8	1.1232-19		7.4933- 1
7.0000+ 6 ~ 1.0000+ 7	4.6883+ 0	2.5726+ 0	1.5053+ 0	8.4958- 4	6.0636- 1		6.6926- 4	4.9729-16	7.7482- 4	6.8759- 6	7.6054- 8	8.8934-12	7.5811- 1
1.0000+ 7 ~ 2.0000+ 7	5.2828+ 0	3.4697+ 0	3.8776- 1	1.0836- 3	1.2539+ 0	1.1579- 1	1.3397- 2	7.4647- 3	4.0280- 3	6.7239- 3	1.6969- 2	4.1867- 3	8.7837- 1

MATERIAL =8203

CROSS SECTION

^{148}Sm (6203)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	8.4751+ 0	9.9691- 1		7.4782+ 0					0.0000+ 0	0.0000+ 0			4.6462- 3
1.0000- 2 ~ 2.0000- 2	4.1901+ 0	9.9675- 1		3.1933+ 0					0.0000+ 0	0.0000+ 0			4.6462- 3
2.0000- 2 ~ 4.0000- 2	3.2522+ 0	9.9862- 1		2.2656+ 0					0.0000+ 0	0.0000+ 0			4.6462- 3
4.0000- 2 ~ 7.0000- 2	2.8511+ 0	9.9813- 1		1.8650+ 0					0.0000+ 0	0.0000+ 0			4.6462- 3
7.0000- 2 ~ 1.0000- 1	2.3180+ 0	9.9666- 1		1.3223+ 0					0.0000+ 0	0.0000+ 0			4.6462- 3
1.0000- 1 ~ 2.0000- 1	1.9958+ 0	9.9484- 1		1.0009+ 0					0.0000+ 0	0.0000+ 0			4.6462- 3
2.0000- 1 ~ 4.0000- 1	1.6946+ 0	9.9292- 1		7.0218- 1					0.0000+ 0	0.0000+ 0			4.6462- 3
4.0000- 1 ~ 7.0000- 1	1.4868+ 0	9.8649- 1		5.1092- 1					0.0000+ 0	0.0000+ 0			4.6462- 3
7.0000- 1 ~ 1.0000+ 0	1.3674+ 0	9.8395- 1		4.0339- 1					0.0000+ 0	0.0000+ 0			4.6462- 3
1.0000+ 0 ~ 2.0000+ 0	1.2769+ 0	9.7431- 1		3.0268- 1					0.0000+ 0	0.0000+ 0			4.6462- 3
2.0000+ 0 ~ 4.0000+ 0	1.1641+ 0	9.6266- 1		2.1155- 1					0.0000+ 0	0.0000+ 0			4.6462- 3
4.0000+ 0 ~ 7.0000+ 0	1.0745+ 0	9.1669- 1		1.5779- 1					0.0000+ 0	0.0000+ 0			4.6462- 3
7.0000+ 0 ~ 1.0000+ 1	1.0044+ 0	8.7337- 1		1.3107- 1					0.0000+ 0	0.0000+ 0			4.6462- 3
1.0000+ 1 ~ 2.0000+ 1	8.8711- 1	7.7583- 1		1.1148- 1					0.0000+ 0	0.0000+ 0			4.5475- 3
2.0000+ 1 ~ 4.0000+ 1	6.3658- 1	5.2626- 1		1.1042- 1					0.0000+ 0	0.0000+ 0			4.5607- 3
4.0000+ 1 ~ 7.0000+ 1	3.2361- 1	1.2010- 1		2.0351- 1					0.0000+ 0	0.0000+ 0			4.5682- 3
7.0000+ 1 ~ 1.0000+ 2	8.3081+ 2	6.5489+ 2		7.5729+ 1					0.0000+ 0	0.0000+ 0			4.5843- 3
1.0000+ 2 ~ 2.0000+ 2	2.0652+ 2	1.8622+ 2		1.8296+ 1					0.0000+ 0	0.0000+ 0			4.5934- 3
2.0000+ 2 ~ 4.0000+ 2	3.8802+ 1	3.2754+ 1		3.8482+ 0					0.0000+ 0	0.0000+ 0			4.6227- 3
4.0000+ 2 ~ 7.0000+ 2	4.4388+ 1	3.8323+ 1		6.0666+ 0					0.0000+ 0	0.0000+ 0			4.8621- 3
7.0000+ 2 ~ 1.0000+ 3	8.0288+ 1	6.8515+ 1		1.7736+ 0					0.0000+ 0	0.0000+ 0			5.0084- 3
1.0000+ 3 ~ 2.0000+ 3	4.6264+ 1	4.3951+ 1		1.3025+ 0					0.0000+ 0	0.0000+ 0			5.5323- 3
2.0000+ 3 ~ 4.0000+ 3	4.1095+ 1	4.0284+ 1		7.7070- 1					0.0000+ 0	0.0000+ 0			7.2006- 3
4.0000+ 3 ~ 7.0000+ 3	2.5849+ 1	2.5526+ 1		3.2292- 1					0.0000+ 0	0.0000+ 0			1.0000- 2
7.0000+ 3 ~ 1.0000+ 4	2.2757+ 1	2.2378+ 1		3.7865- 1					0.0000+ 0	0.0000+ 0			1.3849- 2
1.0000+ 4 ~ 2.0000+ 4	1.5633+ 1	1.5250+ 1		3.7310- 1					0.0000+ 0	0.0000+ 0			2.3487- 2
2.0000+ 4 ~ 4.0000+ 4	1.2854+ 1	1.2588+ 1		2.6757- 1					0.0000+ 0	0.0000+ 0			4.6952- 2
4.0000+ 4 ~ 7.0000+ 4	1.0422+ 1	1.0215+ 1		2.0628- 1					0.0000+ 0	0.0000+ 0			8.4853- 2
7.0000+ 4 ~ 1.0000+ 5	9.0596+ 0	8.8789+ 0		1.8064- 1					0.0000+ 0	0.0000+ 0			1.2435- 1
1.0000+ 5 ~ 2.0000+ 5	8.0776+ 0	7.9147+ 0		1.8281- 1					8.9168- 8	1.7039-14			1.9089- 1
2.0000+ 5 ~ 4.0000+ 5	7.4886+ 0	7.3139+ 0		1.5263- 1					2.7803- 7	8.8157-14			2.7809- 1
4.0000+ 5 ~ 7.0000+ 5	7.3159+ 0	7.0295+ 0	1.9778- 1	1.4892- 1					8.1328- 7	5.5795-13			3.4218- 1
7.0000+ 5 ~ 1.0000+ 6	7.3312+ 0	6.5164+ 0	7.0638- 1	1.0920- 1					1.1179- 6	3.8605-11			4.1166- 1
1.0000+ 6 ~ 2.0000+ 6	7.0807+ 0	5.6735+ 0	1.3041+ 0	1.0264- 1					3.3653- 5	2.6777-10			5.2690- 1
2.0000+ 6 ~ 4.0000+ 6	6.0794+ 0	3.8134+ 0	2.2015+ 0	5.0426- 2			5.6272-18		2.0589- 5	3.7947- 9			6.8195- 1
4.0000+ 6 ~ 7.0000+ 6	5.1098+ 0	2.5974+ 0	2.4961+ 0	1.5075- 2			8.2258- 8		8.7533- 5	5.0598- 8			7.4481- 1
7.0000+ 6 ~ 1.0000+ 7	4.9610+ 0	2.5100+ 0	2.1716+ 0	3.4711- 3	2.7239- 1		1.1243- 4	1.6292-17	3.1662- 4	3.4269- 4	2.8306-12	1.6433-16	8.0318- 1
1.0000+ 7 ~ 2.0000+ 7	5.3225+ 0	3.0348+ 0	6.0076- 1	1.2420- 3	1.3696+ 0	2.7563- 1	8.9951- 3	5.2420- 3	9.3607- 3	7.6716- 3	1.1635- 2	2.5974- 3	8.7740- 1

MATERIAL =6204

CROSS SECTION

^{149}Sm (6204)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	7.8826+ 4	1.1536+ 2		7.8710+ 4					6.0315- 2	0.0000+ 0			4.6156- 3
1.0000- 2 ~ 2.0000- 2	4.2254+ 4	1.4087+ 2		4.2114+ 4					3.2271- 2	0.0000+ 0			4.6156- 3
2.0000- 2 ~ 4.0000- 2	4.2152+ 4	1.2961+ 2		4.1952+ 4					3.2149- 2	0.0000+ 0			4.6156- 3
4.0000- 2 ~ 7.0000- 2	8.2561+ 4	4.0212+ 2		8.2158+ 4					4.7832- 2	0.0000+ 0			4.5156- 3
7.0000- 2 ~ 1.0000- 1	1.1298+ 5	8.8462+ 2		1.1209+ 5					8.6895- 2	0.0000+ 0			4.5166- 3
1.0000- 1 ~ 2.0000- 1	4.1781+ 4	3.8895+ 2		4.1394+ 4					9.1720- 2	0.0000+ 0			4.5158- 3
2.0000- 1 ~ 4.0000- 1	2.6262+ 3	2.8437+ 1		2.4977+ 3					1.9004- 3	0.0000+ 0			4.5156- 3
4.0000- 1 ~ 7.0000- 1	8.0520+ 2	2.8362+ 0		8.0236+ 2					8.8932- 4	0.0000+ 0			4.5156- 3
7.0000- 1 ~ 1.0000+ 0	6.8869+ 3	6.9636+ 1		6.8173+ 3					3.4081- 3	0.0000+ 0			4.5166- 3
1.0000+ 0 ~ 2.0000+ 0	1.4779+ 2	5.7537+ 0		1.4203+ 2					9.6817- 4	0.0000+ 0			4.5156- 3
2.0000+ 0 ~ 4.0000+ 0	1.4936+ 1	1.0462+ 0		1.3890+ 1					3.3878- 6	0.0000+ 0			4.5156- 3
4.0000+ 0 ~ 7.0000+ 0	4.4920+ 2	1.5893+ 1		4.3591+ 2					5.1899- 4	0.0000+ 0			4.5156- 3
7.0000+ 0 ~ 1.0000+ 1	1.0137+ 3	1.4577+ 2		8.6789+ 2					4.3988- 4	0.0000+ 0			4.5156- 3
1.0000+ 1 ~ 2.0000+ 1	1.5183+ 2	1.0583+ 1		1.4125+ 2					1.5832- 4	0.0000+ 0			4.5156- 3
2.0000+ 1 ~ 4.0000+ 1	1.5012+ 2	2.0180+ 1		1.2994+ 2					1.3290- 4	0.0000+ 0			4.5164- 3
4.0000+ 1 ~ 7.0000+ 1	6.1140+ 2	1.9872+ 2		3.1268+ 2					2.3068- 4	0.0000+ 0			4.5221- 3
7.0000+ 1 ~ 1.0000+ 2	5.6382+ 2	2.9329+ 2		2.7059+ 2					1.9288- 4	0.0000+ 0			4.5270- 3
1.0000+ 2 ~ 2.0000+ 2	1.6202+ 2	9.2072+ 1		6.9950+ 1					5.4418- 5	0.0000+ 0			4.5429- 3
2.0000+ 2 ~ 4.0000+ 2	1.0294+ 2	5.8106+ 1		4.4699+ 1					9.4796- 5	0.0000+ 0			4.5703- 3
4.0000+ 2 ~ 7.0000+ 2	7.4818+ 1	4.4483+ 1		3.0336+ 1					1.9696- 5	0.0000+ 0			4.6683- 3
7.0000+ 2 ~ 1.0000+ 3	7.5358+ 1	4.5701+ 1		2.7658+ 1					2.0000- 6	0.0000+ 0			4.7441- 3
1.0000+ 3 ~ 2.0000+ 3	5.7473+ 1	3.9464+ 1		1.8008+ 1					2.0000- 5	0.0000+ 0			4.9868- 3
2.0000+ 3 ~ 4.0000+ 3	4.2842+ 1	3.2309+ 1		1.0332+ 1					2.0000- 5	0.0000+ 0			5.6822- 3
4.0000+ 3 ~ 7.0000+ 3	3.3063+ 1	2.6779+ 1		6.2842+ 0					2.0000- 6	0.0000+ 0			7.0844- 3
7.0000+ 3 ~ 1.0000+ 4	2.7654+ 1	2.3251+ 1		4.4028+ 0					2.0000- 5	0.0000+ 0			8.8722- 3
1.0000+ 4 ~ 2.0000+ 4	2.2188+ 1	1.9286+ 1		2.9113+ 0					2.0000- 6	0.0000+ 0			1.3614- 2
2.0000+ 4 ~ 4.0000+ 4	1.7037+ 1	1.4741+ 1	5.8225- 1	1.7127+ 0					2.0000- 5	0.0000+ 0			2.8751- 2
4.0000+ 4 ~ 7.0000+ 4	1.3461+ 1	1.1580+ 1	8.8588- 1	1.1815+ 0					2.0000- 5	0.0000+ 0			4.9622- 2
7.0000+ 4 ~ 1.0000+ 5	1.1220+ 1	9.6664+ 0	6.0540- 1	9.6792- 1					2.0000- 5	0.0000+ 0			7.4394- 2
1.0000+ 5 ~ 2.0000+ 5	9.0562+ 0	7.7120+ 0	6.6436- 1	7.8817- 1					2.0268- 5	0.0000+ 0			1.1986- 1
2.0000+ 5 ~ 4.0000+ 5	7.4258+ 0	5.9851+ 0	8.6001- 1	6.0428- 1					2.1099- 5	0.0000+ 0			1.9919- 1
4.0000+ 5 ~ 7.0000+ 5	7.0138+ 0	5.0824+ 0	1.5246+ 0	4.2847- 1			0.0000+ 0		2.2544- 5	0.0000+ 0			2.9089- 1
7.0000+ 5 ~ 1.0000+ 6	7.1281+ 0	4.6666+ 0	2.1746+ 0	2.8738- 1			0.0000+ 0		2.4414- 5	0.0000+ 0			4.2500- 1
1.0000+ 6 ~ 2.0000+ 6	7.2468+ 0	4.5542+ 0	2.6246+ 0	1.6641- 1			3.6000-19		2.8040- 5	1.5200-10			6.1871- 1
2.0000+ 6 ~ 4.0000+ 6	8.5978+ 0	4.0238+ 0	2.5144+ 0	5.4822- 2			2.2820-15		9.8767- 6	1.3654- 9			7.4361- 1
4.0000+ 6 ~ 7.0000+ 6	6.2837+ 0	2.7369+ 0	2.3967+ 0	7.4990- 3	1.3679- 1		6.6889- 7		4.8998- 6	8.3982- 7			7.5387- 1
7.0000+ 6 ~ 1.0000+ 7	4.7080+ 0	2.2544+ 0	9.2493- 1	1.1098- 3	1.5156+ 0		1.6007- 4	4.3166-18	2.6791- 4	1.6652- 6	9.1418-10	1.4626-12	7.6862- 1
1.0000+ 7 ~ 2.0000+ 7	6.3043+ 0	3.0612+ 0	3.6527- 1	1.0924- 3	1.6696+ 0	2.6754- 1	8.9162- 3	4.6720- 3	2.5960- 3	6.0498- 3	1.3061- 2	4.0618- 3	8.7731- 1

MATERIAL =6205

CROSS SECTION

^{150}Sm (6205)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	3.4828+ 2	8.3829+ 0		3.3989+ 2					0.0000+ 0	0.0000+ 0			4.4864- 3
1.0000- 2 ~ 2.0000- 2	1.5276+ 2	8.3623+ 0		1.4439+ 2					0.0000+ 0	0.0000+ 0			4.4864- 3
2.0000- 2 ~ 4.0000- 2	1.0963+ 2	8.3316+ 0		1.0130+ 2					0.0000+ 0	0.0000+ 0			4.4864- 3
4.0000- 2 ~ 7.0000- 2	8.1710+ 1	8.2609+ 0		7.3429+ 1					0.0000+ 0	0.0000+ 0			4.4864- 3
7.0000- 2 ~ 1.0000- 1	6.6144+ 1	8.2213+ 0		5.7923+ 1					0.0000+ 0	0.0000+ 0			4.4864- 3
1.0000- 1 ~ 2.0000- 1	5.0719+ 1	8.0984+ 0		4.2618+ 1					0.0000+ 0	0.0000+ 0			4.4864- 3
2.0000- 1 ~ 4.0000- 1	3.5900+ 1	7.8269+ 0		2.8073+ 1					0.0000+ 0	0.0000+ 0			4.4864- 3
4.0000- 1 ~ 7.0000- 1	2.5794+ 1	7.4283+ 0		1.8368+ 1					0.0000+ 0	0.0000+ 0			4.4864- 5
7.0000- 1 ~ 1.0000+ 0	1.9568+ 1	7.0109+ 0		1.2947+ 1					0.0000+ 0	0.0000+ 0			4.4864- 3
1.0000+ 0 ~ 2.0000+ 0	1.4173+ 1	8.3062+ 0		7.8871+ 0					0.0000+ 0	0.0000+ 0			4.4864- 3
2.0000+ 0 ~ 4.0000+ 0	8.9754+ 0	5.2069+ 0		3.7686+ 0					0.0000+ 0	0.0000+ 0			4.4864- 3
4.0000+ 0 ~ 7.0000+ 0	8.0311+ 0	4.0721+ 0		1.9590+ 0					0.0000+ 0	0.0000+ 0			4.4864- 3
7.0000+ 0 ~ 1.0000+ 1	4.5921+ 0	3.0702+ 0		1.5219+ 0					0.0000+ 0	0.0000+ 0			4.4864- 3
1.0000+ 1 ~ 2.0000+ 1	1.7588+ 1	4.4387+ 0		1.3148+ 1					0.0000+ 0	0.0000+ 0			4.4870- 3
2.0000+ 1 ~ 4.0000+ 1	4.7631+ 2	2.1661+ 2		2.6981+ 2					0.0000+ 0	0.0000+ 0			4.4907- 3
4.0000+ 1 ~ 7.0000+ 1	6.9228+ 1	1.8686+ 1		4.0642+ 1					0.0000+ 0	0.0000+ 0			4.4989- 3
7.0000+ 1 ~ 1.0000+ 2	4.9520+ 0	4.9002+ 0		5.1768- 2					0.0000+ 0	0.0000+ 0			4.5068- 3
1.0000+ 2 ~ 2.0000+ 2	1.0605+ 1	4.8148+ 0		5.7907+ 0					0.0000+ 0	0.0000+ 0			4.5360- 3
2.0000+ 2 ~ 4.0000+ 2	1.4894+ 2	1.3844+ 2		1.1901+ 1					0.0000+ 0	0.0000+ 0			4.6078- 3
4.0000+ 2 ~ 7.0000+ 2	3.9106+ 1	3.6008+ 1		4.0983+ 0					0.0000+ 0	0.0000+ 0			4.7988- 3
7.0000+ 2 ~ 1.0000+ 3	8.9892+ 1	8.5915+ 1		3.7787+ 0					0.0000+ 0	0.0000+ 0			4.9582- 3
1.0000+ 3 ~ 2.0000+ 3	4.7736+ 1	4.6573+ 1		2.1631+ 0					0.0000+ 0	0.0000+ 0			6.4628- 3
2.0000+ 3 ~ 4.0000+ 3	3.2068+ 1	3.0464+ 1		1.8037+ 0					0.0000+ 0	0.0000+ 0			8.9442- 3
4.0000+ 3 ~ 7.0000+ 3	2.4707+ 1	2.3842+ 1		1.0664+ 0					0.0000+ 0	0.0000+ 0			9.9219- 3
7.0000+ 3 ~ 1.0000+ 4	2.0818+ 1	1.9788+ 1		8.2984- 1					0.0000+ 0	0.0000+ 0			1.3744- 2
1.0000+ 4 ~ 2.0000+ 4	1.6589+ 1	1.6051+ 1		5.3805- 1					0.0000+ 0	0.0000+ 0			2.3317- 2
2.0000+ 4 ~ 4.0000+ 4	1.2988+ 1	1.2516+ 1		4.7154- 1					0.0000+ 0	0.0000+ 0			4.8750- 2
4.0000+ 4 ~ 7.0000+ 4	1.0644+ 1	1.0174+ 1		3.7048- 1					0.0000+ 0	0.0000+ 0			8.4623- 2
7.0000+ 4 ~ 1.0000+ 5	8.1364+ 0	8.6112+ 0		3.2416- 1					0.0000+ 0	0.0000+ 0			1.2416- 1
1.0000+ 5 ~ 2.0000+ 5	8.0986+ 0	7.8033+ 0		2.9532- 1					2.8660- 9	1.8510-15			1.9066- 1
2.0000+ 5 ~ 4.0000+ 5	7.4368+ 0	7.1220+ 0	4.0080- 2	2.7598- 1					1.1460- 8	7.4040-15			2.7093- 1
4.0000+ 5 ~ 7.0000+ 5	7.2917+ 0	6.6171+ 0	6.8049- 1	1.8527- 1					2.5657- 8	6.4045-14			3.6508- 1
7.0000+ 5 ~ 1.0000+ 6	7.3224+ 0	6.1766+ 0	9.6968- 1	1.7707- 1					6.0206- 8	6.0496-12			4.2094- 1
1.0000+ 6 ~ 2.0000+ 6	7.1129+ 0	6.3166+ 0	1.6682+ 0	1.3896- 1					2.3310- 7	2.8366-11			5.6335- 1
2.0000+ 6 ~ 4.0000+ 6	6.1592+ 0	5.7986+ 0	2.2706+ 0	6.5126- 2					9.2717- 8	3.5672-10			8.9818- 1
4.0000+ 6 ~ 7.0000+ 6	5.1732+ 0	2.8280+ 0	2.5112+ 0	3.2488- 2			8.2311-12		2.3439- 6	4.8574- 7			7.5180- 1
7.0000+ 6 ~ 1.0000+ 7	4.9770+ 0	2.6240+ 0	2.1733+ 0	9.2826- 3	2.6946- 1		2.6229- 6	1.9762-2	1.1426- 4	6.0713- 6	1.8630-16	7.1996-18	8.0214- 1
1.0000+ 7 ~ 2.0000+ 7	6.3604+ 0	3.0306+ 0	6.6747- 1	1.6427- 3	1.2617+ 0	4.8402- 1	8.2780- 3	1.7278- 2	3.2803- 3	3.8187- 9	4.6830- 3	1.6814- 3	8.7857- 1

CROSS SECTION

^{151}Sm (6206)

MATERIAL =6206

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.2304+ 4	6.2677+ 1		6.2242+ 4					0.0000+ 0	0.0000+ 0			4.4556- 3
1.0000- 2 ~ 2.0000- 2	2.2566+ 4	6.6120+ 1		2.2910+ 4					0.0000+ 0	0.0000+ 0			4.4556- 3
2.0000- 2 ~ 4.0000- 2	1.3686+ 4	4.8269+ 1		1.3637+ 4					0.0000+ 0	0.0000+ 0			4.4556- 3
4.0000- 2 ~ 7.0000- 2	7.8187+ 3	3.8623+ 1		7.5801+ 3					0.0000+ 0	0.0000+ 0			4.4558- 3
7.0000- 2 ~ 1.0000- 1	4.6761+ 3	3.0660+ 1		4.6466+ 3					0.0000+ 0	0.0000+ 0			4.4556- 3
1.0000- 1 ~ 2.0000- 1	2.2200+ 3	2.1012+ 1		2.1990+ 3					0.0000+ 0	0.0000+ 0			4.4556- 3
2.0000- 1 ~ 4.0000- 1	8.6394+ 2	1.1469+ 1		8.5246+ 2					0.0000+ 0	0.0000+ 0			4.4556- 3
4.0000- 1 ~ 7.0000- 1	6.0854+ 2	6.0873+ 0		6.0048+ 2					0.0000+ 0	0.0000+ 0			4.4558- 3
7.0000- 1 ~ 1.0000+ 0	8.0540+ 2	1.0530+ 1		7.9487+ 2					0.0000+ 0	0.0000+ 0			4.4556- 3
1.0000+ 0 ~ 2.0000+ 0	1.8889+ 3	1.7323+ 1		1.8498+ 3					0.0000+ 0	0.0000+ 0			4.4556- 3
2.0000+ 0 ~ 4.0000+ 0	2.6937+ 2	6.0406+ 0		2.6393+ 2					0.0000+ 0	0.0000+ 0			4.4556- 3
4.0000+ 0 ~ 7.0000+ 0	7.4963+ 2	4.5321+ 1		7.0451+ 2					0.0000+ 0	0.0000+ 0			4.4556- 3
7.0000+ 0 ~ 1.0000+ 1	8.1794+ 1	4.7158+ 0		5.7078+ 1					0.0000+ 0	0.0000+ 0			4.4556- 3
1.0000+ 1 ~ 2.0000+ 1	8.1249+ 2	8.1760+ 1		7.3073+ 2					0.0000+ 0	0.0000+ 0			4.4825- 3
2.0000+ 1 ~ 4.0000+ 1	1.7831+ 2	1.6516+ 1		1.6280+ 2					0.0000+ 0	0.0000+ 0			4.4768- 3
4.0000+ 1 ~ 7.0000+ 1	1.6048+ 2	2.7262+ 1		1.3323+ 2					0.0000+ 0	0.0000+ 0			4.5012- 3
7.0000+ 1 ~ 1.0000+ 2	1.7756+ 2	3.4392+ 1		1.4317+ 2					0.0000+ 0	0.0000+ 0			4.5205- 3
1.0000+ 2 ~ 2.0000+ 2	1.1352+ 2	3.2486+ 1		8.1031+ 1					0.0000+ 0	0.0000+ 0			4.5887- 3
2.0000+ 2 ~ 4.0000+ 2	1.1125+ 2	6.0875+ 1		5.0379+ 1					0.0000+ 0	0.0000+ 0			4.7916- 3
4.0000+ 2 ~ 7.0000+ 2	7.9206+ 1	5.0817+ 1		2.8589+ 1					0.0000+ 0	0.0000+ 0			6.0596- 3
7.0000+ 2 ~ 1.0000+ 3	6.4175+ 1	4.2783+ 1		2.1393+ 1					0.0000+ 0	0.0000+ 0			5.3269- 3
1.0000+ 3 ~ 2.0000+ 3	4.8765+ 1	3.4866+ 1		1.4878+ 1					0.0000+ 0	0.0000+ 0			6.1004- 3
2.0000+ 3 ~ 4.0000+ 3	3.6381+ 1	2.7069+ 1		9.2929+ 0					0.0000+ 0	0.0000+ 0			8.0810- 3
4.0000+ 3 ~ 7.0000+ 3	2.7224+ 1	2.1026+ 1	2.5364- 1	5.9464+ 0					0.0000+ 0	0.0000+ 0			1.1869- 2
7.0000+ 3 ~ 1.0000+ 4	2.2241+ 1	1.7417+ 1	5.4842- 1	4.2788+ 0					0.0000+ 0	0.0000+ 0			1.6870- 2
1.0000+ 4 ~ 2.0000+ 4	1.7726+ 1	1.4204+ 1	5.1956- 1	3.0003+ 0					0.0000+ 0	0.0000+ 0			2.8069- 2
2.0000+ 4 ~ 4.0000+ 4	1.3551+ 1	1.1098+ 1	4.3310- 1	2.0188+ 0					0.0000+ 0	0.0000+ 0			5.5178- 2
4.0000+ 4 ~ 7.0000+ 4	1.0776+ 1	8.9160+ 0	3.8560- 1	1.4727+ 0					0.0000+ 0	0.0000+ 0			9.7674- 2
7.0000+ 4 ~ 1.0000+ 5	8.1666+ 0	7.3039+ 0	8.1677- 1	1.0392+ 0					0.0000+ 0	0.0000+ 0			1.4846- 1
1.0000+ 5 ~ 2.0000+ 5	8.1072+ 0	6.2733+ 0	1.1637+ 0	6.6788- 1					7.6008- 8	1.5310-11			2.3498- 1
2.0000+ 5 ~ 4.0000+ 5	7.4253+ 0	5.4459+ 0	1.6402+ 0	3.3891- 1					3.0003- 7	8.1242-11			3.5046- 1
4.0000+ 5 ~ 7.0000+ 5	7.2782+ 0	5.0575+ 0	2.0384+ 0	1.8310- 1					3.9414- 7	2.7148-10			4.8219- 1
7.0000+ 5 ~ 1.0000+ 6	7.3171+ 0	4.9274+ 0	2.2670+ 0	1.2262- 1			0.0000+ 0		4.1199- 7	2.2872-10			5.3484- 1
1.0000+ 6 ~ 2.0000+ 6	7.1236+ 0	4.6712+ 0	2.3787+ 0	7.3240- 2			1.8714-20		5.2064- 7	1.0160-10			6.3764- 1
2.0000+ 6 ~ 4.0000+ 6	6.1880+ 0	3.7045+ 0	2.4618+ 0	2.5120- 2			1.2404-14		1.5492- 6	4.2643-11			7.1935- 1
4.0000+ 6 ~ 7.0000+ 6	5.2048+ 0	2.6580+ 0	2.3894+ 0	9.7420- 3	1.5184- 1		1.9688- 7		4.2067- 6	1.2952- 8			7.5531- 1
7.0000+ 6 ~ 1.0000+ 7	4.9866+ 0	2.5030+ 0	1.2096+ 0	9.9303- 4	1.2716+ 0		7.3201- 6		7.3032- 6	1.6933- 6	6.1825-13	9.7053-16	8.0161- 1
1.0000+ 7 ~ 2.0000+ 7	6.3691+ 0	3.0708+ 0	5.6238- 1	1.0862- 3	1.4561+ 0	2.4018- 1	6.3658- 3	8.2058- 4	1.7604- 3	3.3194- 3	7.5747- 3	3.0408- 3	8.7617- 1

CROSS SECTION

^{152}Sm (6207)

MATERIAL =6207

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.3626+ 2	9.2062- 1		6.3634+ 2					0.0000+ 0	0.0000+ 0			4.4263- 3
1.0000- 2 ~ 2.0000- 2	2.7305+ 2	9.3331- 1		2.7212+ 2					0.0000+ 0	0.0000+ 0			4.4263- 3
2.0000- 2 ~ 4.0000- 2	1.9411+ 2	8.5272- 1		1.9316+ 2					0.0000+ 0	0.0000+ 0			4.4263- 3
4.0000- 2 ~ 7.0000- 2	1.4377+ 2	8.8588- 1		1.4279+ 2					0.0000+ 0	0.0000+ 0			4.4263- 3
7.0000- 2 ~ 1.0000- 1	1.1672+ 2	1.0261+ 0		1.1470+ 2					0.0000+ 0	0.0000+ 0			4.4263- 3
1.0000- 1 ~ 2.0000- 1	8.9506+ 1	1.1180+ 0		8.8387+ 1					0.0000+ 0	0.0000+ 0			4.4263- 3
2.0000- 1 ~ 4.0000- 1	6.5776+ 1	1.3510+ 0		6.4424+ 1					0.0000+ 0	0.0000+ 0			4.4263- 3
4.0000- 1 ~ 7.0000- 1	5.1834+ 1	1.8102+ 0		5.0025+ 1					0.0000+ 0	0.0000+ 0			4.4263- 3
7.0000- 1 ~ 1.0000+ 0	4.6430+ 1	2.4938+ 0		4.2937+ 1					0.0000+ 0	0.0000+ 0			4.4263- 3
1.0000+ 0 ~ 2.0000+ 0	4.3109+ 1	4.7128+ 0		3.8398+ 1					0.0000+ 0	0.0000+ 0			4.4263- 3
2.0000+ 0 ~ 4.0000+ 0	6.1766+ 1	1.7153+ 1		4.4609+ 1					0.0000+ 0	0.0000+ 0			4.4263- 3
4.0000+ 0 ~ 7.0000+ 0	4.0095+ 2	2.2885+ 2		1.7370+ 2					0.0000+ 0	0.0000+ 0			4.4263- 3
7.0000+ 0 ~ 1.0000+ 1	2.1631+ 4	1.4787+ 4		6.7444+ 3					0.0000+ 0	0.0000+ 0			4.4263- 3
1.0000+ 1 ~ 2.0000+ 1	1.3329+ 2	1.1000+ 2		2.3289+ 1					0.0000+ 0	0.0000+ 0			4.4278- 3
2.0000+ 1 ~ 4.0000+ 1	2.0994+ 1	1.9839+ 1		1.1649+ 0					0.0000+ 0	0.0000+ 0			4.4514- 3
4.0000+ 1 ~ 7.0000+ 1	1.7389+ 1	8.6871+ 0		8.7022+ 0					0.0000+ 0	0.0000+ 0			4.4393- 3
7.0000+ 1 ~ 1.0000+ 2	3.2958+ 2	2.5201+ 2		7.7544+ 1					0.0000+ 0	0.0000+ 0			4.4468- 3
1.0000+ 2 ~ 2.0000+ 2	6.0855+ 1	3.2347+ 1		1.8308+ 1					0.0000+ 0	0.0000+ 0			4.4764- 3
2.0000+ 2 ~ 4.0000+ 2	8.7754+ 1	5.6698+ 1		1.2058+ 1					0.0000+ 0	0.0000+ 0			4.6449- 3
4.0000+ 2 ~ 7.0000+ 2	2.4979+ 1	1.9988+ 1		4.9809+ 0					0.0000+ 0	0.0000+ 0			4.7316- 3
7.0000+ 2 ~ 1.0000+ 3	7.5967+ 1	7.0857+ 1		5.3298+ 0					0.0000+ 0	0.0000+ 0			4.8853- 3
1.0000+ 3 ~ 2.0000+ 3	2.6826+ 1	2.4611+ 1		2.2146+ 0					0.0000+ 0	0.0000+ 0			5.3960- 3
2.0000+ 3 ~ 4.0000+ 3	2.2280+ 1	2.1119+ 1		1.1808+ 0					0.0000+ 0	0.0000+ 0			8.8156- 3
4.0000+ 3 ~ 7.0000+ 3	1.9899+ 1	1.8949+ 1		9.5297- 1					0.0000+ 0	0.0000+ 0			9.7129- 3
7.0000+ 3 ~ 1.0000+ 4	1.6784+ 1	1.5950+ 1		8.3418- 1					0.0000+ 0	0.0000+ 0			1.3435- 2
1.0000+ 4 ~ 2.0000+ 4	1.4266+ 1	1.3619+ 1		6.3670- 1					0.0000+ 0	0.0000+ 0			2.2781- 2
2.0000+ 4 ~ 4.0000+ 4	1.1825+ 1	1.1362+ 1		4.6240- 1					0.0000+ 0	0.0000+ 0			4.5731- 2
4.0000+ 4 ~ 7.0000+ 4	1.0108+ 1	9.7393+ 0		3.6916- 1					0.0000+ 0	0.0000+ 0			8.2960- 2
7.0000+ 4 ~ 1.0000+ 5	9.0643+ 0	8.7246+ 0		3.2984- 1					0.0000+ 0	0.0000+ 0			1.2169- 1
1.0000+ 5 ~ 2.0000+ 5	8.1222+ 0	7.7182+ 0	1.8489- 1	2.9790- 1					5.7948-12	4.0024-15			1.9039- 1
2.0000+ 5 ~ 4.0000+ 5	7.4210+ 0	6.7081+ 0	5.6084- 1	1.5169- 1					2.3179-11	1.6009-14			2.9080- 1
4.0000+ 5 ~ 7.0000+ 5	7.2870+ 0	6.2496+ 0	8.8629- 1	1.3677- 1					5.1615-11	9.3894-14			3.7188- 1
7.0000+ 5 ~ 1.0000+ 6	7.3119+ 0	6.9204+ 0	1.2696+ 0	1.3183- 1					9.4701-11	6.2072-14			4.4370- 1
1.0000+ 6 ~ 2.0000+ 6	7.1398+ 0	5.1636+ 0	1.8752+ 0	1.0031- 1					6.3983-10	7.0894-14			5.8007- 1
2.0000+ 6 ~ 4.0000+ 6	6.2372+ 0	3.8129+ 0	2.3601+ 0	6.8897- 2			4.5770-21		3.7821- 8	1.0997-12			7.0779- 1
4.0000+ 6 ~ 7.0000+ 6	5.2382+ 0	2.2382+ 0	2.8898+ 0	2.5490+ 0			1.9228-11		1.3151- 8	2.1770- 9			7.6752- 1
7.0000+ 6 ~ 1.0000+ 7	4.9953+ 0	2.5310+ 0	2.2166+ 0	6.0036- 3	2.4102- 1		1.4540- 5		1.6829- 6	1.0338- 8	4.7928-17		8.0079- 1
1.0000+ 7 ~ 2.0000+ 7	6.3762+ 0	3.0454+ 0	5.8517- 1	1.3016- 3	1.2933+ 0	4.3102- 1	5.3203- 3	1.6139- 3	2.6446- 3	2.0888- 3	5.7698- 3	8.6777- 4	8.7677- 1

MATERIAL =6208 CROSS SECTION

^{153}Sm (6208)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.9089+ 3	6.7000+ 0		1.2962+ 3					0.0000+ 0				4.3973- 3
1.0000- 2 ~ 2.0000- 2	6.6164+ 2	6.7000+ 0		6.6344+ 2					0.0000+ 0				4.3973- 3
2.0000- 2 ~ 4.0000- 2	3.9869+ 2	6.7000+ 0		3.9134+ 2					0.0000+ 0				4.3973- 3
4.0000- 2 ~ 7.0000- 2	2.9565+ 2	6.7000+ 0		2.8780+ 2					0.0000+ 0				4.3973- 3
7.0000- 2 ~ 1.0000- 1	2.3817+ 2	6.7000+ 0		2.3006+ 2					0.0000+ 0				4.3973- 3
1.0000- 1 ~ 2.0000- 1	1.8279+ 2	6.7000+ 0		1.7501+ 2					0.0000+ 0				4.3973- 3
2.0000- 1 ~ 4.0000- 1	1.3070+ 2	6.7000+ 0		1.2376+ 2					0.0000+ 0				4.3973- 3
4.0000- 1 ~ 7.0000- 1	9.7947+ 1	6.7000+ 0		9.0948+ 1					0.0000+ 0				4.3973- 3
7.0000- 1 ~ 1.0000+ 0	7.9662+ 1	6.7000+ 0		7.2749+ 1					0.0000+ 0				4.3973- 3
1.0000+ 0 ~ 2.0000+ 0	6.2223+ 1	6.7000+ 0		5.5346+ 1					0.0000+ 0				4.3973- 3
2.0000+ 0 ~ 4.0000+ 0	4.6065+ 1	6.7000+ 0		3.9136+ 1					0.0000+ 0				4.3973- 3
4.0000+ 0 ~ 7.0000+ 0	3.6000+ 2	6.9816+ 1		2.9016+ 2					0.0000+ 0				4.3973- 3
7.0000+ 0 ~ 1.0000+ 1	3.5471+ 2	7.5366+ 1		2.5932+ 2					0.0000+ 0				4.3973- 3
1.0000+ 1 ~ 2.0000+ 1	2.5264+ 2	6.9393+ 1		1.8316+ 2					0.0000+ 0				4.3997- 3
2.0000+ 1 ~ 4.0000+ 1	1.7739+ 2	6.2198+ 1		1.1619+ 2					0.0000+ 0				4.4061- 3
4.0000+ 1 ~ 7.0000+ 1	1.3262+ 2	5.6637+ 1		7.6288+ 1					0.0000+ 0				4.4159- 3
7.0000+ 1 ~ 1.0000+ 2	1.0949+ 2	5.2623+ 1		5.6865+ 1					0.0000+ 0				4.4246- 3
1.0000+ 2 ~ 2.0000+ 2	8.5368+ 1	4.6864+ 1		3.8525+ 1					0.0000+ 0				4.4610- 3
2.0000+ 2 ~ 4.0000+ 2	6.2393+ 1	3.9223+ 1		2.3110+ 1					0.0000+ 0				4.5455- 3
4.0000+ 2 ~ 7.0000+ 2	4.7623+ 1	3.3078+ 1		1.4443+ 1					0.0000+ 0				4.7647- 3
7.0000+ 2 ~ 1.0000+ 3	3.9291+ 1	2.9098+ 1		1.0193+ 1					0.0000+ 0				4.9283- 3
1.0000+ 3 ~ 2.0000+ 3	3.1393+ 1	2.4743+ 1		6.6504+ 0					0.0000+ 0				5.4816- 3
2.0000+ 3 ~ 4.0000+ 3	2.4046+ 1	2.0172+ 1		3.8744+ 0					0.0000+ 0				6.9870- 3
4.0000+ 3 ~ 7.0000+ 3	1.9337+ 1	1.6892+ 1		2.4451+ 0					0.0000+ 0				9.9646- 3
7.0000+ 3 ~ 1.0000+ 4	1.6639+ 1	1.4450+ 1	5.5187- 1	1.6388+ 0					0.0000+ 0				1.4109- 2
1.0000+ 4 ~ 2.0000+ 4	1.4096+ 1	1.2111+ 1	9.0631- 1	1.0781+ 0					0.0000+ 0				2.4612- 2
2.0000+ 4 ~ 4.0000+ 4	1.1615+ 1	1.0128+ 1	6.0086- 1	6.8382- 1					0.0000+ 0				4.8797- 2
4.0000+ 4 ~ 7.0000+ 4	9.9924+ 0	8.6626+ 0	9.2311- 1	4.0873- 1					0.0000+ 0				8.9836- 2
7.0000+ 4 ~ 1.0000+ 5	9.0143+ 0	7.7027+ 0	1.0282+ 0	2.8396- 1					0.0000+ 0				1.3516- 1
1.0000+ 5 ~ 2.0000+ 5	8.1365+ 0	6.8867+ 0	1.2931+ 0	1.6587- 1					5.5510-11				2.1774- 1
2.0000+ 5 ~ 4.0000+ 5	7.4121+ 0	5.8198+ 0	1.7265+ 0	7.2410- 2					2.2207-10				3.4989- 1
4.0000+ 5 ~ 7.0000+ 5	7.2634+ 0	5.1092+ 0	2.1110+ 0	3.9116- 2					4.5379-10	8.8230-19			4.5005- 1
7.0000+ 5 ~ 1.0000+ 6	7.3068+ 0	4.9643+ 0	2.3128+ 0	2.8684- 2					6.6812-10	1.1692-17			5.2510- 1
1.0000+ 6 ~ 2.0000+ 6	7.1515+ 0	4.7218+ 0	2.4091+ 0	2.0612- 2					2.4852- 9	1.4669-16			6.3215- 1
2.0000+ 6 ~ 4.0000+ 6	6.2762+ 0	3.7663+ 0	2.5008+ 0	9.1698- 3			3.3507-17		2.4200- 8	1.2829-14			7.2256- 1
4.0000+ 6 ~ 7.0000+ 6	5.2868+ 0	2.8989+ 0	2.4891+ 0	1.5792- 3	7.6801- 2		8.5815- 9		1.4917- 7	1.1934-11			7.8089- 1
7.0000+ 6 ~ 1.0000+ 7	6.0039+ 0	2.6224+ 0	1.4206+ 0	9.2623- 4	1.0693+ 0		3.0742- 5		7.3126- 6	8.9364- 9	7.6562-14	1.6967-17	8.0002- 1
1.0000+ 7 ~ 2.0000+ 7	6.3863+ 0	3.0869+ 0	5.5913- 1	1.0864- 3	1.6031+ 0	1.3362- 1	3.3896- 3	2.3574- 3	1.1836- 3	1.3299- 3	1.0259- 2	3.4019- 3	8.7640- 1

MATERIAL =6209 CROSS SECTION

^{154}Sm (6209)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	3.6997+ 1	1.0997+ 1		2.6000+ 1					0.0000+ 0				4.3687- 3
1.0000- 2 ~ 2.0000- 2	2.2101+ 1	1.0996+ 1		1.1104+ 1					0.0000+ 0				4.3687- 3
2.0000- 2 ~ 4.0000- 2	1.6640+ 1	1.0996+ 1		7.8454+ 0					0.0000+ 0				4.3687- 3
4.0000- 2 ~ 7.0000- 2	1.6750+ 1	1.0992+ 1		5.7575+ 0					0.0000+ 0				4.3687- 3
7.0000- 2 ~ 1.0000- 1	1.6692+ 1	1.0990+ 1		4.6026+ 0					0.0000+ 0				4.3687- 3
1.0000- 1 ~ 2.0000- 1	1.4470+ 1	1.0984+ 1		3.4860+ 0					0.0000+ 0				4.3687- 3
2.0000- 1 ~ 4.0000- 1	1.3417+ 1	1.0970+ 1		2.4471+ 0					0.0000+ 0				4.3687- 3
4.0000- 1 ~ 7.0000- 1	1.2728+ 1	1.0948+ 1		1.7775+ 0					0.0000+ 0				4.3687- 3
7.0000- 1 ~ 1.0000+ 0	1.2321+ 1	1.0922+ 1		1.3996+ 0					0.0000+ 0				4.3687- 3
1.0000+ 0 ~ 2.0000+ 0	1.1901+ 1	1.0867+ 1		1.0340+ 0					0.0000+ 0				4.3687- 3
2.0000+ 0 ~ 4.0000+ 0	1.1428+ 1	1.0746+ 1		6.8330- 1					0.0000+ 0				4.3687- 3
4.0000+ 0 ~ 7.0000+ 0	1.1010+ 1	1.0560+ 1		4.5069- 1					0.0000+ 0				4.3687- 3
7.0000+ 0 ~ 1.0000+ 1	1.0860+ 1	1.0360+ 1		5.2047- 1					0.0000+ 0				4.3687- 3
1.0000+ 1 ~ 2.0000+ 1	1.0186+ 1	9.9948+ 0		2.0124- 1					0.0000+ 0				4.3689- 3
2.0000+ 1 ~ 4.0000+ 1	9.4170+ 0	9.3069+ 0		1.1012- 1					0.0000+ 0				4.3728- 3
4.0000+ 1 ~ 7.0000+ 1	8.1548+ 0	8.0529+ 0		1.1246- 1					0.0000+ 0				4.3788- 3
7.0000+ 1 ~ 1.0000+ 2	2.1185+ 2	1.3743+ 2		7.4422+ 1					0.0000+ 0				4.3861- 3
1.0000+ 2 ~ 2.0000+ 2	1.1228+ 1	1.1122+ 1		1.0598- 1					0.0000+ 0				4.4115- 3
2.0000+ 2 ~ 4.0000+ 2	2.2492+ 1	1.7576+ 1		4.9180+ 0					0.0000+ 0				4.4746- 3
4.0000+ 2 ~ 7.0000+ 2	1.5638+ 1	1.2607+ 1		3.0008+ 0					0.0000+ 0				4.6472- 3
7.0000+ 2 ~ 1.0000+ 3	7.7607+ 1	7.4965+ 1		2.6421+ 0					0.0000+ 0				4.7897- 3
1.0000+ 3 ~ 2.0000+ 3	3.2200+ 1	3.0747+ 1		1.4537+ 0					0.0000+ 0				5.2868- 3
2.0000+ 3 ~ 4.0000+ 3	2.0952+ 1	2.0454+ 1		5.1778- 1					0.0000+ 0				6.6168- 3
4.0000+ 3 ~ 7.0000+ 3	1.8619+ 1	1.7999+ 1		6.2618- 1					0.0000+ 0				9.3706- 3
7.0000+ 3 ~ 1.0000+ 4	1.5360+ 1	1.4805+ 1		5.5463- 1					0.0000+ 0				1.2857- 2
1.0000+ 4 ~ 2.0000+ 4	1.3298+ 1	1.2946+ 1		3.4989- 1					0.0000+ 0				2.1892- 2
2.0000+ 4 ~ 4.0000+ 4	1.1336+ 1	1.1078+ 1		2.5749- 1					0.0000+ 0				4.3958- 2
4.0000+ 4 ~ 7.0000+ 4	9.9525+ 0	9.7479+ 0		2.0470- 1					0.0000+ 0				7.9989- 2
7.0000+ 4 ~ 1.0000+ 5	9.0939+ 0	8.8894+ 0	4.3660- 2	1.8103- 1					0.0000+ 0				1.1790- 1
1.0000+ 5 ~ 2.0000+ 5	8.1699+ 0	7.7401+ 0	3.2633- 1	8.7918- 2					2.6618-14				1.8740- 1
2.0000+ 5 ~ 4.0000+ 5	7.4224+ 0	6.7057+ 0	8.5441- 1	6.1068- 2					1.0847-13				2.8828- 1
4.0000+ 5 ~ 7.0000+ 5	7.2487+ 0	6.2141+ 0	9.8078- 1	5.3185- 2					2.3836-13				3.8882- 1
7.0000+ 5 ~ 1.0000+ 6	7.2999+ 0	6.0178+ 0	1.2261+ 0	5.0888- 2					4.8008-13				4.3144- 1
1.0000+ 6 ~ 2.0000+ 6	7.1507+ 0	5.3170+ 0	1.8038+ 0	4.7863- 2					2.8886-12	7.5428-18			5.8501- 1
2.0000+ 6 ~ 4.0000+ 6	6.3148+ 0	3.8854+ 0	2.3858+ 0	2.8443- 2					3.3888-10	1.7930-16			7.0838- 1
4.0000+ 6 ~ 7.0000+ 6	5.2984+ 0	2.7031+ 0	2.5648+ 0	9.2505- 3			8.7855-14		5.4552- 8	5.8378-12			7.8788- 1
7.0000+ 6 ~ 1.0000+ 7	6.0161+ 0	2.6607+ 0	2.1026+ 0	2.3289- 3	3.5950- 1		3.7855- 6		1.7092- 6	6.5542- 9	2.8196-18	3.6187-21	7.8816- 1
1.0000+ 7 ~ 2.0000+ 7	6.3971+ 0	3.0537+ 0	5.4615- 1	1.1597- 3	1.4274+ 0	3.5575- 1	3.4598- 3	1.5137- 3	1.6129- 3	9.3731- 4	4.4689- 3	1.4409- 3	8.7804- 1

MATERIAL =6301 CROSS SECTION

^{151}Eu (6301)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	NU-BAR
1.0000- 6 ~ 1.0000- 2	3.6013+ 4	3.7660+ 0		3.6009+ 4			0.0000+ 0		3.4171- 6	0.0000+ 0			4.4668- 3
1.0000- 2 ~ 2.0000- 2	1.4017+ 4	3.6398+ 0		1.4013+ 4			0.0000+ 0		1.3308- 5	0.0000+ 0			4.4568- 3
2.0000- 2 ~ 4.0000- 2	8.0883+ 3	3.0458+ 0		8.0863+ 3			0.0000+ 0		7.7308- 6	0.0000+ 0			4.4882- 3
4.0000- 2 ~ 7.0000- 2	4.1549+ 3	2.3336+ 0		4.1525+ 3			0.0000+ 0		4.0107- 6	0.0000+ 0			4.5924- 3
7.0000- 2 ~ 1.0000- 1	2.4217+ 3	1.8601+ 0		2.4199+ 3			0.0000+ 0		2.3913- 6	0.0000+ 0			4.6716- 3
1.0000- 1 ~ 2.0000- 1	1.7188+ 3	1.9809+ 0		1.7148+ 3			0.0000+ 0		1.7828- 6	0.0000+ 0			4.7708- 3
2.0000- 1 ~ 4.0000- 1	5.1946+ 3	1.3906+ 1		5.1807+ 3			0.0000+ 0		6.7968- 6	0.0000+ 0			4.8946- 3
4.0000- 1 ~ 7.0000- 1	8.7304+ 3	8.0928+ 1		8.6495+ 3			0.0000+ 0		8.7738- 6	0.0000+ 0			5.0041- 3
7.0000- 1 ~ 1.0000+ 0	6.2815+ 2	1.0476+ 1		6.1767+ 2			0.0000+ 0		9.1367- 7	0.0000+ 0			5.0833- 3
1.0000+ 0 ~ 2.0000+ 0	4.0779+ 2	9.0529+ 0		3.9874+ 2			0.0000+ 0		3.0081- 7	0.0000+ 0			5.1824- 3
2.0000+ 0 ~ 4.0000+ 0	6.0001+ 2	9.6701+ 0		5.9034+ 2			0.0000+ 0		5.6745- 7	0.0000+ 0			5.3063- 3
4.0000+ 0 ~ 7.0000+ 0	1.1920+ 2	6.1254+ 0		1.1407+ 2			0.0000+ 0		1.9981- 7	0.0000+ 0			5.4168- 3
7.0000+ 0 ~ 1.0000+ 1	4.4868+ 2	1.4985+ 1		4.3169+ 2			0.0000+ 0		4.0549- 7	0.0000+ 0			5.4950- 3
1.0000+ 1 ~ 2.0000+ 1	2.4514+ 2	1.1449+ 1		2.3370+ 2			0.0000+ 0		2.0340- 7	0.0000+ 0			5.5841- 3
2.0000+ 1 ~ 4.0000+ 1	2.0970+ 2	1.6342+ 1		1.9336+ 2			0.0000+ 0		2.2047- 7	0.0000+ 0			5.7180- 3
4.0000+ 1 ~ 7.0000+ 1	2.3642+ 2	4.3858+ 1		1.9266+ 2			0.0000+ 0		1.8992- 7	0.0000+ 0			5.8276- 3
7.0000+ 1 ~ 1.0000+ 2	1.6874+ 2	3.0872+ 1		1.3768+ 2			0.0000+ 0		1.2541- 7	0.0000+ 0			5.9088- 3
1.0000+ 2 ~ 2.0000+ 2	1.3337+ 2	3.4148+ 1		9.9223+ 1			0.0000+ 0		1.0848- 7	0.0000+ 0			6.0058- 3
2.0000+ 2 ~ 4.0000+ 2	9.5834+ 1	3.0630+ 1		6.5204+ 1			0.0000+ 0		8.8500- 8	0.0000+ 0			6.1298- 3
4.0000+ 2 ~ 7.0000+ 2	7.2029+ 1	2.7004+ 1		4.5026+ 1			0.0000+ 0		7.1841- 8	0.0000+ 0			6.2393- 3
7.0000+ 2 ~ 1.0000+ 3	5.8759+ 1	2.4230+ 1		3.4522+ 1			0.0000+ 0		6.2964- 8	0.0000+ 0			6.3185- 3
1.0000+ 3 ~ 2.0000+ 3	4.6922+ 1	2.1384+ 1		2.4538+ 1			0.0000+ 0		5.3386- 8	0.0000+ 0			8.4621- 3
2.0000+ 3 ~ 4.0000+ 3	3.4027+ 1	1.8130+ 1		1.5898+ 1			0.0000+ 0		4.3368- 8	0.0000+ 0			1.5021- 2
4.0000+ 3 ~ 7.0000+ 3	2.6350+ 1	1.5602+ 1		1.0748+ 1			0.0000+ 0		3.6068- 8	0.0000+ 0			1.9943- 2
7.0000+ 3 ~ 1.0000+ 4	2.2036+ 1	1.3942+ 1		8.0936+ 0			0.0000+ 0		3.1563- 8	0.0000+ 0			2.3500- 2
1.0000+ 4 ~ 2.0000+ 4	1.7807+ 1	1.1978+ 1		5.8290+ 0			0.0000+ 0		3.1483- 8	0.0000+ 0			3.7041- 2
2.0000+ 4 ~ 4.0000+ 4	1.3359+ 1	9.6983+ 0	6.6683- 2	3.5740+ 0			0.0000+ 0		3.4342- 8	0.0000+ 0			7.1158- 2
4.0000+ 4 ~ 7.0000+ 4	1.0562+ 1	7.9849+ 0	1.8924- 1	2.3776+ 0			0.0000+ 0		3.7070- 8	0.0000+ 0			1.1793- 1
7.0000+ 4 ~ 1.0000+ 5	8.9066+ 0	6.8464+ 0	2.0069- 1	1.8606+ 0			0.0000+ 0		3.9174- 8	0.0000+ 0			1.6940- 1
1.0000+ 5 ~ 2.0000+ 5	7.7466+ 0	6.0432+ 0	1.9612- 1	1.5060+ 0			0.0000+ 0		8.1414- 8	0.0000+ 0			2.6381- 1
2.0000+ 5 ~ 4.0000+ 5	7.0864+ 0	5.5595+ 0	4.4526- 1	1.0830+ 0			0.0000+ 0		2.8433- 7	0.0000+ 0			3.8603- 1
4.0000+ 5 ~ 7.0000+ 5	7.0839+ 0	5.4913+ 0	9.1367- 1	6.5795- 1			0.0000+ 0		7.3497- 7	0.0000+ 0			4.5714- 1
7.0000+ 5 ~ 1.0000+ 6	7.2723+ 0	6.6941+ 0	1.2128+ 0	4.6601- 1			0.0000+ 0		1.5268- 6	0.0000+ 0			5.2716- 1
1.0000+ 6 ~ 2.0000+ 6	7.2518+ 0	5.3674+ 0	1.6012+ 0	2.7856- 1			0.0000+ 0		1.0697- 5	0.0000+ 0			6.3838- 1
2.0000+ 6 ~ 4.0000+ 6	6.3478+ 0	4.0552+ 0	2.1644+ 0	1.0462- 1			1.8037- 5		7.3002- 5	0.0000+ 0			7.2904- 1
4.0000+ 6 ~ 7.0000+ 6	5.1819+ 0	2.8862+ 0	2.4629+ 0	1.3279- 2			2.0869- 4	5.4515- 9	3.8019- 4	0.0000+ 0			7.3848- 1
7.0000+ 6 ~ 1.0000+ 7	4.9227+ 0	2.6666+ 0	2.1490+ 0	1.1126- 3	2.0322- 1		1.1838- 3	3.7422- 6	1.8927- 3	0.0000+ C			7.7878- 1
1.0000+ 7 ~ 2.0000+ 7	5.2496+ 0	3.0144+ 0	4.9423- 1	1.0891- 3	1.4681+ 0	2.4339- 1	8.1776- 3	8.0940- 3	7.9486- 3	3.1972- 3			8.7372- 1

MATERIAL =6302 CROSS SECTION

^{152}Eu (6302)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	NU-BAR
1.0000- 5 ~ 1.0000- 2	5.0984+ 4	3.3040+ 1		5.0951+ 4			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
1.0000- 2 ~ 2.0000- 2	1.9109+ 4	3.0976+ 1		1.9079+ 4			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
2.0000- 2 ~ 4.0000- 2	1.1470+ 4	2.8288+ 1		1.1441+ 4			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
4.0000- 2 ~ 7.0000- 2	8.5165+ 3	2.4882+ 1		8.4938+ 3			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
7.0000- 2 ~ 1.0000- 1	3.9369+ 3	2.1381+ 1		3.9175+ 3			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
1.0000- 1 ~ 2.0000- 1	1.8979+ 3	1.8987+ 1		1.8804+ 3			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
2.0000- 1 ~ 4.0000- 1	8.6030+ 2	1.2167+ 1		8.3814+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
4.0000- 1 ~ 7.0000- 1	3.4265+ 2	8.6905+ 0		3.3418+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
7.0000- 1 ~ 1.0000+ 0	1.4040+ 3	8.6521+ 0		1.3944+ 3			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
1.0000+ 0 ~ 2.0000+ 0	8.7099+ 2	9.3932+ 0		8.8180+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
2.0000+ 0 ~ 4.0000+ 0	2.8066+ 2	9.6778+ 0		2.7087+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
4.0000+ 0 ~ 7.0000+ 0	2.9591+ 2	4.0489+ 1		2.5542+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
7.0000+ 0 ~ 1.0000+ 1	5.2017+ 2	1.9357+ 2		3.2880+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
1.0000+ 1 ~ 2.0000+ 1	3.9748+ 2	1.4922+ 2		2.4823+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4282- 3
2.0000+ 1 ~ 4.0000+ 1	2.8229+ 2	1.0756+ 2		1.7474+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.4382- 3
4.0000+ 1 ~ 7.0000+ 1	2.0848+ 2	8.0684+ 1		1.2780+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.5286- 3
7.0000+ 1 ~ 1.0000+ 2	1.6789+ 2	6.5808+ 1		1.0202+ 2			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.6050- 3
1.0000+ 2 ~ 2.0000+ 2	1.2888+ 2	5.1591+ 1		7.7274+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			4.7808- 3
2.0000+ 2 ~ 4.0000+ 2	9.2508+ 1	3.8351+ 1		5.4158+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			5.1079- 3
4.0000+ 2 ~ 7.0000+ 2	6.9203+ 1	2.9860+ 1		3.9365+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			5.7778- 3
7.0000+ 2 ~ 1.0000+ 3	5.6304+ 1	2.6129+ 1		3.1181+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			6.3105- 3
1.0000+ 3 ~ 2.0000+ 3	4.3927+ 1	2.0561+ 1		2.3377+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			7.7082- 3
2.0000+ 3 ~ 4.0000+ 3	3.2373+ 1	1.8231+ 1		1.8142+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			1.0801- 2
4.0000+ 3 ~ 7.0000+ 3	2.4914+ 1	1.3371+ 1		1.1543+ 1			0.0000+ 0		0.0000+ 0	0.0000+ 0			1.8336- 2
7.0000+ 3 ~ 1.0000+ 4	2.0770+ 1	1.1730+ 1		9.0387+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			2.2573- 2
1.0000+ 4 ~ 2.0000+ 4	1.6758+ 1	1.0062+ 1		6.7062+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			3.8392- 2
2.0000+ 4 ~ 4.0000+ 4	1.2919+ 1	8.3117+ 0		4.8079+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			6.7172- 2
4.0000+ 4 ~ 7.0000+ 4	1.0325+ 1	8.9744+ 0	1.1523- 4	3.3607+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			1.1384- 1
7.0000+ 4 ~ 1.0000+ 5	8.6278+ 0	5.7893+ 0	6.6211- 2	2.6633+ 0			0.0000+ 0		0.0000+ 0	0.0000+ 0			1.6264- 1
1.0000+ 5 ~ 2.0000+ 5	7.2766+ 0	6.0468+ 0	1.7962- 1	2.0498+ 0			3.0914-13		1.0696- 7	0.0000+ 0			2.4506- 1
2.0000+ 5 ~ 4.0000+ 5	6.6378+ 0	4.6409+ 0	6.6194- 1	1.4309+ 0			1.2368-12		4.2785- 7	0.0000+ 0			3.8000- 1
4.0000+ 5 ~ 7.0000+ 5	6.6860+ 0	4.6144+ 0	1.1059+ 0	8.8871- 1			4.1248-12		8.8163- 7	0.0000+ 0			4.6077- 1
7.0000+ 5 ~ 1.0000+ 6	6.8039+ 0	4.6638+ 0	1.5686+ 0	6.8120- 1			2.8642-11		1.2808- 6	0.0000+ 0			5.2100- 1
1.0000+ 6 ~ 2.0000+ 6	6.9477+ 0	4.5687+ 0	1.9898+ 0	3.8772- 1			1.1739- 6		2.8646- 6	0.0000+ 0			6.3108- 1
2.0000+ 6 ~ 4.0000+ 6	6.2068+ 0	3.8450+ 0	2.2329+ 0	1.2703- 1			5.4848- 6		8.8198- 6	2.7837-11			7.3083- 1
4.0000+ 6 ~ 7.0000+ 6	4.9818+ 0	2.7287+ 0	2.2076+ 0	1.4889- 2	8.7321- 3		2.2082- 5	8.1116-21	2.4872- 5	1.0873- 8	6.4210-18	4.0136-18	7.2886- 1
7.0000+ 6 ~ 1.0000+ 7	4.6942+ 0	2.6210+ 0	1.3186+ 0	1.3934- 3	7.4847- 1		4.6614- 4	8.1087-11	2.1488- 4	3.8180- 8	1.3298- 7	3.8481- 9	7.1866- 1
1.0000+ 7 ~ 2.0000+ 7	6.1140+ 0	3.9311+ 0	2.8767- 1	1.0918- 3	1.1666+ 0	3.0266- 1	6.8696- 3	4.1983- 3	2.4428- 3	1.0181- 3	6.4388- 3	2.0846- 3	8.3048- 1

MATERIAL =6303 CROSS SECTION

^{153}Eu (6303)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.0038+ 3	1.0444+ 1		9.9334+ 2					2.2688- 6	0.0000+ 0			4.4366- 3
1.0000- 2 ~ 2.0000- 2	4.2919+ 2	1.0387+ 1		4.1874+ 2					9.6194- 7	0.0000+ 0			4.4366- 3
2.0000- 2 ~ 4.0000- 2	3.0132+ 2	1.0305+ 1		2.9101+ 2					6.6132- 7	0.0000+ 0			4.4641- 3
4.0000- 2 ~ 7.0000- 2	2.1814+ 2	1.0172+ 1		2.0798+ 2					4.7230- 7	0.0000+ 0			4.5139- 3
7.0000- 2 ~ 1.0000- 1	1.7105+ 2	1.0018+ 1		1.6103+ 2					3.6542- 7	0.0000+ 0			4.5582- 3
1.0000- 1 ~ 2.0000- 1	1.2440+ 2	9.7117+ 0		1.1489+ 2					2.5982- 7	0.0000+ 0			4.6159- 3
2.0000- 1 ~ 4.0000- 1	8.0781+ 1	9.0998+ 0		7.1681+ 1					1.6099- 7	0.0000+ 0			4.6969- 3
4.0000- 1 ~ 7.0000- 1	5.4323+ 1	8.2761+ 0		4.6047+ 1					1.0324- 7	0.0000+ 0			4.7497- 3
7.0000- 1 ~ 1.0000+ 0	4.2888+ 1	7.4608+ 0		3.6427+ 1					7.8692- 8	0.0000+ 0			4.7950- 3
1.0000+ 0 ~ 2.0000+ 0	1.1290+ 2	5.8509+ 0		1.0705+ 2					3.0548- 7	0.0000+ 0			4.8518- 3
2.0000+ 0 ~ 4.0000+ 0	1.0019+ 3	1.6660+ 1		9.8528+ 2					1.8790- 6	0.0000+ 0			4.9228- 3
4.0000+ 0 ~ 7.0000+ 0	1.3188+ 2	9.7358+ 0		1.2219+ 2					3.7527- 7	0.0000+ 0			4.9856- 3
7.0000+ 0 ~ 1.0000+ 1	2.7769+ 2	1.9508+ 1		2.5419+ 2					9.4147- 7	0.0000+ 0			5.0509- 3
1.0000+ 1 ~ 2.0000+ 1	2.2927+ 2	1.4649+ 1		2.1442+ 2					4.3598- 7	0.0000+ 0			5.0877- 3
2.0000+ 1 ~ 4.0000+ 1	1.3477+ 2	1.6883+ 1		1.1889+ 2					2.5638- 7	0.0000+ 0			5.1587- 3
4.0000+ 1 ~ 7.0000+ 1	1.7199+ 2	2.9423+ 1		1.4257+ 2					2.9781- 7	0.0000+ 0			5.2216- 3
7.0000+ 1 ~ 1.0000+ 2	1.0410+ 2	2.7768+ 1		7.6396+ 1					1.7939- 7	0.0000+ 0			5.2888- 3
1.0000+ 2 ~ 2.0000+ 2	1.0125+ 2	2.7509+ 1		7.3744+ 1					7.2769- 8	0.0000+ 0			5.3236- 3
2.0000+ 2 ~ 4.0000+ 2	7.9188+ 1	2.4987+ 1		4.8219+ 1					4.1921- 8	0.0000+ 0			5.3948- 3
4.0000+ 2 ~ 7.0000+ 2	5.5186+ 1	2.2698+ 1		3.2667+ 1					2.5631- 8	0.0000+ 0			5.4673- 3
7.0000+ 2 ~ 1.0000+ 3	4.5663+ 1	2.1178+ 1		2.4507+ 1					1.7930- 8	0.0000+ 0			5.5027- 3
1.0000+ 3 ~ 2.0000+ 3	3.7370+ 1	1.9909+ 1		1.7461+ 1					1.1642- 8	0.0000+ 0			5.7487- 3
2.0000+ 3 ~ 4.0000+ 3	2.8643+ 1	1.7815+ 1		1.1028+ 1					8.7049-10	0.0000+ 0			1.1749- 2
4.0000+ 3 ~ 7.0000+ 3	2.2722+ 1	1.5463+ 1		7.2692+ 0					4.0996-10	0.0000+ 0			1.5292- 2
7.0000+ 3 ~ 1.0000+ 4	1.9181+ 1	1.3811+ 1		5.3699+ 0					2.8878-10	0.0000+ 0			1.7637- 2
1.0000+ 4 ~ 2.0000+ 4	1.5487+ 1	1.1737+ 1		3.7601+ 0					1.8620-10	0.0000+ 0			3.4714- 2
2.0000+ 4 ~ 4.0000+ 4	1.1962+ 1	9.4669+ 0		2.4747+ 0					1.0724-10	0.0000+ 0			5.3282- 2
4.0000+ 4 ~ 7.0000+ 4	9.7943+ 0	7.9749+ 0		1.8194+ 0			0.0000+ 0		6.6667-11	0.0000+ 0			9.5175- 2
7.0000+ 4 ~ 1.0000+ 5	8.5398+ 0	7.0667+ 0	6.4394- 2	1.4797+ 0			0.0000+ 0		4.5857-11	0.0000+ 0			1.3824- 1
1.0000+ 5 ~ 2.0000+ 5	7.7911+ 0	6.1494+ 0	5.1648- 1	1.0202+ 0			0.0000+ 0		4.1633-11	0.0000+ 0			2.2174- 1
2.0000+ 5 ~ 4.0000+ 5	7.0811+ 0	5.2538+ 0	1.2081+ 0	6.2075- 1			0.0000+ 0		4.4419-11	0.0000+ 0			3.4087- 1
4.0000+ 5 ~ 7.0000+ 5	7.0561+ 0	5.0474+ 0	1.6694+ 0	4.2118- 1			0.0000+ 0		4.7133-11	0.0000+ 0			4.3335- 1
7.0000+ 5 ~ 1.0000+ 6	7.2720+ 0	6.0697+ 0	1.8830+ 0	3.2016- 1			0.0000+ 0		4.9196-11	0.0000+ 0			5.1037- 1
1.0000+ 6 ~ 2.0000+ 6	7.2864+ 0	4.9189+ 0	2.1464+ 0	2.2065- 1			1.7119- 9		3.6641-10	0.0000+ 0			6.3173- 1
2.0000+ 6 ~ 4.0000+ 6	8.4277+ 0	5.9822+ 0	2.3668+ 0	7.7276- 2			2.8594- 6		6.2018- 8	0.0000+ 0			7.3141- 1
4.0000+ 6 ~ 7.0000+ 6	5.2219+ 0	2.7222+ 0	2.4925+ 0	6.8882- 3			8.0411- 5		8.4229- 8	0.0000+ 0			7.4980- 1
7.0000+ 6 ~ 1.0000+ 7	4.9416+ 0	2.6730+ 0	2.2860+ 0	7.7604- 4	8.0749- 2		6.6331- 4	6.4319- 6	8.8640- 5	0.0000+ 0			7.7727- 1
1.0000+ 7 ~ 2.0000+ 7	5.2500+ 0	2.9688+ 0	6.2514- 1	1.0743- 3	1.6110+ 0	9.6320- 2	6.8267- 3	6.8013- 3	2.0445- 3	7.6927- 4			8.7907- 1

MATERIAL =6304 CROSS SECTION

^{154}Eu (6304)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	3.4462+ 3	6.1666+ 0		3.4391+ 3			0.0000+ 0		0.0000+ 0				4.3687- 3
1.0000- 2 ~ 2.0000- 2	1.6268+ 3	6.1080+ 0		1.6197+ 3			0.0000+ 0		0.0000+ 0				4.3687- 3
2.0000- 2 ~ 4.0000- 2	1.3196+ 3	6.0344+ 0		1.3136+ 3			0.0000+ 0		0.0000+ 0				4.3687- 3
4.0000- 2 ~ 7.0000- 2	1.2502+ 3	5.9128+ 0		1.2443+ 3			0.0000+ 0		0.0000+ 0				4.3687- 3
7.0000- 2 ~ 1.0000- 1	1.4049+ 3	5.7964+ 0		1.3990+ 3			0.0000+ 0		0.0000+ 0				4.3687- 3
1.0000- 1 ~ 2.0000- 1	2.3137+ 3	8.5021+ 0		2.3071+ 3			0.0000+ 0		0.0000+ 0				4.3687- 3
2.0000- 1 ~ 4.0000- 1	1.0871+ 3	9.1412+ 0		1.0880+ 3			0.0000+ 0		0.0000+ 0				4.3687- 3
4.0000- 1 ~ 7.0000- 1	1.8837+ 2	7.5759+ 0		1.8079+ 2			0.0000+ 0		0.0000+ 0				4.3687- 3
7.0000- 1 ~ 1.0000+ 0	3.8392+ 2	7.0728+ 0		3.7686+ 2			0.0000+ 0		0.0000+ 0				4.3687- 3
1.0000+ 0 ~ 2.0000+ 0	5.7238+ 2	1.0036+ 1		5.6233+ 2			0.0000+ 0		0.0000+ 0				4.3687- 3
2.0000+ 0 ~ 4.0000+ 0	9.0347+ 1	7.6849+ 0		8.2663+ 1			0.0000+ 0		0.0000+ 0				4.3687- 3
4.0000+ 0 ~ 7.0000+ 0	2.8179+ 2	9.3581+ 0		2.7244+ 2			0.0000+ 0		0.0000+ 0				4.3687- 3
7.0000+ 0 ~ 1.0000+ 1	3.4696+ 2	1.6060+ 1		3.3089+ 2			0.0000+ 0		0.0000+ 0				4.3687- 3
1.0000+ 1 ~ 2.0000+ 1	6.2360+ 1	1.0583+ 1		5.1788+ 1			0.0000+ 0		0.0000+ 0				4.3687- 3
2.0000+ 1 ~ 4.0000+ 1	1.6761+ 2	1.1473+ 1		1.4603+ 2			0.0000+ 0		0.0000+ 0				4.3774- 3
4.0000+ 1 ~ 7.0000+ 1	1.3037+ 2	1.0276+ 1		1.2010+ 2			0.0000+ 0		0.0000+ 0				4.4370- 3
7.0000+ 1 ~ 1.0000+ 2	1.0586+ 2	1.0219+ 1		9.5462+ 1			0.0000+ 0		0.0000+ 0				4.4879- 3
1.0000+ 2 ~ 2.0000+ 2	8.1919+ 1	1.0123+ 1		7.1797+ 1			0.0000+ 0		0.0000+ 0				4.6092- 3
2.0000+ 2 ~ 4.0000+ 2	5.9720+ 1	9.9886+ 0		4.9780+ 1			0.0000+ 0		0.0000+ 0				4.8956- 3
4.0000+ 2 ~ 7.0000+ 2	4.5490+ 1	9.7929+ 0		3.6697+ 1			0.0000+ 0		0.0000+ 0				5.3128- 3
7.0000+ 2 ~ 1.0000+ 3	3.7607+ 1	9.8402+ 0		2.7967+ 1			0.0000+ 0		0.0000+ 0				5.6992- 3
1.0000+ 3 ~ 2.0000+ 3	3.0037+ 1	9.4116+ 0		2.0626+ 1			0.0000+ 0		0.0000+ 0				6.7182- 3
2.0000+ 3 ~ 4.0000+ 3	2.2989+ 1	9.0706+ 0		1.3898+ 1			0.0000+ 0		0.0000+ 0				9.1326- 3
4.0000+ 3 ~ 7.0000+ 3	1.8401+ 1	8.7126+ 0		9.6882+ 0			0.0000+ 0		0.0000+ 0				1.3366- 2
7.0000+ 3 ~ 1.0000+ 4	1.5855+ 1	8.4181+ 0		7.4373+ 0			0.0000+ 0		0.0000+ 0				1.8936- 2
1.0000+ 4 ~ 2.0000+ 4	1.3360+ 1	7.9888+ 0		5.3713+ 0			0.0000+ 0		0.0000+ 0				2.9882- 2
2.0000+ 4 ~ 4.0000+ 4	1.0970+ 1	7.3875+ 0		3.5829+ 0			0.0000+ 0		0.0000+ 0				5.8900- 2
4.0000+ 4 ~ 7.0000+ 4	9.3308+ 0	6.7728+ 0	7.5286- 5	2.6579+ 0			0.0000+ 0		0.0000+ 0				9.6260- 2
7.0000+ 4 ~ 1.0000+ 5	8.3274+ 0	5.2698+ 0	2.9697- 2	2.0279+ 0			0.0000+ 0		0.0000+ 0				1.3948- 1
1.0000+ 5 ~ 2.0000+ 5	7.3678+ 0	5.8558+ 0	1.7480- 1	1.5260+ 0			1.0301-17		4.4684-10				2.1473- 1
2.0000+ 5 ~ 4.0000+ 5	6.6843+ 0	5.0878+ 0	4.3329- 1	1.1814+ 0			4.1205-17		1.7974- 9				3.2144- 1
4.0000+ 5 ~ 7.0000+ 5	6.8016+ 0	4.8249+ 0	8.9793- 1	9.9760- 1			1.4448-16		3.7586- 9	2.1984-19			4.1221- 1
7.0000+ 5 ~ 1.0000+ 6	6.8122+ 0	4.7806+ 0	1.2449+ 0	7.7868- 1			1.1234-15		5.8901- 9	3.3930-18			4.8787- 1
1.0000+ 6 ~ 2.0000+ 6	5.9838+ 0	4.6854+ 0	1.7952+ 0	6.0062- 1			5.2247-13		2.0284- 8	4.3778-17			6.1787- 1
2.0000+ 6 ~ 4.0000+ 6	6.2884+ 0	3.9157+ 0	2.2335+ 0	1.5189- 1			1.1047- 7		2.7896- 7	3.1510-16			7.3331- 1
4.0000+ 6 ~ 7.0000+ 6	5.0294+ 0	2.7902+ 0	2.2187+ 0	1.0058- 2	9.8798- 3		2.8061- 6		2.1837- 6	2.2968-12	2.8527-19	3.5294-19	7.2846- 1
7.0000+ 6 ~ 1.0000+ 7	4.6184+ 0	2.6317+ 0	1.0889+ 0	1.2028- 3	9.9378- 1		1.3243- 4	3.3962-14	4.0222- 6	3.0036- 9	4.8102-10	6.8760-11	7.1749- 1
1.0000+ 7 ~ 2.0000+ 7	5.1283+ 0	3.3338+ 0	2.2682- 1	1.0697- 3	1.3400+ 0	2.0892- 1	4.4272- 3	2.6961- 3	2.4100- 3	9.6415- 4	4.8472- 3	1.2892- 3	8.2920- 1

MATERIAL =6305 CROSS SECTION ^{155}Eu (6305)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	NU-BAR
1.0000- 5 ~ 1.0000- 2	1.2212+ 4	8.7386+ 0		1.2203+ 4					0.0000+ 0				4.3406- 3
1.0000- 2 ~ 2.0000- 2	5.2879+ 3	9.2663+ 0		5.2786+ 3					0.0000+ 0				4.3405- 3
2.0000- 2 ~ 4.0000- 2	3.8213+ 3	1.0148+ 1		3.8112+ 3					0.0000+ 0				4.3406- 3
4.0000- 2 ~ 7.0000- 2	2.9239+ 3	1.1872+ 1		2.9121+ 3					0.0000+ 0				4.3405- 3
7.0000- 2 ~ 1.0000- 1	2.4969+ 3	1.4413+ 1		2.4815+ 3					0.0000+ 0				4.3405- 3
1.0000- 1 ~ 2.0000- 1	2.3003+ 3	2.2919+ 1		2.2774+ 3					0.0000+ 0				4.3406- 3
2.0000- 1 ~ 4.0000- 1	3.6121+ 3	8.2481+ 1		3.4206+ 3					0.0000+ 0				4.3406- 3
4.0000- 1 ~ 7.0000- 1	5.8034+ 4	1.9973+ 3		3.6037+ 4					0.0000+ 0				4.3405- 3
7.0000- 1 ~ 1.0000+ 0	4.4612+ 3	3.4806+ 2		4.1031+ 3					0.0000+ 0				4.3405- 3
1.0000+ 0 ~ 2.0000+ 0	3.1795+ 2	4.8393+ 1		2.6956+ 2					0.0000+ 0				4.3405- 3
2.0000+ 0 ~ 4.0000+ 0	5.6622+ 1	1.7001+ 1		3.9620+ 1					0.0000+ 0				4.3405- 3
4.0000+ 0 ~ 7.0000+ 0	1.6653+ 1	1.0658+ 1		5.9949+ 0					0.0000+ 0				4.3405- 3
7.0000+ 0 ~ 1.0000+ 1	2.9288+ 1	9.1415+ 0		2.0147+ 1					0.0000+ 0				4.3405- 3
1.0000+ 1 ~ 2.0000+ 1	8.8208+ 1	1.0606+ 1		7.7601+ 1					0.0000+ 0				4.3405- 3
2.0000+ 1 ~ 4.0000+ 1	1.7260+ 2	3.4204+ 1		1.3839+ 2					0.0000+ 0				4.3427- 3
4.0000+ 1 ~ 7.0000+ 1	1.3542+ 2	3.9828+ 1		8.5889+ 1					0.0000+ 0				4.3681- 3
7.0000+ 1 ~ 1.0000+ 2	1.0997+ 2	3.7009+ 1		7.2960+ 1					0.0000+ 0				4.3715- 3
1.0000+ 2 ~ 2.0000+ 2	8.5143+ 1	3.4038+ 1		5.1105+ 1					0.0000+ 0				4.4111- 3
2.0000+ 2 ~ 4.0000+ 2	6.2090+ 1	3.0256+ 1		3.1854+ 1					0.0000+ 0				4.4969- 3
4.0000+ 2 ~ 7.0000+ 2	4.7272+ 1	2.6731+ 1		2.0541+ 1					0.0000+ 0				4.7042- 3
7.0000+ 2 ~ 1.0000+ 3	3.9029+ 1	2.4228+ 1		1.4801+ 1					0.0000+ 0				4.6749- 3
1.0000+ 3 ~ 2.0000+ 3	3.1112+ 1	2.1271+ 1		8.8409+ 0					0.0000+ 0				6.3999- 3
2.0000+ 3 ~ 4.0000+ 3	2.3734+ 1	1.7862+ 1		5.7727+ 0					0.0000+ 0				8.7949- 3
4.0000+ 3 ~ 7.0000+ 3	1.8989+ 1	1.6404+ 1		3.6849+ 0					0.0000+ 0				9.5257- 3
7.0000+ 3 ~ 1.0000+ 4	1.6322+ 1	1.3771+ 1		2.5510+ 0					0.0000+ 0				1.2085- 2
1.0000+ 4 ~ 2.0000+ 4	1.3706+ 1	1.1983+ 1		1.7220+ 0					0.0000+ 0				2.1470- 2
2.0000+ 4 ~ 4.0000+ 4	1.1196+ 1	1.0090+ 1		1.1060+ 0					0.0000+ 0				4.2981- 2
4.0000+ 4 ~ 7.0000+ 4	9.4716+ 0	8.6739+ 0		7.9767- 1					0.0000+ 0				7.8707- 2
7.0000+ 4 ~ 1.0000+ 5	8.3938+ 0	7.6468+ 0	1.2624- 1	6.2318- 1					0.0000+ 0				1.1474- 1
1.0000+ 5 ~ 2.0000+ 5	7.4041+ 0	8.6389+ 0	4.4217- 1	4.2086- 1					3.3116-12				1.8503- 1
2.0000+ 5 ~ 4.0000+ 5	8.8652+ 0	8.6492+ 0	8.7349- 1	2.4191- 1					1.3245-11				2.9070- 1
4.0000+ 5 ~ 7.0000+ 5	6.5992+ 0	5.0774+ 0	1.3804+ 0	1.8121- 1					2.8149-11				3.8727- 1
7.0000+ 5 ~ 1.0000+ 6	6.8186+ 0	4.9956+ 0	1.8888+ 0	1.3306- 1					4.4859-11	1.3698-20			4.6456- 1
1.0000+ 6 ~ 2.0000+ 6	7.0014+ 0	4.8476+ 0	2.0423+ 0	1.1150- 1			0.0000+ 0		1.9606-10	2.1142-17			6.9794- 1
2.0000+ 6 ~ 4.0000+ 6	6.3253+ 0	3.9820+ 0	2.2870+ 0	5.7247- 2			3.4541-18		1.0714- 8	8.3546-15			7.2819- 1
4.0000+ 6 ~ 7.0000+ 6	5.0895+ 0	2.8107+ 0	2.2494+ 0	8.4414- 3			1.9461- 7		1.3848- 6	8.3877-12	4.8149-20		7.2916- 1
7.0000+ 6 ~ 1.0000+ 7	4.6284+ 0	2.6381+ 0	1.8760+ 0	1.2090- 3	2.1447- 1		2.8076- 6	7.0576-16	2.0705- 5	7.6486- 9	1.5414-10	1.8515-16	7.1564- 1
1.0000+ 7 ~ 2.0000+ 7	5.1341+ 0	3.3176+ 0	3.1044- 1	1.0840- 3	1.1631+ 0	3.2922- 1	3.9757- 3	2.4402- 3	1.8968- 3	7.2275- 4	2.4706- 3	7.7176- 4	8.2853- 1

MATERIAL =6308 CROSS SECTION ^{156}Eu (6306)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	NU-BAR
1.0000- 5 ~ 1.0000- 2	3.1661+ 2	6.6000+ 0		3.0837+ 2			0.0000+ 0		0.0000+ 0				4.3126- 3
1.0000- 2 ~ 2.0000- 2	1.3889+ 2	6.6000+ 0		1.3177+ 2			0.0000+ 0		0.0000+ 0				4.3128- 3
2.0000- 2 ~ 4.0000- 2	1.0006+ 2	6.6000+ 0		9.3176+ 1			0.0000+ 0		0.0000+ 0				4.3126- 3
4.0000- 2 ~ 7.0000- 2	7.5708+ 1	6.6000+ 0		8.8475+ 1			0.0000+ 0		0.0000+ 0				4.3126- 3
7.0000- 2 ~ 1.0000- 1	6.1893+ 1	6.6000+ 0		5.4772+ 1			0.0000+ 0		0.0000+ 0				4.3126- 3
1.0000- 1 ~ 2.0000- 1	4.8418+ 1	6.6000+ 0		4.1869+ 1			0.0000+ 0		0.0000+ 0				4.3126- 3
2.0000- 1 ~ 4.0000- 1	3.6163+ 1	6.6000+ 0		2.9465+ 1			0.0000+ 0		0.0000+ 0				4.3126- 3
4.0000- 1 ~ 7.0000- 1	2.8358+ 1	6.6000+ 0		2.1854+ 1			0.0000+ 0		0.0000+ 0				4.3126- 3
7.0000- 1 ~ 1.0000+ 0	2.3986+ 1	6.6000+ 0		1.7321+ 1			0.0000+ 0		0.0000+ 0				4.3126- 3
1.0000+ 0 ~ 2.0000+ 0	7.8608+ 2	8.2494+ 1		7.0362+ 2			0.0000+ 0		0.0000+ 0				4.3126- 3
2.0000+ 0 ~ 4.0000+ 0	5.4832+ 2	8.3924+ 1		4.6440+ 2			0.0000+ 0		0.0000+ 0				4.3125- 3
4.0000+ 0 ~ 7.0000+ 0	4.0829+ 2	8.5254+ 1		3.2105+ 2			0.0000+ 0		0.0000+ 0				4.3126- 3
7.0000+ 0 ~ 1.0000+ 1	3.2215+ 2	8.6244+ 1		2.4691+ 2			0.0000+ 0		0.0000+ 0				4.3126- 3
1.0000+ 1 ~ 2.0000+ 1	2.5196+ 2	8.0812+ 1		1.7117+ 2			0.0000+ 0		0.0000+ 0				4.3126- 3
2.0000+ 1 ~ 4.0000+ 1	1.7676+ 2	7.1220+ 1		1.0664+ 2			0.0000+ 0		0.0000+ 0				4.3140- 3
4.0000+ 1 ~ 7.0000+ 1	1.3242+ 2	6.3757+ 1		6.8552+ 1			0.0000+ 0		0.0000+ 0				4.3240- 3
7.0000+ 1 ~ 1.0000+ 2	1.0925+ 2	5.8930+ 1		5.0326+ 1			0.0000+ 0		0.0000+ 0				4.3524- 3
1.0000+ 2 ~ 2.0000+ 2	8.5213+ 1	5.1585+ 1		3.3627+ 1			0.0000+ 0		0.0000+ 0				4.3815- 3
2.0000+ 2 ~ 4.0000+ 2	6.2158+ 1	4.2417+ 1		1.9793+ 1			0.0000+ 0		0.0000+ 0				4.4266- 3
4.0000+ 2 ~ 7.0000+ 2	4.7337+ 1	3.6222+ 1		1.2114+ 1			0.0000+ 0		0.0000+ 0				4.5968- 3
7.0000+ 2 ~ 1.0000+ 3	3.9094+ 1	3.0665+ 1		8.4308+ 0			0.0000+ 0		0.0000+ 0				4.7349- 3
1.0000+ 3 ~ 2.0000+ 3	3.1180+ 1	2.5779+ 1		5.4012+ 0			0.0000+ 0		0.0000+ 0				6.1841- 3
2.0000+ 3 ~ 4.0000+ 3	2.3809+ 1	2.0749+ 1		3.0538+ 0			0.0000+ 0		0.0000+ 0				8.4158- 3
4.0000+ 3 ~ 7.0000+ 3	1.9056+ 1	1.7198+ 1		1.8580+ 0			0.0000+ 0		0.0000+ 0				8.8986- 3
7.0000+ 3 ~ 1.0000+ 4	1.6390+ 1	1.5089+ 1		1.3204+ 0			0.0000+ 0		0.0000+ 0				1.2074- 2
1.0000+ 4 ~ 2.0000+ 4	1.3635+ 1	1.2788+ 1		8.8894- 1			0.0000+ 0		0.0000+ 0				2.0063- 2
2.0000+ 4 ~ 4.0000+ 4	1.1050+ 1	9.8880+ 0	6.8459- 1	5.0494- 1			0.0000+ 0		0.0000+ 0				4.2311- 2
4.0000+ 4 ~ 7.0000+ 4	9.3856+ 0	7.9898+ 0	1.0446+ 0	3.5664- 1			0.0000+ 0		0.0000+ 0				8.1086- 2
7.0000+ 4 ~ 1.0000+ 5	8.3512+ 0	6.9210+ 0	1.1483+ 0	2.8180- 1			0.0000+ 0		0.0000+ 0				1.2307- 1
1.0000+ 5 ~ 2.0000+ 5	7.4547+ 0	8.0829+ 0	1.1766+ 0	1.9614- 1			0.0000+ 0		2.3491-11				1.9634- 1
2.0000+ 5 ~ 4.0000+ 5	6.6828+ 0	5.2919+ 0	1.2449+ 0	1.6712- 1			0.0000+ 0		9.3964-11				3.0086- 1
4.0000+ 5 ~ 7.0000+ 5	6.8150+ 0	4.9375+ 0	1.5611+ 0	1.1605- 1			0.0000+ 0		1.9847-10				3.9389- 1
7.0000+ 5 ~ 1.0000+ 6	6.0261+ 0	4.8452+ 0	1.8936+ 0	8.7179- 2			0.0000+ 0		2.8802-10				4.7582- 1
1.0000+ 6 ~ 2.0000+ 6	7.0186+ 0	4.7183+ 0	2.2435+ 0	5.6660- 2			5.0650-19		8.2531-10	2.2769-17			6.1446- 1
2.0000+ 6 ~ 4.0000+ 6	6.9658+ 0	3.9650+ 0	2.3605+ 0	1.8708- 2			5.5330-13		1.8054- 9	2.3840-15			7.3883- 1
4.0000+ 6 ~ 7.0000+ 6	5.0976+ 0	2.8490+ 0	2.2280+ 0	1.5718- 3	1.8704- 2		7.2186- 8		3.6552- 7	2.3250-12		2.7944-21	7.3063- 1
7.0000+ 6 ~ 1.0000+ 7	4.6440+ 0	2.6326+ 0	1.8612+ 0	8.8838- 4	1.0474+ 0		2.4062- 5	3.2670-17	1.3916- 6	1.1873- 9	9.4932-12	7.6600-12	7.1669- 1
1.0000+ 7 ~ 2.0000+ 7	5.1407+ 0	3.3297+ 0	2.1460- 1	1.0847- 3	1.3089+ 0	2.7409- 1	3.0990- 3	2.0119- 3	1.4688- 3	5.0977- 4	3.5962- 3	1.0182- 3	8.2786- 1

^{152}Gd (6401)

CROSS SECTION

MATERIAL =6401

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	3.2952+ 3	1.3953+ 1		3.2812+ 3					2.1595- 2	0.0000+ 0			4.4263- 3
1.0000- 2 ~ 2.0000- 2	1.4131+ 3	1.3940+ 1		1.3991+ 3					9.2138- 3	0.0000+ 0			4.4263- 3
2.0000- 2 ~ 4.0000- 2	1.0004+ 3	1.3906+ 1		9.8653+ 2					6.6018- 3	0.0000+ 0			4.4263- 3
4.0000- 2 ~ 7.0000- 2	7.3571+ 2	1.3850+ 1		7.2185+ 2					4.7897- 3	0.0000+ 0			4.4263- 3
7.0000- 2 ~ 1.0000- 1	5.8826+ 2	1.3783+ 1		5.7443+ 2					3.7973- 3	0.0000+ 0			4.4263- 3
1.0000- 1 ~ 2.0000- 1	4.4450+ 2	1.3839+ 1		4.3086+ 2					2.8579- 3	0.0000+ 0			4.4263- 3
2.0000- 1 ~ 4.0000- 1	3.0989+ 2	1.3316+ 1		2.9668+ 2					1.9770- 3	0.0000+ 0			4.4263- 3
4.0000- 1 ~ 7.0000- 1	2.2081+ 2	1.2798+ 1		2.0801+ 2					1.4125- 3	0.0000+ 0			4.4263- 3
7.0000- 1 ~ 1.0000+ 0	1.7011+ 2	1.2209+ 1		1.6790+ 2					1.0834- 3	0.0000+ 0			4.4263- 3
1.0000+ 0 ~ 2.0000+ 0	1.1891+ 2	1.1044+ 1		1.0787+ 2					7.0824- 4	0.0000+ 0			4.4263- 3
2.0000+ 0 ~ 4.0000+ 0	8.1136+ 1	8.7475+ 0		7.2387+ 1					1.4189- 3	0.0000+ 0			4.4263- 3
4.0000+ 0 ~ 7.0000+ 0	4.3193+ 1	4.8594+ 0		3.8315+ 1					1.8380- 2	0.0000+ 0			4.4263- 3
7.0000+ 0 ~ 1.0000+ 1	9.0684+ 2	7.9920+ 1		8.2757+ 2					4.6959- 2	0.0000+ 0			4.4263- 3
1.0000+ 1 ~ 2.0000+ 1	1.6861+ 2	1.7682+ 1		1.5084+ 2					1.2215- 2	0.0000+ 0			4.4291- 3
2.0000+ 1 ~ 4.0000+ 1	6.7172+ 2	3.6676+ 2		3.1496+ 2					1.7722- 2	0.0000+ 0			4.4362- 3
4.0000+ 1 ~ 7.0000+ 1	2.6830+ 1	1.4103+ 1		1.2719+ 1					7.9678- 3	0.0000+ 0			4.4476- 3
7.0000+ 1 ~ 1.0000+ 2	9.2583+ 2	2.0918+ 2		1.1665+ 2					7.3338- 3	0.0000+ 0			4.4576- 3
1.0000+ 2 ~ 2.0000+ 2	8.7893+ 1	4.4438+ 1		2.3452+ 1					2.3515- 3	0.0000+ 0			4.4993- 3
2.0000+ 2 ~ 4.0000+ 2	1.4369+ 2	1.0846+ 2		9.7226+ 1					2.7908- 3	0.0000+ 0			4.5936- 3
4.0000+ 2 ~ 7.0000+ 2	8.2784+ 1	6.8744+ 1		1.4040+ 1					1.0869- 3	0.0000+ 0			4.8344- 3
7.0000+ 2 ~ 1.0000+ 3	5.5930+ 1	4.5791+ 1		1.0138+ 1					7.8791- 4	0.0000+ 0			5.0322- 3
1.0000+ 3 ~ 2.0000+ 3	3.3660+ 1	2.8723+ 1		4.8367+ 0					3.9153- 4	0.0000+ 0			5.6696- 3
2.0000+ 3 ~ 4.0000+ 3	9.4428+ 1	9.1174+ 1		3.2530+ 0					1.4629- 4	0.0000+ 0			7.3581- 3
4.0000+ 3 ~ 7.0000+ 3	2.7979+ 1	2.6346+ 1		2.8346+ 0					9.2108- 5	0.0000+ 0			1.0736- 2
7.0000+ 3 ~ 1.0000+ 4	2.2777+ 1	2.0858+ 1		1.9188+ 0					6.7556- 5	0.0000+ 0			1.5010- 2
1.0000+ 4 ~ 2.0000+ 4	1.7826+ 1	1.6499+ 1		1.3268+ 0					5.0000- 5	0.0000+ 0			2.6591- 2
2.0000+ 4 ~ 4.0000+ 4	1.3238+ 1	1.2770+ 1		9.8788- 1					8.0000- 5	0.0000+ 0			5.1275- 2
4.0000+ 4 ~ 7.0000+ 4	1.0243+ 1	9.4899+ 0		7.5300- 1					6.0000- 5	0.0000+ 0			9.2489- 2
7.0000+ 4 ~ 1.0000+ 5	8.6092+ 0	7.9957+ 0		6.1339- 1					6.0000- 5	0.0000+ 0			1.3626- 1
1.0000+ 5 ~ 2.0000+ 5	7.6117+ 0	7.0875+ 0		5.2404- 1					6.0000- 5	2.5000-14			2.0676- 1
2.0000+ 5 ~ 4.0000+ 5	7.1916+ 0	6.6428+ 0	2.5115- 2	5.2268- 1					6.0000- 5	1.0000-13			2.9830- 1
4.0000+ 5 ~ 7.0000+ 5	7.3154+ 0	6.9809+ 0	5.1940- 1	4.1377- 1					6.0000- 5	2.4878-13			5.7741- 1
7.0000+ 5 ~ 1.0000+ 6	7.6629+ 0	6.2068+ 0	9.5187- 1	3.9502- 1					6.0000- 5	6.5637-13			4.4662- 1
1.0000+ 6 ~ 2.0000+ 6	7.6204+ 0	6.4746+ 0	1.7290+ 0	3.1670- 1			2.4019-20		6.6476- 5	8.0498-12			5.8976- 1
2.0000+ 6 ~ 4.0000+ 6	6.4044+ 0	5.9286+ 0	2.2909+ 0	1.7414- 1			2.5368-14		9.8523- 5	1.2352- 9			7.2356- 1
4.0000+ 6 ~ 7.0000+ 6	5.2314+ 0	2.7467+ 0	2.4447+ 0	3.8500- 2			3.5393- 8		2.2944- 4	4.5549- 7			7.3571- 1
7.0000+ 6 ~ 1.0000+ 7	6.1306+ 0	2.7189+ 0	2.3171+ 0	3.4720- 3	8.7814- 2		2.8287- 4	5.6645-17	4.0190- 4	9.7783- 6	5.6198-12	1.3865-17	7.8494- 1
1.0000+ 7 ~ 2.0000+ 7	5.6678+ 0	3.3816+ 0	5.9197- 1	1.1424- 3	1.3121+ 0	3.6997- 1	1.6659- 2	1.7023- 3	4.3665- 3	2.7947- 3	3.6967- 3	7.4206- 4	8.8076- 1

^{154}Gd (6402)

CROSS SECTION

MATERIAL =6402

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	2.7406+ 2	7.3766+ 0		2.6669+ 2					0.0000+ 0	0.0000+ 0			4.3688- 3
1.0000- 2 ~ 2.0000- 2	1.2062+ 2	7.3663+ 0		1.1316+ 2					0.0000+ 0	0.0000+ 0			4.3688- 3
2.0000- 2 ~ 4.0000- 2	8.6616+ 1	7.3609+ 0		7.9266+ 1					0.0000+ 0	0.0000+ 0			4.3688- 3
4.0000- 2 ~ 7.0000- 2	6.4869+ 1	7.3265+ 0		5.7538+ 1					0.0000+ 0	0.0000+ 0			4.3688- 3
7.0000- 2 ~ 1.0000- 1	5.2357+ 1	7.2957+ 0		4.6062+ 1					0.0000+ 0	0.0000+ 0			4.3688- 3
1.0000- 1 ~ 2.0000- 1	4.0192+ 1	7.2393+ 0		3.2959+ 1					0.0000+ 0	0.0000+ 0			4.3688- 3
2.0000- 1 ~ 4.0000- 1	2.8492+ 1	7.0986+ 0		2.1392+ 1					0.0000+ 0	0.0000+ 0			4.3688- 3
4.0000- 1 ~ 7.0000- 1	2.0606+ 1	6.9025+ 0		1.3705+ 1					0.0000+ 0	0.0000+ 0			4.3688- 3
7.0000- 1 ~ 1.0000+ 0	1.6119+ 1	6.6997+ 0		9.4189+ 0					0.0000+ 0	0.0000+ 0			4.3688- 3
1.0000+ 0 ~ 2.0000+ 0	1.1659+ 1	6.3611+ 0		6.4918+ 0					0.0000+ 0	0.0000+ 0			4.3688- 3
2.0000+ 0 ~ 4.0000+ 0	8.2716+ 0	5.8446+ 0		2.4271+ 0					0.0000+ 0	0.0000+ 0			4.3688- 3
4.0000+ 0 ~ 7.0000+ 0	6.4544+ 0	5.3278+ 0		1.1266+ 0					0.0000+ 0	0.0000+ 0			4.3688- 3
7.0000+ 0 ~ 1.0000+ 1	5.7882+ 0	4.8623+ 0		9.2694- 1					0.0000+ 0	0.0000+ 0			4.3688- 3
1.0000+ 1 ~ 2.0000+ 1	1.7791+ 1	4.0572+ 0		1.3674+ 1					0.0000+ 0	0.0000+ 0			4.3718- 3
2.0000+ 1 ~ 4.0000+ 1	1.0599+ 2	1.6786+ 1		9.0205+ 1					0.0000+ 0	0.0000+ 0			4.3780- 3
4.0000+ 1 ~ 7.0000+ 1	6.9610+ 1	1.5564+ 1		5.3946+ 1					0.0000+ 0	0.0000+ 0			4.3907- 3
7.0000+ 1 ~ 1.0000+ 2	8.7218+ 0	3.7080+ 0		3.0138+ 0					0.0000+ 0	0.0000+ 0			4.4009- 3
1.0000+ 2 ~ 2.0000+ 2	1.3779+ 2	7.4534+ 1		8.3259- 1					0.0000+ 0	0.0000+ 0			4.4433- 3
2.0000+ 2 ~ 4.0000+ 2	2.5853+ 1	1.2874+ 1		1.3278+ 1					0.0000+ 0	0.0000+ 0			4.5966- 3
4.0000+ 2 ~ 7.0000+ 2	3.2980+ 1	2.1222+ 1		1.1668+ 1					0.0000+ 0	0.0000+ 0			4.7822- 3
7.0000+ 2 ~ 1.0000+ 3	5.1103+ 1	4.0366+ 1		1.0737+ 1					0.0000+ 0	0.0000+ 0			4.9021- 3
1.0000+ 3 ~ 2.0000+ 3	2.3613+ 1	1.7677+ 1		5.9358+ 0					0.0000+ 0	0.0000+ 0			5.6141- 3
2.0000+ 3 ~ 4.0000+ 3	2.0573+ 1	1.7639+ 1		3.0337+ 0					0.0000+ 0	0.0000+ 0			7.3220- 3
4.0000+ 3 ~ 7.0000+ 3	1.7091+ 1	1.6061+ 1		2.0306+ 0					0.0000+ 0	0.0000+ 0			1.0712- 2
7.0000+ 3 ~ 1.0000+ 4	1.4814+ 1	1.3303+ 1		1.5107+ 0					0.0000+ 0	0.0000+ 0			1.5002- 2
1.0000+ 4 ~ 2.0000+ 4	1.2604+ 1	1.1491+ 1		1.1127+ 0					0.0000+ 0	0.0000+ 0			2.6611- 2
2.0000+ 4 ~ 4.0000+ 4	1.0537+ 1	9.7197+ 0		8.1719- 1					0.0000+ 0	0.0000+ 0			5.1362- 2
4.0000+ 4 ~ 7.0000+ 4	9.1376+ 0	8.4819+ 0		6.6666- 1					0.0000+ 0	0.0000+ 0			9.2686- 2
7.0000+ 4 ~ 1.0000+ 5	8.3111+ 0	7.7306+ 0		5.8059- 1					0.0000+ 0	0.0000+ 0			1.3557- 1
1.0000+ 5 ~ 2.0000+ 5	7.5076+ 0	7.0093+ 0	1.2658- 1	4.7145- 1					4.2490-10	7.2330-14			2.0896- 1
2.0000+ 5 ~ 4.0000+ 5	7.1900+ 0	6.9567+ 0	4.7538- 1	3.5673- 1					1.8998- 9	2.8232-13			3.1175- 1
4.0000+ 5 ~ 7.0000+ 5	7.9145+ 0	6.1559+ 0	8.1766- 1	3.4127- 1					6.8088- 9	6.3292-13			5.9100- 1
7.0000+ 5 ~ 1.0000+ 6	7.5623+ 0	6.0142+ 0	1.2093+ 0	3.3671- 1					7.1968- 9	1.0882-12			4.6074- 1
1.0000+ 6 ~ 2.0000+ 6	7.6154+ 0	5.3823+ 0	1.8498+ 0	2.8705- 1					3.7200- 8	1.0862-12			5.9907- 1
2.0000+ 6 ~ 4.0000+ 6	8.4040+ 0	3.9192+ 0	2.2935+ 0	1.8307- 1			9.4788-16		1.9753- 8	8.1528-12			7.2476- 1
4.0000+ 6 ~ 7.0000+ 6	6.2311+ 0	2.7456+ 0	2.4192+ 0	7.0388- 2			5.1823- 7		5.7059- 8	5.1487- 9			7.3562- 1
7.0000+ 6 ~ 1.0000+ 7	6.1302+ 0	2.7388+ 0	2.2684+ 0	1.9008- 2	1.0944- 1		1.4663- 4	6.7136-18	1.2446- 4	3.7780- 6	1.4607-12	4.0092-21	7.8494- 1
1.0000+ 7 ~ 2.0000+ 7	5.6876+ 0	3.3633+ 0	4.1034- 1	1.4163- 3	1.5001+ 0	3.8260- 1	9.9097- 3	1.3886- 3	3.8615- 3	1.9042- 3	2.1802- 3	4.3838- 4	8.8076- 1

MATERIAL =8409 CROSS SECTION ^{155}Gd (6403)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.6893+ 6	4.4463+ 1		1.6889+ 6			0.0000+ 0		2.1331- 4	0.0000+ 0			4.3406- 3
1.0000- 2 ~ 2.0000- 2	7.6583+ 4	6.2521+ 1		7.6531+ 4			0.0000+ 0		1.0274- 4	0.0000+ 0			4.3406- 3
2.0000- 2 ~ 4.0000- 2	6.6156+ 4	6.9679+ 1		6.6096+ 4			0.0000+ 0		7.6311- 5	0.0000+ 0			4.3406- 3
4.0000- 2 ~ 7.0000- 2	3.9125+ 4	5.4932+ 1		3.9070+ 4			0.0000+ 0		4.4397- 5	0.0000+ 0			4.3406- 3
7.0000- 2 ~ 1.0000- 1	1.5892+ 4	3.9174+ 1		1.5852+ 4			0.0000+ 0		2.1282- 5	0.0000+ 0			4.3406- 3
1.0000- 1 ~ 2.0000- 1	4.8225+ 3	2.0247+ 1		4.8022+ 3			0.0000+ 0		8.4480- 6	0.0000+ 0			4.3406- 3
2.0000- 1 ~ 4.0000- 1	8.4063+ 2	6.7902+ 0		8.3184+ 2			0.0000+ 0		1.1063- 6	0.0000+ 0			4.3406- 3
4.0000- 1 ~ 7.0000- 1	1.8818+ 2	4.9990+ 0		1.8115+ 2			0.0000+ 0		2.4706- 7	0.0000+ 0			4.3406- 3
7.0000- 1 ~ 1.0000+ 0	7.8760+ 1	3.6462+ 0		7.6116+ 1			0.0000+ 0		9.9478- 6	0.0000+ 0			4.3406- 3
1.0000+ 0 ~ 2.0000+ 0	1.9187+ 2	3.0377+ 0		1.8884+ 2			0.0000+ 0		2.3949- 7	0.0000+ 0			4.3406- 3
2.0000+ 0 ~ 4.0000+ 0	9.3016+ 2	2.6963+ 1		9.0420+ 2			0.0000+ 0		1.1879- 6	0.0000+ 0			4.3406- 3
4.0000+ 0 ~ 7.0000+ 0	2.8876+ 2	6.7584+ 0		2.8009+ 2			0.0000+ 0		5.9629- 7	0.0000+ 0			4.3406- 3
7.0000+ 0 ~ 1.0000+ 1	1.3848+ 2	5.4652+ 0		1.3301+ 2			0.0000+ 0		1.4102- 7	0.0000+ 0			4.3406- 3
1.0000+ 1 ~ 2.0000+ 1	1.2586+ 2	5.9925+ 0		1.1967+ 2			0.0000+ 0		2.4784- 7	0.0000+ 0			4.3542- 3
2.0000+ 1 ~ 4.0000+ 1	2.2731+ 2	2.2703+ 1		2.0481+ 2			0.0000+ 0		2.2571- 7	0.0000+ 0			4.3821- 3
4.0000+ 1 ~ 7.0000+ 1	1.2414+ 2	1.4656+ 1		1.0969+ 2			0.0000+ 0		1.0230- 7	0.0000+ 0			4.4266- 3
7.0000+ 1 ~ 1.0000+ 2	4.9699+ 1	7.0556+ 0		3.8849+ 1			0.0000+ 0		4.9695- 8	0.0000+ 0			4.4616- 3
1.0000+ 2 ~ 2.0000+ 2	8.1702+ 1	1.5506+ 1		8.6193+ 1			0.0000+ 0		7.3985- 8	0.0000+ 0			4.5765- 3
2.0000+ 2 ~ 4.0000+ 2	5.4577+ 1	1.1990+ 1		4.2587+ 1			0.0000+ 0		3.0000- 8	0.0000+ 0			4.8075- 3
4.0000+ 2 ~ 7.0000+ 2	4.1660+ 1	1.1647+ 1		3.0003+ 1			0.0000+ 0		3.0000- 8	0.0000+ 0			5.3043- 3
7.0000+ 2 ~ 1.0000+ 3	3.4487+ 1	1.1341+ 1		2.3156+ 1			0.0000+ 0		3.0000- 8	0.0000+ 0			5.7076- 3
1.0000+ 3 ~ 2.0000+ 3	2.7593+ 1	1.0888+ 1		1.6706+ 1			0.0000+ 0		3.0000- 8	0.0000+ 0			6.7987- 3
2.0000+ 3 ~ 4.0000+ 3	2.1214+ 1	1.0246+ 1		1.0966+ 1			0.0000+ 0		3.0000- 8	0.0000+ 0			9.4394- 3
4.0000+ 3 ~ 7.0000+ 3	1.7132+ 1	9.8271+ 0		7.5044+ 0			0.0000+ 0		3.0000- 8	0.0000+ 0			1.4173- 2
7.0000+ 3 ~ 1.0000+ 4	1.4654+ 1	9.1509+ 0		5.7092+ 0			0.0000+ 0		3.0000- 8	0.0000+ 0			1.9812- 2
1.0000+ 4 ~ 2.0000+ 4	1.2643+ 1	8.5222+ 0		4.1211+ 0			0.0000+ 0		3.0000- 8	0.0000+ 0			3.2899- 2
2.0000+ 4 ~ 4.0000+ 4	1.0575+ 1	7.7418+ 0		2.8333+ 0			0.0000+ 0		3.0000- 8	0.0000+ 0			6.3300- 2
4.0000+ 4 ~ 7.0000+ 4	9.1592+ 0	7.0260+ 0	1.4662- 2	2.1167+ 0			0.0000+ 0		3.0000- 8	0.0000+ 0			1.1022- 1
7.0000+ 4 ~ 1.0000+ 6	8.2064+ 0	6.4230+ 0	1.8273- 1	1.6804+ 0			0.0000+ 0		3.0000- 8	0.0000+ 0			1.6124- 1
1.0000+ 5 ~ 2.0000+ 5	7.6074+ 0	6.0225+ 0	5.0920- 1	1.0738+ 0			1.6993-21		3.5765- 8	0.0000+ 0			2.4733- 1
2.0000+ 5 ~ 4.0000+ 5	7.1058+ 0	5.5518+ 0	9.9482- 1	6.3684- 1			6.7972-21		8.0595- 8	0.0000+ 0			3.6595- 1
4.0000+ 5 ~ 7.0000+ 5	7.3098+ 0	5.9243+ 0	1.8421+ 0	3.4307- 1			2.4517-20		1.2342- 7	0.0000+ 0			4.6828- 1
7.0000+ 5 ~ 1.0000+ 6	7.5626+ 0	6.2820+ 0	2.0375+ 0	2.4284- 1			2.1311-19		1.9064- 7	0.0000+ 0			5.4091- 1
1.0000+ 6 ~ 2.0000+ 6	7.5147+ 0	6.0217+ 0	2.3403+ 0	1.6216- 1			1.2906-16		6.3269- 7	0.0000+ 0			6.6660- 1
2.0000+ 6 ~ 4.0000+ 6	8.4054+ 0	5.8987+ 0	2.4379+ 0	6.5481- 2			2.4071-10		3.4768- 6	2.3594-13			7.3918- 1
4.0000+ 6 ~ 7.0000+ 6	5.2320+ 0	2.7524+ 0	2.4569+ 0	1.7512- 2	4.0544- 3		3.2437- 5		8.3319- 8	1.1219-10			7.3822- 1
7.0000+ 6 ~ 1.0000+ 7	6.1302+ 0	2.7220+ 0	1.6568+ 0	1.8478- 3	7.4621- 1		2.0177- 4	2.5497-18	4.5592- 5	6.4734- 8	7.9812-11	2.6126-15	7.6492- 1
1.0000+ 7 ~ 2.0000+ 7	5.6678+ 0	3.3828+ 0	4.8312- 1	1.1003- 3	1.4833+ 0	2.9927- 1	7.3764- 3	1.2972- 3	2.7430- 3	8.2967- 4	4.4468- 3	7.7848- 4	8.8876- 1

MATERIAL =8404 CROSS SECTION ^{156}Gd (6404)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.1569+ 1	4.8040+ 0		6.7661+ 0					0.0000+ 0				4.3127- 3
1.0000- 2 ~ 2.0000- 2	7.6958+ 0	4.8038+ 0		2.8919+ 0					0.0000+ 0				4.3127- 3
2.0000- 2 ~ 4.0000- 2	6.8616+ 0	4.8036+ 0		2.0480+ 0					0.0000+ 0				4.3127- 3
4.0000- 2 ~ 7.0000- 2	6.5063+ 0	4.8031+ 0		1.6033+ 0					0.0000+ 0				4.3127- 3
7.0000- 2 ~ 1.0000- 1	6.0065+ 0	4.8026+ 0		1.2040+ 0					0.0000+ 0				4.3127- 3
1.0000- 1 ~ 2.0000- 1	5.7195+ 0	4.8019+ 0		9.1821- 1					0.0000+ 0				4.3127- 3
2.0000- 1 ~ 4.0000- 1	5.4601+ 0	4.7984+ 0		6.6166- 1					0.0000+ 0				4.3127- 3
4.0000- 1 ~ 7.0000- 1	5.2764+ 0	4.7936+ 0		4.8274- 1					0.0000+ 0				4.3127- 3
7.0000- 1 ~ 1.0000+ 0	5.1779+ 0	4.7878+ 0		3.9002- 1					0.0000+ 0				4.3127- 3
1.0000+ 0 ~ 2.0000+ 0	5.0774+ 0	4.7751+ 0		3.0236- 1					0.0000+ 0				4.3127- 3
2.0000+ 0 ~ 4.0000+ 0	4.9867+ 0	4.7444+ 0		2.2428- 1					0.0000+ 0				4.3127- 3
4.0000+ 0 ~ 7.0000+ 0	4.8593+ 0	4.6893+ 0		1.7996- 1					0.0000+ 0				4.3127- 3
7.0000+ 0 ~ 1.0000+ 1	4.7779+ 0	4.8149+ 0		1.6301- 1					0.0000+ 0				4.3127- 3
1.0000+ 1 ~ 2.0000+ 1	4.5763+ 0	4.3954+ 0		1.8086- 1					0.0000+ 0				4.3149- 3
2.0000+ 1 ~ 4.0000+ 1	9.1796+ 1	1.8632+ 1		7.3264+ 1					0.0000+ 0				4.3198- 3
4.0000+ 1 ~ 7.0000+ 1	4.4938+ 0	4.1334+ 0		3.6046- 1					0.0000+ 0				4.3304- 3
7.0000+ 1 ~ 1.0000+ 2	1.4093+ 2	5.7572+ 1		8.3363+ 1					0.0000+ 0				4.3390- 3
1.0000+ 2 ~ 2.0000+ 2	8.9910+ 1	4.3695+ 1		2.6025+ 1					0.0000+ 0				4.3762- 3
2.0000+ 2 ~ 4.0000+ 2	5.2534+ 1	3.7974+ 1		1.4560+ 1					0.0000+ 0				4.4620- 3
4.0000+ 2 ~ 7.0000+ 2	1.8153+ 1	1.2209+ 1		5.9433+ 0					0.0000+ 0				4.6665- 3
7.0000+ 2 ~ 1.0000+ 3	8.7819+ 1	7.5640+ 1		1.1979+ 1					0.0000+ 0				4.8712- 3
1.0000+ 3 ~ 2.0000+ 3	3.0099+ 1	2.5272+ 1		4.8267+ 0					0.0000+ 0				5.4685- 3
2.0000+ 3 ~ 4.0000+ 3	1.9874+ 1	1.7858+ 1		2.0168+ 0					0.0000+ 0				7.1059- 3
4.0000+ 3 ~ 7.0000+ 3	1.6266+ 1	1.4876+ 1		1.3798+ 0					0.0000+ 0				1.0391- 2
7.0000+ 3 ~ 1.0000+ 4	1.4264+ 1	1.3240+ 1		1.0442+ 0					0.0000+ 0				1.4572- 2
1.0000+ 4 ~ 2.0000+ 4	1.2357+ 1	1.1667+ 1		7.8994- 1					0.0000+ 0				2.4953- 2
2.0000+ 4 ~ 4.0000+ 4	1.0487+ 1	9.8993+ 0		5.8742- 1					0.0000+ 0				5.0174- 2
4.0000+ 4 ~ 7.0000+ 4	9.1812+ 0	8.7092+ 0		4.7205- 1					0.0000+ 0				9.0882- 2
7.0000+ 4 ~ 1.0000+ 6	8.3609+ 0	7.9649+ 0	1.3980- 2	4.0049- 1					0.0000+ 0				1.3288- 1
1.0000+ 5 ~ 2.0000+ 5	7.6117+ 0	7.0794+ 0	2.5384- 1	2.7634- 1					7.7324-11	2.7448-23			2.0723- 1
2.0000+ 5 ~ 4.0000+ 5	7.2018+ 0	6.4094+ 0	5.8084- 1	2.1118- 1					1.8361-10	1.6947-19			3.0801- 1
4.0000+ 5 ~ 7.0000+ 5	7.3175+ 0	6.1854+ 0	9.2986- 1	1.9472- 1					2.9591-10	2.7848-18			3.8025- 1
7.0000+ 5 ~ 1.0000+ 6	7.5626+ 0	6.1617+ 0	1.1995+ 0	2.1132- 1					5.4435-10	3.8343-18			4.6028- 1
1.0000+ 6 ~ 2.0000+ 6	7.6208+ 0	6.4862+ 0	1.8463+ 0	1.8632- 1					2.4483- 9	4.2894-15			5.6802- 1
2.0000+ 6 ~ 4.0000+ 6	8.4051+ 0	5.9347+ 0	2.3548+ 0	1.0715- 1			4.6192-18		1.2408- 7	6.8564-14			7.3237- 1
4.0000+ 6 ~ 7.0000+ 6	5.2318+ 0	2.7486+ 0	2.4566+ 0	2.6904- 2			5.6609- 8		8.5120- 8	9.2794-11			7.9857- 1
7.0000+ 6 ~ 1.0000+ 7	6.1301+ 0	2.7243+ 0	2.2634+ 0	3.1004- 3	1.3715- 1		7.1208- 5	2.7769-19	3.7662- 5	1.0094- 8	1.6344-14	2.9142-20	7.8492- 1
1.0000+ 7 ~ 2.0000+ 7	6676+ 0	3.3692+ 0	6.1548- 1	1.1422- 3	1.2830+ 0	3.7938- 1	9.0666- 3	9.9956- 4	4.8538- 3	7.4879- 4	2.2608- 3	4.8228- 4	8.8876- 1

MATERIAL =6405 CROSS SECTION ^{157}Gd (6405)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	6.2818+ 6	8.0610+ 2		6.2737+ 6					1.1792- 3				4.2851- 3
1.0000- 2 ~ 2.0000- 2	3.1163+ 6	9.2170+ 2		3.1071+ 6					6.8398- 4				4.2851- 3
2.0000- 2 ~ 4.0000- 2	2.3786+ 6	1.0091+ 3		2.3686+ 6					4.4615- 4				4.2851- 3
4.0000- 2 ~ 7.0000- 2	1.4885+ 5	8.8564+ 2		1.4778+ 5					2.7778- 4				4.2851- 3
7.0000- 2 ~ 1.0000- 1	7.2477+ 4	6.4487+ 2		7.1932+ 4					1.3620- 4				4.2851- 3
1.0000- 1 ~ 2.0000- 1	2.1440+ 4	2.1609+ 2		2.1229+ 4					3.9890- 5				4.2851- 3
2.0000- 1 ~ 4.0000- 1	3.6138+ 3	6.6633+ 1		3.4672+ 3					6.4416- 6				4.2851- 3
4.0000- 1 ~ 7.0000- 1	8.7987+ 2	1.8587+ 1		8.8108+ 2					1.2711- 6				4.2851- 3
7.0000- 1 ~ 1.0000+ 0	2.1122+ 2	9.1940+ 0		2.0202+ 2					3.7277- 7				4.2851- 3
1.0000+ 0 ~ 2.0000+ 0	6.3042+ 1	4.5874+ 0		5.8455+ 1					1.1548- 7				4.2851- 3
2.0000+ 0 ~ 4.0000+ 0	1.6610+ 2	3.2479+ 0		1.6286+ 2					3.3468- 7				4.2851- 3
4.0000+ 0 ~ 7.0000+ 0	5.5843+ 0	1.9376+ 0		5.6467+ 0					6.7709- 8				4.2851- 3
7.0000+ 0 ~ 1.0000+ 1	3.4090+ 0	1.3913+ 0		2.0177+ 0					3.5292- 9				4.2851- 3
1.0000+ 1 ~ 2.0000+ 1	1.9313+ 2	1.8195+ 1		1.7693+ 2					3.6880- 7				4.2901- 3
2.0000+ 1 ~ 4.0000+ 1	8.7376+ 1	8.9907+ 0		7.8985+ 1					9.5567- 8				4.3006- 3
4.0000+ 1 ~ 7.0000+ 1	1.1686+ 2	2.1693+ 1		9.6171+ 1					1.3940- 7				4.3194- 3
7.0000+ 1 ~ 1.0000+ 2	4.9065+ 1	7.1026+ 0		4.1982+ 1					1.0250- 7				4.3345- 3
1.0000+ 2 ~ 2.0000+ 2	1.2185+ 2	4.6527+ 1		7.5324+ 1					1.2367- 7				4.3916- 3
2.0000+ 2 ~ 4.0000+ 2	5.1195+ 1	2.5358+ 1		2.5837+ 1					4.7788- 8				4.5149- 3
4.0000+ 2 ~ 7.0000+ 2	3.8913+ 1	2.0886+ 1		1.9017+ 1					3.6308- 8				4.8111- 3
7.0000+ 2 ~ 1.0000+ 3	3.3118+ 1	1.9292+ 1		1.3885+ 1					2.6914- 8				5.0535- 3
1.0000+ 3 ~ 2.0000+ 3	2.6601+ 1	1.7208+ 1		9.3931+ 0					1.9332- 8				5.7824- 3
2.0000+ 3 ~ 4.0000+ 3	2.0545+ 1	1.4883+ 1		5.8814+ 0					1.2095- 8				7.6870- 3
4.0000+ 3 ~ 7.0000+ 3	1.6570+ 1	1.3016+ 1		3.6539+ 0					8.7317- 9				1.1369- 2
7.0000+ 3 ~ 1.0000+ 4	1.4508+ 1	1.1821+ 1		2.6875+ 0					6.6558- 9				1.5926- 2
1.0000+ 4 ~ 2.0000+ 4	1.2409+ 1	1.0503+ 1		1.9058+ 0					5.0125- 9				2.7040- 2
2.0000+ 4 ~ 4.0000+ 4	1.0447+ 1	9.1385+ 0		1.3062+ 0					3.6010- 9				5.3672- 2
4.0000+ 4 ~ 7.0000+ 4	9.0625+ 0	8.0353+ 0	9.5693- 2	9.3209- 1					2.6842- 9				9.6083- 2
7.0000+ 4 ~ 1.0000+ 5	8.2708+ 0	7.1821+ 0	4.8763- 1	6.3070- 1					2.1693- 9				1.4621- 1
1.0000+ 5 ~ 2.0000+ 5	7.6042+ 0	6.4571+ 0	7.2245- 1	4.2418- 1					2.1060- 9				2.2621- 1
2.0000+ 5 ~ 4.0000+ 5	7.1870+ 0	5.8844+ 0	1.0304+ 0	2.7188- 1					2.3082- 9				3.3817- 1
4.0000+ 5 ~ 7.0000+ 5	7.3095+ 0	5.8443+ 0	1.4892+ 0	1.9689- 1					2.6429- 9	2.6282-21			4.2589- 1
7.0000+ 5 ~ 1.0000+ 6	7.6624+ 0	6.4062+ 0	2.0225+ 0	1.3367- 1				0.0000+ 0	4.1618- 9	6.2424-18			5.1208- 1
1.0000+ 6 ~ 2.0000+ 6	7.6137+ 0	4.9993+ 0	2.4269+ 0	8.7048- 2				2.9493-20	1.4891- 8	1.6666-16			6.4236- 1
2.0000+ 6 ~ 4.0000+ 6	8.4043+ 0	3.8528+ 0	2.5079+ 0	3.8522- 2				2.1035-14	3.0068- 7	1.0724-14			7.3811- 1
4.0000+ 6 ~ 7.0000+ 6	5.2313+ 0	2.7525+ 0	2.4590+ 0	8.9595- 3	1.2328- 2			3.2458- 7	1.8819- 6	7.3687-12			7.3808- 1
7.0000+ 6 ~ 1.0000+ 7	5.1269+ 0	2.7186+ 0	1.4621+ 0	1.1308- 3	8.6647- 1		4.2370-20	7.6722- 6	1.3912- 6	3.1631- 9	1.9368-12	2.0988-16	7.8493- 1
1.0000+ 7 ~ 2.0000+ 7	5.6672+ 0	3.3824+ 0	6.0165- 1	1.0907- 3	1.4301+ 0	3.3673- 1		6.7795- 3	9.6234- 4	2.0533- 3	4.6634- 4	3.8699- 3	7.9920- 4	8.8876- 1

MATERIAL =6406 CROSS SECTION ^{158}Gd (6406)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 5 ~ 1.0000- 2	1.1679+ 1	3.8686+ 0		7.7207+ 0					0.0000+ 0				4.2580- 3
1.0000- 2 ~ 2.0000- 2	7.1584+ 0	3.8683+ 0		3.3001+ 0					0.0000+ 0				4.2580- 3
2.0000- 2 ~ 4.0000- 2	6.1919+ 0	3.8680+ 0		2.3340+ 0					0.0000+ 0				4.2580- 3
4.0000- 2 ~ 7.0000- 2	5.5727+ 0	3.8574+ 0		1.7153+ 0					0.0000+ 0				4.2580- 3
7.0000- 2 ~ 1.0000- 1	5.2317+ 0	3.8668+ 0		1.3749+ 0					0.0000+ 0				4.2580- 3
1.0000- 1 ~ 2.0000- 1	4.9012+ 0	3.8554+ 0		1.0458+ 0					0.0000+ 0				4.2580- 3
2.0000- 1 ~ 4.0000- 1	4.5946+ 0	3.8623+ 0		7.4219- 1					0.0000+ 0				4.2580- 3
4.0000- 1 ~ 7.0000- 1	4.3991+ 0	3.8471+ 0		5.4904- 1					0.0000+ 0				4.2580- 3
7.0000- 1 ~ 1.0000+ 0	4.2828+ 0	3.8408+ 0		4.4204- 1					0.0000+ 0				4.2580- 3
1.0000+ 0 ~ 2.0000+ 0	4.1898+ 0	3.8259+ 0		3.4286- 1					0.0000+ 0				4.2580- 3
2.0000+ 0 ~ 4.0000+ 0	4.0493+ 0	3.7940+ 0		2.5531- 1					0.0000+ 0				4.2580- 3
4.0000+ 0 ~ 7.0000+ 0	3.9475+ 0	3.7344+ 0		2.1312- 1					0.0000+ 0				4.2580- 3
7.0000+ 0 ~ 1.0000+ 1	3.8658+ 0	3.6507+ 0		2.1505- 1					0.0000+ 0				4.2580- 3
1.0000+ 1 ~ 2.0000+ 1	3.9777+ 0	3.2314+ 0		7.4626- 1					0.0000+ 0				4.2598- 3
2.0000+ 1 ~ 4.0000+ 1	6.0795+ 1	7.6832+ 0		6.3202+ 1					0.0000+ 0				4.2633- 3
4.0000+ 1 ~ 7.0000+ 1	3.7954+ 0	3.7573+ 0		2.8104- 2					0.0000+ 0				4.2719- 3
7.0000+ 1 ~ 1.0000+ 2	3.5848+ 0	3.5367+ 0		2.7878- 2					0.0000+ 0				4.2789- 3
1.0000+ 2 ~ 2.0000+ 2	3.6329+ 0	3.2623+ 0		3.7064- 1					0.0000+ 0				4.3114- 3
2.0000+ 2 ~ 4.0000+ 2	1.6937+ 1	9.7128+ 0		7.2241+ 0					0.0000+ 0				4.3881- 3
4.0000+ 2 ~ 7.0000+ 2	3.5602+ 1	2.8199+ 1		7.4029+ 0					0.0000+ 0				4.5950- 3
7.0000+ 2 ~ 1.0000+ 3	3.6553+ 1	3.3740+ 1		2.7929+ 0					0.0000+ 0				4.7658- 3
1.0000+ 3 ~ 2.0000+ 3	2.2398+ 1	1.8538+ 1		2.8505+ 0					0.0000+ 0				5.3309- 3
2.0000+ 3 ~ 4.0000+ 3	1.7728+ 1	1.6884+ 1		1.0435+ 0					0.0000+ 0				6.9017- 3
4.0000+ 3 ~ 7.0000+ 3	1.3244+ 1	1.2766+ 1		4.7744- 1					0.0000+ 0				1.0087- 2
7.0000+ 3 ~ 1.0000+ 4	1.3163+ 1	1.2622+ 1		5.4098- 1					0.0000+ 0				1.4156- 2
1.0000+ 4 ~ 2.0000+ 4	1.1521+ 1	1.1102+ 1		4.1881- 1					0.0000+ 0				2.4277- 2
2.0000+ 4 ~ 4.0000+ 4	9.9655+ 0	9.6556+ 0		3.1004- 1					0.0000+ 0				4.8886- 2
4.0000+ 4 ~ 7.0000+ 4	8.9098+ 0	8.5620+ 0		2.4759- 1					0.0000+ 0				8.8442- 2
7.0000+ 4 ~ 1.0000+ 5	8.2723+ 0	8.0260+ 0	4.9676- 2	1.9768- 1					0.0000+ 0				1.3006- 1
1.0000+ 5 ~ 2.0000+ 5	7.6112+ 0	7.1768+ 0	9.1774- 1	1.1567- 1					1.8881-12				2.0452- 1
2.0000+ 5 ~ 4.0000+ 5	7.2012+ 0	6.4792+ 0	8.4470- 1	8.2881- 2					7.4723-12				3.0595- 1
4.0000+ 5 ~ 7.0000+ 5	7.3175+ 0	6.2434+ 0	1.0015+ 0	7.2772- 2					1.5999-11	6.2045-20			3.8521- 1
7.0000+ 5 ~ 1.0000+ 6	7.5620+ 0	6.2002+ 0	1.2836+ 0	7.8328- 2					2.8436-11	6.7567-18			4.4872- 1
1.0000+ 6 ~ 2.0000+ 6	7.5200+ 0	6.4869+ 0	1.9744+ 0	5.9502- 2					1.1696-10	9.4896-17			5.8866- 1
2.0000+ 6 ~ 4.0000+ 6	8.4048+ 0	3.9352+ 0	2.4384+ 0	2.8297- 2			2.8650-21		5.9558- 9	8.3845-15			7.2295- 1
4.0000+ 6 ~ 7.0000+ 6	5.2315+ 0	2.7467+ 0	2.4787+ 0	5.8888- 3			9.0177-12		8.0444- 7	5.7969-12			7.3660- 1
7.0000+ 6 ~ 1.0000+ 7	5.1298+ 0	2.7418+ 0	2.0239+ 0	1.1866- 3	3.6033- 1		7.1870- 6	1.6132-21	1.1173- 6	3.6054- 9	1.7238-18	1.6052-19	7.8493- 1
1.0000+ 7 ~ 2.0000+ 7	5.6673+ 0	3.3720+ 0	4.6792- 1	1.0929- 3	1.3138+ 0	5.0099- 1	3.6302- 3	7.2830- 4	4.0566- 3	4.2439- 4	1.6615- 3	6.0156- 4	8.8876- 1

MATERIAL =6407 CROSS SECTION

^{160}Gd (6407)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	6.6700+ 0	4.1060+ 0		2.4650+ 0					0.0000+ 0				4.2047- 3
1.0000- 2 ~ 2.0000- 2	5.1680+ 0	4.1049+ 0		1.0631+ 0					0.0000+ 0				4.2047- 3
2.0000- 2 ~ 4.0000- 2	4.8492+ 0	4.1046+ 0		7.4443- 1					0.0000+ 0				4.2047- 3
4.0000- 2 ~ 7.0000- 2	4.6516+ 0	4.1046+ 0		5.4701- 1					0.0000+ 0				4.2047- 3
7.0000- 2 ~ 1.0000- 1	4.6418+ 0	4.1044+ 0		4.3730- 1					0.0000+ 0				4.2047- 3
1.0000- 1 ~ 2.0000- 1	4.4353+ 0	4.1040+ 0		3.3139- 1					0.0000+ 0				4.2047- 3
2.0000- 1 ~ 4.0000- 1	4.3364+ 0	4.1029+ 0		2.3347- 1					0.0000+ 0				4.2047- 3
4.0000- 1 ~ 7.0000- 1	4.2715+ 0	4.1012+ 0		1.7027- 1					0.0000+ 0				4.2047- 3
7.0000- 1 ~ 1.0000+ 0	4.2344+ 0	4.0991+ 0		1.3624- 1					0.0000+ 0				4.2047- 3
1.0000+ 0 ~ 2.0000+ 0	4.1957+ 0	4.0848+ 0		1.0098- 1					0.0000+ 0				4.2047- 3
2.0000+ 0 ~ 4.0000+ 0	4.1536+ 0	4.0860+ 0		6.8592- 2					0.0000+ 0				4.2047- 3
4.0000+ 0 ~ 7.0000+ 0	4.1169+ 0	4.0598+ 0		4.7301- 2					0.0000+ 0				4.2047- 3
7.0000+ 0 ~ 1.0000+ 1	4.0878+ 0	4.0524+ 0		3.5192- 2					0.0000+ 0				4.2047- 3
1.0000+ 1 ~ 2.0000+ 1	4.0493+ 0	4.0198+ 0		2.3661- 2					0.0000+ 0				4.2060- 3
2.0000+ 1 ~ 4.0000+ 1	3.9715+ 0	3.9678+ 0		1.3677- 2					0.0000+ 0				4.2093- 3
4.0000+ 1 ~ 7.0000+ 1	3.8868+ 0	3.8772+ 0		8.6236- 3					0.0000+ 0				4.2170- 3
7.0000+ 1 ~ 1.0000+ 2	3.8021+ 0	3.7950+ 0		7.0274- 3					0.0000+ 0				4.2234- 3
1.0000+ 2 ~ 2.0000+ 2	3.5878+ 0	3.5752+ 0		1.2604- 2					0.0000+ 0				4.2539- 3
2.0000+ 2 ~ 4.0000+ 2	6.4383+ 0	5.1579+ 0		9.2803+ 0					0.0000+ 0				4.3268- 3
4.0000+ 2 ~ 7.0000+ 2	8.4683+ 1	8.7018+ 1		7.5644+ 0					0.0000+ 0				4.6266- 3
7.0000+ 2 ~ 1.0000+ 3	7.2131+ 1	6.9099+ 1		3.0323+ 0					0.0000+ 0				4.6914- 3
1.0000+ 3 ~ 2.0000+ 3	4.2986+ 1	4.0818+ 1		2.1671+ 0					0.0000+ 0				5.2431- 3
2.0000+ 3 ~ 4.0000+ 3	2.3793+ 1	2.2997+ 1		7.9563- 1					0.0000+ 0				6.7842- 3
4.0000+ 3 ~ 7.0000+ 3	1.6001+ 1	1.4666+ 1		3.3648- 1					0.0000+ 0				9.9182- 3
7.0000+ 3 ~ 1.0000+ 4	1.3971+ 1	1.3674+ 1		2.9655- 1					0.0000+ 0				1.3925- 2
1.0000+ 4 ~ 2.0000+ 4	1.2136+ 1	1.1909+ 1		2.2732- 1					0.0000+ 0				2.3896- 2
2.0000+ 4 ~ 4.0000+ 4	1.0371+ 1	1.0205+ 1		1.6595- 1					0.0000+ 0				4.8175- 2
4.0000+ 4 ~ 7.0000+ 4	9.1193+ 0	8.9800+ 0		1.3930- 1					0.0000+ 0				8.7066- 2
7.0000+ 4 ~ 1.0000+ 5	8.3617+ 0	8.1881+ 0	8.7928- 2	8.6029- 2					0.0000+ 0				1.2667- 1
1.0000+ 5 ~ 2.0000+ 5	7.6116+ 0	7.2127+ 0	3.4765- 1	4.9431- 2					6.1668-14				2.0339- 1
2.0000+ 5 ~ 4.0000+ 5	7.2014+ 0	6.4953+ 0	6.7163- 1	9.4172- 2					2.4867-13				3.0475- 1
4.0000+ 5 ~ 7.0000+ 5	7.3181+ 0	6.2587+ 0	1.0298+ 0	2.9843- 2					6.4995-13				3.8423- 1
7.0000+ 5 ~ 1.0000+ 6	7.6623+ 0	6.2168+ 0	1.3140+ 0	3.2362- 2					1.0176-12				4.4646- 1
1.0000+ 6 ~ 2.0000+ 6	7.5199+ 0	5.5033+ 0	1.9903+ 0	2.5949- 2					4.6521-12	1.7595-17			5.6532- 1
2.0000+ 6 ~ 4.0000+ 6	6.4057+ 0	3.9683+ 0	2.4140+ 0	1.8938- 2					2.1388-10	1.0751-15			7.1726- 1
4.0000+ 6 ~ 7.0000+ 6	5.2921+ 0	2.7473+ 0	2.4606+ 0	9.0065- 3			6.3598-16		4.6829- 8	8.1339-13			7.3534- 1
7.0000+ 6 ~ 1.0000+ 7	5.1297+ 0	2.7311+ 0	1.7491+ 0	6.7467- 4	6.4560- 1		1.1876- 6		3.4025- 5	2.2602-10	9.8876-20	3.8784-20	7.6491- 1
1.0000+ 7 ~ 2.0000+ 7	5.6674+ 0	3.3808+ 0	4.8723- 1	1.0691- 3	1.3348+ 0	4.6029- 1	3.4467- 3	7.4017- 4	3.8866- 3	5.4067- 4	2.7777- 3	1.2954- 3	6.8876- 1

MATERIAL =6501 CROSS SECTION

^{159}Tb (6501)

ENERGY	TOTAL	ELASTIC	INELA	CAPTURE	(N,2N)	(N,3N)	(N,P)	(N,NP)	(N,A)	(N,NA)	(N,D)	(N,T)	MU-BAR
1.0000- 6 ~ 1.0000- 2	1.2672+ 2	2.5476+ 1		1.0124+ 2					0.0000+ 0				4.2312- 3
1.0000- 2 ~ 2.0000- 2	6.1437+ 1	2.2953+ 1		3.8484+ 1					0.0000+ 0				4.2312- 3
2.0000- 2 ~ 4.0000- 2	4.4223+ 1	2.0139+ 1		2.4090+ 1					0.0000+ 0				4.2312- 3
4.0000- 2 ~ 7.0000- 2	3.2167+ 1	1.6910+ 1		1.5247+ 1					0.0000+ 0				4.2312- 3
7.0000- 2 ~ 1.0000- 1	2.6176+ 1	1.4396+ 1		1.0780+ 1					0.0000+ 0				4.2312- 3
1.0000- 1 ~ 2.0000- 1	1.8781+ 1	1.1528+ 1		7.2351+ 0					0.0000+ 0				4.2312- 3
2.0000- 1 ~ 4.0000- 1	1.3463+ 1	8.7784+ 0		4.7066+ 0					0.0000+ 0				4.2312- 3
4.0000- 1 ~ 7.0000- 1	1.0778+ 1	7.1906+ 0		3.5878+ 0					0.0000+ 0				4.2312- 3
7.0000- 1 ~ 1.0000+ 0	9.5691+ 0	6.4349+ 0		3.2342+ 0					0.0000+ 0				4.2312- 3
1.0000+ 0 ~ 2.0000+ 0	9.4629+ 0	6.7408+ 0		3.7221+ 0					0.0000+ 0				4.2312- 3
2.0000+ 0 ~ 4.0000+ 0	1.7983+ 2	6.1715+ 0		1.7366+ 2					0.0000+ 0				4.2312- 3
4.0000+ 0 ~ 7.0000+ 0	1.5128+ 1	6.2776+ 0		9.0503+ 0					0.0000+ 0				4.2312- 3
7.0000+ 0 ~ 1.0000+ 1	1.2022+ 1	5.7124+ 0		6.3094+ 0					0.0000+ 0				4.2312- 3
1.0000+ 1 ~ 2.0000+ 1	2.2440+ 2	2.7071+ 1		1.9733+ 2					0.0000+ 0				4.2370- 3
2.0000+ 1 ~ 4.0000+ 1	6.6270+ 1	7.6887+ 0		4.8681+ 1					0.0000+ 0				4.2492- 3
4.0000+ 1 ~ 7.0000+ 1	7.4211+ 1	1.1931+ 1		6.2279+ 1					0.0000+ 0				4.2704- 3
7.0000+ 1 ~ 1.0000+ 2	6.1453+ 1	1.5018+ 1		4.6437+ 1					0.0000+ 0				4.2872- 3
1.0000+ 2 ~ 2.0000+ 2	6.6760+ 1	2.8997+ 1		3.7763+ 1					0.0000+ 0				4.3477- 3
2.0000+ 2 ~ 4.0000+ 2	4.5227+ 1	2.0169+ 1		2.5058+ 1					0.0000+ 0				4.4757- 3
4.0000+ 2 ~ 7.0000+ 2	4.4212+ 1	2.4226+ 1		1.9988+ 1					0.0000+ 0				4.7731- 3
7.0000+ 2 ~ 1.0000+ 3	3.4444+ 1	2.3462+ 1		1.0981+ 1					0.0000+ 0				5.0159- 3
1.0000+ 3 ~ 2.0000+ 3	2.6071+ 1	1.4940+ 1		1.1131+ 1					0.0000+ 0				5.7252- 3
2.0000+ 3 ~ 4.0000+ 3	2.0367+ 1	1.2201+ 1		8.1657+ 0					0.0000+ 0				7.5425- 3
4.0000+ 3 ~ 7.0000+ 3	1.7107+ 1	1.1412+ 1		5.6947+ 0					0.0000+ 0				1.0986- 2
7.0000+ 3 ~ 1.0000+ 4	1.5068+ 1	1.0681+ 1		4.3867+ 0					0.0000+ 0				1.5234- 2
1.0000+ 4 ~ 2.0000+ 4	1.2700+ 1	9.5314+ 0		3.1689+ 0					0.0000+ 0				2.5491- 2
2.0000+ 4 ~ 4.0000+ 4	1.0383+ 1	8.2489+ 0		2.1342+ 0					0.0000+ 0				5.0103- 2
4.0000+ 4 ~ 7.0000+ 4	8.8893+ 0	7.3404+ 0	3.0470- 2	1.4926+ 0					0.0000+ 0				8.9211- 2
7.0000+ 4 ~ 1.0000+ 5	8.2766+ 0	6.8619+ 0	2.8046- 1	1.1369+ 0					0.0000+ 0				1.3564- 1
1.0000+ 5 ~ 2.0000+ 5	7.5542+ 0	6.3550+ 0	3.8122- 1	8.2687- 1					7.1433-11	1.7364-18			2.0733- 1
2.0000+ 5 ~ 4.0000+ 5	7.0015+ 0	5.8777+ 0	8.1663- 1	5.0817- 1			0.0000+ 0		8.3717-11	7.0860-16			3.1182- 1
4.0000+ 5 ~ 7.0000+ 5	6.9212+ 0	5.4586+ 0	1.1742+ 0	2.8622- 1			0.0000+ 0		9.4970-11	2.0275-15			4.1017- 1
7.0000+ 5 ~ 1.0000+ 6	7.0259+ 0	6.1416+ 0	1.5736+ 0	2.1079- 1			0.0000+ 0		1.4543-10	2.6474-15			4.8477- 1
1.0000+ 6 ~ 2.0000+ 6	6.9466+ 0	4.7169+ 0	2.0823+ 0	1.3761- 1			1.4521-16		6.6760-10	3.3160-15			6.2266- 1
2.0000+ 6 ~ 4.0000+ 6	6.0873+ 0	3.7290+ 0	2.3041+ 0	5.9946- 2			9.0909-13		2.4431- 8	3.4243-14			7.2884- 1
4.0000+ 6 ~ 7.0000+ 6	5.0800+ 0	2.8695+ 0	2.3785+ 0	1.1834- 2			6.9530- 7		1.3702- 8	2.0392-11	4.5539-16		7.5972- 1
7.0000+ 6 ~ 1.0000+ 7	4.8386+ 0	2.6157+ 0	2.0174+ 0	1.8030- 3	3.0312- 1		7.6479- 6	6.3451-13	4.4640- 5	1.5445- 8	9.3722-10	7.3388-15	7.9740- 1
1.0000+ 7 ~ 2.0000+ 7	5.2503+ 0	3.0660+ 0	3.4984- 1	1.1017- 3	1.4596+ 0	3.5666- 1	5.1174- 3	3.2936- 3	3.1172- 3	5.0772- 4	4.5328- 3	1.0902- 3	8.8095- 1

4. Table of 2200−m/s and 14−MeV Cross Sections, Resonance Integrals, Maxwellian and Fission Spectrum Average Cross Sections

The cross sections are given in the unit of barns. For the values less than 1.0 barn, they are listed with an exponential part. For example, the value of 361.2 μb is listed as 361.2 −6 which should be read as 361.2×10^{-6} barn.

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
33-As- 75	total	9.930	9.432		3.840	4.947
	elastic	5.430	5.430		2.458	3.407
	inelastic		(E-thr = 0.201 MeV)		225.5 -3	1.504
	(n,2n)		(E-thr = 10.390 MeV)		1.024	361.2 -6
	(n,3n)		(E-thr = 18.480 MeV)			10.70 -9
	(n,na)		(E-thr = 5.386 MeV)		8.866 -3	1.927 -6
	(n,np)		(E-thr = 6.998 MeV)		75.80 -3	98.96 -6
	(n,nd)		(E-thr = 15.000 MeV)			403.0 -12
	(n,nt)		(E-thr = 15.610 MeV)			20.55 -12
	capture	4.500	4.003	63.94	1.035 -3	31.25 -3
	(n,p)		(E-thr = 0.401 MeV)		33.93 -3	2.580 -3
	(n,d)		(E-thr = 4.657 MeV)		1.032 -3	471.8 -9
	(n,t)		(E-thr = 8.731 MeV)		17.98 -6	13.74 -9
	(n,He-3)		(E-thr = 10.300 MeV)		27.15 -15	3.082 -12
	(n,a)	0.0	0.0	8.483 -3	11.62 -3	86.84 -6
34-Se- 74	total	59.07	53.38		3.840	4.940
	elastic	7.274	7.268		2.391	3.877
	inelastic		(E-thr = 0.644 MeV)		498.4 -3	1.002
	(n,2n)		(E-thr = 12.240 MeV)		271.8 -3	34.44 -6
	(n,na)		(E-thr = 4.129 MeV)		174.3 -3	50.20 -6
	(n,np)		(E-thr = 8.674 MeV)		310.1 -3	59.24 -6
	capture	51.80	46.11	580.1	1.042 -3	38.55 -3
	(n,p)		(E-thr = 0.578 MeV)		151.4 -3	17.48 -3
	(n,d)		(E-thr = 6.332 MeV)		1.240 -3	387.4 -9
	(n,t)		(E-thr = 11.000 MeV)		179.3 -9	3.278 -9
	(n,He-3)		(E-thr = 6.574 MeV)		279.6 -9	337.2 -12
	(n,a)	0.0	0.0	79.72 -3	41.42 -3	4.225 -3
	(n,2p)		(E-thr = 7.532 MeV)		12.38 -6	5.474 -9
34-Se- 76	total	103.4	93.98		3.841	4.941
	elastic	18.40	18.40		2.550	3.902
	inelastic		(E-thr = 0.567 MeV)		349.9 -3	1.020
	(n,2n)		(E-thr = 11.310 MeV)		824.9 -3	154.6 -6
	(n,3n)		(E-thr = 19.450 MeV)			226.3 -12
	(n,na)		(E-thr = 5.166 MeV)		12.87 -3	3.775 -6
	(n,np)		(E-thr = 9.645 MeV)		11.20 -3	1.982 -6
	capture	85.00	75.59	41.13	1.023 -3	17.46 -3
	(n,p)		(E-thr = 2.215 MeV)		73.36 -3	606.4 -6
	(n,d)		(E-thr = 7.305 MeV)		146.2 -6	57.84 -9
	(n,t)		(E-thr = 11.420 MeV)		13.03 -9	1.541 -9
	(n,He-3)		(E-thr = 8.808 MeV)		480.7 -12	3.999 -12
	(n,a)	0.0	0.0	15.71 -3	17.19 -3	253.0 -6
	(n,2p)		(E-thr = 10.050 MeV)		822.1 -12	175.8 -12
34-Se- 77	total	50.43	45.77		3.841	4.945
	elastic	8.430	8.427		2.502	3.387
	inelastic		(E-thr = 0.164 MeV)		136.3 -3	1.525
	(n,2n)		(E-thr = 7.520 MeV)		1.156	3.973 -3
	(n,3n)		(E-thr = 18.830 MeV)			5.166 -9
	(n,na)		(E-thr = 5.810 MeV)		901.2 -6	249.9 -9
	(n,np)		(E-thr = 9.735 MeV)		1.476 -3	369.3 -9
	(n,nd)		(E-thr = 14.820 MeV)			293.3 -12
	capture	42.00	37.34	32.11	1.001 -3	26.28 -3
	(n,p)	0.0	0.0	29.40 -3	32.57 -3	878.8 -6
	(n,d)		(E-thr = 7.395 MeV)		1.207 -3	251.6 -9
	(n,t)		(E-thr = 8.557 MeV)		1.758 -6	5.593 -9
	(n,He-3)		(E-thr = 9.732 MeV)		1.976 -12	19.37 -12
	(n,a)	0.0	0.0	10.98 -3	9.336 -3	700.4 -6
	(n,2p)		(E-thr = 8.007 MeV)		146.5 -9	89.82 -12
34-Se- 78	total	8.830	8.782		3.841	4.940
	elastic	8.400	8.400		2.570	3.948
	inelastic		(E-thr = 0.622 MeV)		250.2 -3	972.0 -3
	(n,2n)		(E-thr = 10.640 MeV)		997.8 -3	296.6 -6
	(n,3n)		(E-thr = 18.160 MeV)			36.65 -9
	(n,na)		(E-thr = 6.109 MeV)		441.6 -6	132.2 -9
	(n,np)		(E-thr = 10.540 MeV)		208.8 -6	89.91 -9
	capture	430.0 -3	382.4 -3	4.743	1.015 -3	19.43 -3
	(n,p)		(E-thr = 3.554 MeV)		16.00 -3	21.17 -6
	(n,d)		(E-thr = 8.204 MeV)		47.32 -6	29.98 -9
	(n,t)		(E-thr = 11.770 MeV)		1.272 -9	1.488 -9
	(n,a)	0.0	0.0	3.678 -3	5.159 -3	16.81 -6
34-Se- 79	total	56.30	50.78		3.841	4.938

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
34-Se- 79	elastic	6.300	6.300		2.514	3.564
	inelastic		(E-thr = 0.097 MeV)		94.99 -3	1.335
	(n,2n)		(E-thr = 7.054 MeV)		1.213	6.730 -3
	(n,3n)		(E-thr = 17.690 MeV)			66.91 -9
	(n,na)		(E-thr = 6.569 MeV)		57.12 -6	32.58 -9
	(n,np)		(E-thr = 10.610 MeV)		63.23 -6	48.01 -9
	(n,nd)		(E-thr = 15.260 MeV)			75.92 -12
	capture	50.00	44.31	60.87	1.001 -3	29.98 -3
	(n,p)		(E-thr = 1.436 MeV)		8.637 -3	26.08 -6
	(n,d)		(E-thr = 8.268 MeV)		317.9 -6	78.70 -9
	(n,t)		(E-thr = 8.993 MeV)		1.535 -6	5.890 -9
	(n,He-3)		(E-thr = 11.710 MeV)		0.0	275.0 -15
	(n,a)	0.0	0.0	7.567 -3	8.553 -3	77.05 -6
34-Se- 80	total	7.560	7.492		3.842	4.947
	elastic	6.950	6.950		2.498	4.012
	inelastic		(E-thr = 0.675 MeV)		182.9 -3	925.0 -3
	(n,2n)		(E-thr = 10.040 MeV)		1.133	575.5 -6
	(n,3n)		(E-thr = 17.100 MeV)			226.0 -9
	(n,na)		(E-thr = 7.058 MeV)		12.33 -6	11.75 -9
	(n,np)		(E-thr = 11.480 MeV)		2.853 -6	13.08 -9
	capture	610.0 -3	542.5 -3	925.4 -3	1.002 -3	7.724 -3
	(n,p)		(E-thr = 4.981 MeV)		12.85 -3	5.247 -6
	(n,d)		(E-thr = 9.139 MeV)		2.755 -6	9.918 -9
	(n,t)		(E-thr = 12.050 MeV)		90.24 -12	912.1 -12
	(n,a)		(E-thr = 0.904 MeV)		13.50 -3	10.25 -6
34-Se- 82	total	5.044	5.039		3.841	4.945
	elastic	5.000	5.000		2.625	4.075
	inelastic		(E-thr = 0.663 MeV)		134.4 -3	857.4 -3
	(n,2n)		(E-thr = 9.385 MeV)		1.079	885.4 -6
	(n,3n)		(E-thr = 16.170 MeV)			775.3 -9
	(n,na)		(E-thr = 8.349 MeV)		128.1 -9	1.793 -9
	(n,np)		(E-thr = 12.390 MeV)		5.754 -9	4.600 -9
	capture	44.20 -3	39.32 -3	799.1 -3	1.006 -3	10.45 -3
	(n,p)		(E-thr = 6.695 MeV)		1.711 -3	411.5 -9
	(n,d)		(E-thr = 10.050 MeV)		269.6 -9	4.249 -9
	(n,t)		(E-thr = 12.550 MeV)		40.35 -15	514.2 -12
	(n,a)		(E-thr = 2.391 MeV)		169.3 -6	49.39 -9
35-Br- 79	total	14.27	13.05		3.841	4.940
	elastic	3.269	3.268		2.474	3.363
	inelastic		(E-thr = 0.210 MeV)		291.2 -3	1.529
	(n,2n)		(E-thr = 10.820 MeV)		883.3 -3	217.9 -6
	(n,3n)		(E-thr = 19.220 MeV)			1.340 -9
	(n,na)		(E-thr = 5.528 MeV)		1.554 -3	371.2 -9
	(n,np)		(E-thr = 6.413 MeV)		144.8 -3	194.6 -6
	(n,nd)		(E-thr = 14.710 MeV)			360.8 -12
	(n,nt)		(E-thr = 15.960 MeV)			3.057 -12
	capture	11.00	9.784	128.7	1.023 -3	42.61 -3
	(n,p)	0.0	0.0	61.83 -3	31.43 -3	4.452 -3
	(n,d)		(E-thr = 4.073 MeV)		1.645 -3	548.7 -9
	(n,t)		(E-thr = 8.445 MeV)		10.21 -6	12.18 -9
	(n,He-3)		(E-thr = 9.125 MeV)		31.46 -12	27.91 -12
	(n,a)	0.0	0.0	7.955 -3	11.87 -3	54.10 -6
	(n,2p)		(E-thr = 9.967 MeV)		45.86 -12	12.03 -12
35-Br- 81	total	6.307	6.009		3.841	4.938
	elastic	3.616	3.616		2.508	3.560
	inelastic		(E-thr = 0.279 MeV)		267.9 -3	1.343
	(n,2n)		(E-thr = 10.290 MeV)		1.029	401.7 -6
	(n,3n)		(E-thr = 18.280 MeV)			24.54 -9
	(n,na)		(E-thr = 6.563 MeV)		28.42 -6	17.85 -9
	(n,np)		(E-thr = 7.602 MeV)		9.470 -3	3.059 -6
	(n,nd)		(E-thr = 15.300 MeV)			94.29 -12
	(n,nt)		(E-thr = 16.090 MeV)			2.060 -12
	capture	2.690	2.393	46.92	1.010 -3	32.42 -3
	(n,p)		(E-thr = 0.813 MeV)		20.73 -3	225.5 -6
	(n,d)		(E-thr = 5.263 MeV)		425.1 -6	127.5 -9
	(n,t)		(E-thr = 9.041 MeV)		1.897 -6	7.111 -9
	(n,a)	0.0	0.0	3.370 -3	4.259 -3	3.500 -6
36-Kr- 78	total	14.03	13.34		3.841	4.931
	elastic	7.829	7.828		2.644	3.791
	inelastic		(E-thr = 0.461 MeV)		409.8 -3	1.057

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
36-Kr- 78	(n,2n)		(E-thr = 12.150 MeV)		192.4 -3	24.50 -6
	(n,na)		(E-thr = 4.416 MeV)		30.79 -3	6.986 -6
	(n,np)		(E-thr = 8.308 MeV)		361.0 -3	73.94 -6
	capture	6.200	5.514	25.76	1.117 -3	67.31 -3
	(n,p)	0.0	0.0	225.8 -3	156.5 -3	11.48 -3
	(n,d)		(E-thr = 5.968 MeV)		847.7 -6	282.2 -9
	(n,t)		(E-thr = 10.860 MeV)		192.0 -9	3.563 -9
	(n,He-3)		(E-thr = 5.821 MeV)		151.2 -9	236.0 -12
	(n,a)	0.0	0.0	55.88 -3	43.15 -3	2.396 -3
	(n,2p)		(E-thr = 6.133 MeV)		1.402 -3	312.3 -9
36-Kr- 80	total	18.79	17.52		3.842	4.931
	elastic	7.290	7.288		2.543	3.946
	inelastic		(E-thr = 0.624 MeV)		441.4 -3	899.4 -3
	(n,2n)		(E-thr = 11.680 MeV)		735.2 -3	112.4 -6
	(n,na)		(E-thr = 5.124 MeV)		7.418 -3	1.960 -6
	(n,np)		(E-thr = 9.236 MeV)		33.77 -3	6.209 -6
	capture	11.50	10.23	60.25	2.361 -3	82.86 -3
	(n,p)		(E-thr = 1.239 MeV)		59.51 -3	1.186 -3
	(n,d)		(E-thr = 6.896 MeV)		315.6 -6	95.47 -9
	(n,t)		(E-thr = 11.460 MeV)		4.774 -9	1.335 -9
	(n,He-3)		(E-thr = 7.819 MeV)		3.849 -9	17.68 -12
	(n,a)	0.0	0.0	13.42 -3	18.76 -3	185.5 -6
	(n,2p)		(E-thr = 8.595 MeV)		449.0 -9	1.955 -9
36-Kr- 82	total	46.46	43.38		3.841	4.933
	elastic	18.46	18.46		2.508	4.045
	inelastic		(E-thr = 0.786 MeV)		339.4 -3	857.9 -3
	(n,2n)		(E-thr = 11.100 MeV)		961.8 -3	202.8 -6
	(n,3n)		(E-thr = 19.080 MeV)			2.473 -9
	(n,na)		(E-thr = 6.055 MeV)		217.3 -6	78.87 -9
	(n,np)		(E-thr = 10.030 MeV)		1.196 -3	309.6 -9
	capture	28.00	24.92	228.0	1.037 -3	29.26 -3
	(n,p)		(E-thr = 2.339 MeV)		21.86 -3	88.85 -6
	(n,d)		(E-thr = 7.692 MeV)		54.54 -6	29.02 -9
	(n,t)		(E-thr = 11.720 MeV)		597.6 -12	936.6 -12
	(n,a)	0.0	0.0	5.512 -3	7.324 -3	22.57 -6
36-Kr- 83	total	188.9	168.1		3.841	4.938
	elastic	9.080	9.051		1.522	3.713
	inelastic		(E-thr = 0.010 MeV)		1.319	1.195
	(n,2n)		(E-thr = 7.561 MeV)		981.1 -3	2.803 -3
	(n,3n)		(E-thr = 18.650 MeV)			2.609 -9
	(n,na)		(E-thr = 6.565 MeV)		11.13 -6	15.00 -9
	(n,np)		(E-thr = 9.899 MeV)		323.4 -6	157.2 -9
	(n,nd)		(E-thr = 15.250 MeV)			105.7 -12
	capture	179.9	159.1	147.7	1.001 -3	24.29 -3
	(n,p)		(E-thr = 0.179 MeV)		12.49 -3	78.13 -6
	(n,d)		(E-thr = 7.561 MeV)		1.251 -3	270.6 -9
	(n,t)		(E-thr = 8.991 MeV)		965.7 -9	6.696 -9
	(n,He-3)		(E-thr = 10.580 MeV)		3.813 -18	2.906 -12
	(n,a)	0.0	0.0	3.846 -3	4.395 -3	12.70 -6
	(n,2p)		(E-thr = 9.018 MeV)		129.0 -12	2.326 -12
36-Kr- 84	total	6.269	6.257		3.842	4.932
	elastic	6.159	6.159		2.541	4.161
	inelastic		(E-thr = 0.893 MeV)		334.7 -3	758.8 -3
	(n,2n)		(E-thr = 10.650 MeV)		953.1 -3	275.5 -6
	(n,3n)		(E-thr = 18.210 MeV)			25.41 -9
	(n,na)		(E-thr = 7.178 MeV)		38.03 -6	70.65 -9
	(n,np)		(E-thr = 10.830 MeV)		592.4 -6	548.1 -9
	capture	110.0 -3	97.90 -3	2.420	1.019 -3	10.01 -3
	(n,p)		(E-thr = 3.937 MeV)		8.014 -3	7.975 -6
	(n,d)		(E-thr = 8.491 MeV)		55.21 -6	46.43 -9
	(n,t)		(E-thr = 11.950 MeV)		209.3 -12	1.951 -9
	(n,a)		(E-thr = 0.391 MeV)		2.611 -3	1.461 -6
36-Kr- 85	total	7.916	7.762		3.842	4.936
	elastic	6.256	6.256		2.531	4.455
	inelastic		(E-thr = 0.309 MeV)		136.9 -3	463.1 -3
	(n,2n)		(E-thr = 7.201 MeV)		1.166	5.259 -3
	(n,3n)		(E-thr = 17.850 MeV)			29.36 -9
	(n,na)		(E-thr = 7.592 MeV)		3.456 -6	14.84 -9
	(n,np)		(E-thr = 11.140 MeV)		39.25 -6	86.19 -9
	(n,nd)		(E-thr = 15.690 MeV)			67.37 -12

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
36-Kr- 85	capture	1.660	1.471	1.824	1.001 -3	10.16 -3
	(n,p)		(E-thr =	2.043 MeV)	5.101 -3	5.925 -6
	(n,d)		(E-thr =	8.800 MeV)	348.5 -6	130.7 -9
	(n,t)		(E-thr =	9.432 MeV)	930.1 -9	8.018 -9
	(n,a)	0.0	0.0	1.832 -3	1.613 -3	1.695 -6
36-Kr- 86	total	6.153	6.152		3.842	5.070
	elastic	6.150	6.150		2.516	4.561
	inelastic		(E-thr =	1.583 MeV)	334.0 -3	506.0 -3
	(n,2n)		(E-thr =	9.983 MeV)	984.1 -3	468.3 -6
	(n,3n)		(E-thr =	17.180 MeV)		105.8 -9
	(n,na)		(E-thr =	8.194 MeV)	440.4 -9	9.529 -9
	(n,np)		(E-thr =	12.030 MeV)	84.57 -9	9.324 -9
	capture	3.000 -3	2.667 -3	23.25 -3	1.002 -3	1.616 -3
	(n,p)		(E-thr =	6.597 MeV)	5.603 -3	1.243 -6
	(n,d)		(E-thr =	9.689 MeV)	3.697 -6	21.11 -9
	(n,t)		(E-thr =	12.520 MeV)	91.73 -15	1.508 -9
	(n,a)		(E-thr =	2.225 MeV)	830.6 -6	236.8 -9
37-Rb- 85	total	6.334	6.281		3.842	4.945
	elastic	5.854	5.854		2.400	3.732
	inelastic		(E-thr =	0.153 MeV)	408.2 -3	1.184
	(n,2n)		(E-thr =	10.610 MeV)	986.5 -3	276.8 -6
	(n,3n)		(E-thr =	19.550 MeV)		67.52 -12
	(n,na)		(E-thr =	6.683 MeV)	41.87 -6	40.07 -9
	(n,np)		(E-thr =	7.104 MeV)	23.02 -3	17.69 -6
	(n,nd)		(E-thr =	15.410 MeV)		51.53 -12
	capture	480.0 -3	426.8 -3	8.733	1.009 -3	26.35 -3
	(n,p)	0.0	0.0	15.47 -3	16.91 -3	410.1 -6
	(n,d)		(E-thr =	4.766 MeV)	959.9 -6	240.0 -9
	(n,t)		(E-thr =	9.156 MeV)	1.940 -6	11.54 -9
	(n,He-3)		(E-thr =	10.110 MeV)	19.99 -15	4.688 -12
	(n,a)	0.0	0.0	4.520 -3	5.623 -3	4.835 -6
37-Rb- 87	total	4.479	4.466		3.842	4.951
	elastic	4.359	4.359		2.243	4.057
	inelastic		(E-thr =	0.408 MeV)	347.5 -3	889.1 -3
	(n,2n)		(E-thr =	10.050 MeV)	1.237	535.6 -6
	(n,3n)		(E-thr =	18.800 MeV)		4.564 -9
	(n,na)		(E-thr =	8.085 MeV)	1.804 -6	35.51 -9
	(n,np)		(E-thr =	8.726 MeV)	881.5 -6	198.4 -9
	(n,nd)		(E-thr =	16.370 MeV)		3.066 -12
	capture	120.0 -3	106.7 -3	2.716	1.012 -3	3.046 -3
	(n,p)		(E-thr =	3.142 MeV)	10.36 -3	8.029 -6
	(n,d)		(E-thr =	6.390 MeV)	307.9 -6	101.7 -9
	(n,t)		(E-thr =	10.110 MeV)	172.4 -9	3.380 -9
	(n,a)		(E-thr =	1.196 MeV)	2.867 -3	924.7 -9
38-Sr- 86	total	5.173	5.058		4.334	5.664
	elastic	4.133	4.133		2.831	4.919
	inelastic		(E-thr =	1.091 MeV)	591.4 -3	719.8 -3
	(n,2n)		(E-thr =	11.630 MeV)	856.2 -3	134.9 -6
	(n,na)		(E-thr =	6.417 MeV)	254.7 -6	237.8 -9
	(n,np)		(E-thr =	9.760 MeV)	3.331 -3	798.3 -9
	capture	1.040	925.3 -3	4.818	1.026 -3	23.16 -3
	(n,p)		(E-thr =	1.004 MeV)	43.03 -3	571.6 -6
	(n,d)		(E-thr =	7.423 MeV)	196.1 -6	80.55 -9
	(n,t)		(E-thr =	11.770 MeV)	208.4 -12	1.231 -9
	(n,a)	0.0	0.0	6.653 -3	8.312 -3	6.580 -6
	(n,2p)		(E-thr =	9.664 MeV)	49.94 -12	8.421 -12
38-Sr- 87	total	22.90	21.21		4.334	5.667
	elastic	6.897	6.895		2.837	5.049
	inelastic		(E-thr =	0.393 MeV)	219.4 -3	602.9 -3
	(n,2n)		(E-thr =	8.531 MeV)	1.249	1.781 -3
	(n,na)		(E-thr =	7.391 MeV)	1.737 -6	7.058 -9
	(n,np)		(E-thr =	9.534 MeV)	1.413 -3	353.7 -9
	(n,nd)		(E-thr =	15.950 MeV)		11.24 -12
	capture	16.00	14.32	121.1	1.002 -3	10.87 -3
	(n,p)	0.0	0.0	17.32 -3	19.52 -3	601.6 -6
	(n,d)		(E-thr =	7.197 MeV)	1.455 -3	300.7 -9
	(n,t)		(E-thr =	9.696 MeV)	252.8 -9	3.306 -9
	(n,He-3)		(E-thr =	10.370 MeV)	1.897 -15	2.881 -12
	(n,a)	0.0	0.0	5.325 -3	5.761 -3	28.33 -6

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ. (barns)	14-MeV (barns)	Fiss.Avg. (barns)
38-Sr- 88	total	5.436	5.436		4.335	5.592
	elastic	5.431	5.431		2.827	5.179
	inelastic		(E-thr = 1.857 MeV)		610.8 -3	408.3 -3
	(n,2n)		(E-thr = 11.250 MeV)		881.2 -3	171.9 -6
	(n,3n)		(E-thr = 19.770 MeV)			1.865 -12
	(n,na)		(E-thr = 7.991 MeV)		210.5 -9	3.518 -9
	(n,np)		(E-thr = 10.730 MeV)		64.64 -6	78.91 -9
	capture	5.789 -3	5.148 -3	70.06 -3	1.004 -3	2.333 -3
	(n,p)		(E-thr = 4.578 MeV)		12.21 -3	4.941 -6
	(n,d)		(E-thr = 8.394 MeV)		72.35 -6	45.97 -9
	(n,t)		(E-thr = 12.190 MeV)		4.607 -12	1.060 -9
	(n,a)		(E-thr = 0.794 MeV)		3.282 -3	1.079 -6
38-Sr- 89	total	6.120	6.103		4.336	5.660
	elastic	5.700	5.700		2.835	5.060
	inelastic		(E-thr = 1.044 MeV)		101.3 -3	586.7 -3
	(n,2n)		(E-thr = 6.441 MeV)		1.388	10.98 -3
	(n,3n)		(E-thr = 17.680 MeV)			67.62 -9
	(n,na)		(E-thr = 7.234 MeV)		2.736 -6	9.207 -9
	(n,np)		(E-thr = 11.020 MeV)		18.58 -6	47.17 -9
	(n,nd)		(E-thr = 14.830 MeV)			176.5 -12
	capture	420.0 -3	372.2 -3	414.0 -3	1.001 -3	2.448 -3
	(n,p)		(E-thr = 3.746 MeV)		7.100 -3	2.805 -6
	(n,d)		(E-thr = 8.682 MeV)		222.0 -6	80.13 -9
	(n,t)		(E-thr = 8.578 MeV)		21.01 -6	17.48 -9
	(n,a)	0.0	0.0	2.034 -3	2.407 -3	4.254 -6
38-Sr- 90	total	6.704	6.628		4.336	5.659
	elastic	5.804	5.804		2.834	4.818
	inelastic		(E-thr = 0.841 MeV)		140.2 -3	832.7 -3
	(n,2n)		(E-thr = 7.895 MeV)		1.356	3.344 -3
	(n,3n)		(E-thr = 14.340 MeV)			4.040 -6
	(n,na)		(E-thr = 5.151 MeV)		75.33 -6	29.49 -9
	(n,np)		(E-thr = 11.640 MeV)		1.029 -6	19.84 -9
	(n,nd)		(E-thr = 16.580 MeV)			946.3 -15
	capture	900.0 -3	797.6 -3	484.7 -3	1.003 -3	4.211 -3
	(n,p)		(E-thr = 5.645 MeV)		4.321 -3	1.079 -6
	(n,d)		(E-thr = 9.304 MeV)		10.73 -6	22.06 -9
	(n,t)		(E-thr = 10.320 MeV)		1.450 -6	7.726 -9
	(n,a)	0.0	0.0	1.158 -3	1.481 -3	752.6 -9
39-Y - 89	total	8.990	8.848		4.336	5.651
	elastic	7.713	7.712		2.725	5.035
	inelastic		(E-thr = 0.919 MeV)		577.5 -3	608.3 -3
	(n,2n)		(E-thr = 11.600 MeV)		847.5 -3	133.5 -6
	(n,na)		(E-thr = 8.049 MeV)		1.018 -6	29.88 -9
	(n,np)		(E-thr = 7.159 MeV)		152.3 -3	88.26 -6
	(n,nd)		(E-thr = 16.070 MeV)			15.75 -12
	capture	1.277	1.136	860.0 -3	1.058 -3	6.253 -3
	(n,p)		(E-thr = 0.718 MeV)		25.93 -3	204.4 -6
	(n,d)		(E-thr = 4.822 MeV)		1.871 -3	445.9 -9
	(n,t)		(E-thr = 9.811 MeV)		610.0 -9	3.241 -9
	(n,He-3)		(E-thr = 10.070 MeV)		137.6 -15	6.034 -12
	(n,a)	0.0	0.0	4.366 -3	4.482 -3	2.756 -6
39-Y - 91	total	7.100	6.967		4.337	5.660
	elastic	5.700	5.700		2.835	4.566
	inelastic		(E-thr = 0.562 MeV)		220.7 -3	1.078
	(n,2n)		(E-thr = 8.033 MeV)		1.264	2.763 -3
	(n,3n)		(E-thr = 14.970 MeV)			2.208 -6
	(n,na)		(E-thr = 4.222 MeV)		408.9 -6	102.8 -9
	(n,np)		(E-thr = 7.794 MeV)		2.226 -3	438.0 -9
	(n,nd)		(E-thr = 13.350 MeV)		0.0	2.022 -9
	(n,nt)		(E-thr = 13.540 MeV)		0.0	504.8 -12
	capture	1.400	1.241	2.848	1.006 -3	12.24 -3
	(n,p)		(E-thr = 1.922 MeV)		9.747 -3	10.44 -6
	(n,d)		(E-thr = 5.458 MeV)		1.096 -3	243.5 -9
	(n,t)		(E-thr = 7.099 MeV)		160.2 -6	49.83 -9
	(n,a)	0.0	0.0	1.908 -3	2.984 -3	3.300 -6
40-Zr- 90	total	5.511	5.506		4.336	5.640
	elastic	5.465	5.465		2.835	5.232
	inelastic		(E-thr = 1.780 MeV)		763.4 -3	398.2 -3
	(n,2n)		(E-thr = 12.120 MeV)		611.3 -3	83.00 -6
	(n,na)		(E-thr = 6.749 MeV)		21.13 -6	36.70 -9

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
40-Zr- 90	(n,np)		(E-thr =	8.457 MeV)	74.46 -3	16.94 -6
	capture	45.84 -3	40.79 -3	196.1 -3	1.030 -3	7.935 -3
	(n,p)		(E-thr =	1.518 MeV)	41.04 -3	174.5 -6
	(n,d)		(E-thr =	6.121 MeV)	1.120 -3	243.3 -9
	(n,t)		(E-thr =	11.470 MeV)	1.548 -9	1.729 -9
	(n,He-3)		(E thr =	7.796 MeV)	377.1 -12	28.18 -12
	(n,a)	0.0	0.0	6.976 -3	8.385 -3	11.51 -6
	(n,2p)		(E-thr =	9.175 MeV)	251.5 -12	28.61 -12
40-Zr- 91	total	11.83	11.70		4.337	5.663
	elastic	10.59	10.59		2.830	5.053
	inelastic		(E-thr =	1.218 MeV)	121.8 -3	590.8 -3
	(n,2n)		(E-thr =	7.28[illegible] MeV)	1.343	5.457 -3
	(n,3n)		(E-thr =	19.400 MeV)		392.2 -12
	(n,na)		(E-thr =	5.506 MeV)	144.5 -6	65.62 -9
	(n,np)		(E-thr =	8.802 MeV)	2.968 -3	601.1 -9
	(n,nd)		(E-thr =	13.400 MeV)	0.0	1.820 -9
	capture	1.247	1.110	6.951	1.002 -3	11.65 -3
	(n,p)		(E-thr =	0.769 MeV)	27.38 -3	100.2 -6
	(n,d)		(E-thr =	6.466 MeV)	2.316 -3	470.6 -9
	(n,t)		(E-thr =	7.150 MeV)	128.0 -6	35.06 -9
	(n,He-3)		(E-thr =	8.640 MeV)	14.29 -12	24.24 -12
	(n,a)	0.0	0.0	6.016 -3	7.865 -3	136.1 -6
40-Zr- 92	total	5.087	5.063		4.337	5.674
	elastic	4.869	4.869		2.815	4.813
	inelastic		(E-thr =	0.945 MeV)	138.3 -3	838.3 -3
	(n,2n)		(E-thr =	8.735 MeV)	1.351	1.688 -3
	(n,3n)		(E-thr =	16.020 MeV)		887.8 -9
	(n,na)		(E-thr =	3.000 MeV)	1.561 -3	350.9 -9
	(n,np)		(E-thr =	9.503 MeV)	676.1 -6	196.8 -9
	(n,nd)		(E-thr =	15.200 MeV)		35.63 -12
	(n,nt)		(E-thr =	15.880 MeV)		1.031 -12
	capture	217.5 -3	193.6 -3	702.3 -3	1.020 -3	19.32 -3
	(n,p)		(E-thr =	2.883 MeV)	19.58 -3	21.02 -6
	(n,d)		(E-thr =	7.168 MeV)	692.2 -6	180.7 -9
	(n,t)		(E-thr =	8.947 MeV)	27.46 -6	16.57 -9
	(n,a)	0.0	0.0	6.205 -3	9.217 -3	55.62 -6
40-Zr- 93	total	7.892	7.644		4.338	5.662
	elastic	5.653	5.653		2.829	4.712
	inelastic		(E-thr =	0.270 MeV)	112.1 -3	925.0 -3
	(n,2n)		(E-thr =	6.810 MeV)	1.380	8.597 -3
	(n,3n)		(E-thr =	15.540 MeV)		1.269 -6
	(n,na)		(E-thr =	3.372 MeV)	415.6 -6	91.64 -9
	(n,np)		(E-thr =	9.692 MeV)	87.95 -6	44.59 -9
	(n,nd)		(E-thr =	13.980 MeV)	0.0	323.6 -12
	(n,nt)		(E-thr =	15.760 MeV)		1.482 -12
	capture	2.239	1.991	18.22	1.000 -3	14.79 -3
	(n,p)		(E-thr =	2.130 MeV)	10.75 -3	7.671 -6
	(n,d)		(E-thr =	7.357 MeV)	570.6 -6	123.7 -9
	(n,t)		(E-thr =	7.725 MeV)	73.61 -6	26.58 -9
	(n,a)	0.0	0.0	2.379 -3	3.450 -3	24.28 -6
40-Zr- 94	total	6.202	6.196		4.338	5.675
	elastic	6.152	6.152		2.827	4.793
	inelastic		(E-thr =	0.928 MeV)	119.4 -3	865.3 -3
	(n,2n)		(E-thr =	8.312 MeV)	1.378	2.718 -3
	(n,3n)		(E-thr =	15.120 MeV)		2.597 -6
	(n,na)		(E-thr =	3.791 MeV)	245.8 -6	58.27 -9
	(n,np)		(E-thr =	10.440 MeV)	6.552 -6	9.436 -9
	(n,nd)		(E-thr =	15.670 MeV)		7.433 -12
	capture	49.81 -3	44.31 -3	321.0 -3	1.002 -3	12.34 -3
	(n,p)		(E-thr =	4.143 MeV)	8.114 -3	3.021 -6
	(n,d)		(E-thr =	8.107 MeV)	29.82 -6	23.85 -9
	(n,t)		(E-thr =	9.416 MeV)	8.044 -6	9.113 -9
	(n,a)	0.0	0.0	2.868 -3	4.171 -3	5.698 -6
40-Zr- 95	total	6.903	6.786		4.338	5.659
	elastic	5.703	5.704		2.833	4.937
	inelastic		(E-thr =	0.963 MeV)	104.6 -3	683.3 -3
	(n,2n)		(E-thr =	6.544 MeV)	1.394	10.88 -3
	(n,3n)		(E-thr =	14.860 MeV)		2.838 -6
	(n,na)		(E-thr =	4.466 MeV)	79.07 -6	28.87 -9
	(n,np)		(E-thr =	10.690 MeV)	2.484 -6	7.793 -9

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
40-Zr- 95	(n,nd)		(E-thr = 14.650 MeV)			59.46 -12
	capture	1.200	1.063	7.794	1.001 -3	27.22 -3
	(n,p)		(E-thr = 3.687 MeV)		4.358 -3	1.178 -6
	(n,d)		(E-thr = 8.353 MeV)		106.7 -6	35.48 -9
	(n,t)		(E-thr = 8.399 MeV)		7.278 -6	9.613 -9
	(n,a)	0.0	0.0	1.025 -3	1.344 -3	829.7 -9
40-Zr- 96	total	6.154	6.151		4.339	5.709
	elastic	6.131	6.131		2.714	5.158
	inelastic		(E-thr = 1.611 MeV)		133.0 -3	537.3 -3
	(n,2n)		(E-thr = 7.940 MeV)		1.485	3.967 -3
	(n,3n)		(E-thr = 14.480 MeV)			5.040 -6
	(n,na)		(E-thr = 5.027 MeV)		39.19 -6	21.09 -9
	(n,np)		(E-thr = 11.630 MeV)		261.1 -9	10.99 -9
	capture	22.80 -3	20.29 -3	5.872	1.001 -3	7.868 -3
	(n,p)		(E-thr = 6.298 MeV)		2.602 -3	563.4 -9
	(n,d)		(E-thr = 9.292 MeV)		397.1 -9	5.558 -9
	(n,t)		(E-thr = 10.040 MeV)		1.220 -6	4.885 -9
	(n,a)	0.0	0.0	2.253 -3	2.276 -3	751.1 -9
41-Nb- 93	total	7.474	7.347		3.971	5.851
	elastic	6.323	6.323		2.257	4.680
	inelastic		(E-thr = 0.031 MeV)		404.7 -3	1.141
	(n,2n)		(E-thr = 8.922 MeV)		1.244	1.076 -3
	(n,3n)		(E-thr = 16.900 MeV)			213.7 -9
	(n,na)		(E-thr = 1.968 MeV)		2.262 -3	1.474 -6
	(n,np)		(E-thr = 6.105 MeV)		11.19 -3	4.516 -6
	capture	1.152	1.024	9.488	1.002 -3	28.41 -3
	(n,p)	0.0	0.0	27.16 -3	37.37 -3	284.0 -6
	(n,d)		(E-thr = 3.856 MeV)		5.913 -3	3.195 -6
	(n,a)	0.0	0.0	5.665 -3	7.169 -3	121.1 -6
41-Nb- 94	total	22.22	20.45		4.338	5.670
	elastic	6.453	6.450		2.827	4.076
	inelastic		(E-thr = 0.041 MeV)		157.3 -3	1.570
	(n,2n)		(E-thr = 7.312 MeV)		1.311	5.230 -3
	(n,3n)		(E-thr = 16.240 MeV)			607.6 -9
	(n,na)		(E-thr = 2.333 MeV)		2.104 -3	481.5 -9
	(n,np)		(E-thr = 6.614 MeV)		6.941 -3	1.607 -6
	(n,nd)		(E-thr = 11.090 MeV)		494.9 -9	24.11 -9
	(n,nt)		(E-thr = 13.570 MeV)		0.0	276.5 -12
	capture	15.77	14.00	125.5	1.001 -3	17.42 -3
	(n,p)	0.0	0.0	15.67 -3	21.41 -3	362.7 -6
	(n,d)		(E-thr = 4.279 MeV)		4.537 -3	1.010 -6
	(n,t)		(E-thr = 4.837 MeV)		610.3 -6	122.2 -9
	(n,He-3)		(E-thr = 8.491 MeV)		1.337 -9	91.57 -12
	(n,a)	0.0	0.0	4.664 -3	6.260 -3	95.69 -6
41-Nb- 95	total	12.70	11.95		4.338	5.661
	elastic	5.700	5.700		2.830	4.770
	inelastic		(E-thr = 0.238 MeV)		157.9 -3	820.2 -3
	(n,2n)		(E-thr = 8.586 MeV)		1.321	1.966 -3
	(n,3n)		(E-thr = 15.900 MeV)			1.075 -6
	(n,na)		(E-thr = 2.889 MeV)		897.3 -6	208.8 -9
	(n,np)		(E-thr = 6.889 MeV)		6.670 -3	1.496 -6
	(n,nd)		(E-thr = 12.860 MeV)		48.27 -18	2.586 -9
	(n,nt)		(E-thr = 13.420 MeV)		0.0	433.8 -12
	capture	7.000	6.204	41.79	1.007 -3	67.68 -3
	(n,p)		(E-thr = 0.344 MeV)		15.14 -3	55.16 -6
	(n,d)		(E-thr = 4.554 MeV)		1.223 -3	264.2 -9
	(n,t)		(E-thr = 6.614 MeV)		210.3 -6	56.94 -9
	(n,He-3)		(E-thr = 9.515 MeV)		29.88 -15	3.748 -12
	(n,a)	0.0	0.0	2.812 -3	4.123 -3	21.74 -6
42-Mo- 92	total	5.566	5.564		4.337	5.661
	elastic	5.545	5.545		2.762	5.096
	inelastic		(E-thr = 1.526 MeV)		774.7 -3	524.7 -3
	(n,2n)		(E-thr = 12.820 MeV)		160.0 -3	24.51 -6
	(n,na)		(E-thr = 5.669 MeV)		367.5 -6	145.6 -9
	(n,np)		(E-thr = 7.546 MeV)		487.3 -3	89.37 -6
	capture	20.75 -3	18.46 -3	968.1 -3	1.045 -3	28.00 -3
	(n,p)	0.0	0.0	180.2 -3	128.1 -3	11.06 -3
	(n,d)		(E-thr = 5.210 MeV)		2.352 -3	508.6 -9
	(n,t)		(E-thr = 11.150 MeV)		4.766 -9	2.117 -9
	(n,He-3)		(E-thr = 4.952 MeV)		259.7 -9	755.7 -12

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
42-Mo- 92	(n,a)	0.0	0.0	16.16 -3	21.40 -3	147.5 -6
	(n,2p)		(E-thr =	5.485 MeV)	103.2 -6	24.79 -9
42-Mo- 94	total	6.011	6.010		4.338	5.662
	elastic	5.998	5.998		2.788	4.778
	inelastic		(E-thr =	0.880 MeV)	261.3 -3	845.9 -3
	(n,2n)		(E-thr =	9.789 MeV)	1.202	632.2 -6
	(n,3n)		(E-thr =	17.950 MeV)		62.66 -9
	(n,na)		(E-thr =	2.092 MeV)	7.498 -3	3.829 -6
	(n,np)		(E-thr =	8.588 MeV)	6.383 -3	1.136 -6
	(n,nd)		(E-thr =	15.190 MeV)		31.51 -12
	capture	13.11 -3	11.66 -3	1.401	1.008 -3	35.39 -3
	(n,p)		(E-thr =	1.276 MeV)	53.40 -3	325.1 -6
	(n,d)		(E-thr =	6.253 MeV)	1.024 -3	219.0 -9
	(n,t)		(E-thr =	8.934 MeV)	15.22 -6	10.76 -9
	(n,He-3)		(E-thr =	6.885 MeV)	643.1 -12	59.72 -12
	(n,a)	0.0	0.0	18.04 -3	17.21 -3	924.1 -6
	(n,2p)		(E-thr =	7.891 MeV)	6.306 -9	25.95 -12
42-Mo- 95	total	19.59	18.03		4.338	5.665
	elastic	5.599	5.597		2.804	4.382
	inelastic		(E-thr =	0.206 MeV)	113.2 -3	1.229
	(n,2n)		(E-thr =	7.454 MeV)	1.365	4.685 -3
	(n,3n)		(E-thr =	17.240 MeV)		222.8 -9
	(n,na)		(E-thr =	2.265 MeV)	2.947 -3	723.8 -9
	(n,np)		(E-thr =	8.730 MeV)	1.560 -3	305.1 -9
	(n,nd)		(E-thr =	13.710 MeV)	0.0	571.4 -12
	capture	13.99	12.43	118.7	1.002 -3	45.47 -3
	(n,p)		(E-thr =	0.145 MeV)	35.23 -3	241.1 -6
	(n,d)		(E-thr =	6.396 MeV)	1.538 -3	313.9 -9
	(n,t)		(E-thr =	7.456 MeV)	80.32 -6	26.90 -9
	(n,He-3)		(E-thr =	7.530 MeV)	433.9 -12	72.91 -12
	(n,a)	0.0	0.0	15.91 -3	13.33 -3	1.504 -3
42-Mo- 96	total	5.322	5.257		4.339	5.664
	elastic	4.727	4.727		2.818	4.670
	inelastic		(E-thr =	0.787 MeV)	149.3 -3	963.3 -3
	(n,2n)		(E-thr =	9.255 MeV)	1.337	1.151 -3
	(n,3n)		(E-thr =	16.710 MeV)		506.3 -9
	(n,na)		(E-thr =	2.790 MeV)	2.931 -3	779.1 -9
	(n,np)		(E-thr =	9.400 MeV)	495.3 -6	130.5 -9
	(n,nd)		(E-thr =	15.650 MeV)		5.213 -12
	capture	595.4 -3	529.8 -3	17.55	1.006 -3	27.42 -3
	(n,p)		(E-thr =	2.430 MeV)	20.65 -3	24.14 -6
	(n,d)		(E-thr =	7.065 MeV)	150.8 -6	52.03 -9
	(n,t)		(E-thr =	9.400 MeV)	4.706 -6	7.493 -9
	(n,a)	0.0	0.0	6.935 -3	9.742 -3	85.63 -6
42-Mo- 97	total	7.959	7.725		4.340	5.667
	elastic	5.857	5.857		2.822	4.367
	inelastic		(E-thr =	0.486 MeV)	90.00 -3	1.247
	(n,2n)		(E-thr =	6.897 MeV)	1.403	8.428 -3
	(n,3n)		(E-thr =	16.150 MeV)		887.3 -9
	(n,na)		(E-thr =	2.879 MeV)	689.6 -6	149.0 -9
	(n,np)		(E-thr =	9.326 MeV)	129.8 -6	50.40 -9
	(n,nd)		(E-thr =	13.960 MeV)	0.0	244.5 -12
	capture	2.102	1.868	17.16	1.001 -3	41.43 -3
	(n,p)		(E-thr =	1.162 MeV)	14.80 -3	15.43 -6
	(n,d)		(E-thr =	6.992 MeV)	658.5 -6	139.4 -9
	(n,t)		(E-thr =	7.712 MeV)	15.09 -6	10.52 -9
	(n,He-3)		(E-thr =	8.828 MeV)	154.6 -15	6.935 -12
	(n,a)	0.0	0.0	4.921 -3	6.881 -3	91.48 -6
42-Mo- 98	total	5.772	5.757		4.340	5.662
	elastic	5.642	5.642		2.830	4.611
	inelastic		(E-thr =	0.743 MeV)	104.9 -3	1.021
	(n,2n)		(E-thr =	8.736 MeV)	1.393	1.923 -3
	(n,3n)		(E-thr =	15.630 MeV)		1.894 -6
	(n,na)		(E-thr =	3.307 MeV)	341.3 -6	77.10 -9
	(n,np)		(E-thr =	9.898 MeV)	27.67 -6	19.09 -9
	(n,nd)		(E-thr =	15.730 MeV)		2.387 -12
	capture	130.0 -3	115.6 -3	6.555	1.012 -3	26.52 -3
	(n,p)		(E-thr =	3.842 MeV)	4.786 -3	1.874 -6
	(n,d)		(E-thr =	7.564 MeV)	31.67 -6	20.18 -9
	(n,t)		(E-thr =	9.479 MeV)	2.762 -6	5.375 -9

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
42-Mo- 98	(n,a)	0.0	0.0	3.405 -3	5.081 -3	8.919 -6
42-Mo- 99	total	13.70	12.84		4.340	5.670
	elastic	5.700	5.700		2.832	3.949
	inelastic		(E-thr = 0.099 MeV)		69.42 -3	1.665
	(n,2n)		(E-thr = 5.991 MeV)		1.429	19.54 -3
	(n,3n)		(E-thr = 14.730 MeV)			4.293 -6
	(n,na)		(E-thr = 2.756 MeV)		187.6 -6	45.16 -9
	(n,np)		(E-thr = 9.832 MeV)		23.39 -6	23.07 -9
	(n,nd)		(E-thr = 13.550 MeV)		0.0	315.3 -12
	(n,nt)		(E-thr = 15.470 MeV)			1.123 -12
	capture	8.000	7.090	41.57	1.001 -3	34.38 -3
	(n,p)		(E-thr = 2.870 MeV)		6.708 -3	2.617 -6
	(n,d)		(E-thr = 7.499 MeV)		267.8 -6	64.34 -9
	(n,t)		(E-thr = 7.306 MeV)		20.41 -6	10.83 -9
	(n,a)	0.0	0.0	1.279 -3	1.950 -3	6.850 -6
42-Mo-100	total	5.499	5.477		4.340	5.665
	elastic	5.300	5.300		2.714	4.481
	inelastic		(E-thr = 0.541 MeV)		95.34 -3	1.158
	(n,2n)		(E-thr = 8.379 MeV)		1.526	2.840 -3
	(n,3n)		(E-thr = 14.370 MeV)			7.505 -6
	(n,na)		(E-thr = 3.198 MeV)		64.50 -6	17.24 -9
	(n,np)		(E-thr = 11.250 MeV)		271.2 -9	4.406 -9
	(n,nd)		(E-thr = 15.880 MeV)			1.061 -12
	capture	199.0 -3	177.0 -3	3.909	1.008 -3	20.96 -3
	(n,p)		(E-thr = 5.502 MeV)		1.838 -3	424.8 -9
	(n,d)		(E-thr = 8.916 MeV)		2.235 -6	7.352 -9
	(n,t)		(E-thr = 9.630 MeV)		1.259 -6	3.269 -9
	(n,a)	0.0	0.0	1.629 -3	2.385 -3	1.159 -6
43-Tc- 99	total	23.16	21.04		4.537	5.612
	elastic	3.373	3.371		3.060	4.195
	inelastic		(E-thr = 0.142 MeV)		214.8 -3	1.324
	(n,2n)		(E-thr = 9.060 MeV)		1.233	1.336 -3
	(n,3n)		(E-thr = 16.420 MeV)			792.2 -9
	(n,na)		(E-thr = 2.992 MeV)		550.7 -6	131.8 -9
	(n,np)		(E-thr = 6.571 MeV)		6.887 -3	1.792 -6
	(n,nd)		(E-thr = 12.970 MeV)		2.497 -18	1.605 -9
	(n,nt)		(E-thr = 13.620 MeV)		0.0	156.0 -12
	capture	19.79	17.67	319.5	1.007 -3	87.11 -3
	(n,p)		(E-thr = 0.580 MeV)		13.41 -3	58.07 -6
	(n,d)		(E-thr = 4.237 MeV)		1.050 -3	228.4 -9
	(n,t)		(E-thr = 6.724 MeV)		94.79 -6	31.23 -9
	(n,He-3)		(E-thr = 8.658 MeV)		107.8 -15	5.943 -12
	(n,a)	0.0	0.0	4.528 -3	6.605 -3	24.12 -6
44-Ru- 96	total	5.390	5.379		4.539	5.613
	elastic	5.100	5.100		2.506	4.647
	inelastic		(E-thr = 0.841 MeV)		868.6 -3	853.7 -3
	(n,2n)		(E-thr = 10.810 MeV)		770.0 -3	176.6 -6
	(n,na)		(E-thr = 1.708 MeV)		19.06 -3	10.77 -6
	(n,np)		(E-thr = 7.433 MeV)		179.9 -3	33.59 -6
	(n,nd)		(E-thr = 15.140 MeV)			12.50 -12
	capture	290.0 -3	257.0 -3	7.297	1.171 -3	97.81 -3
	(n,p)	0.0	0.0	127.4 -3	156.8 -3	3.277 -3
	(n,d)		(E-thr = 5.099 MeV)		1.770 -3	381.6 -9
	(n,t)		(E-thr = 8.886 MeV)		8.094 -6	6.967 -9
	(n,He-3)		(E-thr = 4.566 MeV)		257.2 -9	743.6 -12
	(n,a)	0.0	0.0	77.09 -3	34.04 -3	9.707 -3
	(n,2p)		(E-thr = 4.925 MeV)		1.412 -3	310.2 -9
44-Ru- 98	total	13.10	12.25		4.538	5.613
	elastic	5.100	5.100		2.653	4.490
	inelastic		(E-thr = 0.659 MeV)		702.3 -3	1.043
	(n,2n)		(E-thr = 10.340 MeV)		1.027	363.9 -6
	(n,3n)		(E-thr = 18.490 MeV)			23.84 -9
	(n,na)		(E-thr = 2.259 MeV)		13.72 -3	5.488 -6
	(n,np)		(E-thr = 8.381 MeV)		44.60 -3	7.519 -6
	(n,nd)		(E-thr = 15.620 MeV)			8.942 -12
	capture	8.000	7.090	11.51	1.389 -3	76.79 -3
	(n,p)		(E-thr = 1.020 MeV)		76.29 -3	466.7 -6
	(n,d)		(E-thr = 6.047 MeV)		706.0 -6	170.0 -9
	(n,t)		(E-thr = 9.375 MeV)		3.897 -6	8.598 -9
	(n,He-3)		(E-thr = 6.352 MeV)		1.254 -9	38.45 -12

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
44-Ru- 98	(n,a)	0.0	0.0	18.16 -3	18.75 -3	648.9 -6
	(n,2p)		(E-thr =	7.267 MeV)	431.3 -9	706.5 -12
44-Ru- 99	total	10.98	10.19		4.537	5.614
	elastic	3.676	3.675		2.798	4.099
	inelastic		(E-thr =	0.090 MeV)	265.1 -3	1.440
	(n,2n)		(E-thr =	7.546 MeV)	1.408	4.020 -3
	(n,3n)		(E-thr =	17.880 MeV)		72.33 -9
	(n,na)		(E-thr =	2.353 MeV)	2.441 -3	556.8 -9
	(n,np)		(E-thr =	8.566 MeV)	2.901 -3	599.1 -9
	(n,nd)		(E-thr =	13.590 MeV)	0.0	565.5 -12
	capture	7.303	6.511	168.9	1.001 -3	67.87 -3
	(n,p)	0.0	0.0	33.81 -3	46.45 -3	361.5 -6
	(n,d)		(E-thr =	6.232 MeV)	1.987 -3	411.3 -9
	(n,t)		(E-thr =	7.344 MeV)	36.19 -6	19.72 -9
	(n,He-3)		(E-thr =	7.002 MeV)	1.034 -9	81.63 -12
	(n,a)	0.0	0.0	11.64 -3	11.75 -3	895.1 -6
44-Ru-100	total	11.49	10.93		4.537	5.610
	elastic	6.465	6.465		2.567	4.385
	inelastic		(E-thr =	0.545 MeV)	471.0 -3	1.166
	(n,2n)		(E-thr =	9.776 MeV)	1.472	871.4 -6
	(n,3n)		(E-thr =	17.320 MeV)		266.5 -9
	(n,na)		(E-thr =	2.877 MeV)	2.303 -3	594.3 -9
	(n,np)		(E-thr =	9.282 MeV)	1.159 -3	285.5 -9
	(n,nd)		(E-thr =	16.010 MeV)		1.065 -12
	capture	5.022	4.468	11.20	1.053 -3	55.92 -3
	(n,p)		(E-thr =	2.445 MeV)	13.88 -3	18.43 -6
	(n,d)		(E-thr =	6.948 MeV)	120.0 -6	48.43 -9
	(n,t)		(E-thr =	9.760 MeV)	941.9 -9	4.826 -9
	(n,a)	0.0	0.0	6.174 -3	8.501 -3	69.80 -6
44-Ru-101	total	7.100	6.732		4.537	5.610
	elastic	3.741	3.740		2.818	3.996
	inelastic		(E-thr =	0.128 MeV)	161.7 -3	1.504
	(n,2n)		(E-thr =	6.874 MeV)	1.527	8.553 -3
	(n,3n)		(E-thr =	16.650 MeV)		517.8 -9
	(n,na)		(E-thr =	2.857 MeV)	623.6 -6	141.8 -9
	(n,np)		(E-thr =	9.319 MeV)	231.0 -6	86.51 -9
	(n,nd)		(E-thr =	13.820 MeV)	0.0	248.5 -12
	capture	3.359	2.992	101.0	1.002 -3	97.81 -3
	(n,p)		(E-thr =	0.851 MeV)	21.31 -3	35.61 -6
	(n,d)		(E-thr =	6.985 MeV)	680.2 -6	150.8 -9
	(n,t)		(E-thr =	7.575 MeV)	11.42 -6	10.64 -9
	(n,He-3)		(E-thr =	8.926 MeV)	15.91 -15	3.879 -12
	(n,a)	0.0	0.0	4.073 -3	5.513 -3	58.77 -6
44-Ru-102	total	6.791	6.655		4.536	5.610
	elastic	5.561	5.561		2.485	4.283
	inelastic		(E-thr =	0.480 MeV)	515.9 -3	1.284
	(n,2n)		(E-thr =	9.316 MeV)	1.515	1.305 -3
	(n,3n)		(E-thr =	16.190 MeV)		1.114 -6
	(n,na)		(E-thr =	3.441 MeV)	283.8 -6	70.83 -9
	(n,np)		(E-thr =	10.170 MeV)	36.35 -6	30.78 -9
	capture	1.229	1.094	4.315	1.019 -3	39.66 -3
	(n,p)		(E-thr =	3.755 MeV)	13.81 -3	5.623 -6
	(n,d)		(E-thr =	7.834 MeV)	35.39 -6	24.23 -9
	(n,t)		(E-thr =	10.050 MeV)	250.6 -9	2.781 -9
	(n,a)	0.0	0.0	4.076 -3	5.269 -3	5.680 -6
44-Ru-103	total	13.10	12.23		4.536	5.609
	elastic	5.100	5.100		2.829	3.798
	inelastic		(E-thr =	0.003 MeV)	153.5 -3	1.762
	(n,2n)		(E-thr =	6.298 MeV)	1.540	14.13 -3
	(n,3n)		(E-thr =	15.610 MeV)		1.527 -6
	(n,na)		(E-thr =	3.750 MeV)	76.73 -6	28.30 -9
	(n,np)		(E-thr =	10.050 MeV)	17.31 -6	27.25 -9
	(n,nd)		(E-thr =	14.130 MeV)		163.6 -12
	capture	8.000	7.090	91.33	1.000 -3	32.58 -3
	(n,p)		(E-thr =	1.584 MeV)	9.826 -3	6.167 -6
	(n,d)		(E-thr =	7.720 MeV)	292.0 -6	83.63 -9
	(n,t)		(E-thr =	7.885 MeV)	13.59 -6	12.36 -9
	(n,a)	0.0	0.0	1.870 -3	2.443 -3	2.383 -6
44-Ru-104	total	5.558	5.523		4.535	5.611

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
44-Ru-104	elastic	5.236	5.236		2.533	4.207
	inelastic		(E-thr = 0.362 MeV)		404.3 -3	1.366
	(n,2n)		(E-thr = 9.000 MeV)		1.589	2.001 -3
	(n,3n)		(E-thr = 15.300 MeV)			3.061 -6
	(n,na)		(E-thr = 4.374 MeV)		71.85 -6	27.87 -9
	(n,np)		(E-thr = 10.580 MeV)		3.100 -6	7.621 -9
	capture	322.6 -3	286.9 -3	6.566	1.093 -3	31.99 -3
	(n,p)		(E-thr = 4.661 MeV)		5.496 -3	1.560 -6
	(n,d)		(E-thr = 8.252 MeV)		5.564 -6	11.20 -9
	(n,t)		(E-thr = 10.470 MeV)		32.42 -9	1.676 -9
	(n,a)	0.0	0.0	2.180 -3	1.988 -3	820.9 -9
44-Ru-106	total	3.488	3.483		4.534	5.604
	elastic	3.342	3.342		2.829	4.303
	inelastic		(E-thr = 0.273 MeV)		123.9 -3	1.279
	(n,2n)		(E-thr = 8.552 MeV)		1.577	2.712 -3
	(n,3n)		(E-thr = 14.520 MeV)			6.762 -6
	(n,na)		(E-thr = 5.242 MeV)		2.298 -6	3.053 -9
	(n,np)		(E-thr = 11.190 MeV)		158.0 -9	3.786 -9
	capture	146.0 -3	129.4 -3	2.005	1.003 -3	14.31 -3
	(n,p)		(E-thr = 5.573 MeV)		2.830 -3	641.2 -9
	(n,d)		(E-thr = 8.860 MeV)		676.0 -9	5.830 -9
	(n,t)		(E-thr = 10.610 MeV)		14.86 -9	1.244 -9
	(n,a)		(E-thr = 0.069 MeV)		559.1 -6	127.3 -9
45-Rh-103	total	149.8	136.6		4.536	5.613
	elastic	3.244	3.227		2.987	4.071
	inelastic		(E-thr = 0.040 MeV)		219.2 -3	1.432
	(n,2n)		(E-thr = 9.414 MeV)		1.285	802.1 -6
	(n,3n)		(E-thr = 16.930 MeV)			414.0 -9
	(n,na)		(E-thr = 3.150 MeV)		782.3 -6	175.6 -9
	(n,np)		(E-thr = 6.278 MeV)		14.57 -3	4.409 -6
	(n,nd)		(E-thr = 13.260 MeV)		0.0	806.7 -12
	(n,nt)		(E-thr = 13.890 MeV)		0.0	56.51 -12
	capture	146.6	133.4	1045.	1.047 -3	105.7 -3
	(n,p)	0.0	0.0	13.43 -3	16.51 -3	200.5 -6
	(n,d)		(E-thr = 3.945 MeV)		1.559 -3	331.9 -9
	(n,t)		(E-thr = 7.015 MeV)		40.55 -6	19.99 -9
	(n,He-3)		(E-thr = 8.637 MeV)		304.6 -15	7.356 -12
	(n,a)	0.0	0.0	6.685 -3	10.16 -3	19.52 -6
45-Rh-105	total	2482.	2295.		4.535	5.611
	elastic	8991.	8910.		2.827	4.035
	inelastic		(E-thr = 0.131 MeV)		213.3 -3	1.493
	(n,2n)		(E-thr = 9.065 MeV)		1.473	1.551 -3
	(n,3n)		(E-thr = 16.140 MeV)			1.155 -6
	(n,na)		(E-thr = 3.988 MeV)		146.8 -6	43.73 -9
	(n,np)		(E-thr = 7.117 MeV)		4.405 -3	935.6 -9
	(n,nd)		(E-thr = 13.780 MeV)		0.0	315.0 -12
	(n,nt)		(E-thr = 13.840 MeV)		0.0	78.13 -12
	capture	1583.	1404.	1702.	1.012 -3	78.03 -3
	(n,p)		(E-thr = 1.145 MeV)		12.56 -3	23.03 -6
	(n,d)		(E-thr = 4.785 MeV)		423.5 -6	109.6 -9
	(n,t)		(E-thr = 7.540 MeV)		13.49 -6	14.23 -9
	(n,a)	0.0	0.0	2.122 -3	2.761 -3	1.644 -6
46-Pd-102	total	8.387	8.007		4.480	5.580
	elastic	5.024	5.024		2.582	4.487
	inelastic		(E-thr = 0.562 MeV)		898.0 -3	980.2 -3
	(n,2n)		(E-thr = 10.680 MeV)		871.9 -3	192.2 -6
	(n,3n)		(E-thr = 19.030 MeV)			8.030 -9
	(n,na)		(E-thr = 2.142 MeV)		4.778 -3	1.254 -6
	(n,np)		(E-thr = 7.886 MeV)		11.17 -3	1.900 -6
	(n,nd)		(E-thr = 15.540 MeV)			1.794 -12
	capture	3.363	2.984	19.54	1.019 -3	108.9 -3
	(n,p)		(E-thr = 0.369 MeV)		92.05 -3	2.098 -3
	(n,d)		(E-thr = 5.553 MeV)		679.5 -6	154.4 -9
	(n,t)		(E-thr = 9.299 MeV)		1.984 -6	4.878 -9
	(n,He-3)		(E-thr = 5.614 MeV)		517.6 -12	51.59 -12
	(n,a)	0.0	0.0	18.05 -3	18.74 -3	672.0 -6
	(n,2p)		(E-thr = 6.549 MeV)		613.2 -9	393.0 -12
46-Pd-104	total	5.440	5.382		4.480	5.576
	elastic	4.917	4.917		2.437	4.386
	inelastic		(E-thr = 0.561 MeV)		523.8 -3	1.109

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
46-Pd-104	(n,2n)		(E-thr = 10.100 MeV)		1.450	591.7 -6
	(n,3n)		(E-thr = 17.800 MeV)			131.4 -9
	(n,na)		(E-thr = 2.626 MeV)		1.978 -3	504.6 -9
	(n,np)		(E-thr = 8.754 MeV)		2.222 -3	443.6 -9
	(n,nd)		(E-thr = 15.830 MeV)			918.5 -15
	capture	523.1 -3	465.2 -3	21.92	1.038 -3	77.24 -3
	(n,p)		(E-thr = 1.682 MeV)		54.30 -3	126.4 -6
	(n,d)		(E-thr = 6.421 MeV)		328.7 -6	87.87 -9
	(n,t)		(E-thr = 9.590 MeV)		869.9 -9	4.475 -9
	(n,He-3)		(E-thr = 7.225 MeV)		8.095 -12	7.857 -12
	(n,a)	0.0	0.0	7.344 -3	9.709 -3	81.04 -6
46-Pd-105	total	25.36	23.10		4.480	5.571
	elastic	5.116	5.115		2.642	3.928
	inelastic		(E-thr = 0.283 MeV)		194.6 -3	1.519
	(n,2n)		(E-thr = 7.166 MeV)		1.605	6.262 -3
	(n,3n)		(E-thr = 17.260 MeV)			259.9 -9
	(n,na)		(E-thr = 2.920 MeV)		589.1 -6	131.2 -9
	(n,np)		(E-thr = 8.848 MeV)		465.3 -6	123.0 -9
	(n,nd)		(E-thr = 13.590 MeV)		0.0	284.7 -12
	capture	20.25	17.99	96.83	1.003 -3	114.8 -3
	(n,p)	0.0	0.0	21.91 -3	28.82 -3	174.1 -6
	(n,d)		(E-thr = 6.516 MeV)		978.8 -6	209.0 -9
	(n,t)		(E-thr = 7.342 MeV)		28.45 -6	14.89 -9
	(n,He-3)		(E-thr = 8.094 MeV)		1.002 -12	9.535 -12
	(n,a)	0.0	0.0	5.062 -3	6.704 -3	79.52 -6
46-Pd-106	total	5.304	5.270		4.480	5.573
	elastic	5.001	5.001		2.508	4.361
	inelastic		(E-thr = 0.517 MeV)		349.2 -3	1.137
	(n,2n)		(E-thr = 9.658 MeV)		1.597	989.4 -6
	(n,3n)		(E-thr = 16.820 MeV)			579.5 -9
	(n,na)		(E-thr = 3.265 MeV)		401.9 -6	99.69 -9
	(n,np)		(E-thr = 9.441 MeV)		211.3 -6	70.48 -9
	capture	303.0 -3	269.5 -3	9.311	1.123 -3	72.70 -3
	(n,p)		(E-thr = 2.785 MeV)		19.90 -3	13.56 -6
	(n,d)		(E-thr = 7.109 MeV)		57.23 -6	30.23 -9
	(n,t)		(E-thr = 9.929 MeV)		236.0 -9	2.750 -9
	(n,a)	0.0	0.0	3.865 -3	4.826 -3	11.67 -6
46-Pd-107	total	5.326	5.106		4.480	5.580
	elastic	3.318	3.318		2.657	3.897
	inelastic		(E-thr = 0.117 MeV)		183.6 -3	1.547
	(n,2n)		(E-thr = 6.596 MeV)		1.621	10.78 -3
	(n,3n)		(E-thr = 16.250 MeV)			912.4 -9
	(n,na)		(E-thr = 3.565 MeV)		68.51 -6	21.22 -9
	(n,np)		(E-thr = 9.380 MeV)		94.77 -6	52.96 -9
	(n,nd)		(E-thr = 13.700 MeV)		0.0	224.5 -12
	capture	2.008	1.788	108.9	1.002 -3	121.3 -3
	(n,p)		(E-thr = 0.735 MeV)		13.68 -3	13.13 -6
	(n,d)		(E-thr = 7.048 MeV)		458.9 -6	108.5 -9
	(n,t)		(E-thr = 7.460 MeV)		9.925 -6	9.258 -9
	(n,a)	0.0	0.0	2.446 -3	3.091 -3	8.855 -6
46-Pd-108	total	10.42	9.489		4.480	5.577
	elastic	1.920	1.919		2.364	4.218
	inelastic		(E-thr = 0.438 MeV)		467.3 -3	1.302
	(n,2n)		(E-thr = 9.314 MeV)		1.637	1.348 -3
	(n,3n)		(E-thr = 15.910 MeV)			1.795 -6
	(n,na)		(E-thr = 3.882 MeV)		71.64 -6	23.06 -9
	(n,np)		(E-thr = 10.050 MeV)		21.48 -6	20.34 -9
	capture	8.504	7.569	252.4	1.097 -3	54.27 -3
	(n,p)		(E-thr = 3.755 MeV)		9.123 -3	4.314 -6
	(n,d)		(E-thr = 7.718 MeV)		16.18 -6	18.53 -9
	(n,t)		(E-thr = 10.120 MeV)		81.58 -9	1.835 -9
	(n,a)	0.0	0.0	2.082 -3	2.045 -3	1.492 -6
46-Pd-110	total	5.222	5.196		4.480	5.571
	elastic	4.995	4.994		2.387	4.132
	inelastic		(E-thr = 0.377 MeV)		412.7 -3	1.406
	(n,2n)		(E-thr = 8.886 MeV)		1.675	2.096 -3
	(n,3n)		(E-thr = 15.100 MeV)			4.281 -6
	(n,na)		(E-thr = 4.464 MeV)		5.884 -6	4.092 -9
	(n,np)		(E-thr = 10.620 MeV)		984.4 -9	5.233 -9
	capture	227.0 -3	201.6 -3	2.816	1.031 -3	27.78 -3

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
46-Pd-110	(n,p)		(E-thr = 4.665 MeV)		4.267 -3	1.159 -6
	(n,d)		(E-thr = 8.284 MeV)		3.000 -6	7.102 -9
	(n,t)		(E-thr = 10.280 MeV)		44.76 -9	1.699 -9
	(n,a)	0.0	0.0	1.300 -3	812.0 -6	238.1 -9
47-Ag-107	total	46.29	41.94		4.258	5.658
	elastic	7.668	7.660		2.514	3.990
	inelastic		(E-thr = 0.094 MeV)		367.8 -3	1.559
	(n,2n)		(E-thr = 9.637 MeV)		1.351	787.8 -6
	(n,3n)		(E-thr = 17.640 MeV)			42.75 -9
	(n,na)		(E-thr = 2.831 MeV)		623.8 -6	211.9 -9
	(n,np)		(E-thr = 5.835 MeV)		6.100 -3	4.466 -6
	capture	38.62	34.28	103.2	78.43 -6	107.6 -3
	(n,p)	0.0	0.0	13.36 -3	14.74 -3	490.1 -6
	(n,a)	0.0	0.0	2.914 -3	4.215 -3	16.83 -6
47-Ag-109	total	93.04	83.40		4.335	5.775
	elastic	2.512	2.504		2.578	4.064
	inelastic		(E-thr = 0.089 MeV)		351.5 -3	1.612
	(n,2n)		(E-thr = 9.277 MeV)		1.382	1.107 -3
	(n,3n)		(E-thr = 16.610 MeV)			314.9 -9
	(n,na)		(E-thr = 3.322 MeV)		495.4 -6	206.1 -9
	(n,np)		(E-thr = 6.548 MeV)		5.243 -3	1.306 -6
	capture	90.53	80.89	1472.	53.80 -6	97.12 -3
	(n,p)		(E-thr = 0.337 MeV)		13.92 -3	100.0 -6
	(n,a)	35.56 -18	71.12 -18	2.851 -3	3.955 -3	3.598 -6
47-Ag-110M	total	88.47	78.55		4.480	5.576
	elastic	6.468	6.454		2.659	3.807
	inelastic	0.0	0.0	4.132	165.0 -3	1.195
	(n,2n)		(E-thr = 6.873 MeV)		1.638	7.517 -3
	(n,3n)		(E-thr = 16.150 MeV)			1.171 -6
	(n,na)		(E-thr = 3.538 MeV)		118.1 -6	36.24 -9
	(n,np)		(E-thr = 7.209 MeV)		1.998 -3	402.3 -9
	(n,nd)		(E-thr = 11.090 MeV)		14.55 -9	6.872 -9
	(n,nt)		(E-thr = 14.160 MeV)			16.98 -12
	capture	82.00	72.09	94.12	1.043 -3	564.0 -3
	(n,p)	0.0	0.0	8.493 -3	12.11 -3	72.78 -6
	(n,d)		(E-thr = 4.878 MeV)		1.140 -3	235.9 -9
	(n,t)		(E-thr = 4.852 MeV)		87.68 -6	27.38 -9
	(n,He-3)		(E-thr = 9.377 MeV)		177.5 -15	4.186 -12
	(n,a)	0.0	0.0	1.895 -3	2.447 -3	2.896 -6
48-Cd-106	total	6.492	6.385		4.480	5.578
	elastic	5.522	5.522		2.371	4.476
	inelastic		(E-thr = 0.639 MeV)		838.3 -3	916.4 -3
	(n,2n)		(E-thr = 10.970 MeV)		841.4 -3	172.9 -6
	(n,3n)		(E-thr = 19.620 MeV)			48.81 -12
	(n,na)		(E-thr = 1.643 MeV)		19.97 -3	6.078 -6
	(n,np)		(E-thr = 7.420 MeV)		216.3 -3	41.54 -6
	(n,nd)		(E-thr = 15.180 MeV)			10.72 -12
	capture	969.5 -3	862.4 -3	10.74	1.701 -3	175.4 -3
	(n,p)	0.0	0.0	80.92 -3	87.00 -3	1.646 -3
	(n,d)		(E-thr = 5.088 MeV)		2.316 -3	505.7 -9
	(n,t)		(E-thr = 8.940 MeV)		5.068 -6	8.703 -9
	(n,He-3)		(E-thr = 4.631 MeV)		23.94 -9	257.7 -12
	(n,a)	0.0	0.0	106.7 -3	102.0 -3	6.070 -3
	(n,2p)		(E-thr = 5.270 MeV)		48.03 -6	12.08 -9
48-Cd-108	total	6.619	6.499		4.480	5.578
	elastic	5.533	5.532		2.446	4.461
	inelastic		(E-thr = 0.639 MeV)		970.6 -3	982.2 -3
	(n,2n)		(E-thr = 10.440 MeV)		966.9 -3	322.1 -6
	(n,3n)		(E-thr = 18.440 MeV)			33.00 -9
	(n,na)		(E-thr = 2.294 MeV)		8.694 -3	2.411 -6
	(n,np)		(E-thr = 8.217 MeV)		13.01 -3	2.252 -6
	(n,nd)		(E-thr = 15.530 MeV)			2.814 -12
	capture	1.087	966.6 -3	27.19	3.151 -3	132.7 -3
	(n,p)		(E-thr = 0.875 MeV)		59.38 -3	380.8 -6
	(n,d)		(E-thr = 5.885 MeV)		392.5 -6	105.9 -9
	(n,t)		(E-thr = 9.282 MeV)		1.563 -6	5.746 -9
	(n,He-3)		(E-thr = 6.252 MeV)		199.5 -12	14.55 -12
	(n,a)	0.0	0.0	9.726 -3	12.08 -3	188.3 -6
	(n,2p)		(E-thr = 7.460 MeV)		38.94 -9	147.4 -12

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
48-Cd-110	total	29.66	28.43		4.480	5.575
	elastic	18.64	18.64		2.474	4.469
	inelastic		(E-thr = 0.664 MeV)		832.1 -3	1.029
	(n,2n)		(E-thr = 9.976 MeV)		1.139	503.3 -6
	(n,3n)		(E-thr = 17.410 MeV)			274.3 -9
	(n,na)		(E-thr = 2.884 MeV)		658.7 -6	159.1 -9
	(n,np)		(E-thr = 9.003 MeV)		607.0 -6	149.0 -9
	capture	11.02	9.796	40.06	1.096 -3	74.70 -3
	(n,p)		(E-thr = 2.130 MeV)		26.42 -3	40.31 -6
	(n,d)		(E-thr = 6.671 MeV)		104.0 -6	42.20 -9
	(n,t)		(E-thr = 9.710 MeV)		296.0 -9	2.714 -9
	(n,a)	0.0	0.0	4.371 -3	5.478 -3	15.48 -6
48-Cd-111	total	28.97	26.20		4.480	5.572
	elastic	5.048	5.046		2.629	4.046
	inelastic		(E-thr = 0.248 MeV)		227.2 -3	1.404
	(n,2n)		(E-thr = 7.045 MeV)		1.575	6.184 -3
	(n,3n)		(E-thr = 17.020 MeV)			407.4 -9
	(n,na)		(E-thr = 3.335 MeV)		108.9 -6	30.42 -9
	(n,np)		(E-thr = 9.174 MeV)		311.3 -6	106.5 -9
	(n,nd)		(E-thr = 13.720 MeV)		0.0	132.0 -12
	capture	23.92	21.16	48.42	1.003 -3	112.2 -3
	(n,p)		(E-thr = 0.248 MeV)		43.82 -3	93.54 -6
	(n,d)		(E-thr = 6.843 MeV)		538.1 -6	126.9 -9
	(n,t)		(E-thr = 7.474 MeV)		5.914 -6	7.298 -9
	(n,a)	0.0	0.0	3.159 -3	3.853 -3	21.23 -6
48-Cd-112	total	9.211	8.968		4.480	5.571
	elastic	7.019	7.018		2.453	4.397
	inelastic		(E-thr = 0.623 MeV)		450.4 -3	1.108
	(n,2n)		(E-thr = 9.485 MeV)		1.560	984.3 -6
	(n,3n)		(E-thr = 16.530 MeV)			925.3 -9
	(n,na)		(E-thr = 3.508 MeV)		112.6 -6	33.48 -9
	(n,np)		(E-thr = 9.732 MeV)		62.53 -6	34.71 -9
	capture	2.192	1.950	13.37	1.046 -3	62.60 -3
	(n,p)		(E-thr = 3.204 MeV)		13.26 -3	7.919 -6
	(n,d)		(E-thr = 7.402 MeV)		36.59 -6	27.67 -9
	(n,t)		(E-thr = 10.090 MeV)		61.90 -9	1.796 -9
	(n,a)	0.0	0.0	2.495 -3	2.460 -3	2.378 -6
48-Cd-113	total	2067.	2449.		4.480	5.574
	elastic	25.47	50.83		2.658	4.070
	inelastic		(E-thr = 0.266 MeV)		182.7 -3	1.414
	(n,2n)		(E-thr = 6.607 MeV)		1.628	9.860 -3
	(n,3n)		(E-thr = 16.090 MeV)			1.261 -6
	(n,na)		(E-thr = 3.901 MeV)		19.46 -6	8.960 -9
	(n,np)		(E-thr = 9.811 MeV)		17.94 -6	19.32 -9
	(n,nd)		(E-thr = 14.010 MeV)			79.17 -12
	capture	2065.	2444.	393.7	1.001 -3	75.53 -3
	(n,p)		(E-thr = 1.239 MeV)		9.096 -3	5.921 -6
	(n,d)		(E-thr = 7.480 MeV)		208.2 -6	63.13 -9
	(n,t)		(E-thr = 7.768 MeV)		4.299 -6	7.304 -9
	(n,a)	0.0	0.0	1.673 -3	1.809 -3	2.269 -6
48-Cd-114	total	6.240	6.203		4.480	5.573
	elastic	5.900	5.900		2.506	4.363
	inelastic		(E-thr = 0.563 MeV)		346.9 -3	1.166
	(n,2n)		(E-thr = 9.126 MeV)		1.618	1.540 -3
	(n,3n)		(E-thr = 15.730 MeV)			2.293 -6
	(n,na)		(E-thr = 4.143 MeV)		12.77 -6	6.496 -9
	(n,np)		(E-thr = 10.360 MeV)		2.764 -6	7.398 -9
	capture	340.4 -3	302.9 -3	16.96	1.020 -3	39.18 -3
	(n,p)		(E-thr = 4.113 MeV)		7.816 -3	2.512 -6
	(n,d)		(E-thr = 8.034 MeV)		3.255 -6	9.028 -9
	(n,t)		(E-thr = 10.360 MeV)		13.79 -9	1.255 -9
	(n,a)	0.0	0.0	748.9 -6	495.6 -6	162.7 -9
48-Cd-116	total	6.058	6.049		4.480	5.569
	elastic	5.983	5.983		2.512	4.362
	inelastic		(E-thr = 0.518 MeV)		343.0 -3	1.181
	(n,2n)		(E-thr = 8.776 MeV)		1.623	1.975 -3
	(n,3n)		(E-thr = 14.980 MeV)			5.146 -6
	(n,na)		(E-thr = 4.855 MeV)		375.3 -9	932.3 -12
	(n,np)		(E-thr = 11.200 MeV)		29.08 -9	1.905 -9
	capture	74.84 -3	66.59 -3	1.745	1.002 -3	21.49 -3

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
48-Cd-116	(n,p)		(E-thr =	5.361 MeV)	1.788 -3	404.2 -9
	(n,d)		(E-thr =	8.868 MeV)	314.2 -9	3.915 -9
	(n,t)		(E-thr =	10.520 MeV)	5.894 -9	986.8 -12
	(n,a)	0.0	0.0	183.8 -6	67.82 -6	16.52 -9
49-In-113	total	15.75	14.54		4.640	5.526
	elastic	3.679	3.676		2.511	4.423
	inelastic		(E-thr =	0.395 MeV)	565.3 -3	900.9 -3
	(n,2n)		(E-thr =	9.533 MeV)	1.530	695.1 -6
	(n,3n)		(E-thr =	17.270 MeV)		248.4 -9
	(n,na)		(E-thr =	3.099 MeV)	70.93 -6	22.90 -9
	(n,np)		(E-thr =	6.142 MeV)	4.319 -3	802.4 -9
	(n,nd)		(E-thr =	13.300 MeV)	0.0	229.2 -12
	(n,nt)		(E-thr =	14.100 MeV)	--	3.313 -12
	capture	12.07	10.87	325.5	1.001 -3	198.2 -3
	(n,p)	0.0	0.0	15.80 -3	22.60 -3	45.81 -6
	(n,d)		(E-thr =	3.811 MeV)	1.135 -3	241.7 -9
	(n,t)		(E-thr =	7.055 MeV)	10.09 -6	13.85 -9
	(n,He-3)		(E-thr =	8.073 MeV)	283.6 -18	5.830 -12
	(n,a)	0.0	0.0	3.440 -3	4.270 -3	3.723 -6
49-In-115	total	203.5	184.6		4.639	5.525
	elastic	2.526	2.504		2.946	4.439
	inelastic		(E-thr =	0.339 MeV)	218.0 -3	952.4 -3
	(n,2n)		(E-thr =	9.120 MeV)	1.460	960.7 -6
	(n,3n)		(E-thr =	16.460 MeV)		815.0 -9
	(n,na)		(E-thr =	3.770 MeV)	134.3 -6	45.51 -9
	(n,np)		(E-thr =	6.875 MeV)	4.652 -3	850.3 -9
	(n,nd)		(E-thr =	13.670 MeV)	0.0	104.0 -12
	(n,nt)		(E-thr =	14.040 MeV)		5.347 -12
	capture	201.0	182.1	3210.	1.013 -3	129.3 -3
	(n,p)		(E-thr =	0.671 MeV)	7.280 -3	7.893 -6
	(n,d)		(E-thr =	4.544 MeV)	350.6 -6	108.1 -9
	(n,t)		(E-thr =	7.430 MeV)	2.515 -6	10.25 -9
	(n,a)	0.0	0.0	1.674 -3	1.999 -3	1.441 -6
50-Sn-112	total	5.597	5.485		4.640	5.522
	elastic	4.588	4.588		2.930	4.758
	inelastic		(E-thr =	1.268 MeV)	418.4 -3	652.7 -3
	(n,2n)		(E-thr =	10.890 MeV)	1.143	262.9 -6
	(n,3n)		(E-thr =	19.150 MeV)		1.922 -9
	(n,na)		(E-thr =	1.845 MeV)	17.91 -3	4.523 -6
	(n,np)		(E-thr =	7.615 MeV)	80.86 -3	11.38 -6
	capture	1.009	896.8 -3	30.51	1.115 -3	109.5 -3
	(n,p)	0.0	0.0	20.22 -3	33.71 -3	182.0 -6
	(n,d)		(E-thr =	5.284 MeV)	1.223 -3	289.5 -9
	(n,t)		(E-thr =	9.206 MeV)	57.09 -9	6.497 -9
	(n,He-3)		(E-thr =	5.211 MeV)	735.8 -12	50.84 -12
	(n,a)	0.0	0.0	9.474 -3	13.44 -3	138.8 -6
	(n,2p)		(E-thr =	5.968 MeV)	105.1 -15	167.4 -12
50-Sn-114	total	4.671	4.657		4.639	5.521
	elastic	4.546	4.546		2.914	4.766
	inelastic		(E-thr =	1.311 MeV)	456.8 -3	663.3 -3
	(n,2n)		(E-thr =	10.400 MeV)	1.223	370.9 -6
	(n,3n)		(E-thr =	18.210 MeV)		50.55 -9
	(n,na)		(E-thr =	2.656 MeV)	1.993 -3	476.4 -9
	(n,np)		(E-thr =	8.557 MeV)	526.9 -6	310.3 -9
	capture	125.3 -3	111.5 -3	6.673	1.025 -3	89.86 -3
	(n,p)		(E-thr =	1.212 MeV)	35.71 -3	44.57 -6
	(n,d)		(E-thr =	6.226 MeV)	330.3 -6	113.8 -9
	(n,t)		(E-thr =	9.518 MeV)	1.753 -9	4.114 -9
	(n,He-3)		(E-thr =	6.898 MeV)	143.4 -15	3.950 -12
	(n,a)	0.0	0.0	4.927 -3	6.619 -3	18.10 -6
50-Sn-115	total	38.22	34.85		4.639	5.522
	elastic	8.370	8.360		2.918	4.328
	inelastic		(E-thr =	0.502 MeV)	232.0 -3	1.109
	(n,2n)		(E-thr =	7.617 MeV)	1.458	3.409 -3
	(n,3n)		(E-thr =	18.010 MeV)		67.43 -9
	(n,na)		(E-thr =	3.231 MeV)	414.2 -6	114.4 -9
	(n,np)		(E-thr =	8.830 MeV)	52.57 -6	95.63 -9
	(n,nd)		(E-thr =	13.840 MeV)	0.0	38.64 -12
	capture	29.85	26.49	13.85	1.003 -3	79.55 -3
	(n,p)	0.0	0.0	18.54 -3	24.91 -3	49.66 -6

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
50-Sn-115	(n,d)		(E-thr =	6.499 MeV)	816.2 -6	180.8 -9
	(n,t)		(E-thr =	7.604 MeV)	2.678 -6	10.72 -9
	(n,He-3)		(E-thr =	7.909 MeV)	736.4 -18	5.495 -12
	(n,a)	0.0	0.0	3.747 -3	4.739 -3	29.81 -6
50-Sn-116	total	4.439	4.425		4.639	5.527
	elastic	4.312	4.312		2.921	4.779
	inelastic		(E-thr =	1.305 MeV)	304.8 -3	689.2 -3
	(n,2n)		(E-thr =	9.650 MeV)	1.392	737.1 -6
	(n,3n)		(E-thr =	17.270 MeV)		288.2 -9
	(n,na)		(E-thr =	3.399 MeV)	371.5 -6	118.3 -9
	(n,np)		(E-thr =	9.359 MeV)	873.2 -9	83.43 -9
	capture	127.7 -3	113.6 -3	12.40	1.014 -3	56.18 -3
	(n,p)		(E-thr =	2.512 MeV)	16.94 -3	8.956 -6
	(n,d)		(E-thr =	7.029 MeV)	25.07 -6	30.06 -9
	(n,t)		(E-thr =	9.910 MeV)	34.80 -12	2.423 -9
	(n,a)	0.0	0.0	3.011 -3	3.186 -3	2.746 -6
50-Sn-117	total	7.277	7.037		4.639	5.525
	elastic	5.104	5.103		2.925	4.195
	inelastic		(E-thr =	0.160 MeV)	134.0 -3	1.253
	(n,2n)		(E-thr =	7.009 MeV)	1.565	7.324 -3
	(n,3n)		(E-thr =	16.660 MeV)		525.2 -9
	(n,na)		(E-thr =	3.803 MeV)	97.30 -6	38.23 -9
	(n,np)		(E-thr =	9.521 MeV)	102.6 -9	37.26 -9
	(n,nd)		(E-thr =	14.040 MeV)		17.95 -12
	capture	2.173	1.933	18.70	1.003 -3	67.64 -3
	(n,p)		(E-thr =	0.678 MeV)	11.80 -3	9.011 -6
	(n,d)		(E-thr =	7.191 MeV)	553.2 -6	163.3 -9
	(n,t)		(E-thr =	7.799 MeV)	76.12 -9	4.433 -9
	(n,a)	0.0	0.0	2.155 -3	2.289 -3	3.635 -6
50-Sn-118	total	4.440	4.415		4.639	5.523
	elastic	4.222	4.222		2.928	4.773
	inelastic		(E-thr =	1.240 MeV)	306.7 -3	713.3 -3
	(n,2n)		(E-thr =	9.411 MeV)	1.397	903.2 -6
	(n,3n)		(E-thr =	16.420 MeV)		773.5 -9
	(n,na)		(E-thr =	4.091 MeV)	22.92 -6	13.02 -9
	(n,np)		(E-thr =	10.090 MeV)	198.4 -12	16.68 -9
	capture	217.8 -3	193.7 -3	5.347	1.002 -3	31.90 -3
	(n,p)		(E-thr =	3.450 MeV)	5.531 -3	1.867 -6
	(n,d)		(E-thr =	7.759 MeV)	1.634 -6	16.89 -9
	(n,t)		(E-thr =	10.360 MeV)	297.1 -15	1.428 -9
	(n,a)	0.0	0.0	1.053 -3	660.7 -6	222.0 -9
50-Sn-119	total	6.852	6.606		4.639	5.521
	elastic	4.676	4.675		2.931	4.106
	inelastic		(E-thr =	0.024 MeV)	121.8 -3	1.367
	(n,2n)		(E-thr =	6.544 MeV)	1.579	11.22 -3
	(n,3n)		(E-thr =	15.950 MeV)		1.198 -6
	(n,na)		(E-thr =	4.433 MeV)	13.83 -6	10.05 -9
	(n,np)		(E-thr =	9.994 MeV)	1.442 -9	29.17 -9
	(n,nd)		(E-thr =	14.300 MeV)		6.182 -12
	capture	2.176	1.931	5.334	1.001 -3	34.05 -3
	(n,p)		(E-thr =	1.567 MeV)	4.424 -3	1.763 -6
	(n,d)		(E-thr =	7.665 MeV)	140.5 -6	60.36 -9
	(n,t)		(E-thr =	8.065 MeV)	33.53 -9	4.708 -9
	(n,a)	0.0	0.0	1.306 -3	1.070 -3	526.7 -9
50-Sn-120	total	5.479	5.464		4.639	5.518
	elastic	5.340	5.340		2.928	4.763
	inelastic		(E-thr =	1.181 MeV)	230.0 -3	734.7 -3
	(n,2n)		(E-thr =	9.188 MeV)	1.476	1.318 -3
	(n,3n)		(E-thr =	15.730 MeV)		1.699 -6
	(n,na)		(E-thr =	4.847 MeV)	2.767 -6	3.877 -9
	(n,np)		(E-thr =	10.760 MeV)	326.1 -15	5.566 -9
	capture	139.2 -3	123.8 -3	1.222	1.001 -3	17.85 -3
	(n,p)		(E-thr =	4.658 MeV)	3.309 -3	777.1 -9
	(n,d)		(E-thr =	8.426 MeV)	19.57 -9	9.912 -9
	(n,t)		(E-thr =	10.610 MeV)	27.46 -15	1.200 -9
	(n,a)	0.0	0.0	721.1 -6	254.0 -6	71.84 -9
50-Sn-122	total	3.979	3.958		4.639	5.520
	elastic	3.795	3.795		2.930	4.791
	inelastic		(E-thr =	1.150 MeV)	172.3 -3	715.2 -3

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
50-Sn-122	(n,2n)		(E-thr = 8.893 MeV)		1.535	1.818 -3
	(n,3n)		(E-thr = 15.120 MeV)			3.054 -6
	(n,na)		(E-thr = 5.708 MeV)		97.86 -9	727.1 -12
	(n,np)		(E-thr = 11.490 MeV)		357.0 -18	2.647 -9
	capture	183.7 -3	163.0 -3	932.7 -3	1.001 -3	10.33 -3
	(n,p)		(E-thr = 5.610 MeV)		714.5 -6	153.0 -9
	(n,d)		(E-thr = 9.163 MeV)		345.7 -12	2.748 -9
	(n,t)		(E-thr = 11.210 MeV)		124.6 -18	644.3 -12
	(n,a)		(E-thr = 0.062 MeV)		44.19 -6	14.83 -9
50-Sn-123	total	7.000	6.684		4.638	5.522
	elastic	4.000	4.000		2.929	4.509
	inelastic		(E-thr = 0.025 MeV)		79.63 -3	930.5 -3
	(n,2n)		(E-thr = 6.000 MeV)		-1.627	19.56 -3
	(n,3n)		(E-thr = 14.890 MeV)			3.280 -6
	(n,na)		(E-thr = 6.062 MeV)		7.614 -9	275.3 -12
	(n,np)		(E-thr = 11.610 MeV)		29.58 -18	1.149 -9
	capture	3.000	2.659	62.64	1.002 -3	59.42 -3
	(n,p)		(E-thr = 3.628 MeV)		1.570 -3	361.3 -9
	(n,d)		(E-thr = 9.280 MeV)		33.38 -9	9.862 -9
	(n,t)		(E-thr = 8.926 MeV)		258.4 -12	1.184 -9
	(n,a)	0.0	0.0	229.1 -6	48.65 -6	14.23 -9
50-Sn-124	total	4.535	4.520		4.638	5.518
	elastic	4.400	4.400		2.929	4.754
	inelastic		(E-thr = 1.141 MeV)		192.0 -3	749.9 -3
	(n,2n)		(E-thr = 8.564 MeV)		1.515	2.352 -3
	(n,3n)		(E-thr = 14.560 MeV)			4.699 -6
	(n,na)		(E-thr = 6.735 MeV)		101 6 -12	72.76 -12
	(n,np)		(E-thr = 12.190 MeV)		68.32 -21	524.0 -12
	capture	135.5 -3	120.4 -3	7.905	1.000 -3	11.03 -3
	(n,p)		(E-thr = 6.409 MeV)		951.7 -6	218.9 -9
	(n,d)		(E-thr = 9.863 MeV)		55.41 -15	1.220 -9
	(n,t)		(E-thr = 11.610 MeV)		1.093 -18	292.0 -12
	(n,a)		(E-thr = 1.268 MeV)		4.269 -6	2.819 -9
50-Sn-126	total	4.090	4.098		4.638	5.521
	elastic	4.000	4.000		2.930	4.772
	inelastic		(E-thr = 1.150 MeV)		178.7 -3	740.7 -3
	(n,2n)		(E-thr = 8.264 MeV)		1.529	3.124 -3
	(n,3n)		(E-thr = 14.050 MeV)			7.990 -6
	(n,na)		(E-thr = 7.758 MeV)		319.9 -15	10.58 -12
	(n,np)		(E-thr = 12.920 MeV)		0.0	140.3 -12
	capture	90.00 -3	79.76 -3	150.0 -3	1.000 -3	4.386 -3
	(n,p)		(E-thr = 7.400 MeV)		46.82 -6	16.63 -9
	(n,d)		(E-thr = 10.590 MeV)		33.98 -18	450.6 -12
	(n,t)		(E-thr = 11.890 MeV)		67.84 -21	183.8 -12
	(n,a)		(E-thr = 2.809 MeV)		147.1 -9	442.3 -12
51-Sb-121	total	9.582	8.936		4.639	5.519
	elastic	3.590	3.589		2.782	4.132
	inelastic		(E-thr = 0.037 MeV)		237.1 -3	1.275
	(n,2n)		(E-thr = 9.321 MeV)		1.605	1.135 -3
	(n,3n)		(E-thr = 16.390 MeV)			836.0 -9
	(n,na)		(E-thr = 3.092 MeV)		74.86 -6	23.41 -9
	(n,np)		(E-thr = 5.828 MeV)		2.551 -3	520.9 -9
	(n,nd)		(E-thr = 12.690 MeV)		0.0	533.2 -12
	(n,nt)		(E-thr = 12.990 MeV)		0.0	77.66 -12
	capture	5.991	5.347	215.3	1.007 -3	108.9 -3
	(n,p)	0.0	0.0	3.834 -3	5.587 -3	13.64 -6
	(n,d)		(E-thr = 3.499 MeV)		1.071 -3	222.1 -9
	(n,t)		(E-thr = 6.450 MeV)		37.85 -6	18.65 -9
	(n,a)	0.0	0.0	3.216 -3	3.793 -3	3.053 -6
51-Sb-123	total	8.086	7.621		4.638	5.517
	elastic	3.899	3.898		2.928	4.341
	inelastic		(E-thr = 0.162 MeV)		193.2 -3	1.093
	(n,2n)		(E-thr = 9.044 MeV)		1.508	1.599 -3
	(n,3n)		(E-thr = 15.910 MeV)			1.555 -6
	(n,na)		(E-thr = 3.941 MeV)		16.46 -6	8.518 -9
	(n,np)		(E-thr = 6.619 MeV)		1.023 -3	193.5 -9
	(n,nd)		(E-thr = 13.180 MeV)		0.0	211.9 -12
	(n,nt)		(E-thr = 13.170 MeV)		0.0	68.24 -12
	capture	4.187	3.724	123.2	1.009 -3	77.31 -3
	(n,p)		(E-thr = 0.619 MeV)		4.240 -3	5.356 -6

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
51-Sb-123	(n,d)		(E-thr = 4.290 MeV)		294.1 -6	79.64 -9
	(n,t)		(E-thr = 6.947 MeV)		13.69 -6	13.15 -9
	(n,a)	0.0	0.0	2.178 -3	1.966 -3	693.5 -9
51-Sb-124	total	21.16	19.26		4.638	5.515
	elastic	3.760	3.760		2.932	3.793
	inelastic		(E-thr = 0.011 MeV)		158.4 -3	1.628
	(n,2n)		(E-thr = 6.525 MeV)		1.541	9.826 -3
	(n,3n)		(E-thr = 15.570 MeV)			1.766 -6
	(n,na)		(E-thr = 4.371 MeV)		1.144 -6	1.705 -9
	(n,np)		(E-thr = 7.144 MeV)		628.3 -6	127.2 -9
	(n,nd)		(E-thr = 10.810 MeV)		60.28 -15	5.571 -9
	(n,nt)		(E-thr = 13.470 MeV)		0.0	30.41 -12
	capture	17.40	15.42	156.1	1.001 -3	80.41 -3
	(n,p)	0.0	0.0	2.237 -3	3.182 -3	4.027 -6
	(n,d)		(E-thr = 4.815 MeV)		804.0 -6	161.1 -9
	(n,t)		(E-thr = 4.579 MeV)		67.63 -6	22.84 -9
	(n,a)	0.0	0.0	1.677 -3	1.498 -3	489.1 -9
51-Sb-125	total	9.000	8.462		4.638	5.520
	elastic	4.000	4.000		2.929	4.404
	inelastic		(E-thr = 0.335 MeV)		241.9 -3	992.9 -3
	(n,2n)		(E-thr = 8.785 MeV)		1.462	1.716 -3
	(n,3n)		(E-thr = 15.310 MeV)			2.614 -6
	(n,na)		(E-thr = 4.871 MeV)		256.3 -9	827.1 -12
	(n,np)		(E-thr = 7.365 MeV)		312.8 -6	73.10 -9
	(n,nd)		(E-thr = 13.600 MeV)		0.0	98.31 -12
	(n,nt)		(E-thr = 13.360 MeV)		0.0	37.95 -12
	capture	5.000	4.431	55.72	1.003 -3	119.9 -3
	(n,p)		(E-thr = 1.580 MeV)		2.213 -3	943.3 -9
	(n,d)		(E-thr = 5.036 MeV)		180.7 -6	63.76 -9
	(n,t)		(E-thr = 7.364 MeV)		3.533 -6	7.233 -9
	(n,a)	0.0	0.0	1.786 -3	1.019 -3	241.5 -9
52-Te-120	total	5.980	5.739		4.975	5.889
	elastic	3.640	3.640		3.449	4.785
	inelastic		(E-thr = 0.565 MeV)		372.3 -3	997.3 -3
	(n,2n)		(E-thr = 10.380 MeV)		1.090	327.1 -6
	(n,3n)		(E-thr = 18.040 MeV)			68.16 -9
	(n,na)		(E-thr = 0.302 MeV)		10.02 -3	7.086 -6
	(n,np)		(E-thr = 7.275 MeV)		12.55 -3	1.905 -6
	(n,nd)		(E-thr = 14.620 MeV)			2.198 -12
	capture	2.340	2.074	22.52	1.054 -3	101.5 -3
	(n,p)		(E-thr = 0.202 MeV)		26.46 -3	188.5 -6
	(n,d)		(E-thr = 4.946 MeV)		1.148 -3	256.4 -9
	(n,t)		(E-thr = 8.381 MeV)		5.147 -6	9.909 -9
	(n,He-3)		(E-thr = 4.645 MeV)		244.8 -12	88.12 -12
	(n,a)	0.0	0.0	13.25 -3	12.11 -3	690.3 -6
52-Te-122	total	6.092	5.717		4.975	5.883
	elastic	2.691	2.691		3.454	4.762
	inelastic		(E-thr = 0.569 MeV)		252.8 -3	972.1 -3
	(n,2n)		(E-thr = 9.954 MeV)		1.249	551.9 -6
	(n,3n)		(E-thr = 17.190 MeV)			297.0 -9
	(n,na)		(E-thr = 1.081 MeV)		1.736 -3	685.2 -9
	(n,np)		(E-thr = 8.076 MeV)		728.5 -6	200.3 -9
	capture	3.401	3.026	81.32	1.271 -3	141.0 -3
	(n,p)		(E-thr = 1.208 MeV)		9.513 -3	12.87 -6
	(n,d)		(E-thr = 5.746 MeV)		273.3 -6	81.84 -9
	(n,t)		(E-thr = 8.830 MeV)		667.9 -9	5.339 -9
	(n,He-3)		(E-thr = 6.108 MeV)		1.615 -12	6.643 -12
	(n,a)	0.0	0.0	4.834 -3	6.164 -3	51.02 -6
52-Te-123	total	418.7	376.8		4.976	5.882
	elastic	589.4 -3	613.0 -3		3.453	4.283
	inelastic		(E-thr = 0.160 MeV)		191.7 -3	1.449
	(n,2n)		(E-thr = 6.995 MeV)		1.315	5.691 -3
	(n,3n)		(E-thr = 16.950 MeV)			354.9 -9
	(n,na)		(E-thr = 1.533 MeV)		296.7 -6	77.81 -9
	(n,np)		(E-thr = 8.203 MeV)		129.0 -6	56.23 -9
	(n,nd)		(E-thr = 12.740 MeV)		0.0	337.2 -12
	capture	418.1	376.2	5648.	1.003 -3	140.2 -3
	(n,p)	0.0	0.0	7.187 -3	9.255 -3	15.50 -6
	(n,d)		(E-thr = 5.874 MeV)		1.072 -3	228.3 -9
	(n,t)		(E-thr = 6.505 MeV)		22.83 -6	14.65 -9

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
52-Te-123	(n,He-3)		(E-thr =	6.876 MeV)	121.9 -15	13.33 -12
	(n,a)	46.21 -6	41.58 -6	4.329 -3	4.451 -3	100.4 -6
52-Te-124	total	10.55	9.782		4.976	5.886
	elastic	3.746	3.745		3.450	4.791
	inelastic		(E-thr =	0.608 MeV)	176.1 -3	1.032
	(n,2n)		(E-thr =	9.506 MeV)	1.337	850.3 -6
	(n,3n)		(E-thr =	16.500 MeV)		832.7 -9
	(n,na)		(E-thr =	1.853 MeV)	219.1 -6	60.52 -9
	(n,np)		(E-thr =	8.664 MeV)	31.82 -6	32.43 -9
	capture	6.802	6.037	5.986	1.043 -3	58.43 -3
	(n,p)		(E-thr =	2.140 MeV)	7.568 -3	4.566 -6
	(n,d)		(E-thr =	6.335 MeV)	48.44 -6	27.29 -9
	(n,t)		(E-thr =	9.143 MeV)	26.15 -9	3.139 -9
	(n,a)	0.0	0.0	2.622 -3	3.173 -3	5.213 -6
52-Te-125	total	5.397	5.225		4.976	5.880
	elastic	3.849	3.849		3.457	4.321
	inelastic		(E-thr =	0.036 MeV)	182.0 -3	1.496
	(n,2n)		(E-thr =	6.630 MeV)	1.328	8.808 -3
	(n,3n)		(E-thr =	16.130 MeV)		770.8 -9
	(n,na)		(E-thr =	2.257 MeV)	29.89 -6	12.50 -9
	(n,np)		(E-thr =	8.769 MeV)	13.87 -6	31.49 -9
	(n,nd)		(E-thr =	12.960 MeV)	0.0	234.1 -12
	capture	1.548	1.376	22.58	1.000 -3	52.52 -3
	(n,p)	0.0	0.0	4.013 -3	4.846 -3	3.959 -6
	(n,d)		(E-thr =	6.441 MeV)	547.0 -6	129.8 -9
	(n,t)		(E-thr =	6.730 MeV)	7.672 -6	8.861 -9
	(n,a)	0.0	0.0	1.969 -3	2.392 -3	6.063 -6
52-Te-126	total	4.662	4.547		4.976	5.883
	elastic	3.629	3.629		3.453	4.890
	inelastic		(E-thr =	0.672 MeV)	137.6 -3	957.7 -3
	(n,2n)		(E-thr =	9.196 MeV)	1.378	1.152 -3
	(n,3n)		(E-thr =	15.830 MeV)		1.814 -6
	(n,na)		(E-thr =	2.562 MeV)	23.80 -6	8.577 -9
	(n,np)		(E-thr =	9.181 MeV)	284.4 -9	14.35 -9
	capture	1.034	918.7 -3	8.085	1.017 -3	31.53 -3
	(n,p)		(E-thr =	2.905 MeV)	3.974 -3	1.479 -6
	(n,d)		(E-thr =	6.852 MeV)	37.65 -6	26.29 -9
	(n,t)		(E-thr =	9.402 MeV)	2.015 -9	2.187 -9
	(n,a)	0.0	0.0	1.815 -3	1.786 -3	1.366 -6
52-Te-127M	total	3384.	3001.		4.976	5.883
	elastic	3.630	3.630		3.457	4.579
	inelastic	0.0	0.0	3.966	175.1 -3	1.147
	(n,2n)		(E-thr =	6.345 MeV)	1.339	9.898 -3
	(n,3n)		(E-thr =	15.540 MeV)		1.751 -6
	(n,na)		(E-thr =	2.909 MeV)	9.936 -6	6.472 -9
	(n,np)		(E-thr =	9.250 MeV)	139.9 -9	14.19 -9
	(n,nd)		(E-thr =	13.200 MeV)	0.0	113.8 -12
	capture	3380.	2995.	1336.	1.000 -3	146.0 -3
	(n,p)		(E-thr =	0.805 MeV)	2.517 -3	1.276 -6
	(n,d)		(E-thr =	6.921 MeV)	259.6 -6	74.03 -9
	(n,t)		(E-thr =	6.962 MeV)	11.26 -6	10.43 -9
	(n,a)	0.0	0.0	1.235 -3	1.336 -3	934.9 -9
52-Te-128	total	4.313	4.289		4.976	5.880
	elastic	4.099	4.099		3.455	4.927
	inelastic		(E-thr =	0.749 MeV)	127.0 -3	932.7 -3
	(n,2n)		(E-thr =	8.853 MeV)	1.391	1.523 -3
	(n,3n)		(E-thr =	15.200 MeV)		3.474 -6
	(n,na)		(E-thr =	3.199 MeV)	4.810 -6	3.182 -9
	(n,np)		(E-thr =	9.657 MeV)	1.629 -9	4.447 -9
	capture	214.0 -3	190.3 -3	1.307	1.001 -3	14.66 -3
	(n,p)		(E-thr =	3.507 MeV)	1.842 -3	541.6 -9
	(n,d)		(E-thr =	7.329 MeV)	6.249 -6	14.07 -9
	(n,t)		(E-thr =	9.539 MeV)	563.5 -12	1.879 -9
	(n,a)	0.0	0.0	925.9 -6	683.6 -6	208.1 -9
52-Te-129M	total	1603.	1424.		4.976	5.884
	elastic	3.400	3.400		3.457	4.710
	inelastic	0.0	0.0	3.446	138.6 -3	992.2 -3
	(n,2n)		(E-thr =	6.138 MeV)	1.378	14.02 -3
	(n,3n)		(E-thr =	14.990 MeV)		2.981 -6

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
52-Te-129M	(n,na)		(E-thr = 3.554 MeV)		2.073 -6	2.769 -9
	(n,np)		(E-thr = 9.646 MeV)		2.373 -9	7.142 -9
	(n,nd)		(E-thr = 13.470 MeV)		0.0	62.96 -12
	capture	1600.	1418.	752.4	1.000 -3	164.5 -3
	(n,p)		(E-thr = 1.607 MeV)		1.324 -3	512.0 -9
	(n,d)		(E-thr = 7.317 MeV)		105.9 -6	38.12 -9
	(n,t)		(E-thr = 7.234 MeV)		3.578 -6	7.086 -9
	(n,a)	0.0	0.0	855.2 -6	733.6 -6	256.2 -9
52-Te-130	total	4.106	4.076		4.976	5.876
	elastic	3.836	3.836		3.455	4.994
	inelastic		(E-thr = 0.846 MeV)		137.8 -3	870.0 -3
	(n,2n)		(E-thr = 8.482 MeV)		1.380	2.160 -3
	(n,3n)		(E-thr = 14.620 MeV)			5.516 -6
	(n,na)		(E-thr = 3.775 MeV)		1.236 -6	1.805 -9
	(n,np)		(E-thr = 10.090 MeV)		18.75 -12	3.659 -9
	capture	270.0 -3	240.1 -3	285.0 -3	1.000 -3	5.517 -3
	(n,p)		(E-thr = 4.218 MeV)		1.316 -3	321.5 -9
	(n,d)		(E-thr = 7.761 MeV)		1.941 -6	11.74 -9
	(n,t)		(E-thr = 9.566 MeV)		517.1 -12	1.803 -9
	(n,a)	0.0	0.0	310.7 -6	164.9 -6	40.65 -9
53-I -127	total	9.740	9.052		4.976	5.881
	elastic	3.540	3.539		3.050	4.352
	inelastic		(E-thr = 0.058 MeV)		117.6 -3	1.455
	(n,2n)		(E-thr = 9.218 MeV)		1.787	1.465 -3
	(n,3n)		(E-thr = 16.420 MeV)			742.3 -9
	(n,na)		(E-thr = 2.202 MeV)		97.57 -6	28.58 -9
	(n,np)		(E-thr = 6.257 MeV)		3.188 -3	607.7 -9
	(n,nd)		(E-thr = 13.120 MeV)		0.0	234.8 -12
	(n,nt)		(E-thr = 13.520 MeV)		0.0	22.84 -12
	capture	6.200	5.513	147.7	1.002 -3	70.62 -3
	(n,p)	0.0	0.0	10.07 -3	14.45 -3	16.64 -6
	(n,d)		(E-thr = 3.928 MeV)		812.2 -6	179.7 -9
	(n,t)		(E-thr = 6.890 MeV)		15.36 -6	15.20 -9
	(n,He-3)		(E-thr = 7.644 MeV)		1.703 -15	3.752 -12
	(n,a)	0.0	0.0	1.005 -3	1.279 -3	979.9 -9
53-I -129	total	33.47	30.42		4.976	5.877
	elastic	6.471	6.461		3.291	4.478
	inelastic		(E-thr = 0.028 MeV)		213.3 -3	1.331
	(n,2n)		(E-thr = 8.916 MeV)		1.464	1.620 -3
	(n,3n)		(E-thr = 15.800 MeV)			1.302 -6
	(n,na)		(E-thr = 2.696 MeV)		29.07 -6	12.45 -9
	(n,np)		(E-thr = 6.860 MeV)		1.294 -3	279.3 -9
	(n,nd)		(E-thr = 13.380 MeV)		0.0	142.6 -12
	(n,nt)		(E-thr = 13.490 MeV)		0.0	19.43 -12
	capture	27.00	23.96	29.40	1.001 -3	62.98 -3
	(n,p)		(E-thr = 0.721 MeV)		3.117 -3	2.077 -6
	(n,d)		(E-thr = 4.531 MeV)		369.9 -6	113.4 -9
	(n,t)		(E-thr = 7.150 MeV)		8.229 -6	14.01 -9
	(n,a)	0.0	0.0	1.438 -3	1.497 -3	719.9 -9
53-I -131	total	83.60	74.84		4.976	5.884
	elastic	3.600	3.600		3.091	4.582
	inelastic		(E-thr = 0.151 MeV)		211.4 -3	1.264
	(n,2n)		(E-thr = 8.697 MeV)		1.670	2.105 -3
	(n,3n)		(E-thr = 15.210 MeV)			2.323 -6
	(n,na)		(E-thr = 3.193 MeV)		6.376 -6	4.801 -9
	(n,np)		(E-thr = 7.454 MeV)		396.4 -6	114.0 -9
	(n,nd)		(E-thr = 13.610 MeV)		0.0	102.9 -12
	(n,nt)		(E-thr = 13.510 MeV)		0.0	27.81 -12
	capture	80.00	70.90	77.81	1.001 -3	31.48 -3
	(n,p)		(E-thr = 1.479 MeV)		1.638 -3	674.0 -9
	(n,d)		(E-thr = 5.126 MeV)		211.9 -6	86.33 -9
	(n,t)		(E-thr = 7.375 MeV)		4.455 -6	13.26 -9
	(n,a)	0.0	0.0	925.6 -6	858.1 -6	301.6 -9
54-Xe-124	total	266.0	247.9		4.976	5.890
	elastic	101.0	100.8		3.332	4.459
	inelastic		(E-thr = 0.357 MeV)		698.3 -3	856.1 -3
	(n,2n)		(E-thr = 10.320 MeV)		882.5 -3	219.2 -6
	(n,3n)		(E-thr = 18.590 MeV)			26.05 -9
	(n,na)		(E-thr = 0.472 MeV)		2.387 -3	816.3 -9
	(n,np)		(E-thr = 6.829 MeV)		9.462 -3	1.392 -6

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
54-Xe-124	(n,nd)		(E-thr = 14.470 MeV)			1.269 -12
	capture	165.0	147.2	2970.	2.741 -3	571.0 -3
	(n,p)	0.0	0.0	28.54 -3	33.58 -3	412.8 -6
	(n,d)		(E-thr = 4.500 MeV)		834.6 -6	182.3 -9
	(n,t)		(E-thr = 8.231 MeV)		3.327 -6	5.849 -9
	(n,He-3)		(E-thr = 4.034 MeV)		604.9 -12	76.98 -12
	(n,a)	0.0	0.0	14.57 -3	13.76 -3	619.6 -6
	(n,2p)		(E-thr = 4.835 MeV)		181.8 -12	99.73 -12
54-Xe-126	total	11.72	11.25		4.976	5.890
	elastic	7.453	7.452		3.245	4.594
	inelastic		(E-thr = 0.392 MeV)		404.1 -3	985.8 -3
	(n,2n)		(E-thr = 10.210 MeV)		1.299	404.0 -6
	(n,3n)		(E-thr = 18.010 MeV)			101.3 -9
	(n,na)		(E-thr = 1.290 MeV)		932.0 -6	274.3 -9
	(n,np)		(E-thr = 7.676 MeV)		754.9 -6	146.5 -9
	capture	4.269	3.798	23.38	1.797 -3	307.9 -3
	(n,p)		(E-thr = 0.472 MeV)		17.21 -3	57.44 -6
	(n,d)		(E-thr = 5.347 MeV)		244.9 -6	72.11 -9
	(n,t)		(E-thr = 8.745 MeV)		539.9 -9	4.278 -9
	(n,He-3)		(E-thr = 5.544 MeV)		9.565 -12	7.605 -12
	(n,a)	0.0	0.0	6.265 -3	7.359 -3	64.05 -6
54-Xe-128	total	19.05	18.17		4.976	5.890
	elastic	11.05	11.05		3.292	4.709
	inelasti.		(E-thr = 0.446 MeV)		278.4 -3	1.081
	(n,2n)		(E-thr = 9.697 MeV)		1.376	647.5 -6
	(n,3n)		(E-thr = 16.980 MeV)			472.4 -9
	(n,na)		(E-thr = 1.779 MeV)		568.9 -6	149.4 -9
	(n,np)		(E-thr = 8.239 MeV)		187.2 -6	61.46 -9
	capture	8.000	7.116	12.48	1.050 -3	97.01 -3
	(n,p)		(E-thr = 1.355 MeV)		23.29 -3	26.50 -6
	(n,d)		(E-thr = 5.911 MeV)		177.6 -6	58.88 -9
	(n,t)		(E-thr = 8.894 MeV)		202.6 -9	3.387 -9
	(n,a)	0.0	0.0	3.425 -3	4.000 -3	9.928 -6
54-Xe-129	total	42.04	39.72		4.976	5.882
	elastic	21.04	21.02		3.457	4.254
	inelastic		(E-thr = 0.040 MeV)		239.4 -3	1.580
	(n,2n)		(E-thr = 6.966 MeV)		1.268	4.721 -3
	(n,3n)		(E-thr = 16.660 MeV)			458.7 -9
	(n,na)		(E-thr = 2.117 MeV)		66.07 -6	22.87 -9
	(n,np)		(E-thr = 8.322 MeV)		93.00 -6	54.42 -9
	(n,nd)		(E-thr = 12.880 MeV)		0.0	297.3 -12
	capture	21.00	18.70	255.5	1.000 -3	40.17 -3
	(n,p)	0.0	0.0	5.389 -3	6.696 -3	8.906 -6
	(n,d)		(E-thr = 5.994 MeV)		813.8 -6	182.2 -9
	(n,t)		(E-thr = 6.644 MeV)		18.47 -6	13.90 -9
	(n,He-3)		(E-thr = 7.325 MeV)		7.366 -15	6.290 -12
	(n,a)	0.0	0.0	2.564 -3	3.034 -3	10.18 -6
54-Xe-130	total	40.48	37.61		4.976	5.884
	elastic	14.48	14.48		3.242	4.763
	inelastic		(E-thr = 0.540 MeV)		174.8 -3	1.015
	(n,2n)		(E-thr = 9.332 MeV)		1.547	1.169 -3
	(n,3n)		(E-thr = 16.300 MeV)			936.0 -9
	(n,na)		(E-thr = 2.254 MeV)		282.0 -6	81.27 -9
	(n,np)		(E-thr = 8.737 MeV)		34.72 -6	36.34 -9
	capture	26.00	23.13	17.80	1.053 -3	100.5 -3
	(n,p)		(E-thr = 2.219 MeV)		8.258 -3	4.355 -6
	(n,d)		(E-thr = 6.409 MeV)		80.24 -6	44.56 -9
	(n,t)		(E-thr = 9.092 MeV)		31.52 -9	3.634 -9
	(n,a)	0.0	0.0	2.170 -3	2.185 -3	1.827 -6
54-Xe-131	total	109.1	99.78		4.976	5.879
	elastic	24.03	24.03		3.458	4.482
	inelastic		(E-thr = 0.081 MeV)		128.3 -3	1.345
	(n,2n)		(E-thr = 6.667 MeV)		1.382	9.428 -3
	(n,3n)		(E-thr = 16.000 MeV)			915.2 -9
	(n,na)		(E-thr = 2.578 MeV)		57.04 -6	21.72 -9
	(n,np)		(E-thr = 8.886 MeV)		10.20 -6	31.09 -9
	(n,nd)		(E-thr = 13.080 MeV)		0.0	228.6 -12
	capture	85.03	75.75	900.1	1.000 -3	40.98 -3
	(n,p)		(E-thr = 0.189 MeV)		5.040 -3	4.163 -6
	(n,d)		(E-thr = 6.558 MeV)		452.3 -6	118.8 -9

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
54-Xe-131	(n,t)		(E-thr =	6.843 MeV)	11.30 -6	12.72 -9
	(n,a)	0.0	0.0	1.609 -3	1.703 -3	2.859 -6
54-Xe-132	total	3.600	3.550		4.976	5.888
	elastic	3.150	3.150		3.456	4.902
	inelastic		(E-thr =	0.673 MeV)	171.9 -3	970.6 -3
	(n,2n)		(E-thr =	9.009 MeV)	1.343	1.348 -3
	(n,3n)		(E-thr =	15.680 MeV)		1.656 -6
	(n,na)		(E-thr =	2.736 MeV)	152.2 -6	54.24 -9
	(n,np)		(E-thr =	9.198 MeV)	643.8 -9	21.02 -9
	capture	450.0 -3	400.2 -3	4.509	1.001 -3	13.34 -3
	(n,p)		(E-thr =	2.819 MeV)	2.523 -3	939.1 -9
	(n,d)		(E-thr =	6.871 MeV)	46.26 -6	36.01 -9
	(n,t)		(E-thr =	9.334 MeV)	5.982 -9	3.226 -9
	(n,a)	0.0	0.0	1.443 -3	1.216 -3	574.9 -9
54-Xe-133	total	193.6	172.5		4.976	5.885
	elastic	3.600	3.600		3.461	4.590
	inelastic		(E-thr =	0.235 MeV)	125.0 -3	1.265
	(n,2n)		(E-thr =	6.501 MeV)	1.386	11.00 -3
	(n,3n)		(E-thr =	15.510 MeV)		1.364 -6
	(n,na)		(E-thr =	3.100 MeV)	33.87 -6	16.76 -9
	(n,np)		(E-thr =	9.320 MeV)	193.6 -9	25.81 -9
	(n,nd)		(E-thr =	13.370 MeV)	0.0	159.1 -12
	capture	190.0	168.4	90.06	1.000 -3	13.92 -3
	(n,p)		(E-thr =	0.985 MeV)	1.945 -3	1.076 -6
	(n,d)		(E-thr =	6.992 MeV)	286.6 -6	93.74 -9
	(n,t)		(E-thr =	7.139 MeV)	9.202 -6	13.17 -9
	(n,a)	0.0	0.0	1.062 -3	973.9 -6	492.8 -9
54-Xe-134	total	3.985	3.956		4.976	5.885
	elastic	3.720	3.720		3.456	5.017
	inelastic		(E-thr =	0.853 MeV)	142.3 -3	854.6 -3
	(n,2n)		(E-thr =	8.603 MeV)	1.375	1.907 -3
	(n,3n)		(E-thr =	15.100 MeV)		2.720 -6
	(n,na)		(E-thr =	3.223 MeV)	41.92 -6	21.60 -9
	(n,np)		(E-thr =	9.588 MeV)	11.02 -9	13.57 -9
	capture	265.0 -3	235.8 -3	617.1 -3	1.001 -3	9.466 -3
	(n,p)		(E-thr =	3.398 MeV)	1.518 -3	449.9 -9
	(n,d)		(E-thr =	7.261 MeV)	42.21 -6	35.71 -9
	(n,t)		(E-thr =	9.363 MeV)	3.013 -9	3.151 -9
	(n,a)	0.0	0.0	1.006 -3	657.6 -6	208.1 -9
54-Xe-135	total	2943.	3117.		4.976	5.887
	elastic	2955.	3822.		3.457	4.873
	inelastic		(E-thr =	0.291 MeV)	131.7 -3	988.8 -3
	(n,2n)		(E-thr =	6.505 MeV)	1.384	10.63 -3
	(n,3n)		(E-thr =	15.110 MeV)		2.107 -6
	(n,na)		(E-thr =	3.755 MeV)	6.775 -6	6.050 -9
	(n,np)		(E-thr =	9.903 MeV)	437.7 -12	7.597 -9
	(n,nd)		(E-thr =	13.770 MeV)	0.0	46.13 -12
	capture	2648.	2735.	7614.	1.000 -3	10.47 -3
	(n,p)		(E-thr =	1.942 MeV)	1.028 -3	362.9 -9
	(n,d)		(E-thr =	7.576 MeV)	103.3 -6	52.87 -9
	(n,t)		(E-thr =	7.534 MeV)	8.034 -6	13.02 -9
	(n,a)	0.0	0.0	1.622 -3	1.227 -3	382.7 -9
54-Xe-136	total	6.348	6.319		4.976	5.770
	elastic	6.088	6.088		3.102	5.071
	inelastic		(E-thr =	1.323 MeV)	160.0 -3	693.8 -3
	(n,2n)		(E-thr =	8.054 MeV)	1.713	3.896 -3
	(n,3n)		(E-thr =	14.560 MeV)		4.472 -6
	(n,na)		(E-thr =	3.661 MeV)	3.353 -6	3.776 -9
	(n,np)		(E-thr =	9.996 MeV)	84.59 -12	4.201 -9
	capture	260.0 -3	231.2 -3	141.5 -3	1.000 -3	537.2 -6
	(n,p)		(E-thr =	6.259 MeV)	157.0 -6	36.93 -9
	(n,d)		(E-thr =	7.669 MeV)	8.870 -6	21.70 -9
	(n,t)		(E-thr =	9.399 MeV)	3.544 -9	4.225 -9
	(n,a)	0.0	0.0	667.0 -6	341.0 -6	85.47 -9
55-Cs-133	total	33.30	30.14		4.914	5.967
	elastic	4.294	4.290		2.913	4.323
	inelastic		(E-thr =	0.082 MeV)	403.9 -3	1.587
	(n,2n)		(E-thr =	9.058 MeV)	1.582	1.339 -3
	(n,3n)		(E-thr =	16.300 MeV)		915.6 -9

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
55-Cs-133	(n,na)		(E-thr = 2.021 MeV)		73.31 -6	26.15 -9
	(n,np)		(E-thr = 6.143 MeV)		1.595 -3	328.0 -9
	(n,nd)		(E-thr = 12.820 MeV)		0.0	443.5 -12
	(n,nt)		(E-thr = 13.260 MeV)		0.0	42.07 -12
	capture	29.00	25.85	396.4	1.001 -3	51.84 -3
	(n,p)	0.0	0.0	6.498 -3	9.409 -3	11.11 -6
	(n,d)		(E-thr = 3.815 MeV)		1.032 -3	233.8 -9
	(n,t)		(E-thr = 6.592 MeV)		25.51 -6	20.68 -9
	(n,He-3)		(E-thr = 7.551 MeV)		2.719 -15	3.907 -12
	(n,a)	0.0	0.0	1.135 -3	1.329 -3	890.6 -9
55-Cs-134	total	162.3	146.6		4.921	5.991
	elastic	22.64	22.59		2.921	3.977
	inelastic		(E-thr = 0.011 MeV)		301.9 -3	1.941
	(n,2n)		(E-thr = 6.948 MeV)		1.689	8.007 -3
	(n,3n)		(E-thr = 16.010 MeV)			843.4 -9
	(n,na)		(E-thr = 2.452 MeV)		56.63 -6	24.84 -9
	(n,np)		(E-thr = 6.590 MeV)		1.272 -3	272.6 -9
	(n,nd)		(E-thr = 10.760 MeV)		160.8 -15	11.72 -9
	(n,nt)		(E-thr = 13.540 MeV)		0.0	32.14 -12
	capture	139.7	124.0	105.6	1.001 -3	64.57 -3
	(n,p)	0.0	0.0	2.371 -3	3.399 -3	5.915 -6
	(n,d)		(E-thr = 4.262 MeV)		2.596 -3	535.4 -9
	(n,t)		(E-thr = 4.531 MeV)		203.2 -6	64.47 -9
	(n,He-3)		(E-thr = 8.120 MeV)		51.68 -15	10.47 -12
	(n,a)	0.0	0.0	1.287 -3	1.541 -3	1.639 -6
55-Cs-135	total	13.55	12.58		4.951	6.017
	elastic	4.850	4.849		2.933	4.684
	inelastic		(E-thr = 0.252 MeV)		328.5 -3	1.301
	(n,2n)		(E-thr = 8.898 MeV)		1.683	1.764 -3
	(n,3n)		(E-thr = 15.850 MeV)			1.344 -6
	(n,na)		(E-thr = 2.656 MeV)		105.5 -6	38.90 -9
	(n,np)		(E-thr = 6.885 MeV)		1.646 -3	342.3 -9
	(n,nd)		(E-thr = 13.160 MeV)		0.0	306.3 -12
	(n,nt)		(E-thr = 13.430 MeV)		0.0	40.45 -12
	capture	8.702	7.735	62.54	1.003 -3	27.60 -3
	(n,p)		(E-thr = 0.379 MeV)		2.454 -3	1.685 -6
	(n,d)		(E-thr = 4.557 MeV)		762.7 -6	193.3 -9
	(n,t)		(E-thr = 6.929 MeV)		15.93 -6	19.31 -9
	(n,a)	0.0	0.0	1.056 -3	1.136 -3	536.2 -9
55-Cs-136	total	16.50	15.07		4.971	6.043
	elastic	3.500	3.500		2.940	4.525
	inelastic		(E-thr = 0.050 MeV)		252.6 -3	1.486
	(n,2n)		(E-thr = 6.819 MeV)		1.772	9.197 -3
	(n,3n)		(E-thr = 15.720 MeV)			1.281 -6
	(n,na)		(E-thr = 3.097 MeV)		48.08 -6	22.77 -9
	(n,np)		(E-thr = 7.199 MeV)		601.0 -6	152.4 -9
	(n,nd)		(E-thr = 11.380 MeV)		367.8 -18	5.580 -9
	(n,nt)		(E-thr = 13.750 MeV)		0.0	18.17 -12
	capture	13.00	11.52	57.38	1.000 -3	19.08 -3
	(n,p)	0.0	0.0	1.334 -3	1.825 -3	1.457 -6
	(n,d)		(E-thr = 4.871 MeV)		1.462 -3	326.1 -9
	(n,t)		(E-thr = 5.145 MeV)		126.9 -6	46.98 -9
	(n,a)	0.0	0.0	809.0 -6	900.4 -6	513.9 -9
55-Cs-137	total	3.782	3.770		4.990	6.075
	elastic	3.672	3.672		2.937	5.125
	inelastic		(E-thr = 0.459 MeV)		327.5 -3	939.1 -3
	(n,2n)		(E-thr = 8.339 MeV)		1.722	2.724 -3
	(n,3n)		(E-thr = 15.160 MeV)			2.817 -6
	(n,na)		(E-thr = 3.103 MeV)		25.37 -6	14.46 -9
	(n,np)		(E-thr = 7.483 MeV)		191.8 -6	63.38 -9
	(n,nd)		(E-thr = 13.210 MeV)		0.0	277.7 -12
	(n,nt)		(E-thr = 13.480 MeV)		0.0	40.73 -12
	capture	109.9 -3	97.80 -3	680.1 -3	1.001 -3	4.987 -3
	(n,p)		(E-thr = 3.589 MeV)		1.175 -3	240.1 -9
	(n,d)		(E-thr = 5.156 MeV)		310.1 -6	113.6 -9
	(n,t)		(E-thr = 6.980 MeV)		15.00 -6	21.68 -9
	(n,a)	0.0	0.0	720.1 -6	663.4 -6	218.4 -9
56-Ba-130	total	14.42	13.17		5.079	6.263
	elastic	3.126	3.124		2.678	4.644
	inelastic		(E-thr = 0.360 MeV)		1.034	1.084

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
58-Ce-140	capture	567.3 -3	504.6 -3	277.2 -3	1.004 -3	6.031 -3
	(n,p)		(E-thr =	3.000 MeV)	5.999 -3	1.880 -6
	(n,d)		(E-thr =	5.876 MeV)	292.3 -6	91.98 -9
	(n,t)		(E-thr =	8.492 MeV)	1.383 -6	6.217 -9
	(n,a)	0.0	0.0	3.308 -3	3.815 -3	3.681 -6
58-Ce-141	total	31.47	28.28		5.088	6.308
	elastic	2.349	2.344		2.917	5.424
	inelastic		(E-thr =	0.667 MeV)	141.6 -3	776.6 -3
	(n,2n)		(E-thr =	5.472 MeV)	2.022	29.10 -3
	(n,3n)		(E-thr =	14.730 MeV)		3.734 -6
	(n,na)		(E-thr =	0.128 MeV)	279.0 -6	84.25 -9
	(n,np)		(E-thr =	8.472 MeV)	53.13 -6	52.78 -9
	(n,nd)		(E-thr =	11.350 MeV)	361.2 -18	3.490 -9
	(n,nt)		(E-thr =	13.960 MeV)	0.0	3.460 -12
	capture	29.12	25.94	503.1	1.001 -3	72.89 -3
	(n,p)		(E-thr =	1.659 MeV)	3.650 -3	1.242 -6
	(n,d)		(E-thr =	6.145 MeV)	779.3 -6	186.1 -9
	(n,t)		(E-thr =	5.118 MeV)	345.3 -6	83.42 -9
	(n,a)	0.0	0.0	1.435 -3	1.762 -3	60.51 -6
58-Ce-142	total	1.618	1.508		5.098	6.369
	elastic	614.5 -3	614.4 -3		2.808	5.280
	inelastic		(E-thr =	0.646 MeV)	231.8 -3	1.072
	(n,2n)		(E-thr =	7.224 MeV)	1.990	7.373 -3
	(n,3n)		(E-thr =	12.700 MeV)	54.17 -3	13.98 -6
	(n,na)	0.0	0.0	10.20 -3	6.125 -3	4.338 -6
	(n,np)		(E-thr =	8.883 MeV)	8.297 -6	32.39 -9
	(n,nd)		(E-thr =	13.370 MeV)	0.0	114.7 -12
	(n,nt)		(E-thr =	12.340 MeV)	10.27 -21	180.3 -12
	capture	1.004	893.1 -3	940.9 -3	1.004 -3	8.245 -3
	(n,p)		(E-thr =	3.761 MeV)	3.569 -3	842.0 -9
	(n,d)		(E-thr =	6.557 MeV)	141.6 -6	69.75 -9
	(n,t)		(E-thr =	7.140 MeV)	49.42 -6	24.71 -9
	(n,a)	0.0	0.0	1.911 -3	2.700 -3	6.899 -6
58-Ce-144	total	3.780	3.679		5.115	6.421
	elastic	2.780	2.780		2.918	5.269
	inelastic		(E-thr =	0.400 MeV)	93.03 -3	1.128
	(n,2n)		(E-thr =	6.945 MeV)	1.662	10.38 -3
	(n,3n)		(E-thr =	12.130 MeV)	439.7 -3	65.04 -6
	(n,na)	0.0	0.0	671.0 -6	248.4 -6	94.19 -9
	(n,np)		(E-thr =	9.481 MeV)	10.28 -9	5.951 -9
	(n,nd)		(E-thr =	13.570 MeV)	0.0	56.76 -12
	(n,nt)		(E-thr =	12.460 MeV)	0.0	181.3 -12
	capture	1.000	886.2 -3	2.546	1.007 -3	6.255 -3
	(n,p)		(E-thr =	4.752 MeV)	1.339 -3	288.3 -9
	(n,d)		(E-thr =	7.154 MeV)	22.27 -6	28.84 -9
	(n,t)		(E-thr =	7.339 MeV)	40.72 -6	26.36 -9
	(n,a)	0.0	0.0	586.3 -6	760.9 -6	1.624 -6
59-Pr-141	total	16.22	14.73		4.890	6.191
	elastic	2.868	2.865		2.953	4.797
	inelastic		(E-thr =	0.146 MeV)	196.0 -3	1.373
	(n,2n)		(E-thr =	9.468 MeV)	1.720	1.054 -3
	(n,3n)		(E-thr =	17.440 MeV)		168.1 -9
	(n,na)		(E-thr =	1.319 MeV)	457.5 -6	123.9 -9
	(n,np)		(E-thr =	5.268 MeV)	5.756 -3	1.299 -6
	(n,nd)		(E-thr =	12.200 MeV)	131.3 -21	791.6 -12
	(n,nt)		(E-thr =	13.500 MeV)	0.0	8.237 -12
	capture	13.35	11.86	18.97	1.002 -3	18.39 -3
	(n,p)	0.0	0.0	5.575 -3	8.766 -3	9.118 -6
	(n,d)		(E-thr =	2.941 MeV)	2.074 -3	433.9 -9
	(n,t)		(E-thr =	5.969 MeV)	34.46 -6	18.11 -9
	(n,He-3)		(E-thr =	5.683 MeV)	109.3 -12	32.09 -12
	(n,a)	0.0	0.0	1.903 -3	2.673 -3	6.337 -6
59-Pr-143	total	92.90	82.86		4.787	6.248
	elastic	2.900	2.900		2.960	4.707
	inelastic		(E-thr =	0.058 MeV)	165.6 -3	1.517
	(n,2n)		(E-thr =	7.403 MeV)	1.626	6.327 -3
	(n,3n)		(E-thr =	13.290 MeV)	19.77 -3	15.62 -6
	(n,na)	0.0	0.0	4.915 -3	4.288 -3	9.751 -6
	(n,np)		(E-thr =	5.865 MeV)	2.054 -3	434.9 -9
	(n,nd)		(E-thr =	10.760 MeV)	127.9 -15	6.703 -9

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
59-Pr-143	(n,nt)		(E-thr = 10.000 MeV)		48.83 -12	6.126 -9
	capture	90.00	79.76	185.4	1.000 -3	14.39 -3
	(n,p)		(E-thr = 0.677 MeV)		4.663 -3	2.508 -6
	(n,d)		(E-thr = 3.538 MeV)		1.494 -3	311.9 -9
	(n,t)		(E-thr = 4.533 MeV)		541.8 -6	118.8 -9
	(n,He-3)		(E-thr = 6.962 MeV)		199.9 -15	8.109 -12
	(n,a)	0.0	0.0	1.438 -3	2.135 -3	14.45 -6
60-Nd-142	total	24.34	22.25		4.781	6.376
	elastic	5.412	5.411		2.842	5.567
	inelastic		(E-thr = 1.587 MeV)		356.9 -3	753.7 -3
	(n,2n)		(E-thr = 9.892 MeV)		1.556	755.8 -6
	(n,3n)		(E-thr = 18.010 MeV)			87.18 -9
	(n,na)		(E-thr = 0.812 MeV)		1.079 -3	342.2 -9
	(n,np)		(E-thr = 7.276 MeV)		3.479 -3	629.0 -9
	(n,nd)		(E-thr = 14.420 MeV)			2.571 -12
	capture	18.92	16.83	8.783	2.525 -3	55.06 -3
	(n,p)		(E-thr = 1.386 MeV)		12.90 -3	13.55 -6
	(n,d)		(E-thr = 4.949 MeV)		570.2 -6	132.1 -9
	(n,t)		(E-thr = 8.188 MeV)		1.792 -6	4.366 -9
	(n,He-3)		(E-thr = 4.757 MeV)		162.9 -12	14.70 -12
	(n,a)	0.0	0.0	4.211 -3	6.223 -3	33.33 -6
60-Nd-143	total	408.2	369.9		4.778	6.434
	elastic	78.29	77.64		2.969	5.387
	inelastic		(E-thr = 0.747 MeV)		155.3 -3	963.0 -3
	(n,2n)		(E-thr = 6.170 MeV)		1.638	16.15 -3
	(n,3n)		(E-thr = 16.060 MeV)			1.071 -6
	(n,na)	5.545 -24	11.09 -24	986.1 -6	450.3 -6	149.4 -9
	(n,np)		(E-thr = 7.557 MeV)		132.2 -6	44.88 -9
	(n,nd)		(E-thr = 11.120 MeV)		1.933 -15	2.519 -9
	capture	329.9	292.3	130.2	1.000 -3	67.42 -3
	(n,p)		(E-thr = 0.154 MeV)		9.483 -3	6.344 -6
	(n,d)		(E-thr = 5.230 MeV)		1.119 -3	232.4 -9
	(n,t)		(E-thr = 4.891 MeV)		213.3 -6	49.79 -9
	(n,He-3)		(E-thr = 5.456 MeV)		30.67 -12	20.83 -12
	(n,a)	17.38 -3	15.40 -3	11.39 -3	3.708 -3	596.4 -6
60-Nd-144	total	4.805	4.384		4.931	6.716
	elastic	1.001	1.002		2.501	5.357
	inelastic		(E-thr = 0.701 MeV)		777.0 -3	1.327
	(n,2n)		(E-thr = 7.877 MeV)		1.632	3.683 -3
	(n,3n)		(E-thr = 14.050 MeV)			7.084 -6
	(n,na)	0.0	0.0	5.646 -3	3.845 -3	8.377 -6
	(n,np)		(E-thr = 8.031 MeV)		111.9 -6	63.44 -9
	(n,nd)		(E-thr = 13.110 MeV)		0.0	255.8 -12
	(n,nt)		(E-thr = 12.770 MeV)		0.0	142.9 -12
	capture	3.804	3.383	4.311	1.028 -3	27.68 -3
	(n,p)		(E-thr = 2.229 MeV)		9.914 -3	3.873 -6
	(n,d)		(E-thr = 5.704 MeV)		836.2 -6	235.3 -9
	(n,t)		(E-thr = 6.878 MeV)		172.1 -6	72.80 -9
	(n,He-3)		(E-thr = 6.109 MeV)		82.30 -15	6.680 -12
	(n,a)	0.0	0.0	3.182 -3	5.038 -3	14.81 -6
60-Nd-145	total	61.22	56.35		4.931	6.713
	elastic	17.39	17.36		2.645	4.865
	inelastic		(E-thr = 0.068 MeV)		159.2 -3	1.746
	(n,2n)		(E-thr = 5.800 MeV)		2.114	29.06 -3
	(n,3n)		(E-thr = 13.680 MeV)		3.017 -3	16.57 -6
	(n,na)	0.0	0.0	1.229 -3	663.2 -6	294.5 -9
	(n,np)		(E-thr = 8.029 MeV)		56.73 -6	35.22 -9
	(n,nd)		(E-thr = 11.500 MeV)		39.11 -18	1.269 -9
	(n,nt)		(E-thr = 12.680 MeV)		0.0	52.52 -12
	capture	43.84	38.99	204.0	1.000 -3	72.99 -3
	(n,p)		(E-thr = 1.030 MeV)		6.131 -3	2.474 -6
	(n,d)		(E-thr = 5.703 MeV)		581.2 -6	132.4 -9
	(n,t)		(E-thr = 5.276 MeV)		145.5 -6	38.31 -9
	(n,a)	88.55 -6	78.75 -6	2.029 -3	2.275 -3	30.84 -6
60-Nd-146	total	10.89	10.74		4.931	6.713
	elastic	9.496	9.495		2.474	5.102
	inelastic		(E-thr = 0.457 MeV)		752.6 -3	1.569
	(n,2n)		(E-thr = 7.621 MeV)		1.682	5.233 -3
	(n,3n)		(E-thr = 13.420 MeV)		13.38 -3	12.25 -6
	(n,na)	0.0	0.0	2.799 -3	1.144 -3	496.4 -9

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
62-Sm-148	elastic	996.6 -3	996.2 -3		3.040	5.299
	inelastic		(E-thr =	0.555 MeV)	582.7 -3	1.364
	(n,2n)		(E-thr =	8.202 MeV)	1.669	3.043 -3
	(n,3n)		(E-thr =	14.600 MeV)		5.624 -6
	(n,na)	0.0	0.0	4.564 -3	2.860 -3	4.191 -6
	(n,np)		(E-thr =	7.640 MeV)	210.2 -6	105.9 -9
	(n,nd)		(E-thr =	13.040 MeV)	0.0	227.6 -12
	(n,nt)		(E-thr =	13.100 MeV)	0.0	28.30 -12
	capture	2.413	2.144	45.24	1.144 -3	90.59 -3
	(n,p)		(E-thr =	1.694 MeV)	6.643 -3	2.931 -6
	(n,d)		(E-thr =	5.315 MeV)	1.287 -3	356.5 -9
	(n,t)		(E-thr =	6.814 MeV)	118.7 -6	57.08 -9
	(n,He-3)		(E-thr =	5.304 MeV)	1.060 -12	12.77 -12
	(n,a)	0.0	0.0	2.329 -3	3.475 -3	18.01 -6
62-Sm-149	total	4033.	6067.		5.322	6.989
	elastic	175.8	373.2		3.080	4.554
	inelastic		(E-thr =	0.023 MeV)	379.5 -3	2.192
	(n,2n)		(E-thr =	5.916 MeV)	1.846	23.45 -3
	(n,3n)		(E-thr =	14.120 MeV)		6.647 -6
	(n,na)	0.0	0.0	2.872 -3	1.468 -3	576.1 -9
	(n,np)		(E-thr =	7.610 MeV)	163.9 -6	88.97 -9
	(n,nd)		(E-thr =	11.230 MeV)	693.6 -18	4.170 -9
	(n,nt)		(E-thr =	12.730 MeV)	0.0	81.96 -12
	capture	4015.	6030.	3495.	1.006 -3	217.0 -3
	(n,p)		(E-thr =	0.292 MeV)	6.871 -3	3.577 -6
	(n,d)		(E-thr =	5.284 MeV)	3.061 -3	650.9 -9
	(n,t)		(E-thr =	5.003 MeV)	475.7 -6	128.7 -9
	(n,He-3)		(E-thr =	5.886 MeV)	6.249 -12	19.50 -12
	(n,a)	30.77 -3	46.20 -3	4.660 -3	2.801 -3	34.29 -6
62-Sm-150	total	116.9	104.2		5.345	6.796
	elastic	8.341	8.291		3.031	5.081
	inelastic		(E-thr =	0.337 MeV)	532.3 -3	1.572
	(n,2n)		(E-thr =	8.044 MeV)	1.770	2.950 -3
	(n,3n)		(E-thr =	13.960 MeV)	0.0	14.05 -6
	(n,na)	0.0	0.0	2.183 -3	1.014 -3	776.3 -9
	(n,np)		(E-thr =	8.335 MeV)	17.94 -6	26.14 -9
	(n,nd)		(E-thr =	13.330 MeV)	0.0	52.73 -12
	(n,nt)		(E-thr =	13.050 MeV)	0.0	19.63 -12
	capture	108.6	95.93	325.8	1.433 -3	137.8 -3
	(n,p)		(E-thr =	2.735 MeV)	5.379 -3	1.559 -6
	(n,d)		(E-thr =	6.010 MeV)	225.7 -6	102.9 -9
	(n,t)		(E-thr =	7.101 MeV)	44.43 -6	30.21 -9
	(n,a)	0.0	0.0	2.089 -3	2.928 -3	4.697 -6
62-Sm-151	total	1521.	1254.		5.363	6.816
	elastic	50.40	42.59		3.052	4.418
	inelastic		(E-thr =	0.005 MeV)	590.4 -3	2.254
	(n,2n)		(E-thr =	5.639 MeV)	1.711	21.55 -3
	(n,3n)		(E-thr =	13.680 MeV)	1.371 -3	7.054 -6
	(n,na)	0.0	0.0	1.851 -3	562.4 -6	163.0 -9
	(n,np)		(E-thr =	8.373 MeV)	1.418 -6	8.696 -9
	(n,nd)		(E-thr =	11.650 MeV)	14.69 -18	1.857 -9
	(n,nt)		(E-thr =	12.740 MeV)	0.0	50.58 -12
	capture	1516.	1250.	3410.	1.000 -3	119.6 -3
	(n,p)		(E-thr =	0.408 MeV)	3.985 -3	1.840 -6
	(n,d)		(E-thr =	6.048 MeV)	1.065 -3	269.3 -9
	(n,t)		(E-thr =	5.421 MeV)	221.2 -6	79.34 -9
	(n,a)	0.0	0.0	1.136 -3	1.668 -3	2.252 -6
62-Sm-152	total	207.2	185.0		5.382	6.820
	elastic	946.6 -3	980.5 -3		3.039	4.949
	inelastic		(E-thr =	0.124 MeV)	566.9 -3	1.767
	(n,2n)		(E-thr =	8.318 MeV)	1.770	2.766 -3
	(n,3n)		(E-thr =	13.960 MeV)	0.0	12.53 -6
	(n,na)	0.0	0.0	1.147 -3	198.9 -6	76.27 -9
	(n,np)		(E-thr =	8.726 MeV)	3.508 -6	20.17 -9
	(n,nt)		(E-thr =	13.740 MeV)	0.0	3.730 -12
	capture	206.2	184.0	2766.	1.148 -3	98.40 -3
	(n,p)		(E-thr =	2.706 MeV)	2.902 -3	858.5 -9
	(n,d)		(E-thr =	6.401 MeV)	136.5 -6	103.3 -9
	(n,t)		(E-thr =	8.139 MeV)	3.584 -6	11.35 -9
	(n,a)	0.0	0.0	1.576 -3	1.626 -3	639.4 -9

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
62-Sm-153	total	426.7	380.3		5.400	6.834
	elastic	6.700	6.700		3.047	4.479
	inelastic		(E-thr = 0.008 MeV)		698.2 -3	2.308
	(n,2n)		(E-thr = 5.911 MeV)		1.649	15.42 -3
	(n,3n)		(E-thr = 14.230 MeV)			2.596 -6
	(n,na)		(E-thr = 0.609 MeV)		57.26 -6	27.47 -9
	(n,np)		(E-thr = 8.617 MeV)		16.39 -6	34.19 -9
	(n,nd)		(E-thr = 12.310 MeV)		11.78 -21	576.0 -12
	capture	420.0	372.2	716.6	1.000 -3	31.07 -3
	(n,p)		(E-thr = 1.021 MeV)		2.363 -3	934.9 -9
	(n,d)		(E-thr = 6.292 MeV)		1.177 -3	323.4 -9
	(n,t)		(E-thr = 6.085 MeV)		90.29 -6	63.62 -9
	(n,a)	0.0	0.0	709.3 -6	768.8 -6	281.0 -9
62-Sm-154	total	19.39	18.45		5.419	6.852
	elastic	11.00	10.99		3.042	5.032
	inelastic		(E-thr = 0.083 MeV)		488.5 -3	1.769
	(n,2n)		(E-thr = 8.025 MeV)		1.885	3.680 -3
	(n,3n)		(E-thr = 13.940 MeV)		0.0	9.992 -6
	(n,na)		(E-thr = 1.202 MeV)		26.43 -6	15.91 -9
	(n,np)		(E-thr = 9.047 MeV)		366.9 -9	17.40 -9
	(n,nd)		(E-thr = 14.320 MeV)			4.132 -12
	(n,nt)		(E-thr = 14.110 MeV)			688.8 -15
	capture	8.393	7.459	36.16	1.069 -3	44.15 -3
	(n,p)		(E-thr = 3.243 MeV)		1.680 -3	427.7 -9
	(n,d)		(E-thr = 6.721 MeV)		90.97 -6	77.72 -9
	(n,t)		(E-thr = 8.091 MeV)		6.578 -6	19.11 -9
	(n,a)	0.0	0.0	928.0 -6	600.6 -6	155.0 -9
63-Eu-151	total	9201.	7358.		5.200	6.839
	elastic	3.207	2.677		2.876	4.847
	inelastic		(E-thr = 0.022 MeV)		592.3 -3	1.616
	(n,2n)		(E-thr = 8.035 MeV)		1.710	2.593 -3
	(n,3n)		(E-thr = 14.510 MeV)			3.314 -6
	(n,na)	0.0	0.0	1.856 -3	1.423 -3	381.3 -9
	(n,np)		(E-thr = 4.918 MeV)		2.854 -3	1.140 -6
	capture	9198.	7355.	3072.	1.013 -3	370.3 -3
	(n,p)	0.0	0.0	5.750 -3	7.479 -3	34.39 -6
	(n,a)	8.806 -6	7.044 -6	6.241 -3	8.881 -3	72.71 -6
63-Eu-152	total	1280.	1053.		5.064	6.544
	elastic	29.06	25.97		3.295	4.235
	inelastic		(E-thr = 0.049 MeV)		257.5 -3	1.786
	(n,2n)		(E-thr = 6.352 MeV)		1.498	8.350 -3
	(n,3n)		(E-thr = 14.380 MeV)			6.669 -6
	(n,na)	0.0	0.0	1.021 -3	400.7 -6	157.1 -9
	(n,np)		(E-thr = 5.641 MeV)		829.7 -6	187.3 -9
	(n,nd)		(E-thr = 8.954 MeV)		306.4 -9	16.85 -9
	(n,nt)		(E-thr = 10.770 MeV)		2.856 -15	571.5 -12
	capture	1277.	1051.	2173.	1.001 -3	511.8 -3
	(n,p)	0.0	0.0	4.533 -3	6.593 -3	9.687 -6
	(n,d)		(E-thr = 3.315 MeV)		2.213 -3	463.1 -9
	(n,t)		(E-thr = 2.727 MeV)		440.1 -6	95.85 -9
	(n,He-3)		(E-thr = 6.231 MeV)		931.3 -15	11.67 -12
	(n,a)	0.0	0.0	1.663 -3	2.418 -3	8.662 -6
63-Eu-153	total	323.0	284.7		5.200	6.868
	elastic	10.33	10.20		2.865	4.566
	inelastic		(E-thr = 0.084 MeV)		509.2 -3	2.043
	(n,2n)		(E-thr = 8.612 MeV)		1.815	1.639 -3
	(n,3n)		(E-thr = 14.960 MeV)			1.045 -6
	(n,na)	0.0	0.0	427.8 -6	163.7 -6	28.25 -9
	(n,np)		(E-thr = 5.926 MeV)		1.807 -3	536.3 -9
	capture	312.7	274.5	1412.	1.000 -3	257.0 -3
	(n,p)		(E-thr = 0.021 MeV)		5.709 -3	12.28 -6
	(n,a)	710.6 -9	623.6 -9	1.316 -3	1.865 -3	1.857 -6
63-Eu-154	total	1355.	1478.		5.028	6.574
	elastic	6.058	5.995		3.267	4.389
	inelastic		(E-thr = 0.069 MeV)		213.4 -3	1.655
	(n,2n)		(E-thr = 6.481 MeV)		1.541	10.94 -3
	(n,3n)		(E-thr = 15.090 MeV)			2.990 -6
	(n,na)		(E-thr = 0.602 MeV)		55.25 -6	20.18 -9
	(n,np)		(E-thr = 6.505 MeV)		279.1 -6	77.72 -9
	(n,nd)		(E-thr = 10.090 MeV)		7.643 -12	5.531 -9

Nuclide	Reaction	2200-m/s (barns)	Maxw.Avg. (barns)	Res.Integ (barns)	14-MeV (barns)	Fiss.Avg. (barns)
65-Tb-159	(n,t)		(E-thr =	5.621 MeV)	38.72 -6	21.58 -9
	(n,a)	0.0	0.0	1.886 -3	2.057 -3	1.093 -6

5. Table of One-Group Cross Sections

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
34-Se- 79	inelastic	4.222E-01	4.979E-01	5.641E-01	5.492E-01	4.044E-01
	(n,2n)	2.091E-03	2.313E-03	3.142E-03	2.366E-03	9.591E-04
	(n,3n)	1.986E-08	2.160E-08	2.957E-08	3.705E-08	1.722E-08
	(n,na)	9.727E-09	1.058E-08	1.448E-08	1.581E-08	7.073E-09
	(n,np)	1.432E-08	1.557E-08	2.131E-08	2.349E-08	1.053E-08
	(n,nd)	2.254E-11	2.451E-11	3.356E-11	4.244E-11	1.978E-11
	capture	9.719E+00	5.050E+00	2.194E+00	1.568E+00	3.449E-01
	(n,p)	7.410E-06	8.494E-06	1.117E-05	8.566E-06	3.483E-06
	(n,d)	2.361E-08	2.567E-08	3.515E-08	3.661E-08	1.618E-08
	(n,t)	1.753E-09	1.906E-09	2.609E-09	2.964E-09	1.340E-09
	(n,He-3)	8.166E-14	8.879E-14	1.216E-13	1.539E-13	7.176E-14
	(n,a)	2.101E-05	2.437E-05	3.142E-05	2.396E-05	9.829E-06
34-Se- 80	total	8.955E+00	9.521E+00	9.947E+00	1.070E+01	1.049E+01
	elastic	8.572E+00	9.152E+00	9.556E+00	1.035E+01	1.029E+01
	inelastic	2.545E-01	2.948E-01	3.474E-01	3.003E-01	1.642E-01
	(n,2n)	1.781E-04	1.937E-04	2.651E-04	2.281E-04	9.609E-05
	(n,3n)	6.716E-08	7.303E-08	9.999E-08	1.232E-07	5.704E-08
	(n,na)	3.503E-09	3.809E-09	5.215E-09	5.813E-09	2.615E-09
	(n,np)	3.893E-09	4.233E-09	5.796E-09	6.591E-09	2.981E-09
	capture	1.281E-01	7.417E-02	4.312E-02	4.181E-02	3.535E-02
	(n,p)	1.623E-06	1.767E-06	2.418E-06	2.075E-06	8.754E-07
	(n,d)	2.951E-09	3.209E-09	4.393E-09	5.025E-09	2.277E-09
	(n,t)	2.710E-10	2.947E-10	4.034E-10	4.811E-10	2.205E-10
	(n,a)	3.180E-06	3.482E-06	4.752E-06	3.851E-06	1.599E-06
34-Se- 82	total	6.560E+00	7.017E+00	7.381E+00	7.850E+00	8.574E+00
	elastic	6.289E+00	6.706E+00	7.018E+00	7.528E+00	8.393E+00
	inelastic	2.372E-01	2.750E-01	3.242E-01	2.810E-01	1.550E-01
	(n,2n)	2.756E-04	2.997E-04	4.103E-04	3.408E-04	1.425E-04
	(n,3n)	2.305E-07	2.506E-07	3.431E-07	4.107E-07	1.885E-07
	(n,na)	5.331E-10	5.797E-10	7.936E-10	9.335E-10	4.263E-10
	(n,np)	1.367E-09	1.487E-09	2.035E-09	2.393E-09	1.093E-09
	capture	3.328E-02	3.543E-02	3.793E-02	4.047E-02	2.605E-02
	(n,p)	1.252E-07	1.362E-07	1.864E-07	1.765E-07	7.625E-08
	(n,d)	1.263E-09	1.373E-09	1.880E-09	2.206E-09	1.006E-09
	(n,t)	1.527E-10	1.661E-10	2.274E-10	2.747E-10	1.264E-10
	(n,a)	1.504E-08	1.635E-08	2.239E-08	2.128E-08	9.209E-09
35-Br- 79	total	1.163E+01	1.194E+01	1.212E+01	1.185E+01	8.349E+00
	elastic	6.035E+00	6.775E+00	7.299E+00	7.740E+00	7.303E+00
	inelastic	4.918E-01	5.803E-01	6.799E-01	6.449E-01	4.690E-01
	(n,2n)	6.669E-05	7.252E-05	9.928E-05	8.979E-05	3.831E-05
	(n,3n)	4.529E-10	4.924E-10	6.742E-10	8.499E-10	4.495E-10
	(n,na)	1.116E-07	1.214E-07	1.662E-07	1.696E-07	7.460E-08
	(n,np)	6.069E-05	6.599E-05	9.035E-05	7.418E-05	3.094E-05
	(n,nd)	1.071E-10	1.165E-10	1.595E-10	2.003E-10	9.321E-11
	(n,nt)	9.075E-13	9.868E-13	1.351E-12	1.731E-12	8.092E-13
	capture	5.083E+00	4.576E+00	4.131E+00	3.459E+00	5.793E-01
	(n,p)	1.163E-03	1.348E-03	1.682E-03	1.313E-03	5.671E-04
	(n,d)	1.679E-07	1.833E-07	2.505E-07	2.254E-07	9.624E-08
	(n,t)	3.631E-09	3.948E-09	5.405E-09	6.027E-09	2.711E-09
	(n,He-3)	8.288E-12	9.012E-12	1.234E-11	1.517E-11	7.017E-12
	(n,a)	1.586E-05	1.802E-05	2.400E-05	1.817E-05	7.342E-06
	(n,2p)	3.574E-12	3.886E-12	5.320E-12	6.369E-12	2.923E-12
35-Br- 81	total	8.278E+00	9.105E+00	9.639E+00	9.842E+00	8.142E+00
	elastic	6.197E+00	6.929E+00	7.413E+00	7.809E+00	7.530E+00
	inelastic	4.050E-01	4.740E-01	5.553E-01	5.091E-01	3.321E-01
	(n,2n)	1.240E-04	1.349E-04	1.847E-04	1.614E-04	6.831E-05
	(n,3n)	7.315E-09	7.954E-09	1.089E-08	1.380E-08	6.536E-09
	(n,na)	5.326E-09	5.791E-09	7.929E-09	8.696E-09	3.895E-09
	(n,np)	9.396E-07	1.022E-06	1.399E-06	1.252E-06	5.335E-07
	(n,nd)	2.799E-11	3.044E-11	4.168E-11	5.280E-11	2.462E-11
	(n,nt)	6.115E-13	6.649E-13	9.104E-13	1.168E-12	5.463E-13
	capture	1.676E+00	1.693E+00	1.661E+00	1.514E+00	2.797E-01
	(n,p)	6.231E-05	7.198E-05	9.347E-05	7.098E-05	2.893E-05
	(n,d)	3.841E-08	4.177E-08	5.718E-08	5.844E-08	2.574E-08
	(n,t)	2.116E-09	2.301E-09	3.150E-09	3.590E-09	1.625E-09
	(n,a)	1.077E-06	1.185E-06	1.613E-06	1.297E-06	5.363E-07
36-Kr- 78	total	9.255E+00	8.835E+00	8.516E+00	8.639E+00	7.967E+00
	elastic	7.246E+00	7.219E+00	7.113E+00	7.368E+00	7.426E+00
	inelastic	3.030E-01	3.524E-01	4.138E-01	3.684E-01	2.189E-01
	(n,2n)	7.421E-06	8.069E-06	1.105E-05	1.072E-05	4.652E-06
	(n,na)	2.130E-06	2.316E-06	3.171E-06	2.947E-06	1.266E-06

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
36-Kr- 78	(n,np)	2.257E-05	2.454E-05	3.359E-05	3.090E-05	1.324E-05
	capture	1.701E+00	1.259E+00	9.830E-01	8.973E-01	3.201E-01
	(n,p)	3.045E-03	3.536E-03	4.490E-03	3.441E-03	1.435E-03
	(n,d)	8.605E-08	9.357E-08	1.281E-07	1.213E-07	5.249E-08
	(n,t)	1.059E-09	1.152E-09	1.577E-09	1.827E-09	8.307E-10
	(n,He-3)	7.027E-11	7.640E-11	1.046E-10	1.226E-10	5.599E-11
	(n,a)	6.458E-04	7.504E-04	9.607E-04	7.317E-04	3.023E-04
	(n,2p)	9.421E-08	1.024E-07	1.402E-07	1.403E-07	6.139E-08
36-Kr- 80	total	1.339E+01	1.340E+01	1.312E+01	1.258E+01	7.976E+00
	elastic	9.722E+00	1.046E+01	1.066E+01	1.047E+01	7.546E+00
	inelastic	2.505E-01	2.904E-01	3.416E-01	2.979E-01	1.668E-01
	(n,2n)	3.415E-05	3.713E-05	5.084E-05	4.794E-05	2.066E-05
	(n,na)	5.930E-07	6.448E-07	8.827E-07	8.693E-07	3.792E-07
	(n,np)	1.876E-06	2.040E-06	2.793E-06	2.749E-06	1.198E-06
	capture	3.419E+00	2.649E+00	2.114E+00	1.808E+00	2.628E-01
	(n,p)	3.315E-04	3.840E-04	5.014E-04	3.774E-04	1.523E-04
	(n,d)	2.884E-08	3.136E-08	4.294E-08	4.295E-08	1.882E-08
	(n,t)	3.967E-10	4.313E-10	5.905E-10	6.971E-10	3.186E-10
	(n,He-3)	5.255E-12	5.714E-12	7.823E-12	9.511E-12	4.386E-12
	(n,a)	5.315E-05	6.099E-05	8.048E-05	6.054E-05	2.442E-05
	(n,2p)	5.816E-10	6.324E-10	8.658E-10	9.980E-10	4.531E-10
36-Kr- 82	total	2.487E+01	2.200E+01	1.878E+01	1.578E+01	7.803E+00
	elastic	1.439E+01	1.337E+01	1.185E+01	1.070E+01	7.563E+00
	inelastic	2.324E-01	2.688E-01	3.172E-01	2.713E-01	1.447E-01
	(n,2n)	6.196E-05	6.738E-05	9.225E-05	8.448E-05	3.615E-05
	(n,3n)	7.735E-10	8.410E-10	1.152E-09	1.467E-09	7.262E-10
	(n,na)	2.361E-08	2.567E-08	3.515E-08	3.734E-08	1.659E-08
	(n,np)	9.272E-08	1.008E-07	1.380E-07	1.448E-07	6.405E-08
	capture	1.024E+01	8.367E+00	6.616E+00	4.807E+00	9.451E-02
	(n,p)	2.622E-05	2.976E-05	3.977E-05	3.010E-05	1.214E-05
	(n,d)	8.674E-09	9.431E-09	1.291E-08	1.399E-08	6.248E-09
	(n,t)	2.783E-10	3.026E-10	4.143E-10	4.929E-10	2.258E-10
	(n,a)	6.773E-06	7.613E-06	1.024E-05	7.780E-06	3.150E-06
36-Kr- 83	total	4.038E+01	2.325E+01	1.319E+01	1.105E+01	7.694E+00
	elastic	7.727E+00	7.502E+00	7.235E+00	7.292E+00	6.919E+00
	inelastic	4.107E-01	4.890E-01	5.766E-01	5.581E-01	5.232E-01
	(n,2n)	8.845E-04	9.658E-04	1.320E-03	1.015E-03	4.155E-04
	(n,3n)	7.751E-10	8.429E-10	1.154E-09	1.477E-09	6.918E-10
	(n,na)	4.467E-09	4.857E-09	6.650E-09	7.505E-09	3.388E-09
	(n,np)	4.693E-08	5.103E-08	6.987E-08	7.579E-08	3.384E-08
	(n,nd)	3.137E-11	3.411E-11	4.670E-11	5.919E-11	2.760E-11
	capture	3.224E+01	1.526E+01	5.373E+00	3.197E+00	2.516E-01
	(n,p)	2.095E-05	2.411E-05	3.075E-05	2.384E-05	1.001E-05
	(n,d)	8.142E-08	8.853E-08	1.212E-07	1.233E-07	5.421E-08
	(n,t)	1.992E-09	2.166E-09	2.965E-09	3.406E-09	1.544E-09
	(n,He-3)	8.627E-13	9.381E-13	1.284E-12	1.612E-12	7.498E-13
	(n,a)	3.434E-06	3.955E-06	5.063E-06	3.965E-06	1.665E-06
	(n,2p)	6.914E-13	7.518E-13	1.029E-12	1.214E-12	5.546E-13
36-Kr- 84	total	6.505E+00	6.635E+00	6.713E+00	6.968E+00	7.468E+00
	elastic	6.211E+00	6.303E+00	6.331E+00	6.623E+00	7.301E+00
	inelastic	2.037E-01	2.354E-01	2.785E-01	2.362E-01	1.234E-01
	(n,2n)	8.450E-05	9.188E-05	1.258E-04	1.124E-04	4.783E-05
	(n,3n)	7.578E-09	8.240E-09	1.128E-08	1.425E-08	6.802E-09
	(n,na)	2.103E-08	2.287E-08	3.131E-08	3.552E-08	1.605E-08
	(n,np)	1.634E-07	1.777E-07	2.433E-07	2.674E-07	1.198E-07
	capture	8.931E-02	9.631E-02	1.029E-01	1.082E-01	4.382E-02
	(n,p)	2.472E-06	2.715E-06	3.700E-06	2.930E-06	1.207E-06
	(n,d)	1.385E-08	1.506E-08	2.062E-08	2.287E-08	1.028E-08
	(n,t)	5.797E-10	6.303E-10	8.630E-10	1.032E-09	4.737E-10
	(n,a)	4.522E-07	4.942E-07	6.750E-07	5.610E-07	2.345E-07
36-Kr- 85	total	6.822E+00	6.787E+00	6.763E+00	7.014E+00	7.591E+00
	elastic	6.363E+00	6.465E+00	6.506E+00	6.798E+00	7.464E+00
	inelastic	1.208E-01	1.397E-01	1.678E-01	1.381E-01	6.729E-02
	(n,2n)	1.642E-03	1.805E-03	2.459E-03	1.861E-03	7.569E-04
	(n,3n)	8.717E-09	9.478E-09	1.298E-08	1.627E-08	7.567E-09
	(n,na)	4.414E-09	4.800E-09	6.572E-09	7.587E-09	3.447E-09
	(n,np)	2.566E-08	2.790E-08	3.820E-08	4.292E-08	1.934E-08
	(n,nd)	2.000E-11	2.175E-11	2.978E-11	3.794E-11	1.772E-11
	capture	3.235E-01	1.708E-01	8.103E-02	7.156E-02	5.818E-02
	(n,p)	1.788E-06	1.993E-06	2.690E-06	2.119E-06	8.693E-07
	(n,d)	3.908E-08	4.249E-08	5.817E-08	6.252E-08	2.786E-08

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
36-Kr- 85	(n,t)	2.384E-09	2.592E-09	3.549E-09	4.111E-09	1.869E-09
	(n,a)	5.047E-07	5.665E-07	7.610E-07	6.016E-07	2.468E-07
36-Kr- 86	total	6.031E+00	6.052E+00	6.040E+00	6.192E+00	6.608E+00
	elastic	5.897E+00	5.898E+00	5.856E+00	6.040E+00	6.533E+00
	inelastic	1.317E-01	1.520E-01	1.826E-01	1.499E-01	7.142E-02
	(n,2n)	1.447E-04	1.574E-04	2.155E-04	1.853E-04	7.813E-05
	(n,3n)	3.141E-08	3.415E-08	4.676E-08	5.794E-08	2.686E-08
	(n,na)	2.832E-09	3.079E-09	4.216E-09	4.988E-09	2.282E-09
	(n,np)	2.771E-09	3.013E-09	4.125E-09	4.833E-09	2.204E-09
	capture	1.675E-03	1.669E-03	1.753E-03	1.943E-03	2.887E-03
	(n,p)	3.771E-07	4.100E-07	5.614E-07	5.396E-07	2.339E-07
	(n,d)	6.279E-09	6.828E-09	9.348E-09	1.074E-08	4.869E-09
	(n,t)	4.480E-10	4.871E-10	6.669E-10	8.088E-10	3.726E-10
	(n,a)	7.195E-08	7.824E-08	1.071E-07	1.030E-07	4.470E-08
37-Rb- 85	total	7.116E+00	7.443E+00	7.680E+00	8.063E+00	8.123E+00
	elastic	6.415E+00	6.659E+00	6.799E+00	7.190E+00	7.550E+00
	inelastic	3.620E-01	4.251E-01	4.996E-01	4.609E-01	3.197E-01
	(n,2n)	8.490E-05	9.232E-05	1.264E-04	1.132E-04	4.821E-05
	(n,3n)	2.241E-11	2.437E-11	3.336E-11	4.243E-11	2.180E-11
	(n,na)	1.194E-08	1.299E-08	1.778E-08	1.981E-08	8.908E-09
	(n,np)	5.488E-06	5.967E-06	8.170E-06	6.887E-06	2.890E-06
	(n,nd)	1.530E-11	1.663E-11	2.277E-11	2.896E-11	1.351E-11
	capture	3.371E-01	3.575E-01	3.799E-01	4.101E-01	2.525E-01
	(n,p)	1.090E-04	1.264E-04	1.606E-04	1.233E-04	5.150E-05
	(n,d)	7.266E-08	7.903E-08	1.082E-07	1.067E-07	4.657E-08
	(n,t)	3.432E-09	3.732E-09	5.109E-09	5.847E-09	2.649E-09
	(n,He-3)	1.392E-12	1.514E-12	2.072E-12	2.593E-12	1.205E-12
	(n,a)	1.483E-06	1.636E-06	2.224E-06	1.782E-06	7.360E-07
37-Rb- 87	total	6.231E+00	6.736E+00	7.145E+00	7.571E+00	8.283E+00
	elastic	5.876E+00	6.332E+00	6.682E+00	7.147E+00	8.068E+00
	inelastic	2.581E-01	3.009E-01	3.547E-01	3.168E-01	1.924E-01
	(n,2n)	1.653E-04	1.798E-04	2.461E-04	2.131E-04	8.999E-05
	(n,3n)	1.355E-09	1.473E-09	2.017E-09	2.574E-09	1.202E-09
	(n,na)	1.055E-08	1.148E-08	1.571E-08	1.852E-08	8.463E-09
	(n,np)	5.962E-08	6.482E-08	8.875E-08	9.123E-08	4.019E-08
	(n,nd)	9.103E-13	9.898E-13	1.355E-12	1.740E-12	8.142E-13
	capture	9.561E-02	1.020E-01	1.076E-01	1.062E-01	2.134E-02
	(n,p)	2.464E-06	2.717E-06	3.694E-06	2.967E-06	1.226E-06
	(n,d)	3.049E-08	3.316E-08	4.540E-08	4.779E-08	2.119E-08
	(n,t)	1.005E-09	1.093E-09	1.496E-09	1.753E-09	7.994E-10
	(n,a)	2.839E-07	3.089E-07	4.228E-07	3.797E-07	1.620E-07
38-Sr- 86	total	8.076E+00	8.963E+00	9.683E+00	1.027E+01	9.062E+00
	elastic	7.574E+00	8.500E+00	9.215E+00	9.840E+00	8.865E+00
	inelastic	1.910E-01	2.205E-01	2.616E-01	2.199E-01	1.123E-01
	(n,2n)	4.102E-05	4.460E-05	6.107E-05	5.736E-05	2.469E-05
	(n,na)	7.090E-08	7.709E-08	1.055E-07	1.167E-07	5.236E-08
	(n,np)	2.394E-07	2.604E-07	3.565E-07	3.697E-07	1.632E-07
	capture	3.105E-01	2.419E-01	2.055E-01	2.081E-01	8.453E-02
	(n,p)	1.597E-04	1.848E-04	2.414E-04	1.820E-04	7.355E-05
	(n,d)	2.411E-08	2.622E-08	3.589E-08	3.832E-08	1.705E-08
	(n,t)	3.657E-10	3.976E-10	5.444E-10	6.501E-10	2.982E-10
	(n,a)	2.010E-06	2.223E-06	3.017E-06	2.418E-06	9.982E-07
	(n,2p)	2.502E-12	2.721E-12	3.725E-12	4.457E-12	2.046E-12
38-Sr- 87	total	1.260E+01	1.141E+01	1.016E+01	9.219E+00	8.493E+00
	elastic	6.953E+00	7.064E+00	7.105E+00	7.436E+00	8.331E+00
	inelastic	1.584E-01	1.829E-01	2.187E-01	1.813E-01	8.891E-02
	(n,2n)	5.608E-04	6.100E-04	8.350E-04	6.648E-04	2.753E-04
	(n,na)	2.099E-09	2.283E-09	3.125E-09	3.611E-09	1.641E-09
	(n,np)	1.060E-07	1.153E-07	1.578E-07	1.650E-07	7.297E-08
	(n,nd)	3.337E-12	3.629E-12	4.968E-12	6.355E-12	2.971E-12
	capture	5.478E+00	4.154E+00	2.826E+00	1.597E+00	7.314E-02
	(n,p)	1.574E-04	1.827E-04	2.294E-04	1.779E-04	7.561E-05
	(n,d)	9.063E-08	9.855E-08	1.349E-07	1.358E-07	5.950E-08
	(n,t)	9.825E-10	1.068E-09	1.463E-09	1.713E-09	7.811E-10
	(n,He-3)	8.555E-13	9.302E-13	1.274E-12	1.594E-12	7.408E-13
	(n,a)	7.925E-06	9.134E-06	1.193E-05	9.087E-06	3.700E-06
38-Sr- 88	total	6.028E+00	6.219E+00	6.365E+00	6.617E+00	7.440E+00
	elastic	5.918E+00	6.092E+00	6.211E+00	6.492E+00	7.380E+00
	inelastic	1.058E-01	1.223E-01	1.482E-01	1.201E-01	5.546E-02
	(n,2n)	5.244E-05	5.702E-05	7.807E-05	7.204E-05	3.089E-05

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
38-Sr- 88	(n,3n)	5.963E-13	6.484E-13	8.877E-13	1.140E-12	5.674E-13
	(n,na)	1.046E-09	1.137E-09	1.557E-09	1.837E-09	8.397E-10
	(n,np)	2.351E-08	2.557E-08	3.501E-08	3.886E-08	1.746E-08
	capture	3.660E-03	3.796E-03	4.042E-03	4.510E-03	4.278E-03
	(n,p)	1.529E-06	1.665E-06	2.278E-06	1.944E-06	8.187E-07
	(n,d)	1.372E-08	1.492E-08	2.043E-08	2.239E-08	1.003E-08
	(n,t)	3.148E-10	3.423E-10	4.687E-10	5.654E-10	2.601E-10
	(n,a)	3.316E-07	3.612E-07	4.941E-07	4.401E-07	1.874E-07
38-Sr- 89	total	6.587E+00	6.791E+00	6.958E+00	7.290E+00	8.245E+00
	elastic	6.339E+00	6.564E+00	6.722E+00	7.095E+00	8.145E+00
	inelastic	1.533E-01	1.770E-01	2.112E-01	1.752E-01	8.555E-02
	(n,2n)	3.320E-03	3.733E-03	5.033E-03	3.764E-03	1.514E-03
	(n,3n)	2.007E-08	2.183E-08	2.989E-08	3.745E-08	1.742E-08
	(n,na)	2.739E-09	2.978E-09	4.078E-09	4.689E-09	2.127E-09
	(n,np)	1.404E-08	1.527E-08	2.090E-08	2.358E-08	1.064E-08
	(n,nd)	5.241E-11	5.698E-11	7.802E-11	9.836E-11	4.581E-11
	capture	8.039E-02	4.137E-02	1.834E-02	1.569E-02	1.246E-02
	(n,p)	8.648E-07	9.440E-07	1.290E-06	1.104E-06	4.648E-07
	(n,d)	2.396E-08	2.605E-08	3.567E-08	3.822E-08	1.702E-08
	(n,t)	5.213E-09	5.668E-09	7.760E-09	8.563E-09	3.841E-09
	(n,a)	1.236E-06	1.403E-06	1.864E-06	1.444E-06	5.896E-07
38-Sr- 90	total	6.535E+00	6.630E+00	6.716E+00	6.993E+00	8.033E+00
	elastic	6.140E+00	6.289E+00	6.383E+00	6.714E+00	7.881E+00
	inelastic	2.255E-01	2.610E-01	3.079E-01	2.632E-01	1.405E-01
	(n,2n)	1.056E-03	1.152E-03	1.575E-03	1.215E-03	4.983E-04
	(n,3n)	1.202E-06	1.307E-06	1.789E-06	2.002E-06	9.005E-07
	(n,na)	8.821E-09	9.591E-09	1.313E-08	1.406E-08	6.260E-09
	(n,np)	5.899E-09	6.414E-09	8.782E-09	1.014E-08	4.607E-09
	(n,nd)	2.810E-13	3.055E-13	4.183E-13	5.383E-13	2.520E-13
	capture	1.602E-01	7.310E-02	2.101E-02	1.243E-02	1.026E-02
	(n,p)	3.299E-07	3.587E-07	4.911E-07	4.526E-07	1.942E-07
	(n,d)	6.568E-09	7.142E-09	9.778E-09	1.103E-08	4.980E-09
	(n,t)	2.299E-09	2.499E-09	3.422E-09	3.902E-09	1.766E-09
	(n,a)	2.316E-07	2.540E-07	3.463E-07	2.871E-07	1.198E-07
39-Y - 89	total	7.283E+00	7.065E+00	6.872E+00	7.020E+00	7.779E+00
	elastic	6.890E+00	6.769E+00	6.614E+00	6.810E+00	7.673E+00
	inelastic	1.596E-01	1.842E-01	2.200E-01	1.826E-01	8.977E-02
	(n,2n)	4.056E-05	4.410E-05	6.038E-05	5.694E-05	2.454E-05
	(n,na)	8.879E-09	9.654E-09	1.322E-08	1.566E-08	7.164E-09
	(n,np)	2.726E-05	2.965E-05	4.059E-05	3.488E-05	1.470E-05
	(n,nd)	4.677E-12	5.086E-12	6.963E-12	8.914E-12	4.168E-12
	capture	2.327E-01	1.105E-01	3.778E-02	2.708E-02	1.611E-02
	(n,p)	5.783E-05	6.637E-05	8.708E-05	6.607E-05	2.682E-05
	(n,d)	1.353E-07	1.471E-07	2.014E-07	1.955E-07	8.500E-08
	(n,t)	9.636E-10	1.048E-09	1.435E-09	1.669E-09	7.596E-10
	(n,He-3)	1.792E-12	1.949E-12	2.668E-12	3.314E-12	1.537E-12
	(n,a)	8.508E-07	9.322E-07	1.271E-06	1.049E-06	4.371E-07
39-Y - 91	total	6.946E+00	7.105E+00	7.250E+00	7.579E+00	8.278E+00
	elastic	6.323E+00	6.555E+00	6.709E+00	7.095E+00	7.993E+00
	inelastic	3.005E-01	3.486E-01	4.093E-01	3.577E-01	2.013E-01
	(n,2n)	8.850E-04	9.668E-04	1.321E-03	1.024E-03	4.202E-04
	(n,3n)	6.565E-07	7.138E-07	9.773E-07	1.114E-06	5.039E-07
	(n,na)	3.089E-08	3.359E-08	4.599E-08	4.727E-08	2.082E-08
	(n,np)	1.322E-07	1.438E-07	1.968E-07	1.955E-07	8.541E-08
	(n,nd)	6.005E-10	6.529E-10	8.940E-10	1.100E-09	5.089E-10
	(n,nt)	1.499E-10	1.630E-10	2.231E-10	2.768E-10	1.283E-10
	capture	3.119E-01	1.935E-01	1.257E-01	1.226E-01	8.336E-02
	(n,p)	3.140E-06	3.503E-06	4.722E-06	3.733E-06	1.533E-06
	(n,d)	7.330E-08	7.971E-08	1.091E-07	1.108E-07	4.867E-08
	(n,t)	1.492E-08	1.622E-08	2.221E-08	2.351E-08	1.043E-08
	(n,a)	1.002E-06	1.113E-06	1.505E-06	1.187E-06	4.874E-07
40-Zr- 90	total	6.204E+00	6.433E+00	6.614E+00	6.911E+00	7.884E+00
	elastic	6.085E+00	6.301E+00	6.457E+00	6.781E+00	7.816E+00
	inelastic	1.031E-01	1.192E-01	1.447E-01	1.169E-01	5.341E-02
	(n,2n)	2.517E-05	2.737E-05	3.747E-05	3.612E-05	1.565E-05
	(n,na)	1.093E-08	1.188E-08	1.627E-08	1.846E-08	8.344E-09
	(n,np)	5.170E-06	5.622E-06	7.697E-06	7.075E-06	3.031E-06
	capture	1.549E-02	1.297E-02	1.197E-02	1.292E-02	1.488E-02
	(n,p)	5.106E-05	5.804E-05	7.728E-05	5.864E-05	2.371E-05
	(n,d)	7.347E-08	7.989E-08	1.094E-07	1.087E-07	4.750E-08
	(n,t)	5.137E-10	5.586E-10	7.648E-10	9.103E-10	4.171E-10

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
40-Zr- 90	(n,He-3)	8.370E-12	9.101E-12	1.246E-11	1.527E-11	7.056E-12
	(n,a)	3.475E-06	3.878E-06	5.233E-06	4.083E-06	1.670E-06
	(n,2p)	8.499E-12	9.241E-12	1.265E-11	1.517E-11	6.965E-12
40-Zr- 91	total	9.778E+00	9.525E+00	9.221E+00	9.359E+00	8.702E+00
	elastic	9.223E+00	9.024E+00	8.728E+00	8.908E+00	8.539E+00
	inelastic	1.541E-01	1.779E-01	2.128E-01	1.757E-01	8.470E-02
	(n,2n)	1.710E-03	1.883E-03	2.563E-03	1.942E-03	7.895E-04
	(n,3n)	1.319E-10	1.434E-10	1.963E-10	2.485E-10	1.297E-10
	(n,na)	1.961E-08	2.132E-08	2.919E-08	3.153E-08	1.406E-08
	(n,np)	1.807E-07	1.965E-07	2.691E-07	2.747E-07	1.208E-07
	(n,nd)	5.406E-10	5.879E-10	8.049E-10	9.918E-10	4.590E-10
	capture	3.969E-01	3.193E-01	2.760E-01	2.723E-01	7.733E-02
	(n,p)	2.863E-05	3.271E-05	4.310E-05	3.294E-05	1.540E-05
	(n,d)	1.423E-07	1.548E-07	2.119E-07	2.078E-07	9.053E-08
	(n,t)	1.051E-08	1.143E-08	1.564E-08	1.643E-08	7.278E-09
	(n,He-3)	7.200E-12	7.829E-12	1.072E-11	1.314E-11	6.072E-12
	(n,a)	3.638E-05	4.208E-05	5.253E-05	4.158E-05	1.873E-05
40-Zr- 92	total	6.694E+00	7.192E+00	7.603E+00	8.132E+00	8.943E+00
	elastic	6.406E+00	6.884E+00	7.255E+00	7.827E+00	8.763E+00
	inelastic	2.246E-01	2.595E-01	3.065E-01	2.603E-01	1.365E-01
	(n,2n)	5.296E-04	5.758E-04	7.884E-04	6.339E-04	2.631E-04
	(n,3n)	2.638E-07	2.868E-07	3.927E-07	4.665E-07	2.136E-07
	(n,na)	1.070E-07	1.163E-07	1.593E-07	1.496E-07	6.453E-08
	(n,np)	5.891E-08	6.406E-08	8.770E-08	9.273E-08	4.113E-08
	(n,nd)	1.058E-11	1.150E-11	1.575E-11	2.000E-11	9.328E-12
	(n,nt)	3.060E-13	3.327E-13	4.556E-13	5.844E-13	2.734E-13
	capture	6.208E-02	4.723E-02	3.994E-02	4.298E-02	4.197E-02
	(n,p)	6.429E-06	7.121E-06	9.661E-06	7.611E-06	3.125E-06
	(n,d)	5.420E-08	5.893E-08	8.069E-08	8.432E-08	3.730E-08
	(n,t)	4.945E-09	5.377E-09	7.361E-09	8.044E-09	3.599E-09
	(n,a)	1.574E-05	1.807E-05	2.371E-05	1.800E-05	7.320E-06
40-Zr- 93	total	8.121E+00	8.515E+00	8.721E+00	8.836E+00	8.210E+00
	elastic	7.025E+00	7.471E+00	7.697E+00	7.920E+00	7.897E+00
	inelastic	2.721E-01	3.184E-01	3.757E-01	3.386E-01	2.166E-01
	(n,2n)	2.634E-03	2.928E-03	3.970E-03	2.977E-03	1.203E-03
	(n,3n)	3.770E-07	4.099E-07	5.612E-07	6.566E-07	2.993E-07
	(n,na)	2.766E-08	3.008E-08	4.118E-08	4.103E-08	1.794E-08
	(n,np)	1.331E-08	1.448E-08	1.982E-08	2.156E-08	9.635E-09
	(n,nd)	9.609E-11	1.045E-10	1.431E-10	1.786E-10	8.294E-11
	(n,nt)	4.401E-13	4.785E-13	6.551E-13	8.398E-13	3.928E-13
	capture	8.111E-01	7.221E-01	6.432E-01	5.734E-01	9.476E-02
	(n,p)	2.321E-06	2.576E-06	3.485E-06	2.820E-06	1.166E-06
	(n,d)	3.720E-08	4.045E-08	5.538E-08	5.660E-08	2.490E-08
	(n,t)	7.948E-09	8.642E-09	1.183E-08	1.267E-08	5.638E-09
	(n,a)	6.518E-06	7.524E-06	9.551E-06	7.435E-06	3.164E-06
40-Zr- 94	total	6.790E+00	7.008E+00	7.170E+00	7.512E+00	8.783E+00
	elastic	6.535E+00	6.718E+00	6.831E+00	7.219E+00	8.615E+00
	inelastic	2.322E-01	2.683E-01	3.166E-01	2.694E-01	1.420E-01
	(n,2n)	8.642E-04	9.413E-04	1.288E-03	1.006E-03	4.145E-04
	(n,3n)	7.719E-07	8.393E-07	1.149E-06	1.322E-06	5.995E-07
	(n,na)	1.756E-08	1.910E-08	2.615E-08	2.637E-08	1.156E-08
	(n,np)	2.810E-09	3.056E-09	4.184E-09	4.691E-09	2.113E-09
	(n,nd)	2.207E-12	2.399E-12	3.285E-12	4.197E-12	1.961E-12
	capture	2.162E-02	2.016E-02	2.017E-02	2.234E-02	2.595E-02
	(n,p)	9.326E-07	1.016E-06	1.390E-06	1.200E-06	5.067E-07
	(n,d)	7.112E-09	7.734E-09	1.059E-08	1.169E-08	5.248E-09
	(n,t)	2.716E-09	2.953E-09	4.043E-09	4.492E-09	2.019E-09
	(n,a)	1.692E-06	1.904E-06	2.552E-06	1.987E-06	8.110E-07
40-Zr- 95	total	7.231E+00	7.483E+00	7.683E+00	7.996E+00	8.294E+00
	elastic	6.622E+00	6.913E+00	7.109E+00	7.465E+00	8.054E+00
	inelastic	1.795E-01	2.073E-01	2.461E-01	2.059E-01	1.032E-01
	(n,2n)	3.300E-03	3.700E-03	4.995E-03	3.734E-03	1.503E-03
	(n,3n)	8.438E-07	9.175E-07	1.256E-06	1.427E-06	6.448E-07
	(n,na)	8.643E-09	9.398E-09	1.287E-08	1.369E-08	6.087E-09
	(n,np)	2.319E-09	2.522E-09	3.453E-09	3.929E-09	1.777E-09
	(n,nd)	1.765E-11	1.920E-11	2.628E-11	3.316E-11	1.545E-11
	capture	4.187E-01	3.541E-01	3.200E-01	3.193E-01	1.355E-01
	(n,p)	3.606E-07	3.927E-07	5.373E-07	4.855E-07	2.073E-07
	(n,d)	1.061E-08	1.154E-08	1.580E-08	1.683E-08	7.484E-09
	(n,t)	2.864E-09	3.114E-09	4.263E-09	4.760E-09	2.142E-09
	(n,a)	2.442E-07	2.735E-07	3.664E-07	2.999E-07	1.248E-07

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
40-Zr- 96	total	7.226E+00	7.560E+00	7.808E+00	8.213E+00	9.151E+00
	elastic	6.918E+00	7.194E+00	7.385E+00	7.823E+00	9.048E+00
	inelastic	1.398E-01	1.614E-01	1.937E-01	1.591E-01	7.570E-02
	(n,2n)	1.254E-03	1.367E-03	1.869E-03	1.438E-03	5.894E-04
	(n,3n)	1.500E-06	1.631E-06	2.233E-06	2.488E-06	1.118E-06
	(n,na)	1.298E-09	6.848E-09	9.376E-09	1.023E-08	4.576E-09
	(n,np)	3.268E-09	3.553E-09	4.864E-09	5.690E-09	2.594E-09
	capture	1.662E-01	2.027E-01	2.265E-01	2.291E-01	2.691E-02
	(n,p)	1.708E-07	1.857E-07	2.542E-07	2.462E-07	1.069E-07
	(n,d)	1.652E-09	1.797E-09	2.460E-09	2.850E-09	1.296E-09
	(n,t)	1.454E-09	1.581E-09	2.164E-09	2.458E-09	1.111E-09
	(n,a)	2.298E-07	2.515E-07	3.432E-07	2.994E-07	1.266E-07
41-Nb- 93	total	7.340E+00	7.511E+00	7.639E+00	7.965E+00	8.607E+00
	elastic	6.564E+00	6.728E+00	6.812E+00	7.184E+00	8.164E+00
	nonelastic	7.763E-01	7.820E-01	8.260E-01	7.816E-01	4.426E-01
	inelastic	3.144E-01	3.640E-01	4.270E-01	3.708E-01	2.065E-01
	(n,2n)	3.358E-04	3.651E-04	4.999E-04	4.111E-04	1.716E-04
	(n,3n)	6.347E-08	6.901E-08	9.449E-08	1.152E-07	5.314E-08
	(n,na)	4.593E-07	5.016E-07	6.854E-07	5.593E-07	2.328E-07
	(n,np)	1.398E-06	1.522E-06	2.083E-06	1.792E-06	7.568E-07
	capture	4.614E-01	4.175E-01	3.982E-01	4.102E-01	2.358E-01
	(n,p)	7.869E-05	9.011E-05	1.160E-04	8.975E-05	3.788E-05
	(n,d)	9.922E-07	1.081E-06	1.479E-06	1.234E-06	5.165E-07
	(n,a)	3.318E-05	3.824E-05	4.871E-05	3.786E-05	1.645E-05
41-Nb- 94	total	1.302E+01	1.214E+01	1.111E+01	1.022E+01	8.328E+00
	elastic	6.783E+00	6.914E+00	6.906E+00	7.061E+00	7.249E+00
	inelastic	5.877E-01	7.074E-01	8.328E-01	8.404E-01	8.195E-01
	(n,2n)	1.640E-03	1.805E-03	2.458E-03	1.863E-03	7.577E-04
	(n,3n)	1.806E-07	1.964E-07	2.689E-07	3.218E-07	1.477E-07
	(n,na)	1.468E-07	1.597E-07	2.186E-07	2.037E-07	8.766E-08
	(n,np)	4.904E-07	5.333E-07	7.301E-07	6.779E-07	2.914E-07
	(n,nd)	7.167E-09	7.793E-09	1.067E-08	1.240E-08	5.641E-09
	(n,nt)	8.211E-11	8.928E-11	1.222E-10	1.523E-10	7.068E-11
	capture	5.648E+00	4.513E+00	3.364E+00	2.321E+00	2.585E-01
	(n,p)	9.716E-05	1.119E-04	1.378E-04	1.115E-04	5.255E-05
	(n,d)	3.076E-07	3.345E-07	4.579E-07	4.290E-07	1.848E-07
	(n,t)	3.688E-08	4.010E-08	5.490E-08	5.471E-08	2.392E-08
	(n,He-3)	2.721E-11	2.958E-11	4.050E-11	4.851E-11	2.227E-11
	(n,a)	2.605E-05	3.009E-05	3.775E-05	2.997E-05	1.381E-05
41-Nb- 95	total	9.088E+00	8.912E+00	8.783E+00	8.818E+00	8.284E+00
	elastic	6.597E+00	6.864E+00	7.015E+00	7.291E+00	7.803E+00
	inelastic	2.239E-01	2.594E-01	3.066E-01	2.630E-01	1.419E-01
	(n,2n)	6.191E-04	6.733E-04	9.218E-04	7.327E-04	3.033E-04
	(n,3n)	3.192E-07	3.471E-07	4.752E-07	5.610E-07	2.564E-07
	(n,na)	6.362E-08	6.919E-08	9.472E-08	8.923E-08	3.851E-08
	(n,np)	4.561E-07	4.959E-07	6.790E-07	6.337E-07	2.727E-07
	(n,nd)	7.680E-10	8.351E-10	1.143E-09	1.396E-09	6.444E-10
	(n,nt)	1.288E-10	1.401E-10	1.918E-10	2.381E-10	1.104E-10
	capture	2.256E+00	1.782E+00	1.458E+00	1.262E+00	3.388E-01
	(n,p)	1.581E-05	1.798E-05	2.371E-05	1.819E-05	7.431E-06
	(n,d)	7.974E-08	8.671E-08	1.187E-07	1.183E-07	5.176E-08
	(n,t)	1.707E-08	1.856E-08	2.541E-08	2.661E-08	1.178E-08
	(n,He-3)	1.113E-12	1.210E-12	1.657E-12	2.060E-12	9.555E-13
	(n,a)	6.147E-06	7.041E-06	9.227E-06	7.036E-06	2.873E-06
42-Mo- 92	total	6.331E+00	6.580E+00	6.772E+00	7.095E+00	8.088E+00
	elastic	6.152E+00	6.371E+00	6.524E+00	6.877E+00	7.959E+00
	inelastic	1.366E-01	1.577E-01	1.890E-01	1.556E-01	7.487E-02
	(n,2n)	7.365E-06	8.008E-06	1.096E-05	1.115E-05	4.896E-06
	(n,na)	4.353E-08	4.734E-08	6.481E-08	6.986E-08	3.116E-08
	(n,np)	2.728E-05	2.966E-05	4.062E-05	3.726E-05	1.595E-05
	capture	3.973E-02	4.701E-02	5.347E-02	5.876E-02	5.233E-02
	(n,p)	2.895E-03	3.370E-03	4.249E-03	3.269E-03	1.371E-03
	(n,d)	1.543E-07	1.678E-07	2.298E-07	2.214E-07	9.605E-08
	(n,t)	6.289E-10	6.838E-10	9.363E-10	1.111E-09	5.084E-10
	(n,He-3)	2.248E-10	2.445E-10	3.347E-10	3.874E-10	1.762E-10
	(n,a)	4.125E-05	4.753E-05	6.203E-05	4.711E-05	1.919E-05
	(n,2p)	7.454E-09	8.106E-09	1.110E-08	1.134E-08	4.988E-09
42-Mo- 94	total	6.696E+00	6.932E+00	7.106E+00	7.446E+00	8.387E+00
	elastic	6.412E+00	6.600E+00	6.715E+00	7.091E+00	8.153E+00
	inelastic	2.279E-01	2.635E-01	3.112E-01	2.650E-01	1.399E-01

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
42-Mo- 94	(n,2n)	1.957E-04	2.127E-04	2.913E-04	2.486E-04	1.046E-04
	(n,3n)	1.860E-08	2.023E-08	2.769E-08	3.471E-08	1.614E-08
	(n,na)	1.191E-06	1.295E-06	1.773E-06	1.489E-06	6.249E-07
	(n,np)	3.422E-07	3.721E-07	5.095E-07	5.124E-07	2.244E-07
	(n,nd)	9.355E-12	1.017E-11	1.393E-11	1.771E-11	8.267E-12
	capture	5.484E-02	6.772E-02	7.866E-02	8.945E-02	9.376E-02
	(n,p)	9.238E-05	1.063E-04	1.398E-04	1.059E-04	4.277E-05
	(n,d)	6.596E-08	7.172E-08	9.819E-08	9.934E-08	4.360E-08
	(n,t)	3.211E-09	3.491E-09	4.780E-09	5.254E-09	2.355E-09
	(n,He-3)	1.774E-11	1.929E-11	2.641E-11	3.193E-11	1.470E-11
	(n,a)	2.423E-04	2.813E-04	3.507E-04	2.746E-04	1.197E-04
	(n,2p)	7.719E-12	8.393E-12	1.149E-11	1.326E-11	6.022E-12
42-Mo- 95	total	1.509E+01	1.515E+01	1.441E+01	1.302E+01	8.368E+00
	elastic	9.396E+00	1.022E+01	1.026E+01	9.751E+00	7.739E+00
	inelastic	3.696E-01	4.333E-01	5.084E-01	4.655E-01	3.135E-01
	(n,2n)	1.471E-03	1.611E-03	2.199E-03	1.675E-03	6.835E-04
	(n,3n)	6.625E-08	7.203E-08	9.862E-08	1.216E-07	5.639E-08
	(n,na)	2.216E-07	2.410E-07	3.300E-07	3.001E-07	1.283E-07
	(n,np)	9.176E-08	9.978E-08	1.366E-07	1.391E-07	6.112E-08
	(n,nd)	1.697E-10	1.845E-10	2.526E-10	3.144E-10	1.459E-10
	capture	5.313E+00	4.494E+00	3.634E+00	2.797E+00	3.137E-01
	(n,p)	6.567E-05	7.584E-05	9.773E-05	7.489E-05	3.085E-05
	(n,d)	9.487E-08	1.032E-07	1.412E-07	1.393E-07	6.078E-08
	(n,t)	8.045E-09	8.748E-09	1.198E-08	1.279E-08	5.691E-09
	(n,He-3)	2.166E-11	2.355E-11	3.224E-11	3.891E-11	1.790E-11
	(n,a)	4.233E-04	4.944E-04	5.965E-04	5.111E-04	3.096E-04
42-Mo- 96	total	8.311E+00	9.204E+00	9.746E+00	9.913E+00	8.365E+00
	elastic	7.496E+00	8.288E+00	8.757E+00	9.026E+00	8.117E+00
	inelastic	2.623E-01	3.035E-01	3.573E-01	3.072E-01	1.661E-01
	(n,2n)	3.587E-04	3.900E-04	5.340E-04	4.412E-04	1.843E-04
	(n,3n)	1.504E-07	1.635E-07	2.239E-07	2.716E-07	1.251E-07
	(n,na)	2.392E-07	2.601E-07	3.561E-07	3.217E-07	1.374E-07
	(n,np)	3.911E-08	4.252E-08	5.822E-08	6.113E-08	2.706E-08
	(n,nd)	1.548E-12	1.683E-12	2.304E-12	2.946E-12	1.377E-12
	capture	5.512E-01	6.110E-01	6.307E-01	5.786E-01	8.128E-02
	(n,p)	7.356E-06	8.168E-06	1.106E-05	8.686E-06	3.561E-06
	(n,d)	1.557E-08	1.693E-08	2.318E-08	2.472E-08	1.099E-08
	(n,t)	2.232E-09	2.427E-09	3.323E-09	3.723E-09	1.677E-09
	(n,a)	2.374E-05	2.738E-05	3.555E-05	2.706E-05	1.108E-05
42-Mo- 97	total	7.452E+00	7.601E+00	7.722E+00	8.012E+00	8.327E+00
	elastic	6.264E+00	6.447E+00	6.555E+00	6.912E+00	7.747E+00
	inelastic	3.566E-01	4.147E-01	4.855E-01	4.322E-01	2.551E-01
	(n,2n)	2.590E-03	2.874E-03	3.899E-03	2.926E-03	1.183E-03
	(n,3n)	2.636E-07	2.866E-07	3.924E-07	4.683E-07	2.147E-07
	(n,na)	4.518E-08	4.913E-08	6.726E-08	6.511E-08	2.828E-08
	(n,np)	1.507E-08	1.638E-08	2.243E-08	2.406E-08	1.071E-08
	(n,nd)	7.260E-11	7.894E-11	1.081E-10	1.352E-10	6.284E-11
	capture	8.305E-01	7.346E-01	6.764E-01	6.637E-01	3.237E-01
	(n,p)	4.600E-06	5.142E-06	6.905E-06	5.476E-06	2.253E-06
	(n,d)	4.197E-08	4.563E-08	6.248E-08	6.338E-08	2.784E-08
	(n,t)	3.139E-09	3.414E-09	4.674E-09	5.134E-09	2.300E-09
	(n,He-3)	2.060E-12	2.240E-12	3.066E-12	3.777E-12	1.748E-12
	(n,a)	2.434E-05	2.817E-05	3.503E-05	2.788E-05	1.271E-05
42-Mo- 98	total	6.970E+00	7.345E+00	7.612E+00	7.940E+00	8.302E+00
	elastic	6.481E+00	6.782E+00	6.977E+00	7.362E+00	8.018E+00
	inelastic	2.801E-01	3.244E-01	3.815E-01	3.298E-01	1.807E-01
	(n,2n)	6.036E-04	6.563E-04	8.986E-04	7.196E-04	2.984E-04
	(n,3n)	5.626E-07	6.117E-07	8.375E-07	9.816E-07	4.476E-07
	(n,na)	2.335E-08	2.539E-08	3.477E-08	3.395E-08	1.478E-08
	(n,np)	5.694E-09	6.191E-09	8.477E-09	9.315E-09	4.174E-09
	(n,nd)	7.087E-13	7.706E-13	1.055E-12	1.350E-12	6.314E-13
	capture	2.073E-01	2.369E-01	2.510E-01	2.469E-01	1.030E-01
	(n,p)	5.792E-07	6.309E-07	8.631E-07	7.401E-07	3.120E-07
	(n,d)	6.020E-09	6.546E-09	8.962E-09	9.831E-09	4.403E-09
	(n,t)	1.600E-09	1.740E-09	2.382E-09	2.679E-09	1.208E-09
	(n,a)	4.362E-06	4.912E-06	6.572E-06	5.028E-06	2.045E-06
42-Mo- 99	total	9.295E+00	9.025E+00	8.837E+00	8.854E+00	8.292E+00
	elastic	6.287E+00	6.486E+00	6.566E+00	6.798E+00	7.233E+00
	inelastic	5.859E-01	6.996E-01	8.204E-01	8.107E-01	7.045E-01
	(n,2n)	5.746E-03	6.573E-03	8.780E-03	6.538E-03	2.615E-03
	(n,3n)	1.277E-06	1.388E-06	1.900E-06	2.148E-06	9.687E-07

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
42-Mo- 99	(n,na)	1.363E-08	1.482E-08	2.030E-08	2.027E-08	8.871E-09
	(n,np)	6.868E-09	7.468E-09	1.023E-08	1.133E-08	5.090E-09
	(n,nd)	9.362E-11	1.018E-10	1.394E-10	1.731E-10	8.029E-11
	(n,nt)	3.350E-13	3.643E-13	4.988E-13	6.385E-13	2.985E-13
	capture	2.403E+00	1.826E+00	1.440E+00	1.237E+00	3.513E-01
	(n,p)	8.169E-07	8.928E-07	1.219E-06	1.044E-06	4.394E-07
	(n,d)	1.931E-08	2.100E-08	2.875E-08	2.979E-08	1.315E-08
	(n,t)	3.233E-09	3.515E-09	4.813E-09	5.234E-09	2.339E-09
	(n,a)	1.862E-06	2.134E-06	2.694E-06	2.152E-06	9.606E-07
42-Mo-100	total	6.893E+00	7.324E+00	7.653E+00	8.005E+00	8.379E+00
	elastic	6.409E+00	6.776E+00	7.027E+00	7.422E+00	8.050E+00
	inelastic	3.326E-01	3.870E-01	4.540E-01	4.042E-01	2.385E-01
	(n,2n)	8.997E-04	9.793E-04	1.340E-03	1.051E-03	4.336E-04
	(n,3n)	2.234E-06	2.429E-06	3.326E-06	3.689E-06	1.655E-06
	(n,na)	5.194E-09	5.648E-09	7.733E-09	7.831E-09	3.440E-09
	(n,np)	1.310E-09	1.424E-09	1.950E-09	2.264E-09	1.030E-09
	(n,nd)	3.151E-13	3.426E-13	4.690E-13	6.014E-13	2.813E-13
	capture	1.494E-01	1.588E-01	1.687E-01	1.759E-01	8.915E-02
	(n,p)	1.295E-07	1.408E-07	1.927E-07	1.806E-07	7.781E-08
	(n,d)	2.188E-09	2.379E-09	3.257E-09	3.707E-09	1.677E-09
	(n,t)	9.732E-10	1.058E-09	1.449E-09	1.638E-09	7.395E-10
	(n,a)	3.528E-07	3.883E-07	5.274E-07	4.400E-07	1.839E-07
43-Tc- 99	total	1.567E+01	1.482E+01	1.332E+01	1.087E+01	7.390E+00
	elastic	4.893E+00	5.265E+00	5.548E+00	5.821E+00	6.430E+00
	inelastic	4.094E-01	4.819E-01	5.667E-01	5.254E-01	3.758E-01
	(n,2n)	4.178E-04	4.543E-04	6.220E-04	5.067E-04	2.110E-04
	(n,3n)	2.354E-07	2.560E-07	3.505E-07	4.218E-07	1.939E-07
	(n,na)	4.008E-08	4.359E-08	5.967E-08	5.696E-08	2.466E-08
	(n,np)	5.483E-07	5.963E-07	8.163E-07	7.479E-07	3.205E-07
	(n,nd)	4.768E-10	5.185E-10	7.098E-10	8.735E-10	4.041E-10
	(n,nt)	4.632E-11	5.036E-11	6.895E-11	8.633E-11	4.013E-11
	capture	1.038E+01	9.062E+00	7.192E+00	4.507E+00	5.821E-01
	(n,p)	1.639E-05	1.876E-05	2.458E-05	1.883E-05	7.690E-06
	(n,d)	6.887E-08	7.489E-08	1.025E-07	1.031E-07	4.517E-08
	(n,t)	9.344E-09	1.016E-08	1.391E-08	1.483E-08	6.594E-09
	(n,He-3)	1.765E-12	1.919E-12	2.627E-12	3.249E-12	1.505E-12
	(n,a)	6.878E-06	7.835E-06	1.030E-05	7.910E-06	3.241E-06
44-Ru- 96	total	6.419E+00	6.728E+00	6.974E+00	7.238E+00	7.367E+00
	elastic	5.897E+00	6.142E+00	6.311E+00	6.603E+00	6.990E+00
	inelastic	2.294E-01	2.653E-01	3.145E-01	2.664E-01	1.392E-01
	(n,2n)	5.402E-05	5.874E-05	8.042E-05	7.311E-05	3.123E-05
	(n,na)	3.340E-06	3.633E-06	4.973E-06	4.202E-06	1.765E-06
	(n,np)	1.021E-05	1.110E-05	1.520E-05	1.442E-05	6.229E-06
	(n,nd)	3.712E-12	4.036E-12	5.526E-12	7.042E-12	3.288E-12
	capture	2.835E-01	3.141E-01	3.426E-01	3.647E-01	2.362E-01
	(n,p)	8.793E-04	1.018E-03	1.299E-03	9.960E-04	4.143E-04
	(n,d)	1.158E-07	1.259E-07	1.724E-07	1.658E-07	7.187E-08
	(n,t)	2.077E-09	2.259E-09	3.093E-09	3.426E-09	1.539E-09
	(n,He-3)	2.212E-10	2.405E-10	3.293E-10	3.814E-10	1.735E-10
	(n,a)	2.539E-03	2.945E-03	3.591E-03	2.901E-03	1.371E-03
	(n,2p)	9.334E-08	1.015E-07	1.389E-07	1.414E-07	6.212E-08
44-Ru- 98	total	7.893E+00	7.469E+00	7.271E+00	7.440E+00	7.362E+00
	elastic	5.953E+00	6.213E+00	6.387E+00	6.676E+00	6.965E+00
	inelastic	2.372E-01	3.329E-01	3.931E-01	3.393E-01	1.855E-01
	(n,2n)	1.122E-04	1.220E-04	1.670E-04	1.467E-04	6.216E-05
	(n,3n)	7.093E-09	7.713E-09	1.056E-08	1.344E-08	6.309E-09
	(n,na)	1.696E-06	1.844E-06	2.524E-06	2.186E-06	9.241E-07
	(n,np)	2.269E-06	2.468E-06	3.378E-06	3.348E-06	1.461E-06
	(n,nd)	2.655E-12	2.887E-12	3.952E-12	5.050E-12	2.360E-12
	capture	1.635E+00	9.132E-01	4.870E-01	4.219E-01	2.113E-01
	(n,p)	1.340E-04	1.535E-04	2.028E-04	1.535E-04	6.205E-05
	(n,d)	5.119E-08	5.566E-08	7.621E-08	7.764E-08	3.415E-08
	(n,t)	2.560E-09	2.783E-09	3.810E-09	4.314E-09	1.949E-09
	(n,He-3)	1.142E-11	1.242E-11	1.700E-11	2.063E-11	9.503E-12
	(n,a)	1.739E-04	2.018E-04	2.566E-04	1.973E-04	8.289E-05
	(n,2p)	2.104E-10	2.287E-10	3.132E-10	3.545E-10	1.601E-10
44-Ru- 99	total	1.106E+01	1.144E+01	1.138E+01	1.045E+01	7.446E+00
	elastic	5.183E+00	5.580E+00	5.864E+00	6.134E+00	6.396E+00
	inelastic	4.704E-01	5.569E-01	6.546E-01	6.238E-01	4.845E-01
	(n,2n)	1.268E-03	1.385E-03	1.893E-03	1.456E-03	5.961E-04
	(n,3n)	2.147E-08	2.335E-08	3.197E-08	4.004E-08	1.861E-08

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
44-Ru- 99	(n,na)	1.698E-07	1.846E-07	2.527E-07	2.363E-07	1.018E-07
	(n,np)	1.801E-07	1.958E-07	2.681E-07	2.741E-07	1.206E-07
	(n,nd)	1.679E-10	1.826E-10	2.500E-10	3.120E-10	1.449E-10
	capture	5.404E+00	5.296E+00	4.855E+00	3.690E+00	5.642E-01
	(n,p)	9.707E-05	1.119E-04	1.427E-04	1.104E-04	4.633E-05
	(n,d)	1.243E-07	1.352E-07	1.851E-07	1.825E-07	7.963E-08
	(n,t)	5.886E-09	6.400E-09	8.762E-09	9.574E-09	4.284E-09
	(n,He-3)	2.425E-11	2.637E-11	3.610E-11	4.349E-11	2.000E-11
	(n,a)	2.523E-04	2.943E-04	3.534E-04	3.047E-04	1.795E-04
44-Ru-100	total	7.726E+00	7.393E+00	7.187E+00	7.326E+00	7.373E+00
	elastic	6.262E+00	6.299E+00	6.274E+00	6.510E+00	6.961E+00
	inelastic	3.277E-01	3.806E-01	4.489E-01	3.929E-01	2.228E-01
	(n,2n)	2.699E-04	2.935E-04	4.018E-04	3.412E-04	1.435E-04
	(n,3n)	7.919E-08	8.611E-08	1.179E-07	1.459E-07	6.769E-08
	(n,na)	1.817E-07	1.976E-07	2.705E-07	2.498E-07	1.073E-07
	(n,np)	8.556E-08	9.303E-08	1.274E-07	1.333E-07	5.897E-08
	(n,nd)	3.163E-13	3.439E-13	4.708E-13	6.045E-13	2.829E-13
	capture	1.135E+00	7.116E-01	4.619E-01	4.218E-01	1.892E-01
	(n,p)	5.605E-06	6.235E-06	8.437E-06	6.588E-06	2.695E-06
	(n,d)	1.448E-08	1.574E-08	2.155E-08	2.323E-08	1.036E-08
	(n,t)	1.436E-09	1.561E-09	2.137E-09	2.452E-09	1.112E-09
	(n,a)	1.950E-05	2.246E-05	2.929E-05	2.225E-05	9.076E-06
44-Ru-101	total	8.613E+00	9.194E+00	9.359E+00	9.086E+00	7.318E+00
	elastic	4.943E+00	5.269E+00	5.507E+00	5.771E+00	6.105E+00
	inelastic	4.902E-01	5.800E-01	6.804E-01	6.487E-01	4.892E-01
	(n,2n)	2.641E-03	2.921E-03	3.969E-03	2.988E-03	1.211E-03
	(n,3n)	1.538E-07	1.672E-07	2.290E-07	2.777E-07	1.280E-07
	(n,na)	4.296E-08	4.672E-08	6.396E-08	6.246E-08	2.719E-08
	(n,np)	2.586E-08	2.812E-08	3.850E-08	4.136E-08	1.842E-08
	(n,nd)	7.379E-11	8.024E-11	1.099E-10	1.378E-10	6.407E-11
	capture	3.180E+00	3.339E+00	3.165E+00	2.661E+00	7.217E-01
	(n,p)	1.040E-05	1.175E-05	1.564E-05	1.218E-05	4.987E-06
	(n,d)	4.536E-08	4.932E-08	6.752E-08	6.902E-08	3.037E-08
	(n,t)	3.172E-09	3.449E-09	4.723E-09	5.245E-09	2.357E-09
	(n,He-3)	1.152E-12	1.253E-12	1.715E-12	2.132E-12	9.891E-13
	(n,a)	1.575E-05	1.823E-05	2.267E-05	1.815E-05	8.440E-06
44-Ru-102	total	6.316E+00	6.381E+00	6.444E+00	6.663E+00	7.242E+00
	elastic	5.621E+00	5.711E+00	5.749E+00	6.026E+00	6.825E+00
	inelastic	3.658E-01	4.254E-01	5.012E-01	4.429E-01	2.593E-01
	(n,2n)	4.064E-04	4.419E-04	6.050E-04	5.012E-04	2.095E-04
	(n,3n)	3.308E-07	3.597E-07	4.924E-07	5.893E-07	2.704E-07
	(n,na)	2.137E-08	2.323E-08	3.181E-08	3.200E-08	1.403E-08
	(n,np)	9.177E-09	9.979E-09	1.366E-08	1.514E-08	6.798E-09
	capture	3.327E-01	2.430E-01	1.921E-01	1.930E-01	1.573E-01
	(n,p)	1.737E-06	1.893E-06	2.589E-06	2.215E-06	9.333E-07
	(n,d)	7.227E-09	7.858E-09	1.076E-08	1.187E-08	5.324E-09
	(n,t)	8.268E-10	8.990E-10	1.231E-09	1.424E-09	6.473E-10
	(n,a)	1.686E-06	1.893E-06	2.539E-06	2.002E-06	8.210E-07
44-Ru-103	total	9.711E+00	9.545E+00	9.261E+00	8.842E+00	7.231E+00
	elastic	5.385E+00	5.479E+00	5.481E+00	5.585E+00	5.763E+00
	inelastic	6.842E-01	8.246E-01	9.700E-01	9.845E-01	1.004E+00
	(n,2n)	4.267E-03	4.809E-03	6.474E-03	4.837E-03	1.945E-03
	(n,3n)	4.536E-07	4.932E-07	6.753E-07	7.922E-07	3.613E-07
	(n,na)	8.479E-09	9.220E-09	1.262E-08	1.339E-08	5.952E-09
	(n,np)	8.115E-09	8.824E-09	1.208E-08	1.361E-08	6.138E-09
	(n,nd)	4.859E-11	5.283E-11	7.233E-11	9.103E-11	4.237E-11
	capture	3.628E+00	3.232E+00	2.801E+00	2.267E+00	4.622E-01
	(n,p)	1.883E-06	2.074E-06	2.817E-06	2.317E-06	9.643E-07
	(n,d)	2.505E-08	2.724E-08	3.730E-08	3.939E-08	1.748E-08
	(n,t)	3.683E-09	4.005E-09	5.483E-09	6.081E-09	2.732E-09
	(n,a)	6.901E-07	7.749E-07	1.026E-06	8.254E-07	3.452E-07
44-Ru-104	total	6.669E+00	7.036E+00	7.326E+00	7.676E+00	7.878E+00
	elastic	6.023E+00	6.305E+00	6.499E+00	6.893E+00	7.413E+00
	inelastic	4.002E-01	4.672E-01	5.496E-01	4.945E-01	3.079E-01
	(n,2n)	6.270E-04	6.818E-04	9.335E-04	7.539E-04	3.133E-04
	(n,3n)	9.102E-07	9.897E-07	1.355E-06	1.569E-06	7.127E-07
	(n,na)	8.340E-09	9.069E-09	1.242E-08	1.335E-08	5.953E-09
	(n,np)	2.268E-09	2.467E-09	3.377E-09	3.834E-09	1.733E-09
	capture	2.458E-01	2.619E-01	2.756E-01	2.854E-01	1.561E-01
	(n,p)	4.787E-07	5.207E-07	7.128E-07	6.414E-07	2.737E-07
	(n,d)	3.335E-09	3.626E-09	4.964E-09	5.623E-09	2.541E-09

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
44-Ru-104	(n,t)	4.981E-10	5.416E-10	7.415E-10	8.696E-10	3.967E-10
	(n,a)	2.514E-07	2.757E-07	3.758E-07	3.204E-07	1.347E-07
44-Ru-106	total	5.206E+00	5.655E+00	6.054E+00	6.394E+00	7.071E+00
	elastic	4.729E+00	5.110E+00	5.425E+00	5.802E+00	6.663E+00
	inelastic	3.849E-01	4.510E-01	5.301E-01	4.844E-01	3.198E-01
	(n,2n)	8.545E-04	9.293E-04	1.272E-03	1.008E-03	4.170E-04
	(n,3n)	2.012E-06	2.188E-06	2.995E-06	3.350E-06	1.507E-06
	(n,na)	9.090E-10	9.884E-10	1.353E-09	1.542E-09	6.984E-10
	(n,np)	1.125E-09	1.224E-09	1.675E-09	1.959E-09	8.929E-10
	capture	8.714E-02	8.974E-02	9.464E-02	1.053E-01	8.723E-02
	(n,p)	1.951E-07	2.122E-07	2.905E-07	2.748E-07	1.187E-07
	(n,d)	1.734E-09	1.885E-09	2.581E-09	2.986E-09	1.357E-09
	(n,t)	3.698E-10	4.021E-10	5.505E-10	6.477E-10	2.958E-10
	(n,a)	3.852E-08	4.191E-08	5.736E-08	5.624E-08	2.450E-08
45-Rh-103	total	5.711E+01	4.352E+01	2.236E+01	1.332E+01	7.551E+00
	elastic	4.987E+00	5.430E+00	5.746E+00	6.037E+00	6.463E+00
	inelastic	4.406E-01	5.172E-01	6.071E-01	5.620E-01	3.833E-01
	(n,2n)	2.490E-04	2.707E-04	3.706E-04	3.122E-04	1.310E-04
	(n,3n)	1.229E-07	1.337E-07	1.830E-07	2.234E-07	1.031E-07
	(n,na)	5.306E-08	5.769E-08	7.899E-08	7.837E-08	3.424E-08
	(n,np)	1.355E-06	1.473E-06	2.016E-06	1.808E-06	7.708E-07
	(n,nd)	2.395E-10	2.605E-10	3.566E-10	4.426E-10	2.052E-10
	(n,nt)	1.678E-11	1.824E-11	2.498E-11	3.149E-11	1.467E-11
	capture	5.184E+01	3.763E+01	1.613E+01	6.714E+00	7.029E-01
	(n,p)	5.438E-05	6.287E-05	8.085E-05	6.181E-05	2.547E-05
	(n,d)	1.004E-07	1.091E-07	1.494E-07	1.471E-07	6.417E-08
	(n,t)	5.970E-09	6.491E-09	8.888E-09	9.676E-09	4.326E-09
	(n,He-3)	2.185E-12	2.375E-12	3.252E-12	4.017E-12	1.860E-12
	(n,a)	5.712E-06	6.444E-06	8.579E-06	6.654E-06	2.724E-06
45-Rh-105	total	6.224E+03	3.430E+03	1.355E+03	6.129E+02	7.366E+00
	elastic	3.290E+03	2.020E+03	9.005E+02	4.203E+02	6.312E+00
	inelastic	4.709E-01	5.549E-01	6.516E-01	6.111E-01	4.427E-01
	(n,2n)	4.849E-04	5.273E-04	7.219E-04	5.892E-04	2.454E-04
	(n,3n)	3.433E-07	3.733E-07	5.111E-07	6.083E-07	2.787E-07
	(n,na)	1.312E-08	1.427E-08	1.954E-08	2.045E-08	9.054E-09
	(n,np)	2.836E-07	3.083E-07	4.222E-07	4.094E-07	1.779E-07
	(n,nd)	9.354E-11	1.017E-10	1.393E-10	1.744E-10	8.104E-11
	(n,nt)	2.320E-11	2.522E-11	3.453E-11	4.351E-11	2.026E-11
	capture	2.934E+03	1.409E+03	4.540E+02	1.921E+02	6.094E-01
	(n,p)	6.777E-06	7.650E-06	1.021E-05	7.925E-06	3.233E-06
	(n,d)	3.289E-08	3.576E-08	4.897E-08	5.096E-08	2.253E-08
	(n,t)	4.241E-09	4.612E-09	6.315E-09	7.033E-09	3.163E-09
	(n,a)	5.039E-07	5.541E-07	7.538E-07	6.201E-07	2.582E-07
46-Pd-102	total	7.781E+00	7.999E+00	8.206E+00	8.379E+00	7.104E+00
	elastic	6.389E+00	6.759E+00	7.007E+00	7.237E+00	6.577E+00
	inelastic	2.739E-01	3.179E-01	3.756E-01	3.270E-01	1.829E-01
	(n,2n)	5.874E-05	6.387E-05	8.745E-05	7.987E-05	3.416E-05
	(n,3n)	2.705E-09	2.941E-09	4.027E-09	5.057E-09	2.706E-09
	(n,na)	3.844E-07	4.180E-07	5.723E-07	5.171E-07	2.208E-07
	(n,np)	5.752E-07	6.255E-07	8.564E-07	8.294E-07	3.599E-07
	(n,nd)	5.327E-13	5.793E-13	7.931E-13	1.016E-12	4.750E-13
	capture	1.117E+00	9.209E-01	8.218E-01	8.141E-01	3.434E-01
	(n,p)	5.677E-04	6.608E-04	8.501E-04	6.451E-04	2.633E-04
	(n,d)	4.642E-08	5.047E-08	6.910E-08	7.075E-08	3.115E-08
	(n,t)	1.452E-09	1.579E-09	2.162E-09	2.449E-09	1.106E-09
	(n,He-3)	1.533E-11	1.667E-11	2.282E-11	2.758E-11	1.269E-11
	(n,a)	1.771E-04	2.057E-04	2.581E-04	2.009E-04	8.642E-05
	(n,2p)	1.173E-10	1.275E-10	1.746E-10	1.918E-10	8.595E-11
46-Pd-104	total	7.256E+00	7.762E+00	8.137E+00	8.328E+00	7.064E+00
	elastic	6.234E+00	6.595E+00	6.837E+00	7.084E+00	6.585E+00
	inelastic	3.097E-01	3.594E-01	4.244E-01	3.695E-01	2.070E-01
	(n,2n)	1.827E-04	1.987E-04	2.720E-04	2.367E-04	1.000E-04
	(n,3n)	3.900E-08	4.241E-08	5.806E-08	7.260E-08	3.373E-08
	(n,na)	1.539E-07	1.673E-07	2.291E-07	2.146E-07	9.249E-08
	(n,np)	1.333E-07	1.449E-07	1.984E-07	2.032E-07	8.939E-08
	(n,nd)	2.727E-13	2.965E-13	4.060E-13	5.210E-13	2.438E-13
	capture	7.114E-01	8.060E-01	8.743E-01	8.727E-01	2.713E-01
	(n,p)	3.740E-05	4.229E-05	5.658E-05	4.338E-05	1.759E-05
	(n,d)	2.635E-08	2.865E-08	3.923E-08	4.108E-08	1.819E-08
	(n,t)	1.331E-09	1.447E-09	1.982E-09	2.271E-09	1.030E-09
	(n,He-3)	2.333E-12	2.537E-12	3.474E-12	4.285E-12	1.984E-12

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
46-Pd-104	(n,a)	2.239E-05	2.586E-05	3.355E-05	2.554E-05	1.046E-05
46-Pd-105	total	1.148E+01	1.309E+01	9.076E+00	8.612E+00	6.867E+00
	elastic	5.179E+00	5.228E+00	5.237E+00	5.382E+00	5.562E+00
	inelastic	4.684E-01	5.500E-01	6.447E-01	5.981E-01	4.054E-01
	(n,2n)	1.956E-03	2.148E-03	2.928E-03	2.224E-03	9.056E-04
	(n,3n)	7.727E-08	8.402E-08	1.150E-07	1.421E-07	6.588E-08
	(n,na)	3.969E-08	4.316E-08	5.909E-08	5.802E-08	2.529E-08
	(n,np)	3.686E-08	4.008E-08	5.488E-08	5.758E-08	2.550E-08
	(n,nd)	8.454E-11	9.192E-11	1.258E-10	1.574E-10	7.317E-11
	capture	5.826E+00	4.295E+00	3.183E+00	2.623E+00	8.977E-01
	(n,p)	4.712E-05	5.439E-05	6.983E-05	5.377E-05	2.229E-05
	(n,d)	6.296E-08	6.846E-08	9.373E-08	9.459E-08	4.149E-08
	(n,t)	4.446E-09	4.835E-09	6.619E-09	7.218E-09	3.228E-09
	(n,He-3)	2.832E-12	3.079E-12	4.216E-12	5.195E-12	2.404E-12
	(n,a)	2.148E-05	2.486E-05	3.085E-05	2.486E-05	1.185E-05
46-Pd-106	total	6.523E+00	6.864E+00	7.118E+00	7.298E+00	6.676E+00
	elastic	5.866E+00	6.113E+00	6.264E+00	6.471E+00	6.199E+00
	inelastic	3.197E-01	3.713E-01	4.378E-01	3.835E-01	2.186E-01
	(n,2n)	3.067E-04	3.335E-04	4.567E-04	3.863E-04	1.623E-04
	(n,3n)	1.721E-07	1.871E-07	2.562E-07	3.119E-07	1.439E-07
	(n,na)	3.008E-08	3.271E-08	4.478E-08	4.495E-08	1.970E-08
	(n,np)	2.108E-08	2.292E-08	3.138E-08	3.349E-08	1.489E-08
	capture	3.363E-01	3.788E-01	4.147E-01	4.420E-01	2.571E-01
	(n,p)	4.179E-06	4.591E-06	6.254E-06	5.084E-06	2.110E-06
	(n,d)	9.026E-09	9.815E-09	1.344E-08	1.466E-08	6.557E-09
	(n,t)	8.177E-10	8.892E-10	1.217E-09	1.410E-09	6.409E-10
	(n,a)	3.402E-06	3.865E-06	5.138E-06	3.937E-06	1.599E-06
46-Pd-107	total	9.448E+00	1.054E+01	1.105E+01	1.084E+01	7.555E+00
	elastic	5.732E+00	6.342E+00	6.731E+00	6.994E+00	6.217E+00
	inelastic	4.873E-01	5.738E-01	6.725E-01	6.311E-01	4.464E-01
	(n,2n)	3.296E-03	3.671E-03	4.971E-03	3.728E-03	1.505E-03
	(n,3n)	2.710E-07	2.947E-07	4.035E-07	4.836E-07	2.220E-07
	(n,na)	6.370E-09	6.926E-09	9.482E-09	9.912E-09	4.389E-09
	(n,np)	1.580E-08	1.718E-08	2.353E-08	2.576E-08	1.154E-08
	(n,nd)	6.666E-11	7.248E-11	9.924E-11	1.243E-10	5.779E-11
	capture	3.224E+00	3.610E+00	3.636E+00	3.207E+00	8.896E-01
	(n,p)	3.931E-06	4.378E-06	5.889E-06	4.703E-06	1.942E-06
	(n,d)	3.260E-08	3.545E-08	4.854E-08	5.012E-08	2.211E-08
	(n,t)	2.760E-09	3.001E-09	4.109E-09	4.560E-09	2.049E-09
	(n,a)	2.396E-06	2.752E-06	3.487E-06	2.774E-06	1.214E-06
46-Pd-108	total	2.083E+01	2.245E+01	2.323E+01	1.988E+01	7.246E+00
	elastic	1.280E+01	1.453E+01	1.549E+01	1.383E+01	6.764E+00
	inelastic	3.727E-01	4.338E-01	5.108E-01	4.530E-01	2.691E-01
	(n,2n)	4.196E-04	4.563E-04	6.247E-04	5.181E-04	2.166E-04
	(n,3n)	5.331E-07	5.797E-07	7.937E-07	9.405E-07	4.303E-07
	(n,na)	6.917E-09	7.521E-09	1.030E-08	1.085E-08	4.813E-09
	(n,np)	6.062E-09	6.592E-09	9.025E-09	1.003E-08	4.511E-09
	capture	7.648E+00	7.573E+00	7.315E+00	5.594E+00	2.128E-01
	(n,p)	1.332E-06	1.456E-06	1.989E-06	1.672E-06	7.009E-07
	(n,d)	5.521E-09	6.003E-09	8.219E-09	9.193E-09	4.139E-09
	(n,t)	5.453E-10	5.930E-10	8.119E-10	9.459E-10	4.307E-10
	(n,a)	4.497E-07	5.007E-07	6.763E-07	5.455E-07	2.253E-07
46-Pd-110	total	5.793E+00	5.978E+00	6.136E+00	6.339E+00	6.748E+00
	elastic	5.260E+00	5.372E+00	5.442E+00	5.691E+00	6.317E+00
	inelastic	4.076E-01	4.751E-01	5.587E-01	4.998E-01	3.052E-01
	(n,2n)	6.566E-04	7.139E-04	9.775E-04	7.890E-04	3.278E-04
	(n,3n)	1.273E-06	1.385E-06	1.896E-06	2.170E-06	9.824E-07
	(n,na)	1.221E-09	1.328E-09	1.818E-09	2.021E-09	9.093E-10
	(n,np)	1.557E-09	1.692E-09	2.317E-09	2.668E-09	1.211E-09
	capture	1.284E-01	1.291E-01	1.338E-01	1.459E-01	1.249E-01
	(n,p)	3.549E-07	3.860E-07	5.285E-07	4.806E-07	2.056E-07
	(n,d)	2.114E-09	2.299E-09	3.147E-09	3.573E-09	1.616E-09
	(n,t)	5.049E-10	5.490E-10	7.516E-10	8.801E-10	4.013E-10
	(n,a)	7.249E-08	7.920E-08	1.082E-07	9.863E-08	4.221E-08
47-Ag-107	total	1.581E+01	1.235E+01	9.918E+00	9.087E+00	7.502E+00
	elastic	6.456E+00	6.289E+00	6.052E+00	6.172E+00	6.518E+00
	nonelastic	9.323E+00	6.045E+00	3.850E+00	2.898E+00	9.830E-01
	inelastic	4.748E-01	5.566E-01	6.531E-01	6.016E-01	4.034E-01
	(n,2n)	2.441E-04	2.654E-04	3.634E-04	3.085E-04	1.297E-04
	(n,3n)	1.269E-08	1.380E-08	1.890E-08	2.361E-08	1.098E-08

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
47-Ag-107	(n,na)	6.196E-08	6.828E-08	9.195E-08	8.863E-08	3.864E-08
	(n,np)	1.372E-06	1.511E-06	2.055E-06	1.683E-06	6.998E-07
	capture	8.848E+00	5.488E+00	3.196E+00	2.296E+00	5.794E-01
	(n,p)	1.275E-04	1.480E-04	1.853E-04	1.440E-04	6.133E-05
	(n,a)	4.812E-06	5.504E-06	7.257E-06	5.528E-06	2.245E-06
47-Ag-109	total	5.559E+01	5.039E+01	4.076E+01	2.630E+01	7.862E+00
	elastic	7.859E+00	8.772E+00	8.867E+00	8.065E+00	6.828E+00
	nonelastic	4.798E+01	4.175E+01	3.202E+01	1.836E+01	1.033E+00
	inelastic	4.927E-01	5.778E-01	6.777E-01	6.253E-01	4.211E-01
	(n,2n)	3.446E-04	3.747E-04	5.130E-04	4.261E-04	1.782E-04
	(n,3n)	9.354E-08	1.017E-07	1.393E-07	1.694E-07	7.810E-08
	(n,na)	6.047E-08	6.655E-08	8.997E-08	8.978E-08	3.940E-08
	(n,np)	3.976E-07	4.323E-07	5.919E-07	5.592E-07	2.415E-07
	capture	4.749E+01	4.117E+01	3.134E+01	1.774E+01	6.117E-01
	(n,p)	2.752E-05	3.180E-05	4.122E-05	3.144E-05	1.285E-05
	(n,a)	1.090E-06	1.212E-06	1.639E-06	1.303E-06	5.364E-07
47-Ag-110m	total	2.099E+01	1.359E+01	9.393E+00	8.808E+00	7.360E+00
	elastic	5.230E+00	4.991E+00	4.767E+00	4.809E+00	4.976E+00
	inelastic	3.406E-01	3.963E-01	4.658E-01	4.125E-01	2.496E-01
	(n,2n)	2.330E-03	2.571E-03	3.497E-03	2.642E-03	1.073E-03
	(n,3n)	3.482E-07	3.786E-07	5.184E-07	6.181E-07	2.833E-07
	(n,na)	1.087E-08	1.182E-08	1.618E-08	1.702E-08	7.547E-09
	(n,np)	1.218E-07	1.324E-07	1.813E-07	1.769E-07	7.699E-08
	(n,nd)	2.042E-09	2.220E-09	3.040E-09	3.610E-09	1.653E-09
	(n,nt)	5.042E-12	5.482E-12	7.506E-12	9.512E-12	4.435E-12
	capture	1.542E+01	8.193E+00	4.156E+00	3.583E+00	2.132E+00
	(n,p)	1.959E-05	2.244E-05	2.807E-05	2.243E-05	1.005E-05
	(n,d)	7.117E-08	7.738E-08	1.059E-07	1.057E-07	4.624E-08
	(n,t)	8.195E-09	8.911E-09	1.220E-08	1.296E-08	5.757E-09
	(n,He-3)	1.243E-12	1.352E-12	1.851E-12	2.285E-12	1.058E-12
	(n,a)	8.422E-07	9.454E-07	1.252E-06	9.977E-07	4.168E-07
48-Cd-106	total	6.788E+00	7.000E+00	7.181E+00	7.437E+00	7.266E+00
	elastic	6.011E+00	6.186E+00	6.293E+00	6.551E+00	6.622E+00
	inelastic	2.528E-01	2.932E-01	3.472E-01	2.991E-01	1.632E-01
	(n,2n)	5.282E-05	5.744E-05	7.864E-05	7.179E-05	3.070E-05
	(n,3n)	1.607E-11	1.747E-11	2.392E-11	3.049E-11	1.554E-11
	(n,na)	1.867E-06	2.030E-06	2.780E-06	2.485E-06	1.058E-06
	(n,np)	1.265E-05	1.375E-05	1.883E-05	1.762E-05	7.586E-06
	(n,nd)	3.184E-12	3.462E-12	4.740E-12	6.050E-12	2.827E-12
	capture	5.210E-01	5.185E-01	5.368E-01	5.839E-01	4.801E-01
	(n,p)	4.380E-04	5.066E-04	6.418E-04	4.959E-04	2.093E-04
	(n,d)	1.529E-07	1.663E-07	2.277E-07	2.243E-07	9.786E-08
	(n,t)	2.591E-09	2.818E-09	3.858E-09	4.350E-09	1.963E-09
	(n,He-3)	7.661E-11	8.330E-11	1.141E-10	1.350E-10	6.175E-11
	(n,a)	1.591E-03	1.847E-03	2.296E-03	1.805E-03	7.961E-04
	(n,2p)	3.627E-09	3.944E-09	5.400E-09	5.586E-09	2.464E-09
48-Cd-108	total	7.815E+00	8.255E+00	8.582E+00	8.846E+00	7.511E+00
	elastic	6.575E+00	6.890E+00	7.094E+00	7.388E+00	6.938E+00
	inelastic	2.710E-01	3.142E-01	3.717E-01	3.205E-01	1.747E-01
	(n,2n)	9.916E-05	1.078E-04	1.476E-04	1.304E-04	5.533E-05
	(n,3n)	9.825E-09	1.068E-08	1.463E-08	1.859E-08	8.747E-09
	(n,na)	7.365E-07	8.008E-07	1.096E-06	1.019E-06	4.384E-07
	(n,np)	6.794E-07	7.387E-07	1.011E-06	1.006E-06	4.392E-07
	(n,nd)	8.355E-13	9.084E-13	1.244E-12	1.592E-12	7.441E-13
	capture	9.679E-01	1.050E+00	1.115E+00	1.137E+00	3.981E-01
	(n,p)	1.094E-04	1.253E-04	1.656E-04	1.253E-04	5.061E-05
	(n,d)	3.179E-08	3.457E-08	4.733E-08	4.929E-08	2.179E-08
	(n,t)	1.710E-09	1.859E-09	2.545E-09	2.909E-09	1.318E-09
	(n,He-3)	4.322E-12	4.700E-12	6.435E-12	7.896E-12	3.650E-12
	(n,a)	5.173E-05	5.985E-05	7.735E-05	5.881E-05	2.414E-05
	(n,2p)	4.384E-11	4.768E-11	6.527E-11	7.511E-11	3.409E-11
48-Cd-110	total	1.515E+01	1.271E+01	1.061E+01	9.688E+00	7.031E+00
	elastic	1.193E+01	1.037E+01	8.810E+00	8.194E+00	6.645E+00
	inelastic	2.824E-01	3.273E-01	3.869E-01	3.329E-01	1.805E-01
	(n,2n)	1.554E-04	1.690E-04	2.314E-04	1.997E-04	8.430E-05
	(n,3n)	8.150E-08	8.862E-08	1.213E-07	1.504E-07	6.981E-08
	(n,na)	4.819E-08	5.240E-08	7.174E-08	7.016E-08	3.056E-08
	(n,np)	4.465E-08	4.855E-08	6.647E-08	6.955E-08	3.077E-08
	capture	2.927E+00	2.006E+00	1.407E+00	1.156E+00	2.055E-01
	(n,p)	1.209E-05	1.356E-05	1.826E-05	1.416E-05	5.771E-06
	(n,d)	1.261E-08	1.371E-08	1.878E-08	2.026E-08	9.037E-09

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
48-Cd-110	(n,t)	8.069E-10	8.774E-10	1.201E-09	1.390E-09	6.318E-10
	(n,a)	4.417E-06	5.052E-06	6.657E-06	5.103E-06	2.077E-06
48-Cd-111	total	1.093E+01	9.079E+00	8.037E+00	7.886E+00	6.945E+00
	elastic	5.401E+00	5.530E+00	5.607E+00	5.809E+00	5.990E+00
	inelastic	4.268E-01	5.006E-01	5.873E-01	5.405E-01	3.610E-01
	(n,2n)	1.929E-03	2.121E-03	2.889E-03	2.193E-03	8.925E-04
	(n,3n)	1.210E-07	1.316E-07	1.802E-07	2.204E-07	1.018E-07
	(n,na)	9.145E-09	9.944E-09	1.362E-08	1.407E-08	6.214E-09
	(n,np)	3.186E-08	3.465E-08	4.744E-08	5.072E-08	2.257E-08
	(n,nd)	3.921E-11	4.263E-11	5.837E-11	7.334E-11	3.413E-11
	capture	5.102E+00	3.039E+00	1.834E+00	1.530E+00	5.922E-01
	(n,p)	2.652E-05	3.019E-05	3.965E-05	3.081E-05	1.267E-05
	(n,d)	3.813E-08	4.146E-08	5.677E-08	5.853E-08	2.581E-08
	(n,t)	2.174E-09	2.364E-09	3.237E-09	3.620E-09	1.630E-09
	(n,a)	5.679E-06	6.556E-06	8.177E-06	6.547E-06	2.991E-06
48-Cd-112	total	7.398E+00	7.229E+00	7.073E+00	7.137E+00	6.914E+00
	elastic	6.354E+00	6.271E+00	6.143E+00	6.304E+00	6.519E+00
	inelastic	3.061E-01	3.548E-01	4.188E-01	3.623E-01	1.992E-01
	(n,2n)	3.053E-04	3.320E-04	4.545E-04	3.836E-04	1.610E-04
	(n,3n)	2.749E-07	2.989E-07	4.092E-07	4.937E-07	2.271E-07
	(n,na)	1.005E-08	1.093E-08	1.497E-08	1.561E-08	6.907E-09
	(n,np)	1.036E-08	1.126E-08	1.542E-08	1.686E-08	7.547E-09
	capture	7.379E-01	6.014E-01	5.101E-01	4.703E-01	1.959E-01
	(n,p)	2.437E-06	2.677E-06	3.648E-06	2.995E-06	1.246E-06
	(n,d)	8.253E-09	8.974E-09	1.229E-08	1.359E-08	6.102E-09
	(n,t)	5.338E-10	5.804E-10	7.947E-10	9.302E-10	4.242E-10
	(n,a)	7.059E-07	7.928E-07	1.064E-06	8.436E-07	3.464E-07
48-Cd-113	total	8.206E+03	3.582E+03	4.650E+02	7.748E+01	6.955E+00
	elastic	3.726E+01	2.144E+01	8.005E+00	6.336E+00	6.139E+00
	inelastic	4.244E-01	4.969E-01	5.826E-01	5.329E-01	3.476E-01
	(n,2n)	3.022E-03	3.361E-03	4.554E-03	3.421E-03	1.383E-03
	(n,3n)	3.747E-07	4.074E-07	5.579E-07	6.645E-07	3.045E-07
	(n,na)	2.679E-09	2.913E-09	3.988E-09	4.333E-09	1.938E-09
	(n,np)	5.757E-09	6.260E-09	8.571E-09	9.577E-09	4.311E-09
	(n,nd)	2.350E-11	2.556E-11	3.499E-11	4.412E-11	2.054E-11
	capture	8.169E+03	3.560E+03	4.566E+02	7.061E+01	4.662E-01
	(n,p)	1.789E-06	1.981E-06	2.679E-06	2.195E-06	9.124E-07
	(n,d)	1.890E-08	2.055E-08	2.814E-08	2.983E-08	1.325E-08
	(n,t)	2.175E-09	2.365E-09	3.238E-09	3.649E-09	1.646E-09
	(n,a)	6.292E-07	7.166E-07	9.277E-07	7.445E-07	3.153E-07
48-Cd-114	total	7.643E+00	8.095E+00	8.384E+00	8.528E+00	7.257E+00
	elastic	6.814E+00	7.123E+00	7.297E+00	7.523E+00	6.874E+00
	inelastic	3.255E-01	3.777E-01	4.452E-01	3.884E-01	2.183E-01
	(n,2n)	4.808E-04	5.227E-04	7.157E-04	5.872E-04	2.449E-04
	(n,3n)	6.812E-07	7.407E-07	1.014E-06	1.192E-06	5.438E-07
	(n,na)	1.941E-09	2.111E-09	2.890E-09	3.166E-09	1.419E-09
	(n,np)	2.202E-09	2.394E-09	3.278E-09	3.734E-09	1.690E-09
	capture	5.022E-01	5.928E-01	6.402E-01	6.160E-01	1.635E-01
	(n,p)	7.724E-07	8.409E-07	1.151E-06	1.019E-06	4.331E-07
	(n,d)	2.687E-09	2.922E-09	4.000E-09	4.555E-09	2.061E-09
	(n,t)	3.730E-10	4.056E-10	5.552E-10	6.551E-10	2.994E-10
	(n,a)	4.942E-08	5.421E-08	7.387E-08	6.575E-08	2.795E-08
48-Cd-116	total	6.149E+00	6.212E+00	6.246E+00	6.376E+00	6.696E+00
	elastic	5.746E+00	5.748E+00	5.706E+00	5.885E+00	6.388E+00
	inelastic	3.322E-01	3.858E-01	4.548E-01	3.987E-01	2.276E-01
	(n,2n)	6.188E-04	6.728E-04	9.211E-04	7.435E-04	3.089E-04
	(n,3n)	1.530E-06	1.664E-06	2.278E-06	2.584E-06	1.167E-06
	(n,na)	2.774E-10	3.016E-10	4.129E-10	4.778E-10	2.172E-10
	(n,np)	5.663E-10	6.158E-10	8.431E-10	9.940E-10	4.542E-10
	capture	6.928E-02	7.626E-02	8.305E-02	9.017E-02	7.883E-02
	(n,p)	1.228E-07	1.335E-07	1.828E-07	1.747E-07	7.564E-08
	(n,d)	1.164E-09	1.266E-09	1.733E-09	2.015E-09	9.171E-10
	(n,t)	2.932E-10	3.188E-10	4.365E-10	5.173E-10	2.367E-10
	(n,a)	4.987E-09	5.425E-09	7.426E-09	7.387E-09	3.230E-09
49-In-113	total	1.552E+01	1.553E+01	1.415E+01	1.151E+01	6.752E+00
	elastic	5.254E+00	5.621E+00	5.844E+00	5.967E+00	5.871E+00
	inelastic	2.385E-01	2.753E-01	3.269E-01	2.746E-01	1.395E-01
	(n,2n)	2.149E-04	2.336E-04	3.198E-04	2.751E-04	1.160E-04
	(n,3n)	7.386E-08	8.031E-08	1.100E-07	1.356E-07	6.287E-08
	(n,na)	6.868E-09	7.468E-09	1.023E-08	1.078E-08	4.783E-09

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
49-In-113	(n,np)	2.427E-07	2.640E-07	3.614E-07	3.531E-07	1.536E-07
	(n,nd)	6.803E-11	7.397E-11	1.013E-10	1.286E-10	5.999E-11
	(n,nt)	9.837E-13	1.070E-12	1.464E-12	1.888E-12	8.847E-13
	capture	1.003E+01	9.629E+00	7.980E+00	5.268E+00	7.409E-01
	(n,p)	1.343E-05	1.517E-05	2.020E-05	1.566E-05	6.389E-06
	(n,d)	7.267E-08	7.902E-08	1.082E-07	1.107E-07	4.872E-08
	(n,t)	4.127E-09	4.487E-09	6.144E-09	6.873E-09	3.094E-09
	(n,He-3)	1.731E-12	1.882E-12	2.577E-12	3.212E-12	1.491E-12
	(n,a)	1.115E-06	1.242E-06	1.671E-06	1.342E-06	5.547E-07
49-In-115	total	1.200E+02	1.049E+02	6.892E+01	3.572E+01	6.559E+00
	elastic	7.557E+00	8.281E+00	7.820E+00	6.816E+00	5.902E+00
	inelastic	2.538E-01	2.931E-01	3.471E-01	2.933E-01	1.517E-01
	(n,2n)	2.986E-04	3.246E-04	4.445E-04	3.723E-04	1.560E-04
	(n,3n)	2.421E-07	2.633E-07	3.604E-07	4.341E-07	1.996E-07
	(n,na)	1.362E-08	1.481E-08	2.028E-08	2.166E-08	9.643E-09
	(n,np)	2.558E-07	2.781E-07	3.808E-07	3.874E-07	1.702E-07
	(n,nd)	3.087E-11	3.357E-11	4.596E-11	5.866E-11	2.740E-11
	(n,nt)	1.588E-12	1.726E-12	2.364E-12	3.045E-12	1.426E-12
	capture	1.124E+02	9.642E+01	6.082E+01	2.868E+01	5.047E-01
	(n,p)	2.396E-06	2.665E-06	3.606E-06	2.854E-06	1.172E-06
	(n,d)	3.237E-08	3.519E-08	4.818E-08	5.130E-08	2.280E-08
	(n,t)	3.050E-09	3.317E-09	4.541E-09	5.147E-09	2.326E-09
	(n,a)	4.380E-07	4.852E-07	6.576E-07	5.318E-07	2.200E-07
50-Sn-112	total	6.806E+00	7.142E+00	7.323E+00	7.271E+00	6.271E+00
	elastic	5.619E+00	5.863E+00	6.005E+00	6.116E+00	5.991E+00
	inelastic	1.704E-01	1.966E-01	2.357E-01	1.942E-01	9.405E-02
	(n,2n)	8.044E-05	8.747E-05	1.198E-04	1.084E-04	4.625E-05
	(n,3n)	6.493E-10	7.060E-10	9.666E-10	1.217E-09	6.466E-10
	(n,na)	1.378E-06	1.498E-06	2.052E-06	1.926E-06	8.303E-07
	(n,np)	3.422E-06	3.721E-06	5.094E-06	5.166E-06	2.266E-06
	capture	1.018E+00	1.081E+00	1.081E+00	9.610E-01	1.854E-01
	(n,p)	5.312E-05	6.055E-05	8.050E-05	6.098E-05	2.461E-05
	(n,d)	8.709E-08	9.470E-08	1.297E-07	1.326E-07	5.837E-08
	(n,t)	1.932E-09	2.101E-09	2.876E-09	3.315E-09	1.505E-09
	(n,He-3)	1.510E-11	1.642E-11	2.248E-11	2.739E-11	1.263E-11
	(n,a)	3.774E-05	4.362E-05	5.711E-05	4.293E-05	1.773E-05
	(n,2p)	4.973E-11	5.408E-11	7.404E-11	8.793E-11	4.026E-11
50-Sn-114	total	5.973E+00	6.307E+00	6.567E+00	6.729E+00	6.245E+00
	elastic	5.569E+00	5.837E+00	6.027E+00	6.219E+00	6.000E+00
	inelastic	1.730E-01	1.997E-01	2.394E-01	1.972E-01	9.517E-02
	(n,2n)	1.140E-04	1.240E-04	1.698E-04	1.508E-04	6.409E-05
	(n,3n)	1.508E-08	1.639E-08	2.244E-08	2.835E-08	1.352E-08
	(n,na)	1.436E-07	1.561E-07	2.138E-07	2.160E-07	9.482E-08
	(n,np)	9.266E-08	1.008E-07	1.379E-07	1.486E-07	6.623E-08
	capture	2.315E-01	2.700E-01	3.000E-01	3.123E-01	1.488E-01
	(n,p)	1.363E-05	1.512E-05	2.051E-05	1.604E-05	6.567E-06
	(n,d)	3.402E-08	3.699E-08	5.064E-08	5.441E-08	2.424E-08
	(n,t)	1.223E-09	1.330E-09	1.820E-09	2.119E-09	9.643E-10
	(n,He-3)	1.173E-12	1.275E-12	1.746E-12	2.182E-12	1.014E-12
	(n,a)	5.149E-06	5.888E-06	7.748E-06	5.953E-06	2.427E-06
50-Sn-115	total	1.179E+01	8.540E+00	6.542E+00	6.283E+00	6.236E+00
	elastic	6.260E+00	5.832E+00	5.446E+00	5.473E+00	5.709E+00
	inelastic	3.122E-01	3.626E-01	4.275E-01	3.750E-01	2.146E-01
	(n,2n)	1.075E-03	1.172E-03	1.603E-03	1.242E-03	5.101E-04
	(n,3n)	2.003E-08	2.178E-08	2.981E-08	3.743E-08	1.811E-08
	(n,na)	3.432E-08	3.731E-08	5.109E-08	5.341E-08	2.364E-08
	(n,np)	2.852E-08	3.101E-08	4.245E-08	4.656E-08	2.084E-08
	(n,nd)	1.147E-11	1.247E-11	1.708E-11	2.189E-11	1.024E-11
	capture	5.211E+00	2.343E+00	6.662E-01	4.329E-01	3.119E-01
	(n,p)	1.440E-05	1.638E-05	2.173E-05	1.681E-05	6.838E-06
	(n,d)	5.429E-08	5.903E-08	8.082E-08	8.346E-08	3.681E-08
	(n,t)	3.191E-09	3.470E-09	4.751E-09	5.390E-09	2.436E-09
	(n,He-3)	1.632E-12	1.774E-12	2.429E-12	3.031E-12	1.408E-12
	(n,a)	7.895E-06	9.097E-06	1.138E-05	9.011E-06	3.950E-06
50-Sn-116	total	6.070E+00	6.524E+00	6.837E+00	6.980E+00	6.610E+00
	elastic	5.545E+00	5.894E+00	6.132E+00	6.353E+00	6.408E+00
	inelastic	1.800E-01	2.077E-01	2.487E-01	2.052E-01	9.940E-02
	(n,2n)	2.281E-04	2.480E-04	3.396E-04	2.899E-04	1.220E-04
	(n,3n)	8.568E-08	9.316E-08	1.275E-07	1.574E-07	7.301E-08
	(n,na)	3.545E-08	3.854E-08	5.277E-08	5.604E-08	2.491E-08
	(n,np)	2.484E-08	2.701E-08	3.698E-08	4.134E-08	1.860E-08

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
50-Sn-116	capture	3.438E-01	4.208E-01	4.543E-01	4.211E-01	1.018E-01
	(n,p)	2.784E-06	3.034E-06	4.150E-06	3.447E-06	1.442E-06
	(n,d)	8.958E-09	9.740E-09	1.334E-08	1.487E-08	6.690E-09
	(n,t)	7.200E-10	7.829E-10	1.072E-09	1.262E-09	5.765E-10
	(n,a)	8.236E-07	9.202E-07	1.240E-06	9.898E-07	4.073E-07
50-Sn-117	total	6.503E+00	6.552E+00	6.592E+00	6.682E+00	6.540E+00
	elastic	5.254E+00	5.333E+00	5.376E+00	5.570E+00	5.908E+00
	inelastic	3.872E-01	4.560E-01	5.370E-01	4.978E-01	3.576E-01
	(n,2n)	2.276E-03	2.508E-03	3.413E-03	2.580E-03	1.048E-03
	(n,3n)	1.560E-07	1.696E-07	2.322E-07	2.819E-07	1.299E-07
	(n,na)	1.143E-08	1.243E-08	1.702E-08	1.841E-08	8.223E-09
	(n,np)	1.109E-08	1.206E-08	1.650E-08	1.865E-08	8.417E-09
	(n,nd)	5.331E-12	5.796E-12	7.936E-12	1.022E-11	4.784E-12
	capture	8.661E-01	7.588E-01	6.757E-01	6.125E-01	2.737E-01
	(n,p)	2.752E-06	3.042E-06	4.130E-06	3.334E-06	1.379E-06
	(n,d)	4.885E-08	5.312E-08	7.272E-08	7.749E-08	3.445E-08
	(n,t)	1.318E-09	1.433E-09	1.963E-09	2.254E-09	1.022E-09
	(n,a)	1.008E-06	1.151E-06	1.495E-06	1.181E-06	4.927E-07
50-Sn-118	total	5.687E+00	6.021E+00	6.298E+00	6.488E+00	6.379E+00
	elastic	5.309E+00	5.599E+00	5.825E+00	6.065E+00	6.197E+00
	inelastic	1.865E-01	2.153E-01	2.574E-01	2.129E-01	1.039E-01
	(n,2n)	2.803E-04	3.048E-04	4.173E-04	3.515E-04	1.475E-04
	(n,3n)	2.298E-07	2.498E-07	3.420E-07	4.127E-07	1.899E-07
	(n,na)	3.885E-09	4.225E-09	5.784E-09	6.413E-09	2.883E-09
	(n,np)	4.957E-09	5.390E-09	7.379E-09	8.577E-09	3.902E-09
	capture	1.906E-01	2.051E-01	2.129E-01	2.086E-01	7.720E-02
	(n,p)	5.753E-07	6.255E-07	8.564E-07	7.562E-07	3.213E-07
	(n,d)	5.025E-09	5.464E-09	7.481E-09	8.514E-09	3.851E-09
	(n,t)	4.242E-10	4.613E-10	6.315E-10	7.528E-10	3.450E-10
	(n,a)	6.764E-08	7.408E-08	1.010E-07	8.995E-08	3.825E-08
50-Sn-119	total	5.941E+00	5.962E+00	6.035E+00	6.207E+00	6.409E+00
	elastic	4.946E+00	5.050E+00	5.116E+00	5.304E+00	5.590E+00
	inelastic	4.787E-01	5.717E-01	6.740E-01	6.589E-01	6.383E-01
	(n,2n)	3.421E-03	3.819E-03	5.166E-03	3.872E-03	1.562E-03
	(n,3n)	3.560E-07	3.871E-07	5.299E-07	6.279E-07	2.873E-07
	(n,na)	2.997E-09	3.259E-09	4.462E-09	4.999E-09	2.253E-09
	(n,np)	8.669E-09	9.427E-09	1.291E-08	1.491E-08	6.773E-09
	(n,nd)	1.836E-12	1.996E-12	2.733E-12	3.533E-12	1.656E-12
	capture	5.116E-01	3.369E-01	2.395E-01	2.390E-01	1.790E-01
	(n,p)	5.441E-07	5.930E-07	8.111E-07	6.988E-07	2.949E-07
	(n,d)	1.802E-08	1.960E-08	2.683E-08	2.915E-08	1.302E-08
	(n,t)	1.400E-09	1.522E-09	2.084E-09	2.401E-09	1.090E-09
	(n,a)	1.554E-07	1.732E-07	2.325E-07	1.961E-07	8.223E-08
50-Sn-120	total	5.534E+00	5.589E+00	5.622E+00	5.700E+00	5.950E+00
	elastic	5.280E+00	5.307E+00	5.297E+00	5.417E+00	5.799E+00
	inelastic	1.926E-01	2.224E-01	2.656E-01	2.203E-01	1.084E-01
	(n,2n)	4.110E-04	4.469E-04	6.118E-04	5.045E-04	2.106E-04
	(n,3n)	5.047E-07	5.488E-07	7.514E-07	8.842E-07	4.037E-07
	(n,na)	1.154E-09	1.255E-09	1.718E-09	1.971E-09	8.940E-10
	(n,np)	1.654E-09	1.798E-09	2.462E-09	2.921E-09	1.337E-09
	capture	6.263E-02	5.893E-02	5.847E-02	6.167E-02	4.277E-02
	(n,p)	2.365E-07	2.571E-07	3.520E-07	3.328E-07	1.437E-07
	(n,d)	2.946E-09	3.203E-09	4.386E-09	5.119E-09	2.332E-09
	(n,t)	3.564E-10	3.876E-10	5.306E-10	6.369E-10	2.925E-10
	(n,a)	2.180E-08	2.372E-08	3.247E-08	3.138E-08	1.364E-08
50-Sn-122	total	4.971E+00	5.232E+00	5.474E+00	5.667E+00	6.133E+00
	elastic	4.724E+00	4.967E+00	5.171E+00	5.408E+00	5.999E+00
	inelastic	1.877E-01	2.168E-01	2.588E-01	2.148E-01	1.062E-01
	(n,2n)	5.689E-04	6.185E-04	8.469E-04	6.862E-04	2.853E-04
	(n,3n)	9.076E-07	9.868E-07	1.351E-06	1.554E-06	7.048E-07
	(n,na)	2.161E-10	2.350E-10	3.218E-10	3.805E-10	1.741E-10
	(n,np)	7.862E-10	8.549E-10	1.170E-09	1.417E-09	6.527E-10
	capture	5.834E-02	4.756E-02	4.192E-02	4.271E-02	2.750E-02
	(n,p)	4.622E-08	5.025E-08	6.880E-08	6.827E-08	2.982E-08
	(n,d)	8.165E-10	8.878E-10	1.215E-09	1.457E-09	6.687E-10
	(n,t)	1.914E-10	2.081E-10	2.849E-10	3.472E-10	1.602E-10
	(n,a)	4.460E-09	4.850E-09	6.640E-09	6.859E-09	3.029E-09
50-Sn-123	total	8.713E+00	9.298E+00	9.589E+00	9.302E+00	6.709E+00
	elastic	6.318E+00	6.850E+00	7.157E+00	7.209E+00	6.215E+00
	inelastic	2.523E-01	2.922E-01	3.452E-01	2.959E-01	1.597E-01

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
50-Sn-123	(n,2n)	5.799E-03	6.599E-03	8.839E-03	6.591E-03	2.641E-03
	(n,3n)	9.750E-07	1.060E-06	1.451E-06	1.660E-06	7.513E-07
	(n,na)	8.180E-11	8.895E-11	1.218E-10	1.460E-10	6.707E-11
	(n,np)	3.412E-10	3.710E-10	5.079E-10	6.161E-10	2.839E-10
	capture	2.130E+00	2.144E+00	2.075E+00	1.788E+00	3.310E-01
	(n,p)	1.098E-07	1.194E-07	1.635E-07	1.558E-07	6.742E-08
	(n,d)	2.933E-09	3.189E-09	4.366E-09	5.031E-09	2.284E-09
	(n,t)	3.517E-10	3.824E-10	5.236E-10	6.245E-10	2.863E-10
	(n,a)	4.279E-09	4.656E-09	6.372E-09	6.537E-09	2.881E-09
50-Sn-124	total	5.375E+00	5.583E+00	5.739E+00	5.834E+00	6.013E+00
	elastic	4.945E+00	5.097E+00	5.214E+00	5.401E+00	5.880E+00
	inelastic	1.969E-01	2.274E-01	2.713E-01	2.254E-01	1.115E-01
	(n,2n)	7.404E-04	8.052E-04	1.102E-03	8.771E-04	3.631E-04
	(n,3n)	1.398E-06	1.520E-06	2.081E-06	2.341E-06	1.055E-06
	(n,na)	2.161E-11	2.350E-11	3.218E-11	3.924E-11	1.811E-11
	(n,np)	1.557E-10	1.693E-10	2.317E-10	2.858E-10	1.323E-10
	capture	2.316E-01	2.569E-01	2.521E-01	2.061E-01	2.077E-02
	(n,p)	6.574E-08	7.148E-08	9.786E-08	1.010E-07	4.457E-08
	(n,d)	3.625E-10	3.942E-10	5.397E-10	6.527E-10	3.005E-10
	(n,t)	8.673E-11	9.431E-11	1.291E-10	1.586E-10	7.333E-11
	(n,a)	8.414E-10	9.149E-10	1.253E-09	1.383E-09	6.212E-10
50-Sn-126	total	5.188E+00	5.468E+00	5.716E+00	5.935E+00	6.389E+00
	elastic	4.959E+00	5.220E+00	5.433E+00	5.699E+00	6.269E+00
	inelastic	1.943E-01	2.243E-01	2.677E-01	2.223E-01	1.098E-01
	(n,2n)	9.929E-04	1.082E-03	1.480E-03	1.157E-03	4.766E-04
	(n,3n)	2.380E-06	2.588E-06	3.543E-06	3.897E-06	1.745E-06
	(n,na)	3.142E-12	3.416E-12	4.677E-12	5.787E-12	2.681E-12
	(n,np)	4.166E-11	4.530E-11	6.202E-11	7.779E-11	3.618E-11
	capture	2.026E-02	1.267E-02	8.406E-03	8.402E-03	8.504E-03
	(n,p)	4.970E-09	5.404E-09	7.399E-09	7.979E-09	3.558E-09
	(n,d)	1.338E-10	1.455E-10	1.992E-10	2.455E-10	1.136E-10
	(n,t)	5.457E-11	5.934E-11	8.124E-11	1.004E-10	4.653E-11
	(n,a)	1.316E-10	1.431E-10	1.959E-10	2.276E-10	1.036E-10
51-Sb-121	total	1.099E+01	1.127E+01	1.067E+01	9.092E+00	6.266E+00
	elastic	4.626E+00	4.864E+00	5.009E+00	5.118E+00	5.273E+00
	inelastic	4.198E-01	4.979E-01	5.875E-01	5.597E-01	4.821E-01
	(n,2n)	3.530E-04	3.838E-04	5.255E-04	4.388E-04	1.838E-04
	(n,3n)	2.485E-07	2.702E-07	3.699E-07	4.449E-07	2.045E-07
	(n,na)	7.020E-09	7.633E-09	1.045E-08	1.103E-08	4.897E-09
	(n,np)	1.581E-07	1.719E-07	2.354E-07	2.253E-07	9.756E-08
	(n,nd)	1.583E-10	1.722E-10	2.357E-10	2.953E-10	1.373E-10
	(n,nt)	2.305E-11	2.507E-11	3.432E-11	4.340E-11	2.023E-11
	capture	5.945E+00	5.896E+00	5.071E+00	3.412E+00	5.104E-01
	(n,p)	3.983E-06	4.515E-06	6.004E-06	4.628E-06	1.883E-06
	(n,d)	6.693E-08	7.277E-08	9.963E-08	1.004E-07	4.404E-08
	(n,t)	5.569E-09	6.055E-09	8.290E-09	9.035E-09	4.040E-09
	(n,a)	9.157E-07	1.020E-06	1.375E-06	1.107E-06	4.573E-07
51-Sb-123	total	9.396E+00	9.692E+00	9.633E+00	8.638E+00	6.190E+00
	elastic	5.460E+00	5.751E+00	5.885E+00	5.800E+00	5.589E+00
	inelastic	3.220E-01	3.770E-01	4.452E-01	4.011E-01	2.640E-01
	(n,2n)	5.000E-04	5.437E-04	7.443E-04	6.065E-04	2.525E-04
	(n,3n)	4.620E-07	5.024E-07	6.878E-07	8.120E-07	3.711E-07
	(n,na)	2.543E-09	2.765E-09	3.786E-09	4.170E-09	1.872E-09
	(n,np)	5.834E-08	6.344E-08	8.685E-08	8.683E-08	3.799E-08
	(n,nd)	6.291E-11	6.840E-11	9.365E-11	1.185E-10	5.524E-11
	(n,nt)	2.026E-11	2.203E-11	3.016E-11	3.823E-11	1.783E-11
	capture	3.608E+00	3.557E+00	3.295E+00	2.429E+00	3.367E-01
	(n,p)	1.610E-06	1.803E-06	2.430E-06	1.906E-06	7.795E-07
	(n,d)	2.386E-08	2.595E-08	3.553E-08	3.739E-08	1.657E-08
	(n,t)	3.918E-09	4.260E-09	5.832E-09	6.482E-09	2.913E-09
	(n,a)	2.126E-07	2.323E-07	3.173E-07	2.769E-07	1.172E-07
51-Sb-124	total	1.148E+01	1.048E+01	9.419E+00	8.312E+00	6.193E+00
	elastic	4.300E+00	4.439E+00	4.521E+00	4.635E+00	4.907E+00
	inelastic	5.497E-01	6.532E-01	7.673E-01	7.422E-01	6.276E-01
	(n,2n)	3.006E-03	3.349E-03	4.534E-03	3.404E-03	1.375E-03
	(n,3n)	5.246E-07	5.704E-07	7.809E-07	9.137E-07	4.164E-07
	(n,na)	5.075E-10	5.519E-10	7.554E-10	8.687E-10	3.944E-10
	(n,np)	3.817E-08	4.151E-08	5.683E-08	5.873E-08	2.590E-08
	(n,nd)	1.655E-09	1.800E-09	2.464E-09	2.945E-09	1.351E-09
	(n,nt)	9.028E-12	9.817E-12	1.344E-11	1.710E-11	7.981E-12
	capture	6.604E+00	5.370E+00	4.123E+00	2.928E+00	6.550E-01

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
51-Sb-124	(n,p)	1.194E-06	1.331E-06	1.782E-06	1.408E-06	5.816E-07
	(n,d)	4.852E-08	5.276E-08	7.223E-08	7.271E-08	3.186E-08
	(n,t)	6.831E-09	7.428E-09	1.017E-08	1.088E-08	4.843E-09
	(n,a)	1.497E-07	1.634E-07	2.232E-07	1.973E-07	8.382E-08
51-Sb-125	total	7.479E+00	7.519E+00	7.504E+00	7.321E+00	6.262E+00
	elastic	4.915E+00	5.145E+00	5.299E+00	5.451E+00	5.647E+00
	inelastic	2.785E-01	3.237E-01	3.827E-01	3.343E-01	1.931E-01
	(n,2n)	5.375E-04	5.844E-04	8.001E-04	6.474E-04	2.691E-04
	(n,3n)	7.772E-07	8.451E-07	1.157E-06	1.338E-06	6.077E-07
	(n,na)	2.460E-10	2.674E-10	3.662E-10	4.292E-10	1.959E-10
	(n,np)	2.191E-08	2.382E-08	3.261E-08	3.419E-08	1.514E-08
	(n,nd)	2.919E-11	3.173E-11	4.345E-11	5.531E-11	2.582E-11
	(n,nt)	1.127E-11	1.225E-11	1.677E-11	2.131E-11	9.944E-12
	capture	2.278E+00	2.045E+00	1.819E+00	1.534E+00	4.207E-01
	(n,p)	2.917E-07	3.179E-07	4.348E-07	3.702E-07	1.557E-07
	(n,d)	1.906E-08	2.073E-08	2.838E-08	3.046E-08	1.356E-08
	(n,t)	2.154E-09	2.342E-09	3.206E-09	3.609E-09	1.628E-09
	(n,a)	7.343E-08	7.986E-08	1.093E-07	1.042E-07	4.508E-08
52-Te-120	total	7.638E+00	8.243E+00	8.684E+00	8.752E+00	6.652E+00
	elastic	6.333E+00	6.986E+00	7.429E+00	7.594E+00	6.194E+00
	inelastic	2.765E-01	3.206E-01	3.784E-01	3.284E-01	1.821E-01
	(n,2n)	1.005E-04	1.093E-04	1.497E-04	1.332E-04	5.664E-05
	(n,3n)	2.026E-08	2.203E-08	3.016E-08	3.790E-08	1.830E-08
	(n,na)	2.206E-06	2.399E-06	3.284E-06	2.734E-06	1.145E-06
	(n,np)	5.730E-07	6.230E-07	8.530E-07	8.625E-07	3.781E-07
	(n,nd)	6.529E-13	7.099E-13	9.720E-13	1.259E-12	5.904E-13
	capture	1.021E+00	9.320E-01	8.732E-01	8.276E-01	2.748E-01
	(n,p)	5.435E-05	6.254E-05	8.286E-05	6.237E-05	2.503E-05
	(n,d)	7.714E-08	8.388E-08	1.148E-07	1.172E-07	5.153E-08
	(n,t)	2.950E-09	3.208E-09	4.392E-09	4.944E-09	2.230E-09
	(n,He-3)	2.618E-11	2.846E-11	3.897E-11	4.679E-11	2.149E-11
	(n,a)	1.806E-04	2.092E-04	2.598E-04	2.044E-04	8.990E-05
52-Te-122	total	8.981E+00	9.824E+00	1.026E+01	9.928E+00	6.485E+00
	elastic	5.949E+00	6.689E+00	7.181E+00	7.297E+00	5.967E+00
	inelastic	2.689E-01	3.118E-01	3.683E-01	3.189E-01	1.759E-01
	(n,2n)	1.704E-04	1.853E-04	2.537E-04	2.192E-04	9.254E-05
	(n,3n)	8.829E-08	9.600E-08	1.314E-07	1.620E-07	7.509E-08
	(n,na)	2.113E-07	2.298E-07	3.146E-07	2.764E-07	1.173E-07
	(n,np)	5.990E-08	6.514E-08	8.918E-08	9.484E-08	4.211E-08
	capture	2.762E+00	2.818E+00	2.705E+00	2.307E+00	3.403E-01
	(n,p)	3.929E-06	4.364E-06	5.916E-06	4.611E-06	1.885E-06
	(n,d)	2.450E-08	2.663E-08	3.647E-08	3.874E-08	1.721E-08
	(n,t)	1.588E-09	1.727E-09	2.365E-09	2.702E-09	1.224E-09
	(n,He-3)	1.973E-12	2.145E-12	2.937E-12	3.627E-12	1.679E-12
	(n,a)	1.392E-05	1.607E-05	2.071E-05	1.586E-05	6.553E-06
52-Te-123	total	2.230E+02	1.910E+02	1.328E+02	7.237E+01	6.519E+00
	elastic	1.820E+01	2.008E+01	1.788E+01	1.273E+01	5.399E+00
	inelastic	4.434E-01	5.206E-01	6.110E-01	5.645E-01	3.884E-01
	(n,2n)	1.765E-03	1.947E-03	2.649E-03	2.006E-03	8.152E-04
	(n,3n)	1.054E-07	1.146E-07	1.569E-07	1.918E-07	8.856E-08
	(n,na)	2.358E-08	2.564E-08	3.510E-08	3.429E-08	1.494E-08
	(n,np)	1.679E-08	1.825E-08	2.499E-08	2.715E-08	1.213E-08
	(n,nd)	1.001E-10	1.088E-10	1.490E-10	1.873E-10	8.716E-11
	capture	2.044E+02	1.704E+02	1.143E+02	5.907E+01	7.303E-01
	(n,p)	4.545E-06	5.123E-06	6.825E-06	5.321E-06	2.178E-06
	(n,d)	6.875E-08	7.475E-08	1.023E-07	1.035E-07	4.540E-08
	(n,t)	4.372E-09	4.753E-09	6.508E-09	7.152E-09	3.205E-09
	(n,He-3)	3.960E-12	4.306E-12	5.895E-12	7.226E-12	3.339E-12
	(n,a)	5.098E-05	5.168E-05	5.225E-05	4.007E-05	1.846E-05
52-Te-124	total	6.494E+00	6.229E+00	6.191E+00	6.377E+00	6.420E+00
	elastic	4.933E+00	5.248E+00	5.517E+00	5.799E+00	6.074E+00
	inelastic	2.839E-01	3.289E-01	3.884E-01	3.354E-01	1.832E-01
	(n,2n)	2.638E-04	2.869E-04	3.928E-04	3.313E-04	1.391E-04
	(n,3n)	2.474E-07	2.690E-07	3.683E-07	4.444E-07	2.045E-07
	(n,na)	1.841E-08	2.002E-08	2.741E-08	2.616E-08	1.133E-08
	(n,np)	9.670E-09	1.051E-08	1.440E-08	1.580E-08	7.078E-09
	capture	1.282E+00	6.504E-01	2.844E-01	2.417E-01	1.621E-01
	(n,p)	1.416E-06	1.547E-06	2.114E-06	1.739E-06	7.250E-07
	(n,d)	8.142E-09	8.853E-09	1.212E-08	1.327E-08	5.940E-09
	(n,t)	9.334E-10	1.015E-09	1.390E-09	1.603E-09	7.277E-10
	(n,a)	1.512E-06	1.715E-06	2.276E-06	1.769E-06	7.231E-07

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
52-Te-125	total	6.349E+00	6.734E+00	7.067E+00	7.203E+00	6.226E+00
	elastic	4.968E+00	5.257E+00	5.479E+00	5.651E+00	5.300E+00
	inelastic	4.969E-01	5.893E-01	6.927E-01	6.645E-01	5.701E-01
	(n,2n)	2.702E-03	3.003E-03	4.071E-03	3.053E-03	1.234E-03
	(n,3n)	2.292E-07	2.492E-07	3.412E-07	4.070E-07	1.866E-07
	(n,na)	3.744E-09	4.071E-09	5.574E-09	5.953E-09	2.050E-09
	(n,np)	9.379E-09	1.020E-08	1.396E-08	1.559E-08	7.017E-09
	(n,nd)	6.949E-11	7.556E-11	1.034E-10	1.306E-10	6.085E-11
	capture	8.871E-01	8.843E-01	8.904E-01	8.846E-01	3.539E-01
	(n,p)	1.220E-06	1.341E-06	1.826E-06	1.471E-06	6.089E-07
	(n,d)	3.897E-08	4.237E-08	5.802E-08	6.014E-08	2.655E-08
	(n,t)	2.640E-09	2.871E-09	3.930E-09	4.383E-09	1.972E-09
	(n,a)	1.643E-06	1.877E-06	2.350E-06	1.912E-06	8.700E-07
52-Te-126	total	5.750E+00	6.094E+00	6.393E+00	6.473E+00	5.743E+00
	elastic	5.097E+00	5.444E+00	5.714E+00	5.857E+00	5.501E+00
	inelastic	2.615E-01	3.028E-01	3.580E-01	3.072E-01	1.651E-01
	(n,2n)	3.587E-04	3.900E-04	5.340E-04	4.423E-04	1.849E-04
	(n,3n)	5.389E-07	5.860E-07	8.023E-07	9.448E-07	4.315E-07
	(n,na)	2.574E-09	2.799E-09	3.832E-09	4.030E-09	1.788E-09
	(n,np)	4.270E-09	4.643E-09	6.357E-09	7.177E-09	3.239E-09
	capture	3.968E-01	3.464E-01	3.195E-01	3.072E-01	7.604E-02
	(n,.)	4.570E-07	4.971E-07	6.805E-07	5.915E-07	2.503E-07
	(n,d)	7.841E-09	8.526E-09	1.167E-08	1.288E-08	5.775E-09
	(n,t)	6.501E-10	7.068E-10	9.677E-10	1.125E-09	5.122E-10
	(n,a)	4.047E-07	4.542E-07	6.095E-07	4.910E-07	2.025E-07
52-Te-127m	total	5.894E+02	2.580E+02	5.884E+01	2.403E+01	6.658E+00
	elastic	5.938E+00	6.415E+00	6.653E+00	6.583E+00	5.616E+00
	inelastic	3.275E-01	3.816E-01	4.492E-01	3.987E-01	2.428E-01
	(n,2n)	3.014E-03	3.372E-03	4.556E-03	3.412E-03	1.375E-03
	(n,3n)	5.203E-07	5.658E-07	7.746E-07	9.047E-07	4.121E-07
	(n,na)	1.932E-09	2.101E-09	2.876E-09	3.169E-09	1.422E-09
	(n,np)	4.222E-09	4.591E-09	6.285E-09	7.148E-09	3.233E-09
	(n,nd)	3.377E-11	3.672E-11	5.028E-11	6.380E-11	2.976E-11
	capture	5.824E+02	2.508E+02	5.165E+01	1.703E+01	7.973E-01
	(n,p)	3.955E-07	4.313E-07	5.897E-07	4.953E-07	2.077E-07
	(n,d)	2.217E-08	2.410E-08	3.300E-08	3.491E-08	1.549E-08
	(n,t)	3.110E-09	3.382E-09	4.630E-09	5.140E-09	2.309E-09
	(n,a)	2.707E-07	3.021E-07	3.999E-07	3.309E-07	1.402E-07
52-Te-128	total	5.056E+00	5.242E+00	5.423E+00	5.517E+00	5.711E+00
	elastic	4.727E+00	4.884E+00	5.016E+00	5.160E+00	5.518E+00
	inelastic	2.518E-01	2.913E-01	3.447E-01	2.935E-01	1.547E-01
	(n,2n)	4.762E-04	5.178E-04	7.089E-04	5.765E-04	2.399E-04
	(n,3n)	1.033E-06	1.123E-06	1.537E-06	1.771E-06	8.035E-07
	(n,na)	9.498E-10	1.033E-09	1.414E-09	1.566E-09	7.036E-10
	(n,np)	1.322E-09	1.438E-09	1.969E-09	2.267E-09	1.029E-09
	capture	7.645E-02	6.543E-02	6.053E-02	6.175E-02	3.720E-02
	(n,p)	1.662E-07	1.807E-07	2.474E-07	2.232E-07	9.532E-08
	(n,d)	4.189E-09	4.555E-09	6.237E-09	7.021E-09	3.166E-09
	(n,t)	5.585E-10	6.073E-10	8.314E-10	9.709E-10	4.424E-10
	(n,a)	6.324E-08	6.927E-08	9.447E-08	8.475E-08	3.610E-08
52-Te-129m	total	2.863E+02	1.298E+02	3.530E+01	1.789E+01	6.670E+00
	elastic	6.182E+00	6.764E+00	7.066E+00	6.981E+00	5.777E+00
	inelastic	2.790E-01	3.244E-01	3.832E-01	3.359E-01	1.965E-01
	(n,2n)	4.222E-03	4.773E-03	6.413E-03	4.786E-03	1.922E-03
	(n,3n)	8.859E-07	9.633E-07	1.319E-06	1.510E-06	6.839E-07
	(n,na)	8.245E-10	8.966E-10	1.228E-09	1.395E-09	6.314E-10
	(n,np)	2.124E-09	2.309E-09	3.161E-09	3.645E-09	1.655E-09
	(n,nd)	1.869E-11	2.032E-11	2.783E-11	3.537E-11	1.651E-11
	capture	2.786E+02	1.221E+02	2.771E+01	1.052E+01	6.941E-01
	(n,p)	1.582E-07	1.721E-07	2.356E-07	2.044E-07	8.648E-08
	(n,d)	1.140E-08	1.239E-08	1.697E-08	1.822E-08	8.115E-09
	(n,t)	2.110E-09	2.294E-09	3.141E-09	3.537E-09	1.595E-09
	(n,a)	7.701E-08	8.461E-08	1.147E-07	1.010E-07	4.292E-08
52-Te-130	total	4.760E+00	4.922E+00	5.091E+00	5.165E+00	5.429E+00
	elastic	4.472E+00	4.622E+00	4.755E+00	4.881E+00	5.275E+00
	inelastic	2.326E-01	2.689E-01	3.187E-01	2.694E-01	1.396E-01
	(n,2n)	6.804E-04	7.400E-04	1.013E-03	8.051E-04	3.332E-04
	(n,3n)	1.641E-06	1.784E-06	2.442E-06	2.750E-06	1.239E-06
	(n,na)	5.375E-10	5.844E-10	8.001E-10	9.139E-10	4.140E-10
	(n,np)	1.087E-09	1.182E-09	1.619E-09	1.895E-09	8.642E-10

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
52-Te-130	capture	5.364E-02	2.896E-02	1.463E-02	1.332E-02	1.278E-02
	(n,p)	9.795E-08	1.065E-07	1.458E-07	1.368E-07	5.898E-08
	(n,d)	3.495E-09	3.800E-09	5.203E-09	5.909E-09	2.671E-09
	(n,t)	5.359E-10	5.827E-10	7.977E-10	9.313E-10	4.243E-10
	(n,a)	1.233E-08	1.343E-08	1.837E-08	1.757E-08	7.610E-09
53-I -127	total	1.153E+01	1.221E+01	1.241E+01	1.135E+01	6.440E+00
	elastic	6.280E+00	6.868E+00	7.161E+00	6.972E+00	5.418E+00
	inelastic	4.680E-01	5.531E-01	6.505E-01	6.151E-01	4.856E-01
	(n,2n)	4.565E-04	4.963E-04	6.796E-04	5.630E-04	2.353E-04
	(n,3n)	2.206E-07	2.399E-07	3.284E-07	3.953E-07	1.817E-07
	(n,na)	8.599E-09	9.350E-09	1.280E-08	1.318E-08	5.813E-09
	(n,np)	1.835E-07	1.995E-07	2.731E-07	2.710E-07	1.184E-07
	(n,nd)	6.970E-11	7.578E-11	1.038E-10	1.313E-10	6.122E-11
	(n,nt)	6.781E-12	7.374E-12	1.010E-11	1.287E-11	6.010E-12
	capture	4.753E+00	4.774E+00	4.578E+00	3.745E+00	5.351E-01
	(n,p)	5.022E-06	5.596E-06	7.551E-06	5.965E-06	2.449E-06
	(n,d)	5.403E-08	5.875E-08	8.043E-08	8.249E-08	3.633E-08
	(n,t)	4.531E-09	4.927E-09	6.745E-09	7.507E-09	3.375E-09
	(n,He-3)	1.114E-12	1.211E-12	1.658E-12	2.057E-12	9.537E-13
	(n,a)	2.947E-07	3.272E-07	4.413E-07	3.571E-07	1.480E-07
53-I -129	total	1.100E+01	8.392E+00	6.835E+00	6.595E+00	5.983E+00
	elastic	5.420E+00	5.227E+00	5.057E+00	5.114E+00	5.194E+00
	inelastic	4.200E-01	4.951E-01	5.829E-01	5.444E-01	4.323E-01
	(n,2n)	5.068E-04	5.511E-04	7.545E-04	6.129E-04	2.550E-04
	(n,3n)	3.868E-07	4.206E-07	5.759E-07	6.787E-07	3.100E-07
	(n,na)	3.725E-09	4.050E-09	5.545E-09	5.977E-09	2.668E-09
	(n,np)	8.387E-08	9.119E-08	1.248E-07	1.288E-07	5.682E-08
	(n,nd)	4.233E-11	4.603E-11	6.302E-11	8.009E-11	3.737E-11
	(n,nt)	5.768E-12	6.272E-12	8.588E-12	1.095E-11	5.116E-12
	capture	5.151E+00	2.662E+00	1.191E+00	9.375E-01	3.556E-01
	(n,p)	6.390E-07	7.022E-07	9.564E-07	7.812E-07	3.246E-07
	(n,d)	3.395E-08	3.692E-08	5.054E-08	5.366E-08	2.384E-08
	(n,t)	4.173E-09	4.538E-09	6.213E-09	6.986E-09	3.150E-09
	(n,a)	2.203E-07	2.418E-07	3.293E-07	2.775E-07	1.163E-07
53-I -131	total	2.232E+01	1.548E+01	1.132E+01	1.024E+01	6.665E+00
	elastic	6.888E+00	7.633E+00	8.059E+00	8.040E+00	6.118E+00
	inelastic	3.705E-01	4.329E-01	5.094E-01	4.588E-01	2.970E-01
	(n,2n)	6.602E-04	7.178E-04	9.828E-04	7.915E-04	3.286E-04
	(n,3n)	6.908E-07	7.512E-07	1.028E-06	1.188E-06	5.391E-07
	(n,na)	1.432E-09	1.557E-09	2.132E-09	2.379E-09	1.071E-09
	(n,np)	3.413E-08	3.711E-08	5.081E-08	5.407E-08	2.403E-08
	(n,nd)	3.054E-11	3.321E-11	4.547E-11	5.794E-11	2.706E-11
	(n,nt)	8.256E-12	8.977E-12	1.229E-11	1.567E-11	7.320E-12
	capture	1.500E+01	7.385E+00	2.748E+00	1.743E+00	2.492E-01
	(n,p)	2.083E-07	2.270E-07	3.104E-07	2.656E-07	1.119E-07
	(n,d)	2.579E-08	2.805E-08	3.840E-08	4.149E-08	1.851E-08
	(n,t)	3.945E-09	4.290E-09	5.874E-09	6.658E-09	3.009E-09
	(n,a)	9.260E-08	1.010E-07	1.381E-07	1.209E-07	5.125E-08
54-Xe-124	total	1.564E+02	1.344E+02	1.034E+02	6.344E+01	6.688E+00
	elastic	6.148E+01	5.010E+01	3.650E+01	2.440E+01	5.426E+00
	inelastic	2.447E-01	2.850E-01	3.364E-01	2.973E-01	1.769E-01
	(n,2n)	6.715E-05	7.301E-05	9.996E-05	9.060E-05	3.868E-05
	(n,3n)	7.742E-09	8.418E-09	1.152E-08	1.469E-08	6.878E-09
	(n,na)	2.514E-07	2.735E-07	3.744E-07	3.302E-07	1.402E-07
	(n,np)	4.197E-07	4.563E-07	6.248E-07	6.211E-07	2.712E-07
	(n,nd)	3.768E-13	4.097E-13	5.610E-13	7.261E-13	3.405E-13
	capture	9.467E+01	8.401E+01	6.653E+01	3.874E+01	1.085E+00
	(n,p)	1.154E-04	1.335E-04	1.743E-04	1.316E-04	5.318E-05
	(n,d)	5.489E-08	5.968E-08	8.171E-08	8.268E-08	3.629E-08
	(n,t)	1.742E-09	1.894E-09	2.593E-09	2.920E-09	1.317E-09
	(n,He-3)	2.287E-11	2.487E-11	3.405E-11	4.061E-11	1.862E-11
	(n,a)	1.621E-04	1.882E-04	2.345E-04	1.837E-04	8.010E-05
	(n,2p)	2.965E-11	3.224E-11	4.414E-11	5.050E-11	2.287E-11
54-Xe-126	total	8.351E+00	8.010E+00	7.783E+00	7.814E+00	6.693E+00
	elastic	6.626E+00	6.481E+00	6.307E+00	6.356E+00	5.824E+00
	inelastic	2.816E-01	3.277E-01	3.863E-01	3.418E-01	2.029E-01
	(n,2n)	1.243E-04	1.351E-04	1.850E-04	1.642E-04	6.976E-05
	(n,3n)	3.008E-08	3.271E-08	4.478E-08	5.617E-08	2.722E-08
	(n,na)	8.394E-08	9.127E-08	1.250E-07	1.145E-07	4.911E-08
	(n,np)	4.390E-08	4.774E-08	6.536E-08	6.817E-08	3.013E-08
	capture	1.442E+00	1.201E+00	1.089E+00	1.116E+00	6.663E-01

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
54-Xe-126	(n,p)	1.687E-05	1.922E-05	2.565E-05	1.948E-05	7.857E-06
	(n,d)	2.159E-08	2.348E-08	3.215E-08	3.404E-08	1.511E-08
	(n,t)	1.273E-09	1.384E-09	1.894E-09	2.170E-09	9.833E-10
	(n,He-3)	2.259E-12	2.456E-12	3.363E-12	4.135E-12	1.913E-12
	(n,a)	1.737E-05	2.009E-05	2.578E-05	1.978E-05	8.205E-06
54-Xe-128	total	1.097E+01	9.896E+00	9.089E+00	8.923E+00	6.804E+00
	elastic	8.991E+00	8.581E+00	8.128E+00	8.072E+00	6.344E+00
	inelastic	3.063E-01	3.561E-01	4.198E-01	3.697E-01	2.154E-01
	(n,2n)	2.001E-04	2.176E-04	2.979E-04	2.562E-04	1.080E-04
	(n,3n)	1.403E-07	1.525E-07	2.088E-07	2.551E-07	1.178E-07
	(n,na)	4.535E-08	4.931E-08	6.751E-08	6.526E-08	2.835E-08
	(n,np)	1.836E-08	1.997E-08	2.734E-08	2.939E-08	1.309E-08
	capture	1.674E+00	9.586E-01	5.395E-01	4.802E-01	2.447E-01
	(n,p)	8.088E-06	8.980E-06	1.218E-05	9.569E-06	3.922E-06
	(n,d)	1.761E-08	1.915E-08	2.622E-08	2.802E-08	1.247E-08
	(n,t)	1.007E-09	1.095E-09	1.500E-09	1.724E-09	7.823E-10
	(n,a)	2.793E-06	3.197E-06	4.185E-06	3.235E-06	1.327E-06
54-Xe-129	total	2.262E+01	1.944E+01	1.633E+01	1.345E+01	6.670E+00
	elastic	1.242E+01	1.049E+01	8.642E+00	7.873E+00	5.649E+00
	inelastic	5.280E-01	6.264E-01	7.360E-01	7.081E-01	6.023E-01
	(n,2n)	1.472E-03	1.618E-03	2.205E-03	1.676E-03	6.825E-04
	(n,3n)	1.362E-07	1.481E-07	2.028E-07	2.459E-07	1.133E-07
	(n,na)	6.870E-09	7.471E-09	1.023E-08	1.067E-08	4.725E-09
	(n,np)	1.623E-08	1.765E-08	2.417E-08	2.652E-08	1.188E-08
	(n,nd)	8.828E-11	9.599E-11	1.314E-10	1.655E-10	7.704E-11
	capture	9.660E+00	8.314E+00	6.942E+00	4.862E+00	4.186E-01
	(n,p)	2.644E-06	2.965E-06	3.973E-06	3.121E-06	1.280E-06
	(n,d)	5.478E-08	5.957E-08	8.155E-08	8.344E-08	3.672E-08
	(n,t)	4.145E-09	4.507E-09	6.170E-09	6.816E-09	3.058E-09
	(n,He-3)	1.868E-12	2.031E-12	2.781E-12	3.436E-12	1.592E-12
	(n,a)	2.777E-06	3.182E-06	3.974E-06	3.234E-06	1.508E-06
54-Xe-130	total	1.469E+01	1.117E+01	8.705E+00	8.093E+00	6.580E+00
	elastic	9.669E+00	8.603E+00	7.568E+00	7.248E+00	6.137E+00
	inelastic	2.822E-01	3.274E-01	3.865E-01	3.360E-01	1.873E-01
	(n,2n)	3.634E-04	3.951E-04	5.410E-04	4.513E-04	1.890E-04
	(n,3n)	2.783E-07	3.026E-07	4.142E-07	4.966E-07	2.280E-07
	(n,na)	2.444E-08	2.657E-08	3.638E-08	3.755E-08	1.658E-08
	(n,np)	1.083E-08	1.178E-08	1.613E-08	1.778E-08	7.974E-09
	capture	4.734E+00	2.237E+00	7.483E-01	5.077E-01	2.552E-01
	(n,p)	1.351E-06	1.474E-06	2.014E-06	1.678E-06	7.020E-07
	(n,d)	1.330E-08	1.446E-08	1.980E-08	2.166E-08	9.698E-09
	(n,t)	1.080E-09	1.175E-09	1.608E-09	1.860E-09	8.454E-10
	(n,a)	5.432E-07	6.080E-07	8.167E-07	6.553E-07	2.703E-07
54-Xe-131	total	9.398E+01	9.173E+01	7.472E+01	4.886E+01	6.370E+00
	elastic	5.782E+01	6.116E+01	5.210E+01	3.467E+01	5.682E+00
	inelastic	4.112E-01	4.830E-01	5.675E-01	5.238E-01	3.712E-01
	(n,2n)	2.890E-03	3.213E-03	4.355E-03	3.265E-03	1.319E-03
	(n,3n)	2.719E-07	2.956E-07	4.047E-07	4.804E-07	2.199E-07
	(n,na)	6.508E-09	7.076E-09	9.688E-09	1.034E-08	4.601E-09
	(n,np)	9.260E-09	1.007E-08	1.379E-08	1.543E-08	6.946E-09
	(n,nd)	6.785E-11	7.378E-11	1.010E-10	1.278E-10	5.958E-11
	capture	3.574E+01	3.006E+01	2.201E+01	1.365E+01	3.148E-01
	(n,p)	1.269E-06	1.404E-06	1.904E-06	1.532E-06	6.328E-07
	(n,d)	3.560E-08	3.871E-08	5.300E-08	5.554E-08	2.459E-08
	(n,t)	3.790E-09	4.121E-09	5.643E-09	6.299E-09	2.834E-09
	(n,a)	7.870E-07	8.972E-07	1.152E-06	9.224E-07	3.962E-07
54-Xe-132	total	5.416E+00	5.898E+00	6.335E+00	6.591E+00	6.382E+00
	elastic	4.946E+00	5.397E+00	5.780E+00	6.077E+00	6.132E+00
	inelastic	2.652E-01	3.070E-01	3.628E-01	3.116E-01	1.680E-01
	(n,2n)	4.209E-04	4.576E-04	6.265E-04	5.128E-04	2.138E-04
	(n,3n)	4.919E-07	5.348E-07	7.322E-07	8.596E-07	3.922E-07
	(n,na)	1.625E-08	1.767E-08	2.419E-08	2.575E-08	1.146E-08
	(n,np)	6.258E-09	6.804E-09	9.316E-09	1.051E-08	4.739E-09
	capture	2.043E-01	1.927E-01	1.915E-01	2.019E-01	8.211E-02
	(n,p)	2.902E-07	3.157E-07	4.321E-07	3.755E-07	1.589E-07
	(n,d)	1.074E-08	1.167E-08	1.598E-08	1.769E-08	7.939E-09
	(n,t)	9.589E-10	1.043E-09	1.428E-09	1.664E-09	7.576E-10
	(n,a)	1.740E-07	1.923E-07	2.608E-07	2.199E-07	9.209E-08
54-Xe-133	total	4.007E+01	2.222E+01	1.157E+01	9.699E+00	6.715E+00
	elastic	6.472E+00	7.183E+00	7.670E+00	7.874E+00	6.317E+00

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
54-Xe-133	inelastic	3.653E-01	4.257E-01	4.998E-01	4.470E-01	2.729E-01
	(n,2n)	3.350E-03	3.747E-03	5.064E-03	3.788E-03	1.527E-03
	(n,3n)	4.052E-07	4.406E-07	6.033E-07	7.056E-07	3.216E-07
	(n,na)	5.009E-09	5.446E-09	7.457E-09	8.151E-09	3.651E-09
	(n,np)	7.679E-09	8.350E-09	1.143E-08	1.300E-08	5.879E-09
	(n,nd)	4.723E-11	5.135E-11	7.030E-11	8.926E-11	4.165E-11
	capture	3.312E+01	1.455E+01	3.375E+00	1.368E+00	1.225E-01
	(n,p)	3.333E-07	3.640E-07	4.973E-07	4.139E-07	1.731E-07
	(n,d)	2.804E-08	3.049E-08	4.175E-08	4.455E-08	1.981E-08
	(n,t)	3.923E-09	4.266E-09	5.840E-09	6.547E-09	2.949E-09
	(n,a)	1.463E-07	1.622E-07	2.181E-07	1.839E-07	7.736E-08
54-Xe-134	total	4.836E+00	5.052E+00	5.268E+00	5.391E+00	5.869E+00
	elastic	4.542E+00	4.744E+00	4.923E+00	5.093E+00	5.704E+00
	inelastic	2.285E-01	2.641E-01	3.131E-01	2.645E-01	1.370E-01
	(n,2n)	5.991E-04	6.515E-04	8.919E-04	7.139E-04	2.960E-04
	(n,3n)	8.085E-07	8.791E-07	1.204E-06	1.389E-06	6.305E-07
	(n,na)	6.453E-09	7.017E-09	9.607E-09	1.054E-08	4.723E-09
	(n,np)	4.035E-09	4.388E-09	6.007E-09	6.875E-09	3.114E-09
	capture	6.370E-02	4.243E-02	3.071E-02	3.129E-02	2.700E-02
	(n,p)	1.381E-07	1.502E-07	2.056E-07	1.853E-07	7.913E-08
	(n,d)	1.064E-08	1.158E-08	1.585E-08	1.758E-08	7.896E-09
	(n,t)	9.365E-10	1.018E-09	1.394E-09	1.626E-09	7.406E-10
	(n,a)	6.341E-08	6.933E-08	9.464E-08	8.515E-08	3.631E-08
54-Xe-135	total	6.080E+05	2.228E+05	2.646E+04	3.566E+03	6.696E+00
	elastic	9.214E+04	3.524E+04	4.306E+03	6.161E+02	6.441E+00
	inelastic	2.754E-01	3.199E-01	3.777E-01	3.295E-01	1.888E-01
	(n,2n)	3.237E-03	3.619E-03	4.893E-03	3.662E-03	1.476E-03
	(n,3n)	6.263E-07	6.810E-07	9.324E-07	1.075E-06	4.876E-07
	(n,na)	1.803E-09	1.960E-09	2.684E-09	3.033E-09	1.370E-09
	(n,np)	2.258E-09	2.455E-09	3.362E-09	3.906E-09	1.777E-09
	(n,nd)	1.370E-11	1.489E-11	2.039E-11	2.604E-11	1.217E-11
	capture	5.159E+05	1.875E+05	2.215E+04	2.949E+03	6.444E-02
	(n,p)	1.119E-07	1.217E-07	1.666E-07	1.465E-07	6.215E-08
	(n,d)	1.578E-08	1.716E-08	2.350E-08	2.564E-08	1.147E-08
	(n,t)	3.876E-09	4.215E-09	5.770E-09	6.485E-09	2.923E-09
	(n,a)	1.166E-07	1.274E-07	1.738E-07	1.559E-07	6.645E-08
54-Xe-136	total	5.777E+00	5.658E+00	5.554E+00	5.486E+00	5.278E+00
	elastic	5.548E+00	5.427E+00	5.297E+00	5.275E+00	5.176E+00
	inelastic	1.810E-01	2.089E-01	2.498E-01	2.065E-01	1.003E-01
	(n,2n)	1.245E-03	1.359E-03	1.858E-03	1.442E-03	5.925E-04
	(n,3n)	1.330E-06	1.446E-06	1.980E-06	2.235E-06	1.008E-06
	(n,na)	1.125E-09	1.223E-09	1.674E-09	1.904E-09	8.615E-10
	(n,np)	1.248E-09	1.357E-09	1.859E-09	2.169E-09	9.881E-10
	capture	4.614E-02	2.084E-02	5.672E-03	3.122E-03	1.253E-03
	(n,p)	1.109E-08	1.206E-08	1.651E-08	1.700E-08	7.492E-09
	(n,d)	6.461E-09	7.025E-09	9.619E-09	1.085E-08	4.899E-09
	(n,t)	1.256E-09	1.365E-09	1.870E-09	2.181E-09	9.932E-10
	(n,a)	2.594E-08	2.824E-08	3.865E-08	3.694E-08	1.600E-08
55-Cs-133	total	2.000E+01	1.841E+01	1.614E+01	1.274E+01	6.460E+00
	elastic	5.944E+00	6.344E+00	6.528E+00	6.514E+00	5.564E+00
	inelastic	4.920E-01	5.788E-01	6.800E-01	6.315E-01	4.601E-01
	(n,2n)	4.177E-04	4.542E-04	6.218E-04	5.129E-04	2.142E-04
	(n,3n)	2.722E-07	2.959E-07	4.052E-07	4.861E-07	2.233E-07
	(n,na)	7.860E-09	8.546E-09	1.170E-08	1.220E-08	5.402E-09
	(n,np)	9.893E-08	1.076E-07	1.473E-07	1.472E-07	6.444E-08
	(n,nd)	1.317E-10	1.432E-10	1.960E-10	2.467E-10	1.148E-10
	(n,nt)	1.249E-11	1.358E-11	1.859E-11	2.363E-11	1.103E-11
	capture	1.354E+01	1.148E+01	8.919E+00	5.576E+00	4.339E-01
	(n,p)	3.341E-06	3.725E-06	5.018E-06	3.959E-06	1.625E-06
	(n,d)	7.030E-08	7.644E-08	1.046E-07	1.073E-07	4.723E-08
	(n,t)	6.167E-09	6.706E-09	9.181E-09	1.017E-08	4.566E-09
	(n,He-3)	1.160E-12	1.262E-12	1.727E-12	2.143E-12	9.936E-13
	(n,a)	2.686E-07	2.974E-07	4.019E-07	3.287E-07	1.367E-07
55-Cs-134	total	3.731E+01	2.170E+01	1.188E+01	1.005E+01	7.158E+00
	elastic	1.121E+01	8.742E+00	6.640E+00	6.112E+00	5.205E+00
	inelastic	6.957E-01	8.319E-01	9.777E-01	9.671E-01	8.986E-01
	(n,2n)	2.480E-03	2.739E-03	3.724E-03	2.812E-03	1.141E-03
	(n,3n)	2.506E-07	2.724E-07	3.730E-07	4.431E-07	2.029E-07
	(n,na)	7.435E-09	8.084E-09	1.107E-08	1.194E-08	5.332E-09
	(n,np)	8.197E-08	8.913E-08	1.220E-07	1.246E-07	5.482E-08
	(n,nd)	3.482E-09	3.786E-09	5.184E-09	6.213E-09	2.853E-09

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
55-Cs-134	(n,nt)	9.543E-12	1.038E-11	1.421E-11	1.811E-11	8.458E-12
	capture	2.540E+01	1.213E+01	4.260E+00	2.971E+00	1.053E+00
	(n,p)	1.737E-06	1.947E-06	2.594E-06	2.025E-06	8.341E-07
	(n,d)	1.616E-07	1.757E-07	2.406E-07	2.391E-07	1.045E-07
	(n,t)	1.930E-08	2.098E-08	2.873E-08	3.054E-08	1.357E-08
	(n,He-3)	3.110E-12	3.382E-12	4.631E-12	5.703E-12	2.639E-12
	(n,a)	4.793E-07	5.363E-07	7.120E-07	5.711E-07	2.392E-07
55-Cs-135	total	1.137E+01	1.166E+01	1.172E+01	1.138E+01	7.283E+00
	elastic	7.968E+00	8.749E+00	9.204E+00	9.316E+00	6.805E+00
	inelastic	3.739E-01	4.356E-01	5.130E-01	4.560E-01	2.771E-01
	(n,2n)	5.516E-04	5.998E-04	8.212E-04	6.682E-04	2.782E-04
	(n,3n)	3.993E-07	4.342E-07	5.945E-07	7.038E-07	3.219E-07
	(n,na)	1.165E-08	1.267E-08	1.734E-08	1.851E-08	8.237E-09
	(n,np)	1.028E-07	1.118E-07	1.531E-07	1.573E-07	6.930E-08
	(n,nd)	9.094E-11	9.888E-11	1.354E-10	1.714E-10	7.991E-11
	(n,nt)	1.201E-11	1.306E-11	1.788E-11	2.276E-11	1.063E-11
	capture	3.029E+00	2.480E+00	1.997E+00	1.610E+00	2.008E-01
	(n,p)	5.186E-07	5.699E-07	7.761E-07	6.318E-07	2.623E-07
	(n,d)	5.799E-08	6.306E-08	8.633E-08	8.999E-08	3.979E-08
	(n,t)	5.752E-09	6.254E-09	8.563E-09	9.583E-09	4.315E-09
	(n,a)	1.639E-07	1.800E-07	2.450E-07	2.062E-07	8.640E-08
55-Cs-136	total	1.321E+01	1.352E+01	1.358E+01	1.294E+01	7.384E+00
	elastic	9.148E+00	1.040E+01	1.106E+01	1.083E+01	6.812E+00
	inelastic	4.372E-01	5.108E-01	5.997E-01	5.422E-01	3.497E-01
	(n,2n)	2.839E-03	3.141E-03	4.267E-03	3.215E-03	1.303E-03
	(n,3n)	3.806E-07	4.138E-07	5.666E-07	6.682E-07	3.053E-07
	(n,na)	6.804E-09	7.399E-09	1.013E-08	1.105E-08	4.946E-09
	(n,np)	4.566E-08	4.965E-08	6.797E-08	7.148E-08	3.167E-08
	(n,nd)	1.657E-09	1.802E-09	2.467E-09	3.006E-09	1.387E-09
	(n,nt)	5.394E-12	5.865E-12	8.030E-12	1.026E-11	4.794E-12
	capture	3.607E+00	2.598E+00	1.918E+00	1.567E+00	2.213E-01
	(n,p)	4.421E-07	4.889E-07	6.616E-07	5.336E-07	2.209E-07
	(n,d)	9.805E-08	1.066E-07	1.460E-07	1.492E-07	6.566E-08
	(n,t)	1.404E-08	1.527E-08	2.091E-08	2.246E-08	1.001E-08
	(n,a)	1.569E-07	1.725E-07	2.344E-07	1.943E-07	8.115E-08
55-Cs-137	total	5.620E+00	6.090E+00	6.509E+00	6.814E+00	6.989E+00
	elastic	5.321E+00	5.755E+00	6.120E+00	6.472E+00	6.797E+00
	inelastic	2.584E-01	2.998E-01	3.558E-01	3.059E-01	1.678E-01
	(n,2n)	8.613E-04	9.375E-04	1.283E-03	1.015E-03	4.193E-04
	(n,3n)	8.377E-07	9.109E-07	1.247E-06	1.440E-06	6.537E-07
	(n,na)	4.319E-09	4.696E-09	6.430E-09	7.093E-09	3.185E-09
	(n,np)	1.896E-08	2.061E-08	2.822E-08	3.024E-08	1.346E-08
	(n,nd)	8.244E-11	8.964E-11	1.227E-10	1.556E-10	7.255E-11
	(n,nt)	1.209E-11	1.315E-11	1.800E-11	2.293E-11	1.071E-11
	capture	3.890E-02	3.340E-02	3.110E-02	3.331E-02	2.290E-02
	(n,p)	7.305E-08	7.943E-08	1.087E-07	1.026E-07	4.425E-08
	(n,d)	3.398E-08	3.694E-08	5.058E-08	5.433E-08	2.420E-08
	(n,t)	6.456E-09	7.020E-09	9.611E-09	1.078E-08	4.858E-09
	(n,a)	6.698E-08	7.307E-08	9.987E-08	8.804E-08	3.736E-08
56-Ba-130	total	1.782E+01	1.938E+01	1.963E+01	1.775E+01	6.483E+00
	elastic	1.093E+01	1.264E+01	1.335E+01	1.253E+01	5.567E+00
	inelastic	3.040E-01	3.530E-01	4.164E-01	3.643E-01	2.091E-01
	(n,2n)	1.070E-04	1.164E-04	1.593E-04	1.427E-04	6.076E-05
	(n,3n)	1.994E-08	2.168E-08	2.968E-08	3.745E-08	1.791E-08
	(n,na)	8.634E-07	9.388E-07	1.285E-06	1.157E-06	4.941E-07
	(n,np)	2.642E-07	2.873E-07	3.933E-07	3.968E-07	1.739E-07
	(n,nd)	2.260E-13	2.458E-13	3.365E-13	4.357E-13	2.043E-13
	capture	6.580E+00	6.387E+00	5.862E+00	4.849E+00	7.050E-01
	(n,p)	6.298E-05	7.268E-05	9.556E-05	7.206E-05	2.900E-05
	(n,d)	6.561E-08	7.135E-08	9.768E-08	9.963E-08	4.382E-08
	(n,t)	2.009E-09	2.185E-09	2.991E-09	3.393E-09	1.533E-09
	(n,He-3)	2.221E-11	2.415E-11	3.306E-11	3.973E-11	1.826E-11
	(n,a)	3.418E-05	3.947E-05	5.029E-05	3.885E-05	1.642E-05
	(n,2p)	1.700E-11	1.849E-11	2.532E-11	2.940E-11	1.337E-11
56-Ba-132	total	7.054E+00	6.927E+00	6.944E+00	6.906E+00	5.628E+00
	elastic	4.678E+00	4.999E+00	5.250E+00	5.360E+00	4.974E+00
	inelastic	3.073E-01	3.563E-01	4.209E-01	3.646E-01	2.027E-01
	(n,2n)	1.855E-04	2.017E-04	2.761E-04	2.402E-04	1.016E-04
	(n,3n)	7.311E-08	7.950E-08	1.088E-07	1.355E-07	6.291E-08
	(n,na)	1.759E-07	1.913E-07	2.619E-07	2.448E-07	1.055E-07
	(n,np)	4.816E-08	5.237E-08	7.170E-08	7.530E-08	3.334E-08

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
56-Ba-132	capture	2.056E+00	1.564E+00	1.269E+00	1.178E+00	4.497E-01
	(n,p)	9.543E-06	1.079E-05	1.447E-05	1.106E-05	4.474E-06
	(n,d)	3.130E-08	3.404E-08	4.660E-08	4.917E-08	2.181E-08
	(n,t)	1.662E-09	1.807E-09	2.474E-09	2.827E-09	1.280E-09
	(n,He-3)	3.214E-12	3.495E-12	4.785E-12	5.872E-12	2.714E-12
	(n,a)	9.056E-06	1.044E-05	1.347E-05	1.033E-05	4.273E-06
56-Ba-134	total	6.698E+00	7.168E+00	7.457E+00	7.281E+00	5.553E+00
	elastic	5.404E+00	5.870E+00	6.151E+00	6.133E+00	5.172E+00
	inelastic	2.899E-01	3.355E-01	3.970E-01	3.399E-01	1.818E-01
	(n,2n)	2.292E-04	2.492E-04	3.412E-04	2.926E-04	1.233E-04
	(n,3n)	1.864E-07	2.027E-07	2.775E-07	3.390E-07	1.565E-07
	(n,na)	3.344E-08	3.636E-08	4.979E-08	4.736E-08	2.050E-08
	(n,np)	1.933E-08	2.102E-08	2.878E-08	3.107E-08	1.385E-08
	capture	1.008E+00	9.620E-01	9.066E-01	8.070E-01	1.990E-01
	(n,p)	2.524E-06	2.812E-06	3.806E-06	2.977E-06	1.217E-06
	(n,d)	2.532E-08	2.753E-08	3.769E-08	4.034E-08	1.795E-08
	(n,t)	1.343E-09	1.461E-09	2.000E-09	2.301E-09	1.044E-09
	(n,a)	2.285E-06	2.620E-06	3.423E-06	2.639E-06	1.082E-06
56-Ba-135	total	1.144E+01	1.254E+01	1.308E+01	1.222E+01	6.454E+00
	elastic	6.723E+00	7.774E+00	8.429E+00	8.335E+00	5.731E+00
	inelastic	3.353E-01	3.898E-01	4.593E-01	4.043E-01	2.372E-01
	(n,2n)	1.538E-03	1.689E-03	2.302E-03	1.761E-03	7.190E-04
	(n,3n)	1.619E-07	1.760E-07	2.410E-07	2.928E-07	1.350E-07
	(n,na)	7.192E-09	7.820E-09	1.071E-08	1.114E-08	4.930E-09
	(n,np)	1.170E-08	1.272E-08	1.742E-08	1.918E-08	8.601E-09
	(n,nd)	7.875E-11	8.563E-11	1.172E-10	1.481E-10	6.899E-11
	capture	4.360E+00	4.365E+00	4.180E+00	3.471E+00	4.845E-01
	(n,p)	2.293E-06	2.579E-06	3.450E-06	2.695E-06	1.103E-06
	(n,d)	6.456E-08	7.020E-08	9.612E-08	9.862E-08	4.344E-08
	(n,t)	5.362E-09	5.830E-09	7.982E-09	8.867E-09	3.986E-09
	(n,He-3)	1.836E-12	1.996E-12	2.733E-12	3.374E-12	1.562E-12
	(n,a)	2.503E-06	2.879E-06	3.581E-06	2.896E-06	1.333E-06
56-Ba-136	total	4.845E+00	5.320E+00	5.776E+00	6.009E+00	6.092E+00
	elastic	4.461E+00	4.921E+00	5.334E+00	5.618E+00	5.880E+00
	inelastic	2.477E-01	2.862E-01	3.399E-01	2.860E-01	1.463E-01
	(n,2n)	3.483E-04	3.787E-04	5.185E-04	4.337E-04	1.817E-04
	(n,3n)	3.246E-07	3.529E-07	4.832E-07	5.805E-07	2.668E-07
	(n,na)	9.467E-09	1.029E-08	1.409E-08	1.449E-08	6.392E-09
	(n,np)	1.020E-08	1.109E-08	1.519E-08	1.680E-08	7.541E-09
	capture	1.340E-01	1.107E-01	9.979E-02	1.029E-01	6.584E-02
	(n,p)	8.795E-07	9.618E-07	1.313E-06	1.086E-06	4.532E-07
	(n,d)	2.206E-08	2.398E-08	3.283E-08	3.513E-08	1.563E-08
	(n,t)	1.479E-09	1.608E-09	2.202E-09	2.546E-09	1.157E-09
	(n,a)	4.115E-07	4.626E-07	6.185E-07	4.955E-07	2.044E-07
56-Ba-137	total	6.291E+00	6.163E+00	6.197E+00	6.274E+00	5.731E+00
	elastic	5.100E+00	5.400E+00	5.663E+00	5.828E+00	5.504E+00
	inelastic	2.342E-01	2.717E-01	3.228E-01	2.766E-01	1.515E-01
	(n,2n)	2.205E-03	2.431E-03	3.308E-03	2.506E-03	1.019E-03
	(n,3n)	2.140E-07	2.327E-07	3.186E-07	3.822E-07	1.755E-07
	(n,na)	3.775E-09	4.105E-09	5.620E-09	6.132E-09	2.746E-09
	(n,np)	1.040E-08	1.130E-08	1.548E-08	1.733E-08	7.805E-09
	(n,nd)	5.932E-11	6.450E-11	8.831E-11	1.120E-10	5.225E-11
	capture	9.670E-01	4.880E-01	2.064E-01	1.657E-01	7.362E-02
	(n,p)	5.906E-07	6.504E-07	8.846E-07	7.208E-07	2.991E-07
	(n,d)	5.361E-08	5.829E-08	7.981E-08	8.324E-08	3.681E-08
	(n,t)	5.696E-09	6.193E-09	8.479E-09	9.374E-09	4.208E-09
	(n,a)	4.307E-07	4.875E-07	6.338E-07	5.113E-07	2.170E-07
56-Ba-138	total	5.495E+00	5.429E+00	5.386E+00	5.284E+00	4.891E+00
	elastic	5.258E+00	5.199E+00	5.137E+00	5.083E+00	4.795E+00
	inelastic	1.724E-01	1.990E-01	2.395E-01	1.959E-01	9.263E-02
	(n,2n)	5.509E-04	5.990E-04	8.202E-04	6.681E-04	2.782E-04
	(n,3n)	7.000E-07	7.611E-07	1.042E-06	1.229E-06	5.614E-07
	(n,na)	1.255E-08	1.364E-08	1.868E-08	1.968E-08	8.731E-09
	(n,np)	2.960E-09	3.219E-09	4.407E-09	4.982E-09	2.249E-09
	capture	6.423E-02	2.934E-02	8.466E-03	4.865E-03	3.317E-03
	(n,p)	1.252E-07	1.361E-07	1.864E-07	1.793E-07	7.771E-08
	(n,d)	9.538E-09	1.037E-08	1.420E-08	1.556E-08	6.967E-09
	(n,t)	1.086E-09	1.181E-09	1.617E-09	1.864E-09	8.464E-10
	(n,a)	2.955E-07	3.272E-07	4.431E-07	3.642E-07	1.514E-07
56-Ba-140	total	4.762E+00	4.846E+00	4.992E+00	5.017E+00	5.112E+00

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
56-Ba-140	elastic	4.211E+00	4.411E+00	4.597E+00	4.691E+00	4.943E+00
	inelastic	2.606E-01	3.018E-01	3.567E-01	3.058E-01	1.639E-01
	(n,2n)	4.066E-03	4.539E-03	6.140E-03	4.595E-03	1.853E-03
	(n,3n)	3.912E-05	4.253E-05	5.823E-05	5.575E-05	2.412E-05
	(n,na)	1.569E-07	1.725E-07	2.349E-07	2.064E-07	8.743E-08
	(n,np)	1.614E-09	1.754E-09	2.402E-09	2.821E-09	1.288E-09
	(n,nd)	3.032E-11	3.297E-11	4.514E-11	5.754E-11	2.687E-11
	(n,nt)	2.842E-10	3.090E-10	4.231E-10	5.222E-10	2.418E-10
	capture	2.783E-01	1.219E-01	2.777E-02	1.109E-02	2.345E-03
	(n,p)	5.926E-08	6.443E-08	8.822E-08	8.774E-08	3.835E-08
	(n,d)	1.034E-08	1.124E-08	1.539E-08	1.741E-08	7.865E-09
	(n,t)	1.028E-08	1.117E-08	1.530E-08	1.670E-08	7.467E-09
	(n,a)	1.742E-07	1.948E-07	2.616E-07	2.086E-07	8.599E-08
57-La-138	total	2.723E+01	2.152E+01	1.581E+01	1.198E+01	5.776E+00
	elastic	8.876E+00	7.980E+00	7.128E+00	6.821E+00	5.202E+00
	inelastic	3.741E-01	4.365E-01	5.138E-01	4.597E-01	2.907E-01
	(n,2n)	1.351E-03	1.476E-03	2.017E-03	1.560E-03	6.401E-04
	(n,3n)	1.023E-07	1.112E-07	1.522E-07	1.861E-07	8.596E-08
	(n,na)	1.001E-08	1.088E-08	1.490E-08	1.559E-08	6.905E-09
	(n,np)	1.198E-07	1.302E-07	1.783E-07	1.786E-07	7.818E-08
	(n,nd)	3.235E-09	3.517E-09	4.815E-09	5.793E-09	2.662E-09
	(n,nt)	3.151E-12	3.426E-12	4.691E-12	6.004E-12	2.807E-12
	capture	1.798E+01	1.310E+01	8.169E+00	4.694E+00	2.827E-01
	(n,p)	5.839E-06	6.681E-06	8.466E-06	6.654E-06	2.847E-06
	(n,d)	1.620E-07	1.761E-07	2.411E-07	2.411E-07	1.055E-07
	(n,t)	1.608E-08	1.748E-08	2.393E-08	2.572E-08	1.146E-08
	(n,He-3)	9.372E-12	1.019E-11	1.395E-11	1.695E-11	7.815E-12
	(n,a)	1.227E-06	1.391E-06	1.807E-06	1.428E-06	6.096E-07
57-La-139	total	9.689E+00	8.276E+00	7.201E+00	6.824E+00	5.780E+00
	elastic	7.657E+00	7.038E+00	6.427E+00	6.230E+00	5.552E+00
	inelastic	2.740E-01	3.190E-01	3.783E-01	3.305E-01	1.963E-01
	(n,2n)	4.966E-04	5.400E-04	7.393E-04	6.071E-04	2.533E-04
	(n,3n)	1.988E-07	2.162E-07	2.960E-07	3.583E-07	1.650E-07
	(n,na)	1.337E-08	1.454E-08	1.990E-08	2.068E-08	9.147E-09
	(n,np)	1.689E-07	1.837E-07	2.514E-07	2.577E-07	1.135E-07
	(n,nd)	1.539E-10	1.674E-10	2.292E-10	2.874E-10	1.337E-10
	(n,nt)	8.942E-12	9.723E-12	1.331E-11	1.695E-11	7.916E-12
	capture	1.757E+00	9.169E-01	3.928E-01	2.613E-01	3.062E-02
	(n,p)	4.255E-07	4.632E-07	6.338E-07	5.535E-07	2.344E-07
	(n,d)	5.054E-08	5.496E-08	7.524E-08	7.857E-08	3.476E-08
	(n,t)	5.353E-09	5.821E-09	7.970E-09	8.963E-09	4.042E-09
	(n,He-3)	1.078E-12	1.172E-12	1.605E-12	1.990E-12	9.223E-13
	(n,a)	4.967E-07	5.518E-07	7.441E-07	6.008E-07	2.488E-07
58-Ce-140	total	4.504E+00	4.793E+00	5.104E+00	5.239E+00	5.866E+00
	elastic	4.241E+00	4.560E+00	4.864E+00	5.047E+00	5.774E+00
	inelastic	1.615E-01	1.864E-01	2.251E-01	1.831E-01	8.523E-02
	(n,2n)	3.425E-04	3.724E-04	5.099E-04	4.304E-04	1.807E-04
	(n,3n)	1.441E-07	1.567E-07	2.145E-07	2.626E-07	1.213E-07
	(n,na)	3.884E-08	4.223E-08	5.782E-08	5.835E-08	2.562E-08
	(n,np)	1.868E-08	2.031E-08	2.781E-08	3.033E-08	1.356E-08
	(n,nd)	1.936E-13	2.105E-13	2.883E-13	3.735E-13	1.752E-13
	capture	1.011E-01	4.613E-02	1.345E-02	8.137E-03	6.104E-03
	(n,p)	5.791E-07	6.299E-07	8.623E-07	7.610E-07	3.232E-07
	(n,d)	2.753E-08	2.993E-08	4.099E-08	4.363E-08	1.939E-08
	(n,t)	1.850E-09	2.011E-09	2.754E-09	3.155E-09	1.430E-09
	(n,a)	1.074E-06	1.209E-06	1.609E-06	1.283E-06	5.303E-07
58-Ce-141	total	2.250E+01	2.088E+01	1.802E+01	1.344E+01	5.631E+00
	elastic	6.610E+00	7.310E+00	7.596E+00	7.179E+00	5.242E+00
	inelastic	2.038E-01	2.352E-01	2.795E-01	2.338E-01	1.165E-01
	(n,2n)	8.492E-03	9.743E-03	1.297E-02	9.676E-03	3.871E-03
	(n,3n)	1.110E-06	1.207E-06	1.653E-06	1.884E-06	8.522E-07
	(n,na)	2.552E-08	2.775E-08	3.799E-08	3.745E-08	1.635E-08
	(n,np)	1.573E-08	1.710E-08	2.341E-08	2.614E-08	1.176E-08
	(n,nd)	1.037E-09	1.127E-09	1.543E-09	1.883E-09	8.692E-10
	(n,nt)	1.027E-12	1.117E-12	1.529E-12	1.966E-12	9.201E-13
	capture	1.567E+01	1.332E+01	1.013E+01	6.012E+00	2.678E-01
	(n,p)	3.828E-07	4.167E-07	5.702E-07	4.992E-07	2.116E-07
	(n,d)	5.587E-08	6.075E-08	8.318E-08	8.609E-08	3.800E-08
	(n,t)	2.504E-08	2.723E-08	3.728E-08	3.866E-08	1.707E-08
	(n,a)	1.713E-05	1.991E-05	2.359E-05	2.071E-05	1.234E-05
58-Ce-142	total	9.200E+00	1.129E+01	1.303E+01	1.428E+01	1.143E+01

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
58-Ce-142	elastic	8.714E+00	1.085E+01	1.258E+01	1.390E+01	1.122E+01
	inelastic	2.917E-01	3.378E-01	3.990E-01	3.421E-01	1.836E-01
	(n,2n)	2.314E-03	2.541E-03	3.464E-03	2.636E-03	1.074E-03
	(n,3n)	4.188E-06	4.554E-06	6.235E-06	6.548E-06	2.899E-06
	(n,na)	1.322E-06	1.462E-06	1.986E-06	1.620E-06	6.717E-07
	(n,np)	9.643E-09	1.048E-08	1.436E-08	1.620E-08	7.310E-09
	(n,nd)	3.407E-11	3.704E-11	5.072E-11	6.448E-11	3.009E-11
	(n,nt)	5.353E-11	5.821E-11	7.969E-11	9.975E-11	4.637E-11
	capture	1.915E-01	9.757E-02	4.208E-02	3.489E-02	2.549E-02
	(n,p)	2.568E-07	2.792E-07	3.823E-07	3.565E-07	1.535E-07
	(n,d)	2.082E-08	2.264E-08	3.100E-08	3.383E-08	1.514E-08
	(n,t)	7.379E-09	8.023E-09	1.099E-08	1.196E-08	5.347E-09
	(n,a)	1.948E-06	2.220E-06	2.903E-06	2.253E-06	9.326E-07
58-Ce-144	total	6.502E+00	7.178E+00	7.662E+00	7.592E+00	5.535E+00
	elastic	5.942E+00	6.653E+00	7.123E+00	7.123E+00	5.288E+00
	inelastic	3.181E-01	3.698E-01	4.357E-01	3.831E-01	2.225E-01
	(n,2n)	3.219E-03	3.552E-03	4.830E-03	3.638E-03	1.475E-03
	(n,3n)	1.957E-05	2.128E-05	2.913E-05	2.931E-05	1.283E-05
	(n,na)	2.857E-08	3.133E-08	4.272E-08	3.877E-08	1.657E-08
	(n,np)	1.769E-09	1.924E-09	2.634E-09	3.050E-09	1.386E-09
	(n,nd)	1.685E-11	1.832E-11	2.509E-11	3.197E-11	1.493E-11
	(n,nt)	5.383E-11	5.853E-11	8.014E-11	1.006E-10	4.680E-11
	capture	2.321E-01	1.470E-01	9.401E-02	7.906E-02	2.214E-02
	(n,p)	8.726E-08	9.489E-08	1.299E-07	1.270E-07	5.529E-08
	(n,d)	8.589E-09	9.340E-09	1.279E-08	1.437E-08	6.479E-09
	(n,t)	7.864E-09	8.551E-09	1.171E-08	1.288E-08	5.774E-09
	(n,a)	4.528E-07	5.194E-07	6.768E-07	5.255E-07	2.166E-07
59-Pr-141	total	1.337E+01	1.413E+01	1.492E+01	1.555E+01	9.542E+00
	elastic	1.026E+01	1.217E+01	1.360E+01	1.441E+01	9.040E+00
	inelastic	4.181E-01	4.911E-01	5.786E-01	5.320E-01	3.733E-01
	(n,2n)	3.270E-04	3.556E-04	4.868E-04	4.107E-04	1.724E-04
	(n,3n)	4.993E-08	5.430E-08	7.434E-08	9.246E-08	4.294E-08
	(n,na)	3.757E-08	4.085E-08	5.593E-08	5.469E-08	2.383E-08
	(n,np)	3.949E-07	4.294E-07	5.880E-07	5.569E-07	2.405E-07
	(n,nd)	2.351E-10	2.556E-10	3.500E-10	4.354E-10	2.020E-10
	(n,nt)	2.445E-12	2.659E-12	3.641E-12	4.643E-12	2.169E-12
	capture	2.684E+00	1.458E+00	7.394E-01	6.054E-01	1.289E-01
	(n,p)	2.782E-06	3.079E-06	4.173E-06	3.312E-06	1.364E-06
	(n,d)	1.312E-07	1.427E-07	1.954E-07	1.921E-07	8.376E-08
	(n,t)	5.405E-09	5.877E-09	8.046E-09	8.787E-09	3.932E-09
	(n,He-3)	9.533E-12	1.036E-11	1.419E-11	1.711E-11	7.869E-12
	(n,a)	1.797E-06	2.043E-06	2.674E-06	2.082E-06	8.655E-07
59-Pr-143	total	4.219E+01	3.672E+01	3.093E+01	2.412E+01	8.013E+00
	elastic	2.269E+01	2.563E+01	2.537E+01	2.073E+01	7.418E+00
	inelastic	4.794E-01	5.653E-01	6.648E-01	6.233E-01	4.836E-01
	(n,2n)	1.991E-03	2.185E-03	2.979E-03	2.263E-03	9.218E-04
	(n,3n)	4.668E-06	5.076E-06	6.950E-06	7.386E-06	3.278E-06
	(n,na)	2.907E-06	3.282E-06	4.415E-06	3.353E-06	1.354E-06
	(n,np)	1.312E-07	1.427E-07	1.954E-07	1.951E-07	8.535E-08
	(n,nd)	1.991E-09	2.165E-09	2.964E-09	3.569E-09	1.641E-09
	(n,nt)	1.820E-09	1.979E-09	2.710E-09	3.223E-09	1.476E-09
	capture	1.897E+01	1.051E+01	4.890E+00	2.766E+00	1.100E-01
	(n,p)	7.738E-07	8.471E-07	1.156E-06	9.579E-07	3.998E-07
	(n,d)	9.401E-08	1.022E-07	1.399E-07	1.407E-07	6.166E-08
	(n,t)	3.571E-08	3.883E-08	5.316E-08	5.430E-08	2.388E-08
	(n,He-3)	2.408E-12	2.619E-12	3.585E-12	4.415E-12	2.043E-12
	(n,a)	3.975E-06	4.561E-06	5.830E-06	4.551E-06	1.966E-06
60-Nd-142	total	9.096E+00	7.331E+00	6.295E+00	6.132E+00	6.057E+00
	elastic	5.584E+00	5.639E+00	5.671E+00	5.752E+00	5.900E+00
	inelastic	1.962E-01	2.264E-01	2.717E-01	2.232E-01	1.061E-01
	(n,2n)	2.336E-04	2.540E-04	3.478E-04	2.985E-04	1.258E-04
	(n,3n)	2.589E-08	2.815E-08	3.854E-08	4.845E-08	2.337E-08
	(n,na)	1.047E-07	1.138E-07	1.558E-07	1.444E-07	6.215E-08
	(n,np)	1.889E-07	2.054E-07	2.813E-07	2.891E-07	1.273E-07
	(n,nd)	7.636E-13	8.303E-13	1.137E-12	1.469E-12	6.888E-13
	capture	3.316E+00	1.463E+00	3.523E-01	1.554E-01	5.024E-02
	(n,p)	4.169E-06	4.600E-06	6.256E-06	4.938E-06	2.030E-06
	(n,d)	3.973E-08	4.320E-08	5.915E-08	6.054E-08	2.665E-08
	(n,t)	1.299E-09	1.413E-09	1.934E-09	2.204E-09	9.971E-10
	(n,He-3)	4.368E-12	4.750E-12	6.503E-12	7.889E-12	3.635E-12
	(n,a)	9.142E-06	1.051E-05	1.353E-05	1.045E-05	4.372E-06
60-Nd-143	total	9.402E+01	5.424E+01	2.895E+01	2.385E+01	8.885E+00

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
60-Nd-143	elastic	3.779E+01	2.958E+01	2.283E+01	2.085E+01	8.427E+00
	inelastic	2.545E-01	2.938E-01	3.479E-01	2.929E-01	1.489E-01
	(n,2n)	4.866E-03	5.497E-03	7.388E-03	5.516E-03	2.216E-03
	(n,3n)	3.182E-07	3.460E-07	4.738E-07	5.643E-07	2.587E-07
	(n,na)	4.574E-08	4.978E-08	6.812E-08	6.240E-08	2.677E-08
	(n,np)	1.342E-08	1.459E-08	1.997E-08	2.151E-08	9.593E-09
	(n,nd)	7.483E-10	8.137E-10	1.114E-09	1.356E-09	6.254E-10
	capture	5.607E+01	2.430E+01	5.768E+00	2.752E+00	3.061E-01
	(n,p)	1.948E-06	2.143E-06	2.915E-06	2.377E-06	9.871E-07
	(n,d)	7.011E-09	7.623E-08	1.044E-07	1.043E-07	4.565E-08
	(n,t)	1.496E-08	1.626E-08	2.227E-08	2.298E-08	1.014E-08
	(n,He-3)	6.187E-12	6.727E-12	9.210E-12	1.118E-11	5.149E-12
	(n,a)	3.158E-03	1.523E-03	5.871E-04	4.248E-04	2.872E-04
60-Nd-144	total	2.205E+01	2.674E+01	3.032E+01	3.124E+01	1.463E+01
	elastic	2.094E+01	2.593E+01	2.964E+01	3.066E+01	1.432E+01
	inelastic	3.625E-01	4.198E-01	4.958E-01	4.258E-01	2.297E-01
	(n,2n)	1.163E-03	1.267E-03	1.733E-03	1.346E-03	5.531E-04
	(n,3n)	2.111E-06	2.295E-06	3.143E-06	3.443E-06	1.540E-06
	(n,na)	2.559E-06	2.846E-06	3.854E-06	2.949E-06	1.199E-06
	(n,np)	1.892E-08	2.058E-08	2.817E-08	3.104E-08	1.392E-08
	(n,nd)	7.593E-11	8.256E-11	1.130E-10	1.432E-10	6.677E-11
	(n,nt)	4.244E-11	4.615E-11	6.318E-11	7.968E-11	3.711E-11
	capture	7.444E-01	3.927E-01	1.850E-01	1.532E-01	7.538E-02
	(n,p)	1.198E-06	1.303E-06	1.784E-06	1.536E-06	6.482E-07
	(n,d)	7.051E-08	7.667E-08	1.050E-07	1.106E-07	4.904E-08
	(n,t)	2.175E-08	2.365E-08	3.238E-08	3.501E-08	1.562E-08
	(n,He-3)	1.984E-12	2.157E-12	2.953E-12	3.649E-12	1.690E-12
	(n,a)	4.119E-06	4.689E-06	6.008E-06	4.769E-06	2.081E-06
60-Nd-145	total	3.416E+01	3.134E+01	2.765E+01	2.399E+01	1.150E+01
	elastic	2.148E+01	2.225E+01	2.137E+01	1.943E+01	1.045E+01
	inelastic	5.480E-01	6.459E-01	7.582E-01	7.101E-01	5.433E-01
	(n,2n)	8.557E-03	9.778E-03	1.307E-02	9.736E-03	3.896E-03
	(n,3n)	4.945E-06	5.377E-06	7.362E-06	7.937E-06	3.535E-06
	(n,na)	9.010E-08	9.869E-08	1.346E-07	1.167E-07	4.935E-08
	(n,np)	1.050E-08	1.142E-08	1.563E-08	1.729E-08	7.764E-09
	(n,nd)	3.769E-10	4.099E-10	5.612E-10	6.884E-10	3.182E-10
	(n,nt)	1.559E-11	1.695E-11	2.321E-11	2.922E-11	1.360E-11
	capture	1.210E+01	8.477E+00	5.606E+00	3.857E+00	5.047E-01
	(n,p)	7.639E-07	8.326E-07	1.139E-06	9.776E-07	4.123E-07
	(n,d)	3.982E-08	4.330E-08	5.928E-08	6.051E-08	2.662E-08
	(n,t)	1.149E-08	1.249E-08	1.710E-08	1.788E-08	7.912E-09
	(n,a)	3.496E-05	2.952E-05	2.623E-05	2.158E-05	1.007E-05
60-Nd-146	total	1.129E+01	1.170E+01	1.200E+01	1.262E+01	1.154E+01
	elastic	1.051E+01	1.097E+01	1.124E+01	1.194E+01	1.112E+01
	inelastic	4.493E-01	5.229E-01	6.158E-01	5.465E-01	3.248E-01
	(n,2n)	1.652E-03	1.805E-03	2.466E-03	1.887E-03	7.718E-04
	(n,3n)	3.661E-06	3.981E-06	5.450E-06	5.797E-06	2.573E-06
	(n,na)	1.308E-07	1.658E-07	2.259E-07	1.980E-07	8.386E-08
	(n,np)	1.388E-08	1.510E-08	2.067E-08	2.336E-08	1.055E-08
	(n,nd)	5.166E-11	5.617E-11	7.691E-11	9.779E-11	4.564E-11
	(n,nt)	2.603E-11	2.831E-11	3.876E-11	4.899E-11	2.283E-11
	capture	3.207E-01	2.041E-01	1.378E-01	1.343E-01	1.011E-01
	(n,p)	2.870E-07	3.120E-07	4.272E-07	3.886E-07	1.663E-07
	(n,d)	4.850E-08	5.274E-08	7.221E-08	7.868E-08	3.519E-08
	(n,t)	1.448E-08	1.575E-08	2.156E-08	2.350E-08	1.051E-08
	(n,a)	7.413E-07	8.286E-07	1.099E-06	8.882E-07	3.736E-07
60-Nd-147	total	1.200E+02	7.093E+01	3.879E+01	2.916E+01	1.145E+01
	elastic	3.507E+01	2.582E+01	1.808E+01	1.569E+01	9.548E+00
	inelastic	7.019E-01	8.354E-01	9.800E-01	9.569E-01	8.300E-01
	(n,2n)	1.300E-02	1.504E-02	1.990E-02	1.484E-02	5.926E-03
	(n,3n)	1.091E-05	1.186E-05	1.624E-05	1.676E-05	7.386E-06
	(n,na)	1.824E-08	1.986E-08	2.717E-08	2.552E-08	1.102E-08
	(n,np)	4.410E-09	4.796E-09	6.566E-09	7.437E-09	3.360E-09
	(n,nd)	3.287E-10	3.574E-10	4.893E-10	6.030E-10	2.791E-10
	(n,nt)	2.450E-11	2.664E-11	3.648E-11	4.582E-11	2.132E-11
	capture	8.424E+01	4.426E+01	1.971E+01	1.251E+01	1.069E+00
	(n,p)	2.428E-07	2.640E-07	3.614E-07	3.265E-07	1.395E-07
	(n,d)	2.703E-08	2.939E-08	4.024E-08	4.233E-08	1.876E-08
	(n,t)	9.961E-09	1.083E-08	1.483E-08	1.578E-08	7.013E-09
	(n,a)	8.558E-07	9.797E-07	1.218E-06	1.048E-06	5.821E-07
60-Nd-148	total	2.223E+01	2.604E+01	2.853E+01	2.860E+01	1.212E+01

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
60-Nd-148	elastic	2.088E+01	2.476E+01	2.724E+01	2.741E+01	1.158E+01
	inelastic	5.309E-01	6.201E-01	7.287E-01	6.582E-01	4.154E-01
	(n,2n)	2.050E-03	2.248E-03	3.066E-03	2.327E-03	9.483E-04
	(n,3n)	7.719E-06	8.393E-06	1.149E-05	1.176E-05	5.169E-06
	(n,na)	3.352E-08	3.649E-08	4.993E-08	5.000E-08	2.191E-08
	(n,np)	3.228E-09	3.510E-09	4.806E-09	5.563E-09	2.529E-09
	(n,nd)	2.019E-11	2.195E-11	3.005E-11	3.838E-11	1.793E-11
	(n,nt)	3.462E-11	3.765E-11	5.155E-11	6.514E-11	3.035E-11
	capture	8.150E-01	6.602E-01	5.676E-01	5.335E-01	1.265E-01
	(n,p)	1.387E-07	1.508E-07	2.064E-07	1.958E-07	8.460E-08
	(n,d)	2.118E-08	2.303E-08	3.154E-08	3.540E-08	1.596E-08
	(n,t)	1.309E-08	1.423E-08	1.949E-08	2.162E-08	9.714E-09
	(n,a)	2.586E-07	2.842E-07	3.852E-07	3.272E-07	1.378E-07
60-Nd-150	total	9.230E+00	1.021E+01	1.098E+01	1.157E+01	1.083E+01
	elastic	7.926E+00	8.817E+00	9.485E+00	1.018E+01	1.007E+01
	inelastic	6.626E-01	7.802E-01	9.171E-01	8.545E-01	6.143E-01
	(n,2n)	1.742E-03	1.909E-03	2.604E-03	1.989E-03	8.120E-04
	(n,3n)	8.968E-06	9.751E-06	1.335E-05	1.353E-05	5.933E-06
	(n,na)	1.490E-08	1.620E-08	2.218E-08	2.350E-08	1.044E-08
	(n,np)	3.374E-09	3.668E-09	5.022E-09	5.875E-09	2.678E-09
	(n,nd)	7.629E-13	8.295E-13	1.136E-12	1.468E-12	6.884E-13
	(n,nt)	9.411E-12	1.023E-11	1.401E-11	1.782E-11	8.319E-12
	capture	6.404E-01	6.094E-01	5.786E-01	5.349E-01	1.452E-01
	(n,p)	7.982E-08	8.679E-08	1.188E-07	1.135E-07	4.914E-08
	(n,d)	1.291E-08	1.403E-08	1.921E-08	2.193E-08	9.930E-09
	(n,t)	5.251E-09	5.710E-09	7.818E-09	8.867E-09	4.008E-09
	(n,a)	1.360E-07	1.486E-07	2.028E-07	1.829E-07	7.806E-08
61-Pm-147	total	1.090E+02	9.703E+01	7.786E+01	4.983E+01	9.066E+00
	elastic	3.292E+01	3.318E+01	2.945E+01	2.129E+01	7.443E+00
	inelastic	5.529E-01	6.493E-01	7.605E-01	7.054E-01	5.049E-01
	(n,2n)	1.436E-03	1.566E-03	2.141E-03	1.649E-03	6.757E-04
	(n,3n)	3.387E-06	3.683E-06	5.042E-06	5.509E-06	2.462E-06
	(n,na)	1.149E-07	1.273E-07	1.727E-07	1.369E-07	5.631E-08
	(n,np)	7.169E-08	7.795E-08	1.067E-07	1.062E-07	4.644E-08
	(n,nd)	9.395E-10	1.021E-09	1.399E-09	1.691E-09	7.783E-10
	(n,nt)	4.331E-10	4.709E-10	6.448E-10	7.789E-10	3.584E-10
	capture	7.549E+01	6.318E+01	4.764E+01	2.783E+01	1.118E+00
	(n,p)	1.103E-06	1.207E-06	1.647E-06	1.361E-06	5.680E-07
	(n,d)	6.304E-08	6.854E-08	9.385E-08	9.409E-08	4.120E-08
	(n,t)	1.591E-08	1.730E-08	2.369E-08	2.448E-08	1.080E-08
	(n,He-3)	1.560E-12	1.696E-12	2.323E-12	2.849E-12	1.317E-12
	(n,a)	3.057E-06	3.505E-06	4.391E-06	3.610E-06	1.846E-06
61-Pm-148	total	3.970E+02	2.060E+02	8.141E+01	4.581E+01	9.278E+00
	elastic	1.081E+01	1.219E+01	1.239E+01	1.137E+01	6.733E+00
	inelastic	7.291E-01	8.647E-01	1.012E+00	9.794E-01	7.922E-01
	(n,2n)	5.698E-03	6.471E-03	8.678E-03	6.470E-03	2.594E-03
	(n,3n)	4.893E-06	5.320E-06	7.284E-06	7.820E-06	3.479E-06
	(n,na)	5.658E-08	6.185E-08	8.445E-08	7.449E-08	3.163E-08
	(n,np)	3.435E-08	3.735E-08	5.114E-08	5.251E-08	2.313E-08
	(n,nd)	5.743E-09	6.245E-09	8.550E-09	9.867E-09	4.481E-09
	(n,nt)	3.555E-10	3.866E-10	5.292E-10	6.407E-10	2.950E-10
	capture	3.851E+02	1.927E+02	6.797E+01	3.345E+01	1.751E+00
	(n,p)	9.480E-07	1.040E-06	1.415E-06	1.158E-06	4.823E-07
	(n,d)	8.610E-08	9.362E-08	1.282E-07	1.257E-07	5.475E-08
	(n,t)	2.657E-08	2.889E-08	3.955E-08	3.954E-08	1.730E-08
	(n,He-3)	2.087E-12	2.269E-12	3.107E-12	3.796E-12	1.752E-12
	(n,a)	4.757E-06	5.548E-06	6.696E-06	6.036E-06	4.017E-06
	total	5.565E+03	2.519E+03	3.886E+02	9.825E+01	9.784E+00
	elastic	4.064E+01	2.743E+01	1.511E+01	1.187E+01	6.387E+00
	inelastic	5.921E-01	6.951E-01	8.122E-01	7.559E-01	5.222E-01
	(n,2n)	5.698E-03	6.471E-03	8.678E-03	6.470E-03	2.594E-03
	(n,3n)	4.893E-06	5.320E-06	7.284E-06	7.820E-06	3.479E-06
	(n,na)	5.658E-08	6.185E-08	8.445E-08	7.449E-08	3.163E-08
	(n,np)	3.435E-08	3.735E-08	5.114E-08	5.251E-08	2.313E-08
	(n,nd)	5.743E-09	6.245E-09	8.550E-09	9.867E-09	4.481E-09
	(n,nt)	3.555E-10	3.866E-10	5.292E-10	6.407E-10	2.950E-10
	capture	5.524E+03	2.491E+03	3.727E+02	8.563E+01	2.872E+00
	(n,p)	9.480E-07	1.040E-06	1.415E-06	1.158E-06	4.823E-07
	(n,d)	8.610E-08	9.362E-08	1.282E-07	1.257E-07	5.475E-08
	(n,t)	2.657E-08	2.889E-08	3.955E-08	3.954E-08	1.730E-08
	(n,He-3)	2.087E-12	2.269E-12	3.107E-12	3.796E-12	1.752E-12
	(n,a)	4.757E-06	5.548E-06	6.696E-06	6.036E-06	4.017E-06
61-Pm-149	total	2.824E+02	1.497E+02	6.505E+01	4.035E+01	9.592E+00

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
61-Pm-149	elastic	1.619E+01	1.843E+01	1.874E+01	1.654E+01	7.802E+00
	inelastic	6.985E-01	8.269E-01	9.680E-01	9.287E-01	7.142E-01
	(n,2n)	1.884E-03	2.063E-03	2.816E-03	2.142E-03	8.736E-04
	(n,3n)	7.678E-06	8.348E-06	1.143E-05	1.194E-05	5.275E-06
	(n,na)	5.860E-08	6.428E-08	8.763E-08	7.600E-08	3.212E-08
	(n,np)	4.212E-08	4.580E-08	6.270E-08	6.438E-08	2.836E-08
	(n,nd)	7.423E-10	8.071E-10	1.105E-09	1.347E-09	6.218E-10
	(n,nt)	6.905E-10	7.508E-10	1.028E-09	1.236E-09	5.678E-10
	capture	2.649E+02	1.302E+02	4.529E+01	2.287E+01	1.074E+00
	(n,p)	4.138E-07	4.505E-07	6.165E-07	5.300E-07	2.236E-07
	(n,d)	4.456E-08	4.845E-08	6.634E-08	6.846E-08	3.019E-08
	(n,t)	1.500E-08	1.631E-08	2.234E-08	2.336E-08	1.034E-08
	(n,a)	7.848E-07	8.890E-07	1.150E-06	9.178E-07	3.979E-07
62-Sm-144	total	1.906E+01	2.162E+01	2.277E+01	2.175E+01	1.103E+01
	elastic	1.819E+01	2.080E+01	2.198E+01	2.108E+01	1.082E+01
	inelastic	1.856E-01	2.143E-01	2.584E-01	2.109E-01	9.911E-02
	(n,2n)	9.632E-05	1.047E-04	1.434E-04	1.305E-04	5.578E-05
	(n,3n)	1.245E-09	1.353E-09	1.853E-09	2.339E-09	1.233E-09
	(n,na)	2.596E-07	2.823E-07	3.865E-07	3.469E-07	1.479E-07
	(n,np)	1.207E-06	1.313E-06	1.798E-06	1.767E-06	7.695E-07
	(n,nd)	1.548E-12	1.684E-12	2.305E-12	2.959E-12	1.384E-12
	capture	6.819E-01	5.990E-01	5.318E-01	4.575E-01	1.084E-01
	(n,p)	2.239E-05	2.539E-05	3.387E-05	2.586E-05	1.047E-05
	(n,d)	7.769E-08	8.448E-08	1.157E-07	1.146E-07	5.005E-08
	(n,t)	1.626E-09	1.768E-09	2.421E-09	2.743E-09	1.240E-09
	(n,He-3)	3.163E-11	3.439E-11	4.709E-11	5.544E-11	2.533E-11
	(n,a)	5.171E-05	5.985E-05	7.468E-05	5.888E-05	2.625E-05
	(n,2p)	1.197E-11	1.301E-11	1.781E-11	2.095E-11	9.566E-12
62-Sm-147	total	5.022E+01	5.103E+01	4.882E+01	4.060E+01	1.372E+01
	elastic	2.166E+01	2.554E+01	2.713E+01	2.501E+01	1.219E+01
	inelastic	5.855E-01	6.890E-01	8.087E-01	7.523E-01	5.445E-01
	(n,2n)	2.104E-03	2.345E-03	3.174E-03	2.390E-03	9.666E-04
	(n,3n)	5.459E-07	5.935E-07	8.126E-07	9.223E-07	4.166E-07
	(n,na)	3.970E-07	4.373E-07	5.946E-07	5.008E-07	2.099E-07
	(n,np)	5.611E-08	6.101E-08	8.353E-08	8.958E-08	3.989E-08
	(n,nd)	1.594E-09	1.733E-09	2.373E-09	2.896E-09	1.337E-09
	(n,nt)	1.735E-11	1.887E-11	2.583E-11	3.269E-11	1.524E-11
	capture	2.795E+01	2.470E+01	2.079E+01	1.493E+01	9.758E-01
	(n,p)	3.323E-06	3.655E-06	4.974E-06	3.984E-06	1.646E-06
	(n,d)	3.328E-07	3.618E-07	4.954E-07	4.855E-07	2.114E-07
	(n,t)	4.704E-08	5.115E-08	7.004E-08	7.223E-08	3.185E-08
	(n,He-3)	3.709E-11	4.033E-11	5.522E-11	6.619E-11	3.040E-11
	(n,a)	2.898E-04	2.607E-04	2.269E-04	1.671E-04	2.446E-05
62-Sm-148	total	1.744E+01	2.075E+01	2.282E+01	2.270E+01	1.157E+01
	elastic	1.540E+01	1.864E+01	2.068E+01	2.075E+01	1.105E+01
	inelastic	3.807E-01	4.419E-01	5.211E-01	4.544E-01	2.551E-01
	(n,2n)	9.664E-04	1.053E-03	1.440E-03	1.131E-03	4.662E-04
	(n,3n)	1.674E-06	1.820E-06	2.492E-06	2.780E-06	1.249E-06
	(n,na)	1.287E-06	1.425E-06	1.934E-06	1.508E-06	6.174E-07
	(n,np)	3.161E-08	3.437E-08	4.705E-08	5.152E-08	2.307E-08
	(n,nd)	6.757E-11	7.348E-11	1.006E-10	1.275E-10	5.946E-11
	(n,nt)	8.403E-12	9.136E-12	1.251E-11	1.590E-11	7.421E-12
	capture	1.648E+00	1.659E+00	1.634E+00	1.494E+00	2.661E-01
	(n,p)	9.072E-07	9.885E-07	1.352E-06	1.148E-06	4.826E-07
	(n,d)	1.069E-07	1.162E-07	1.591E-07	1.672E-07	7.406E-08
	(n,t)	1.705E-08	1.854E-08	2.538E-08	2.758E-08	1.233E-08
	(n,He-3)	3.794E-12	4.126E-12	5.648E-12	6.938E-12	3.208E-12
	(n,a)	4.915E-06	5.649E-06	7.091E-06	5.686E-06	2.615E-06
62-Sm-149	total	1.524E+04	5.827E+03	7.614E+02	1.454E+02	1.396E+01
	elastic	1.299E+02	6.466E+01	2.738E+01	2.161E+01	1.099E+01
	inelastic	7.616E-01	9.067E-01	1.064E+00	1.039E+00	9.372E-01
	(n,2n)	6.925E-03	7.901E-03	1.057E-02	7.877E-03	3.153E-03
	(n,3n)	1.980E-06	2.153E-06	2.948E-06	3.234E-06	1.447E-06
	(n,na)	1.753E-07	1.923E-07	2.620E-07	2.310E-07	9.801E-08
	(n,np)	2.655E-08	2.887E-08	3.952E-08	4.340E-08	1.945E-08
	(n,nd)	1.239E-09	1.347E-09	1.844E-09	2.257E-09	1.043E-09
	(n,nt)	2.433E-11	2.646E-11	3.623E-11	4.576E-11	2.132E-11
	capture	1.512E+04	5.764E+03	7.331E+02	1.227E+02	2.028E+00
	(n,p)	1.108E-06	1.209E-06	1.652E-06	1.380E-06	5.778E-07
	(n,d)	1.963E-07	2.134E-07	2.921E-07	2.932E-07	1.284E-07
	(n,t)	3.859E-08	4.196E-08	5.745E-08	6.016E-08	2.663E-08
	(n,He-3)	5.791E-12	6.296E-12	8.620E-12	1.056E-11	4.878E-12

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
62-Sm-149	(n,a)	1.159E-02	4.432E-03	5.831E-04	1.148E-04	2.278E-05
62-Sm-150	total	4.203E+01	3.392E+01	2.842E+01	2.434E+01	1.172E+01
	elastic	1.673E+01	1.828E+01	1.890E+01	1.798E+01	1.092E+01
	inelastic	4.577E-01	5.339E-01	6.280E-01	5.629E-01	3.471E-01
	(n,2n)	9.313E-04	1.014E-03	1.387E-03	1.088E-03	4.487E-04
	(n,3n)	4.188E-06	4.553E-06	6.234E-06	6.767E-06	3.019E-06
	(n,na)	2.388E-07	2.626E-07	3.576E-07	2.933E-07	1.220E-07
	(n,np)	7.785E-09	8.465E-09	1.159E-08	1.305E-08	5.887E-09
	(n,nd)	1.566E-11	1.702E-11	2.331E-11	2.968E-11	1.386E-11
	(n,nt)	5.827E-12	6.336E-12	8.674E-12	1.102E-11	5.145E-12
	capture	2.484E+01	1.512E+01	8.902E+00	5.800E+00	4.495E-01
	(n,p)	4.789E-07	5.208E-07	7.130E-07	6.397E-07	2.728E-07
	(n,d)	3.074E-08	3.342E-08	4.576E-08	4.969E-08	2.220E-08
	(n,t)	9.012E-09	9.799E-09	1.342E-08	1.478E-08	6.626E-09
	(n,a)	1.312E-06	1.491E-06	1.928E-06	1.538E-06	6.582E-07
62-Sm-151	total	1.780E+03	6.917E+02	1.445E+02	5.814E+01	1.217E+01
	elastic	1.921E+01	1.644E+01	1.461E+01	1.393E+01	9.089E+00
	inelastic	8.589E-01	1.033E+00	1.215E+00	1.226E+00	1.217E+00
	(n,2n)	6.320E-03	7.238E-03	9.657E-03	7.200E-03	2.880E-03
	(n,3n)	2.105E-06	2.289E-06	3.133E-06	3.382E-06	1.507E-06
	(n,na)	4.935E-08	5.372E-08	7.350E-08	7.197E-08	3.140E-08
	(n,np)	2.586E-09	2.812E-09	3.850E-09	4.472E-09	2.035E-09
	(n,nd)	5.514E-10	5.996E-10	8.209E-10	1.012E-09	4.686E-10
	(n,nt)	1.502E-11	1.633E-11	2.235E-11	2.827E-11	1.318E-11
	capture	1.761E+03	6.742E+02	1.287E+02	4.297E+01	1.859E+00
	(n,p)	5.694E-07	6.207E-07	8.489E-07	7.199E-07	3.026E-07
	(n,d)	8.082E-08	8.788E-08	1.203E-07	1.250E-07	5.520E-08
	(n,t)	2.373E-08	2.581E-08	3.533E-08	3.777E-08	1.681E-08
	(n,a)	6.819E-07	7.717E-07	9.921E-07	8.373E-07	4.409E-07
62-Sm-152	total	2.288E+02	2.192E+02	1.822E+02	1.089E+02	1.042E+01
	elastic	1.338E+02	1.416E+02	1.252E+02	7.665E+01	9.485E+00
	inelastic	5.493E-01	6.466E-01	7.603E-01	7.068E-01	5.082E-01
	(n,2n)	8.722E-04	9.488E-04	1.299E-03	1.025E-03	4.235E-04
	(n,3n)	3.735E-06	4.061E-06	5.560E-06	6.035E-06	2.692E-06
	(n,na)	2.309E-08	2.513E-08	3.439E-08	3.408E-08	1.491E-08
	(n,np)	6.000E-09	6.524E-09	8.932E-09	1.024E-08	4.641E-09
	(n,nt)	1.107E-12	1.204E-12	1.648E-12	2.110E-12	9.866E-13
	capture	9.445E+01	7.686E+01	5.623E+01	3.146E+01	4.261E-01
	(n,p)	2.637E-07	2.868E-07	3.927E-07	3.521E-07	1.501E-07
	(n,d)	3.081E-08	3.351E-08	4.588E-08	5.080E-08	2.281E-08
	(n,t)	3.378E-09	3.673E-09	5.029E-09	5.744E-09	2.601E-09
	(n,a)	1.919E-07	2.118E-07	2.865E-07	2.461E-07	1.038E-07
62-Sm-153	total	1.001E+02	6.168E+01	3.632E+01	2.680E+01	1.039E+01
	elastic	1.354E+01	1.475E+01	1.485E+01	1.369E+01	8.290E+00
	inelastic	9.117E-01	1.100E+00	1.295E+00	1.319E+00	1.385E+00
	(n,2n)	4.584E-03	5.209E-03	6.985E-03	5.215E-03	2.091E-03
	(n,3n)	7.726E-07	8.400E-07	1.150E-06	1.282E-06	5.763E-07
	(n,na)	8.216E-09	8.933E-09	1.223E-08	1.324E-08	5.912E-09
	(n,np)	1.018E-08	1.107E-08	1.515E-08	1.714E-08	7.743E-09
	(n,nd)	1.710E-10	1.860E-10	2.546E-10	3.190E-10	1.483E-10
	capture	8.534E+01	4.570E+01	2.014E+01	1.178E+01	7.124E-01
	(n,p)	2.891E-07	3.147E-07	4.307E-07	3.703E-07	1.562E-07
	(n,d)	9.694E-08	1.054E-07	1.443E-07	1.515E-07	6.711E-08
	(n,t)	1.897E-08	2.063E-08	2.825E-08	3.118E-08	1.399E-08
	(n,a)	8.567E-08	9.370E-08	1.274E-07	1.107E-07	4.704E-08
62-Sm-154	total	1.440E+01	1.403E+01	1.364E+01	1.352E+01	1.025E+01
	elastic	1.147E+01	1.164E+01	1.156E+01	1.167E+01	9.476E+00
	inelastic	5.611E-01	6.623E-01	7.794E-01	7.317E-01	5.555E-01
	(n,2n)	1.162E-03	1.265E-03	1.732E-03	1.350E-03	5.555E-04
	(n,3n)	2.979E-06	3.239E-06	4.434E-06	4.821E-06	2.152E-06
	(n,na)	4.754E-09	5.170E-09	7.078E-09	7.768E-09	3.484E-09
	(n,np)	5.175E-09	5.627E-09	7.704E-09	8.904E-09	4.045E-09
	(n,nd)	1.227E-12	1.334E-12	1.827E-12	2.360E-12	1.106E-12
	(n,nt)	2.045E-13	2.224E-13	3.045E-13	3.927E-13	1.840E-13
	capture	2.370E+00	1.715E+00	1.295E+00	1.116E+00	2.173E-01
	(n,p)	1.308E-07	1.422E-07	1.947E-07	1.793E-07	7.692E-08
	(n,d)	2.317E-08	2.519E-08	3.449E-08	3.832E-08	1.722E-08
	(n,t)	5.687E-09	6.184E-09	8.466E-09	9.656E-09	4.371E-09
	(n,a)	4.710E-08	5.135E-08	7.018E-08	6.539E-08	2.814E-08
63-Eu-151	total	1.324E+03	6.693E+02	1.722E+02	6.422E+01	1.177E+01

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
63-Eu-151	elastic	1.001E+01	1.145E+01	1.118E+01	1.074E+01	7.908E+00
	inelastic	5.126E-01	6.047E-01	7.121E-01	6.671E-01	5.093E-01
	(n,2n)	8.222E-04	8.965E-04	1.226E-03	9.703E-04	4.007E-04
	(n,3n)	9.853E-07	1.071E-06	1.467E-06	1.679E-06	7.607E-07
	(n,na)	1.163E-07	1.264E-07	1.731E-07	1.609E-07	6.917E-08
	(n,np)	3.512E-07	3.824E-07	5.232E-07	4.592E-07	1.949E-07
	capture	1.314E+03	6.572E+02	1.603E+02	5.281E+01	3.358E+00
	(n,p)	9.516E-06	1.087E-05	1.411E-05	1.087E-05	4.502E-06
	(n,a)	2.127E-05	2.354E-05	2.918E-05	2.292E-05	1.010E-05
63-Eu-152	total	1.493E+03	5.713E+02	1.195E+02	5.021E+01	1.121E+01
	elastic	2.005E+01	1.910E+01	1.749E+01	1.488E+01	6.852E+00
	inelastic	5.686E-01	6.708E-01	7.869E-01	7.420E-01	5.512E-01
	(n,2n)	2.561E-03	2.849E-03	3.859E-03	2.907E-03	1.176E-03
	(n,3n)	1.985E-06	2.159E-06	2.956E-06	3.275E-06	1.469E-06
	(n,na)	4.822E-08	5.249E-08	7.182E-08	6.497E-08	2.779E-08
	(n,np)	5.644E-08	6.136E-08	8.402E-08	8.471E-08	3.715E-08
	(n,nd)	5.009E-09	5.447E-09	7.457E-09	8.657E-09	3.938E-09
	(n,nt)	1.697E-10	1.846E-10	2.527E-10	3.101E-10	1.433E-10
	capture	1.473E+03	5.515E+02	1.012E+02	3.459E+01	3.807E+00
	(n,p)	2.843E-06	3.171E-06	4.206E-06	3.338E-06	1.398E-06
	(n,d)	1.403E-07	1.526E-07	2.089E-07	2.027E-07	8.809E-08
	(n,t)	2.889E-08	3.141E-08	4.300E-08	4.334E-08	1.901E-08
	(n,He-3)	3.467E-12	3.770E-12	5.162E-12	6.313E-12	2.916E-12
	(n,a)	2.478E-06	2.831E-06	3.557E-06	2.934E-06	1.468E-06
63-Eu-153	total	9.231E+01	6.669E+01	4.629E+01	3.322E+01	1.080E+01
	elastic	9.928E+00	9.969E+00	9.809E+00	9.706E+00	7.665E+00
	inelastic	6.966E-01	8.290E-01	9.748E-01	9.472E-01	7.980E-01
	(n,2n)	5.123E-04	5.570E-04	7.626E-04	6.239E-04	2.601E-04
	(n,3n)	3.103E-07	3.374E-07	4.620E-07	5.404E-07	2.463E-07
	(n,na)	8.473E-09	9.212E-09	1.261E-08	1.310E-08	5.786E-09
	(n,np)	1.637E-07	1.780E-07	2.437E-07	2.278E-07	9.816E-08
	capture	8.168E+01	5.589E+01	3.550E+01	2.257E+01	2.331E+00
	(n,p)	3.552E-06	4.011E-06	5.309E-06	4.125E-06	1.698E-06
	(n,a)	7.270E-07	7.294E-07	8.978E-07	7.003E-07	2.744E-07
63-Eu-154	total	4.812E+02	2.351E+02	6.087E+01	3.032E+01	9.719E+00
	elastic	6.674E+00	6.734E+00	6.578E+00	[illegible]	6.078E+00
	inelastic	5.137E-01	6.043E-01	7.094E-01	6.604E-01	4.743E-01
	(n,2n)	3.343E-03	3.726E-03	5.045E-03	3.784E-03	1.528E-03
	(n,3n)	8.892E-07	9.669E-07	1.324E-06	1.517E-06	6.871E-07
	(n,na)	6.046E-09	6.575E-09	9.001E-09	9.605E-09	4.277E-09
	(n,np)	2.330E-08	2.534E-08	3.469E-08	3.641E-08	1.613E-08
	(n,nd)	1.643E-09	1.787E-09	2.446E-09	2.930E-09	1.345E-09
	(n,nt)	2.365E-11	2.571E-11	3.520E-11	4.420E-11	2.056E-11
	capture	4.741E+02	2.278E+02	5.357E+01	2.315E+01	3.165E+00
	(n,p)	8.270E-07	9.086E-07	1.234E-06	1.007E-06	4.191E-07
	(n,d)	6.361E-08	6.917E-08	9.470E-08	9.616E-08	4.224E-08
	(n,t)	9.424E-09	1.025E-08	1.403E-08	1.501E-08	6.682E-09
	(n,a)	3.101E-07	3.439E-07	4.607E-07	3.785E-07	1.598E-07
63-Eu-155	total	1.329E+03	9.442E+02	3.493E+02	1.190E+02	9.875E+00
	elastic	4.225E+01	4.495E+01	2.676E+01	1.591E+01	8.026E+00
	inelastic	6.279E-01	7.447E-01	8.747E-01	8.407E-01	6.806E-01
	(n,2n)	8.430E-04	9.179E-04	1.256E-03	9.935E-04	4.105E-04
	(n,3n)	1.843E-06	2.004E-06	2.743E-06	3.079E-06	1.386E-06
	(n,na)	5.633E-09	6.125E-09	8.386E-09	8.726E-09	3.862E-09
	(n,np)	1.865E-08	2.028E-08	2.777E-08	2.956E-08	1.314E-08
	(n,nd)	7.504E-11	8.159E-11	1.117E-10	1.400E-10	6.507E-11
	(n,nt)	2.231E-11	2.425E-11	3.321E-11	4.167E-11	1.938E-11
	capture	1.286E+03	8.986E+02	3.217E+02	1.022E+02	1.168E+00
	(n,p)	3.179E-07	3.464E-07	4.737E-07	4.100E-07	1.732E-07
	(n,d)	1.807E-08	1.965E-08	2.690E-08	2.887E-08	1.283E-08
	(n,t)	3.556E-09	3.867E-09	5.294E-09	5.940E-09	2.677E-09
	(n,a)	1.764E-07	1.951E-07	2.640E-07	2.203E-07	9.204E-08
63-Eu-156	total	6.765E+01	6.224E+01	4.854E+01	3.367E+01	9.868E+00
	elastic	1.699E+01	1.852E+01	1.786E+01	1.544E+01	8.110E+00
	inelastic	7.756E-01	9.314E-01	1.095E+00	1.101E+00	1.137E+00
	(n,2n)	3.637E-03	4.064E-03	5.494E-03	4.117E-03	1.661E-03
	(n,3n)	1.514E-06	1.646E-06	2.254E-06	2.530E-06	1.139E-06
	(n,na)	2.788E-09	3.032E-09	4.151E-09	4.493E-09	2.009E-09
	(n,np)	1.266E-08	1.376E-08	1.884E-08	2.048E-08	9.154E-09
	(n,nd)	8.402E-10	9.136E-10	1.251E-09	1.520E-09	7.007E-10
	(n,nt)	1.359E-11	1.478E-11	2.023E-11	2.551E-11	1.188E-11

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
63-Eu-156	capture	4.978E+01	4.275E+01	2.957E+01	1.712E+01	6.202E-01
	(n,p)	2.536E-07	2.762E-07	3.779E-07	3.262E-07	1.378E-07
	(n,d)	3.314E-08	3.603E-08	4.933E-08	5.183E-08	2.296E-08
	(n,t)	6.246E-09	6.792E-09	9.299E-09	1.014E-08	4.537E-09
	(n,a)	1.236E-07	1.355E-07	1.844E-07	1.565E-07	6.590E-08
64-Gd-152	total	2.159E+02	1.161E+02	5.417E+01	3.766E+01	1.165E+01
	elastic	2.161E+01	2.296E+01	2.306E+01	2.143E+01	1.031E+01
	inelastic	4.603E-01	5.364E-01	6.304E-01	5.638E-01	3.438E-01
	(n,2n)	5.349E-04	5.816E-04	7.963E-04	6.490E-04	2.703E-04
	(n,3n)	1.596E-06	1.735E-06	2.375E-06	2.723E-06	1.233E-06
	(n,na)	4.088E-07	4.472E-07	6.104E-07	4.892E-07	2.026E-07
	(n,np)	9.882E-09	1.075E-08	1.471E-08	1.610E-08	7.209E-09
	(n,nd)	1.339E-11	1.456E-11	1.993E-11	2.532E-11	1.181E-11
	(n,nt)	6.615E-13	7.193E-13	9.847E-13	1.257E-12	5.872E-13
	capture	1.939E+02	9.249E+01	3.045E+01	1.577E+01	9.934E-01
	(n,p)	1.908E-06	2.089E-06	2.850E-06	2.372E-06	9.911E-07
	(n,d)	3.213E-08	3.494E-08	4.783E-08	5.041E-08	2.235E-08
	(n,t)	4.140E-09	4.502E-09	6.164E-09	6.791E-09	3.046E-09
	(n,He-3)	2.000E-12	2.175E-12	2.977E-12	3.673E-12	1.700E-12
	(n,a)	2.601E-03	2.073E-03	1.574E-03	1.071E-03	8.745E-05
64-Gd-154	total	2.877E+01	2.213E+01	1.820E+01	1.661E+01	9.609E+00
	elastic	9.385E+00	1.000E+01	1.032E+01	1.046E+01	8.264E+00
	inelastic	5.270E-01	6.195E-01	7.282E-01	6.740E-01	4.751E-01
	(n,2n)	6.882E-04	7.484E-04	1.025E-03	8.325E-04	3.464E-04
	(n,3n)	1.600E-06	1.739E-06	2.381E-06	2.737E-06	1.241E-06
	(n,na)	5.074E-08	5.521E-08	7.556E-08	6.844E-08	2.929E-08
	(n,np)	7.786E-09	8.466E-09	1.159E-08	1.273E-08	5.704E-09
	(n,nd)	8.476E-13	9.217E-13	1.262E-12	1.622E-12	7.595E-13
	capture	1.883E+01	1.158E+01	7.135E+00	5.470E+00	8.711E-01
	(n,p)	1.050E-06	1.146E-06	1.566E-06	1.316E-06	5.516E-07
	(n,d)	1.603E-08	1.743E-08	2.387E-08	2.557E-08	1.139E-08
	(n,t)	1.756E-09	1.910E-09	2.615E-09	2.975E-09	1.346E-09
	(n,a)	1.417E-06	1.626E-06	2.108E-06	1.647E-06	6.837E-07
64-Gd-155	total	6.047E+03	2.070E+03	2.718E+02	5.818E+01	9.701E+00
	elastic	1.514E+01	1.027E+01	7.721E+00	7.322E+00	6.519E+00
	inelastic	7.119E-01	8.454E-01	9.924E-01	9.595E-01	7.871E-01
	(n,2n)	2.474E-03	2.744E-03	3.723E-03	2.812E-03	1.139E-03
	(n,3n)	1.267E-06	1.378E-06	1.887E-06	2.165E-06	9.813E-07
	(n,na)	7.735E-09	8.411E-09	1.152E-08	1.167E-08	5.136E-09
	(n,np)	6.462E-09	7.027E-09	9.620E-09	1.071E-08	4.820E-09
	(n,nd)	1.412E-10	1.535E-10	2.101E-10	2.612E-10	1.212E-10
	capture	6.032E+03	2.059E+03	2.632E+02	4.990E+01	2.394E+00
	(n,p)	1.159E-06	1.272E-06	1.733E-06	1.415E-06	5.881E-07
	(n,d)	5.374E-08	5.843E-08	8.000E-08	8.171E-08	3.595E-08
	(n,t)	4.569E-09	4.968E-09	6.803E-09	7.455E-09	3.339E-09
	(n,a)	8.888E-06	3.672E-06	1.504E-06	1.024E-06	4.635E-07
64-Gd-156	total	1.343E+01	1.496E+01	1.596E+01	1.575E+01	9.862E+00
	elastic	9.308E+00	1.040E+01	1.114E+01	1.146E+01	8.712E+00
	inelastic	5.489E-01	6.467E-01	7.606E-01	7.103E-01	5.247E-01
	(n,2n)	6.692E-04	7.276E-04	9.962E-04	8.018E-04	3.329E-04
	(n,3n)	1.738E-06	1.890E-06	2.588E-06	2.951E-06	1.335E-06
	(n,na)	6.694E-09	7.279E-09	9.966E-09	1.015E-08	4.471E-09
	(n,np)	4.463E-09	4.853E-09	6.644E-09	7.475E-09	3.372E-09
	(n,nd)	6.089E-13	6.621E-13	9.065E-13	1.167E-12	5.462E-13
	capture	3.560E+00	3.907E+00	4.052E+00	3.577E+00	6.245E-01
	(n,p)	6.898E-07	7.512E-07	1.028E-06	8.864E-07	3.743E-07
	(n,d)	1.537E-08	1.671E-08	2.288E-08	2.470E-08	1.102E-08
	(n,t)	1.949E-09	2.119E-09	2.901E-09	3.298E-09	1.492E-09
	(n,a)	4.154E-07	4.659E-07	6.216E-07	5.153E-07	2.153E-07
64-Gd-157	total	2.602E+04	8.812E+03	1.028E+03	1.451E+02	9.599E+00
	elastic	1.461E+02	5.817E+01	1.507E+01	1.013E+01	7.552E+00
	inelastic	7.314E-01	8.696E-01	1.021E+00	9.910E-01	8.486E-01
	(n,2n)	3.268E-03	3.644E-03	4.932E-03	3.704E-03	1.496E-03
	(n,3n)	1.594E-06	1.733E-06	2.373E-06	2.697E-06	1.219E-06
	(n,na)	2.655E-09	2.887E-09	3.952E-09	4.261E-09	1.903E-09
	(n,np)	4.208E-09	4.576E-09	6.265E-09	7.069E-09	3.191E-09
	(n,nd)	7.704E-11	8.377E-11	1.147E-10	1.434E-10	6.664E-11
	capture	2.587E+04	8.753E+03	1.012E+03	1.340E+02	1.198E+00
	(n,p)	6.202E-07	6.764E-07	9.247E-07	7.852E-07	3.301E-07
	(n,d)	3.703E-08	4.026E-08	5.512E-08	5.729E-08	2.532E-08
	(n,t)	4.488E-09	4.881E-09	6.682E-09	7.357E-09	3.299E-09

(unit: barns)

Nuclide	Reaction	BWR	PWR	HCLWR(1.4)	HCLWR(0.5)	FBR
64-Gd-157	(n,a)	4.878E-05	1.664E-05	2.181E-06	4.874E-07	1.041E-07
64-Gd-158	total	9.137E+00	9.956E+00	1.056E+01	1.064E+01	9.120E+00
	elastic	6.565E+00	7.288E+00	7.863E+00	8.364E+00	8.249E+00
	inelastic	5.812E-01	6.856E-01	8.058E-01	7.565E-01	5.707E-01
	(n,2n)	1.194E-03	1.300E-03	1.779E-03	1.388E-03	5.717E-04
	(n,3n)	3.218E-06	3.499E-06	4.791E-06	5.320E-06	2.388E-06
	(n,na)	2.557E-09	2.781E-09	3.807E-09	4.075E-09	1.817E-09
	(n,np)	2.720E-09	2.958E-09	4.049E-09	4.637E-09	2.102E-09
	(n,nd)	1.501E-12	1.632E-12	2.234E-12	2.861E-12	1.338E-12
	capture	1.993E+00	1.976E+00	1.884E+00	1.516E+00	3.004E-01
	(n,p)	1.573E-07	1.710E-07	2.341E-07	2.120E-07	9.061E-08
	(n,d)	1.001E-08	1.088E-08	1.490E-08	1.628E-08	7.288E-09
	(n,t)	2.195E-09	2.387E-09	3.268E-09	3.687E-09	1.664E-09
	(n,a)	1.661E-07	1.825E-07	2.481E-07	2.209E-07	9.393E-08
64-Gd-160	total	9.596E+00	1.089E+01	1.195E+01	1.263E+01	1.022E+01
	elastic	8.534E+00	9.718E+00	1.064E+01	1.135E+01	9.445E+00
	inelastic	5.864E-01	6.924E-01	8.137E-01	7.665E-01	5.865E-01
	(n,2n)	1.893E-03	2.070E-03	2.827E-03	2.157E-03	8.807E-04
	(n,3n)	4.645E-06	5.051E-06	6.915E-06	7.385E-06	3.281E-06
	(n,na)	2.382E-09	2.590E-09	3.546E-09	3.959E-09	1.784E-09
	(n,np)	2.211E-09	2.404E-09	3.291E-09	3.852E-09	1.756E-09
	(n,nd)	4.679E-12	5.088E-12	6.966E-12	8.920E-12	4.171E-12
	(n,nt)	1.387E-12	1.508E-12	2.065E-12	2.639E-12	1.233E-12
	capture	4.733E-01	4.798E-01	4.940E-01	5.077E-01	1.913E-01
	(n,p)	9.450E-08	1.028E-07	1.407E-07	1.331E-07	5.748E-08
	(n,d)	1.285E-08	1.397E-08	1.912E-08	2.146E-08	9.672E-09
	(n,t)	5.577E-09	6.064E-09	8.302E-09	9.384E-09	4.238E-09
	(n,a)	1.079E-07	1.174E-07	1.607E-07	1.507E-07	6.496E-08
65-Tb-159	total	2.606E+01	2.460E+01	2.252E+01	1.905E+01	9.458E+00
	elastic	1.023E+01	9.296E+00	8.703E+00	8.622E+00	7.114E+00
	inelastic	6.127E-01	7.244E-01	8.508E-01	8.087E-01	6.351E-01
	(n,2n)	1.087E-03	1.184E-03	1.620E-03	1.274E-03	5.252E-04
	(n,3n)	1.676E-06	1.823E-06	2.496E-06	2.839E-06	1.283E-06
	(n,na)	3.657E-09	3.977E-09	5.445E-09	5.686E-09	2.520E-09
	(n,np)	2.983E-08	3.244E-08	4.441E-08	4.653E-08	2.061E-08
	(n,nd)	1.539E-10	1.674E-10	2.292E-10	2.850E-10	1.323E-10
	(n,nt)	1.427E-11	1.552E-11	2.124E-11	2.669E-11	1.242E-11
	capture	1.519E+01	1.468E+01	1.296E+01	9.614E+00	1.708E+00
	(n,p)	5.893E-07	6.440E-07	8.795E-07	7.389E-07	3.097E-07
	(n,d)	4.769E-08	5.185E-08	7.099E-08	7.343E-08	3.241E-08
	(n,t)	6.442E-09	7.004E-09	9.590E-09	1.050E-08	4.704E-09
	(n,a)	3.339E-07	3.669E-07	4.988E-07	4.160E-07	1.740E-07

6. Table of 30-keV Maxwellian Spectrum Average Capture Cross Sections

Nuclide	JENDL-3 (mb)	Bao and Kaeppeler[11] (mb)
33-As- 75	4.532E+02	5.760E+02 +- 3.500E+01
34-Se- 74	2.097E+02	2.380E+02
34-Se- 76	9.662E+01	1.460E+02
34-Se- 77	4.487E+02	4.410E+02
34-Se- 78	9.136E+01	8.950E+01
34-Se- 79	4.180E+02	2.180E+02 +- 5.000E+01
34-Se- 80	2.849E+01	4.400E+01 +- 3.000E+00
34-Se- 82	3.042E+01	1.900E+01
35-Br- 79	6.163E+02	6.360E+02 +- 4.200E+01
35-Br- 81	3.259E+02	3.170E+02 +- 1.700E+01
36-Kr- 78	3.830E+02	3.370E+02 +- 4.100E+01
36-Kr- 80	2.965E+02	2.420E+02 +- 1.400E+01
36-Kr- 82	1.031E+02	7.900E+01 +- 6.000E+00
36-Kr- 83	2.685E+02	2.370E+02 +- 1.500E+01
36-Kr- 84	4.080E+01	3.500E+01 +- 4.000E+00
36-Kr- 85	6.923E+01	6.700E+01 +- 1.700E+01
36-Kr- 86	5.129E+00	4.000E+00 +- 3.000E-01
37-Rb- 85	2.841E+02	3.600E+02 +- 2.000E+01
37-Rb- 87	2.344E+01	1.100E+01 +- 2.000E+00
38-Sr- 86	6.890E+01	7.000E+01 +- 4.000E+00
38-Sr- 87	8.127E+01	9.400E+01 +- 7.000E+00
38-Sr- 88	6.122E+00	6.200E+00 +- 5.000E-01
38-Sr- 89	1.463E+01	
38-Sr- 90	1.477E+01	
39-Y - 89	2.032E+01	2.100E+01 +- 3.000E+00
39-Y - 91	8.866E+01	
40-Zr- 90	2.245E+01	1.640E+01 +- 1.000E+00
40-Zr- 91	6.748E+01	6.000E+01 +- 8.000E+00
40-Zr- 92	4.599E+01	5.000E+01 +- 6.000E+00
40-Zr- 93	1.001E+02	9.500E+01 +- 1.000E+01
40-Zr- 94	3.019E+01	3.300E+01 +- 5.000E+00
40-Zr- 95	1.406E+02	7.230E+01
40-Zr- 96	1.243E+01	2.500E+01 +- 1.500E+01
41-Nb- 93	2.671E+02	2.710E+02 +- 1.500E+01
41-Nb- 94	3.201E+02	5.340E+02
41-Nb- 95	4.058E+02	
42-Mo- 92	6.708E+01	7.000E+01 +- 1.000E+01
42-Mo- 94	1.155E+02	1.040E+02 +- 2.000E+01
42-Mo- 95	3.920E+02	3.740E+02 +- 5.000E+01
42-Mo- 96	1.045E+02	1.030E+02 +- 1.600E+01
42-Mo- 97	3.915E+02	3.840E+02 +- 5.000E+01
42-Mo- 98	9.585E+01	1.020E+02 +- 1.500E+01
42-Mo- 99	4.829E+02	
42-Mo-100	8.769E+01	9.700E+01 +- 2.000E+01
43-Tc- 99	7.849E+02	7.990E+02 +- 4.000E+01
44-Ru- 96	2.670E+02	2.700E+02 +- 6.000E+01
44-Ru- 98	2.383E+02	2.220E+02
44-Ru- 99	7.166E+02	9.310E+02
44-Ru-100	2.077E+02	2.060E+02 +- 1.300E+01
44-Ru-101	9.525E+02	9.960E+02 +- 4.000E+01

Nuclide	JENDL-3 (mb)	Bao and Kaeppeler[11] (mb)
44-Ru-102	1.907E+02	1.860E+02 +- 1.100E+01
44-Ru-103	5.799E+02	5.690E+02
44-Ru-104	1.665E+02	1.610E+02 +- 1.000E+01
44-Ru-106	1.011E+02	
45-Rh-103	9.797E+02	8.750E+02 +- 3.500E+01
45-Rh-105	8.260E+02	
46-Pd-102	3.862E+02	3.100E+02
46-Pd-104	2.961E+02	2.890E+02 +- 2.900E+01
46-Pd-105	1.202E+03	1.199E+03 +- 6.000E+01
46-Pd-106	2.927E+02	2.520E+02 +- 2.500E+01
46-Pd-107	1.289E+03	1.340E+03 +- 6.000E+01
46-Pd-108	2.441E+02	2.030E+02 +- 2.000E+01
46-Pd-110	1.568E+02	1.460E+02 +- 2.000E+01
47-Ag-107	8.341E+02	7.990E+02 +- 2.400E+01
47-Ag-109	8.478E+02	7.790E+02 +- 2.300E+01
47-Ag-110m	2.717E+03	
48-Cd-106	5.692E+02	5.550E+02 +- 5.500E+01
48-Cd-108	4.237E+02	4.070E+02 +- 7.000E+01
48-Cd-110	2.337E+02	2.530E+02 +- 3.000E+01
48-Cd-111	8.721E+02	1.063E+03 +- 1.250E+02
48-Cd-112	2.152E+02	2.220E+02 +- 3.000E+01
48-Cd-113	6.737E+02	
48-Cd-114	1.507E+02	1.500E+02 +- 2.500E+01
48-Cd-116	9.141E+01	9.400E+01 +- 1.200E+01
49-In-113	9.264E+02	7.870E+02 +- 7.000E+01
49-In-115	6.603E+02	
50-Sn-112	1.964E+02	2.020E+02 +- 4.800E+01
50-Sn-114	1.533E+02	1.840E+02
50-Sn-115	3.929E+02	4.300E+02
50-Sn-116	1.063E+02	1.000E+02 +- 1.900E+01
50-Sn-117	3.936E+02	4.020E+02 +- 7.700E+01
50-Sn-118	6.719E+01	6.300E+01 +- 1.200E+01
50-Sn-119	2.266E+02	2.470E+02 +- 4.700E+01
50-Sn-120	4.157E+01	3.900E+01 +- 7.000E+00
50-Sn-122	2.401E+01	2.300E+01 +- 5.000E+00
50-Sn-123	3.623E+02	
50-Sn-124	2.480E+01	2.300E+01 +- 4.000E+00
50-Sn-126	1.088E+01	
51-Sb-121	6.902E+02	7.400E+02 +- 1.000E+02
51-Sb-123	4.390E+02	4.400E+02 +- 5.000E+01
51-Sb-124	9.721E+02	
51-Sb-125	5.285E+02	
52-Te-120	2.927E+02	4.840E+02
52-Te-122	3.605E+02	2.950E+02 +- 6.000E+01
52-Te-123	9.405E+02	8.220E+02 +- 5.000E+01
52-Te-124	1.647E+02	1.620E+02 +- 2.100E+01
52-Te-125	4.225E+02	4.440E+02 +- 4.400E+01
52-Te-126	8.137E+01	8.000E+01 +- 1.200E+01
52-Te-127m	8.916E+02	
52-Te-128	4.013E+01	3.900E+01 +- 5.000E+00

Nuclide	JENDL-3 (mb)	Bao and Kaeppeler[11] (mb)
52-Te-129m	7.523E+02	
52-Te-130	1.433E+01	1.550E+01 +- 2.300E+00
53-I -127	6.619E+02	6.350E+02 +- 3.000E+01
53-I -129	4.420E+02	4.410E+02 +- 2.200E+01
53-I -131	2.644E+02	
54-Xe-124	1.157E+03	9.930E+02 +- 1.040E+02
54-Xe-126	6.867E+02	3.240E+02
54-Xe-128	2.883E+02	2.490E+02
54-Xe-129	4.359E+02	4.700E+02
54-Xe-130	2.834E+02	1.530E+02
54-Xe-131	3.655E+02	3.480E+02
54-Xe-132	5.242E+01	5.750E+01 +- 3.800E+00
54-Xe-133	1.281E+02	1.340E+02
54-Xe-134	2.632E+01	2.730E+01 +- 2.000E+00
54-Xe-135	6.572E+01	
54-Xe-136	8.797E-01	2.900E+00
55-Cs-133	5.129E+02	5.090E+02 +- 2.100E+01
55-Cs-134	1.162E+03	9.580E+02
55-Cs-135	2.020E+02	2.010E+02
55-Cs-136	2.251E+02	
55-Cs-137	2.215E+01	
56-Ba-130	7.403E+02	7.150E+02 +- 1.160E+02
56-Ba-132	4.574E+02	4.470E+02
56-Ba-134	2.329E+02	2.210E+02 +- 3.500E+01
56-Ba-135	5.017E+02	4.570E+02 +- 8.000E+01
56-Ba-136	6.691E+01	6.900E+01 +- 1.000E+01
56-Ba-137	6.469E+01	5.700E+01 +- 1.000E+01
56-Ba-138	4.053E+00	3.900E+00 +- 3.000E-01
56-Ba-140	3.259E+00	
57-La-138	3.148E+02	
57-La-139	3.346E+01	3.840E+01 +- 2.700E+00
58-Ce-140	7.431E+00	1.060E+01 +- 6.000E-01
58-Ce-141	2.768E+02	1.670E+02
58-Ce-142	2.192E+01	1.810E+01 +- 1.100E+00
58-Ce-144	2.434E+01	
59-Pr-141	1.170E+02	1.190E+02 +- 1.500E+01
59-Pr-143	1.080E+02	
60-Nd-142	5.558E+01	4.600E+01 +- 4.000E+00
60-Nd-143	2.894E+02	2.420E+02 +- 1.000E+01
60-Nd-144	7.361E+01	1.100E+02 +- 6.000E+00
60-Nd-145	5.316E+02	4.850E+02 +- 1.000E+02
60-Nd-146	1.217E+02	1.570E+02 +- 4.000E+01
60-Nd-147	1.009E+03	6.250E+02
60-Nd-148	1.270E+02	1.920E+02 +- 4.000E+01
60-Nd-150	1.657E+02	1.870E+02 +- 1.900E+01
61-Pm-147	1.053E+03	1.163E+03
61-Pm-148	1.711E+03	
61-Pm-148m	2.874E+03	
61-Pm-149	1.026E+03	
62-Sm-144	1.023E+02	9.200E+01 +- 9.000E+00

Nuclide	JENDL-3 (mb)	Bao and Kaeppeler[11] (mb)
62-Sm-147	9.102E+02	1.005E+03 +- 1.000E+02
62-Sm-148	2.700E+02	2.670E+02 +- 1.200E+01
62-Sm-149	1.836E+03	1.454E+03 +- 6.600E+01
62-Sm-150	4.913E+02	4.470E+02 +- 2.600E+01
62-Sm-151	2.007E+03	1.932E+03
62-Sm-152	4.797E+02	3.780E+02 +- 2.300E+01
62-Sm-153	6.529E+02	
62-Sm-154	2.521E+02	2.930E+02 +- 1.900E+01
63-Eu-151	3.587E+03	4.367E+03 +- 1.750E+02
63-Eu-152	4.580E+03	4.816E+03
63-Eu-153	2.542E+03	3.170E+03 +- 3.170E+02
63-Eu-154	3.581E+03	3.720E+03
63-Eu-155	1.144E+03	1.909E+03
63-Eu-156	5.434E+02	
64-Gd-152	1.000E+03	9.850E+02 +- 6.100E+01
64-Gd-154	8.701E+02	1.278E+03 +- 1.020E+02
64-Gd-155	2.842E+03	2.800E+03 +- 2.800E+02
64-Gd-156	6.091E+02	6.390E+02 +- 6.400E+01
64-Gd-157	1.271E+03	1.538E+03 +- 1.540E+02
64-Gd-158	3.092E+02	2.080E+02 +- 1.900E+01
64-Gd-160	1.653E+02	1.360E+02 +- 1.300E+01
65-Tb-159	2.086E+03	1.800E+03 +- 1.000E+02

国際単位系 (SI) と換算表

表 1　SI 基本単位および補助単位

量	名称	記号
長さ	メートル	m
質量	キログラム	kg
時間	秒	s
電流	アンペア	A
熱力学温度	ケルビン	K
物質量	モル	mol
光度	カンデラ	cd
平面角	ラジアン	rad
立体角	ステラジアン	sr

表 2　SI と併用される単位

名称	記号
分，時，日	min，h，d
度，分，秒	°，′，″
リットル	l，L
トン	t
電子ボルト	eV
原子質量単位	u

1 eV　1.60218 × 10^{-19} J
1 u　1.66054 × 10^{-27} kg

表 3　固有の名称をもつ SI 組立単位

量	名称	記号	他の SI 単位による表現
周波数	ヘルツ	Hz	s^{-1}
力	ニュートン	N	m·kg/s^2
圧力，応力	パスカル	Pa	N/m^2
エネルギー，仕事，熱量	ジュール	J	N·m
仕事率，放射束	ワット	W	J/s
電気量，電荷	クーロン	C	A·s
電位，電圧，起電力	ボルト	V	W/A
静電容量	ファラド	F	C/V
電気抵抗	オーム	Ω	V/A
コンダクタンス	ジーメンス	S	A/V
磁束	ウェーバ	Wb	V·s
磁束密度	テスラ	T	Wb/m^2
インダクタンス	ヘンリー	H	Wb/A
セルシウス温度	セルシウス度	℃	
光束	ルーメン	lm	cd·sr
照度	ルクス	lx	lm/m^2
放射能	ベクレル	Bq	s^{-1}
吸収線量	グレイ	Gy	J/kg
線量当量	シーベルト	Sv	J/kg

表 4　SI と共に暫定的に維持される単位

名称	記号
オングストローム	Å
バーン	b
バール	bar
ガル	Gal
キュリー	Ci
レントゲン	R
ラド	rad
レム	rem

1 Å　0.1 nm　10^{-10} m
1 b　100 fm　10^{-28} m^2
1 bar　0.1 MPa　10^5 Pa
1 Gal　1 cm/s　10^{-2} m/s
1 Ci　3.7 × 10^{10} Bq
1 R　2.58 × 10^{-4} C/kg
1 rad　1 cGy　10^{-2} Gy
1 rem　1 cSv　10^{-2} Sv

表 5　SI 接頭語

倍数	接頭語	記号
10^{18}	エクサ	E
10^{15}	ペタ	P
10^{12}	テラ	T
10^{9}	ギガ	G
10^{6}	メガ	M
10^{3}	キロ	k
10^{2}	ヘクト	h
10^{1}	デカ	da
10^{-1}	デシ	d
10^{-2}	センチ	c
10^{-3}	ミリ	m
10^{-6}	マイクロ	μ
10^{-9}	ナノ	n
10^{-12}	ピコ	p
10^{-15}	フェムト	f
10^{-18}	アト	a

（注）

1. 表 1～5 は「国際単位系，第 5 版，国際度量衡局 1985 年刊行」による．ただし，1 eV および 1 u の値は CODATA の 1986 年推奨値による．
2. 表 4 には角度，グレード，ベル，ヘクタールも含まれているが日常の単位なので，ここでは省略した．
3. bar は，JIS では流体の圧力を表わす場合に限り表 2 のカテゴリーに分類されている．
4. EC 閣僚理事会指令では bar，barn および海里の単位，mmHg を表 2 のカテゴリーに入れている．

換算表

圧力	MPa（= 10 bar）	kgf/cm^2	atm	mmHg（Torr）	lbf/in^2（psi）
	1	10.1972	9.86923	7.50062 × 10^3	145.038
	0.0980665	1	0.967841	735.559	14.2233
	0.101325	1.03323	1	760	14.6959
	1.33322 × 10^{-4}	1.35951 × 10^{-3}	1.31579 × 10^{-3}	1	1.93368 × 10^{-2}
	6.89476 × 10^{-3}	7.03070 × 10^{-2}	6.80460 × 10^{-2}	51.7149	1

力	N（= 10^5 dyn）	kgf	lbf
	1	0.101972	0.224809
	9.80665	1	2.20462
	4.44822	0.453592	1

粘度　1 Pa·s（N·s/m^2）= 10 P（ポアズ）（g/(cm·s)）
動粘度　1 m^2/s = 10^4 St（ストークス）（cm^2/s）

エネルギー・仕事・熱量	J（= 10^7 erg）	kgf·m	kW·h	cal（cal 量法）	Btu	ft·lbf	eV
	1	0.101972	2.77778 × 10^{-7}	0.238889	9.47813 × 10^{-4}	0.737562	6.24150 × 10^{18}
	9.80665	1	2.72407 × 10^{-6}	2.34270	9.29487 × 10^{-3}	7.23301	6.12082 × 10^{19}
	3.6 × 10^6	3.67098 × 10^5	1	8.59999 × 10^{-1}	3412.13	2.65522 × 10^6	2.24694 × 10^{25}
	4.18605	0.426858	1.16279 × 10^{-6}	1	3.96759 × 10^{-3}	3.08747	2.61272 × 10^{19}
	1055.06	107.586	2.93072 × 10^{-4}	252.042	1	778.172	6.58515 × 10^{21}
	1.35582	0.138255	3.76616 × 10^{-7}	0.323890	1.28506 × 10^{-3}	1	8.46233 × 10^{18}
	1.60218 × 10^{-19}	1.63377 × 10^{-20}	4.45050 × 10^{-26}	3.82743 × 10^{-20}	1.51857 × 10^{-22}	1.18171 × 10^{-19}	1

1 cal = 4.18605 J（cal 量法）
= 4.184 J（熱化学）
= 4.1855 J（15 ℃）
= 4.1868 J（国際蒸気表）

仕事率　1 PS（仏馬力）
= 75 $kgf·m/s$
735.499 W

放射能	Bq	Ci
	1	2.70270 × 10^{-11}
	3.7 × 10^{10}	1

吸収線量	Gy	rad
	1	100
	0.01	1

照射線量	C/kg	R
	1	3876
	2.58 × 10^{-4}	1

線量当量	Sv	rem
	1	100
	0.01	1

（86 年 12 月 26 日現在）