EXFOR News (June 2016)

New experimental data available from Nuclear Reaction Data Centres

EXFOR [1] is a world-wide data library for experimental neutron, charged-particle and photon induced reaction data compiled by the International Network of the Nuclear Reaction Data Centres (NRDC)[a] co-ordinated by the IAEA Nuclear Data Section. Regularly updated web retrieval databases are available at IAEA-NDS as well as NNDC, NEADB, JAEA, JCPRG and CDFE.

This News lists newly created EXFOR entries as well as revised EXFOR entries where new data subentries are added. Entries from articles pubslished in past 10 years are flagged by asterisks (*). Please send an email to N.Otsuka (NRDC Coordinator n.otsuka@iaea.org) for inclusion in the EXFOR News distribution list as well as any question on EXFOR.

[1] N.Otuka et al., Nucl.Data.Sheets **120**(2014)272.

Quantity codes

ALF	α-value ($\sigma_{\rm capt}/\sigma_{\rm fis}$)	FY	Fission product yield
AMP	Length or amplitude	INT	Cross section integral over incident energy
CHG	Fragment charge	KE	Kinetic energy
CS	Cross section	KER	Kerma factor
CSN	Differential with respect to number of particles	MLT	Multiplicity
CSP	Partial cross section	NQ	Nuclear quantity
CST	Temperature dependent cross section	NU	Fission neutron multiplicity $\bar{\nu}$
D3A	Triple differential dΩ_1/dΩ_2/dE'	NUD	Delayed fission neutron multiplicity $\bar{\nu}_d$
D3E	Triple differential dΩ/dE'_1/dE'_2	NUF	Fragment neutrons
D4A	Quadruple diff. dΩ_1/dΩ_2/dE'_1/dE'_2	POL	Polarization
DA	Differential d/dΩ	POD	Differential polarization
DAA	Double differential dΩ_1/dΩ_2	PY	Product yield (other than fission)
DAE	Double differential dΩ/dE'	RI	Resonance integral
DAP	Partial differential d/dΩ	RP	Resonance parameter
DAT	Temperature-dependent Legendre coefficient	RR	Reaction rate
DE	Differential d/dE'	SIF	Self indication
DEP	Energy spectrum for specific group	SPC	Gamma spectrum
DP	Diff. by linear momentum of outgoing part.	TSL	Thermal scattering
DT	Diff. by 4-momentum transfer squared	TT	Thick target yield
ETA	η-value $\bar{\nu}\sigma_{\rm fis}/(\sigma_{\rm capt}+\sigma_{\rm fis})$	TTD	Differential thick target yield, d/dΩ
EVL	Evaluation	TTP	Partial thick target yield

Special codes in outgoing particle field

abs	Absorption	fus	Fusion	sct	Scattering	tot	Total
el	Elastic	inel	Inelastic	tcx	Total charge changing		
fis	Fission	non	Nonelastic	ths	Thermal scattering		

Special codes in incident energy field

Fast	Fast reactor spectrum average	Maxw	Maxwellian spectrum average
Fiss	Fission spectrum average	Spont	Spontaneous (for fission)

[a] NNDC (USA), NEADB (France), NDS (Austria), CJD (Russia), CNDC (China), ATOMKI (Hungary), NDPCI (India), JAEA (Japan), JCPRG (Japan), KAERI (Korea), CDFE (Russia), CNPD (Russia), UkrNDC (Ukraine)

1 Hydrogen 1

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{6}He,el	^{1}H	?	2GERGSI	4.3+09	4.3+09	Jour	NIM/A,641,72	11	O.A.Kiselev+	O1908
*	^{8}He,el	^{1}H	?	2GERGSI	5.4+09	5.4+09	Jour	NIM/A,641,72	11	O.A.Kiselev+	O1908
*	^{6}Li,el	^{1}H	?	2ITYLNS	1.6+07	2.9+07	Jour	PR/C,91,057601	15	V.Soukeras+	O2277
*	^{6}Li,^{3}He	^{4}He	?	2ITYLNS	1.6+07	2.9+07	Jour	EPJ/A,51,86	15	Ch.Betsou+	O2281
*	^{208}Pb,fis	Many	?	2GERGSI	1.0+11	1.0+11	Jour	PR/C,91,064616	15	J.L.Rodriguez-Sanchez+	O2267

1 Hydrogen 2

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{78}Zn,p	^{79}Zn	?	2ZZZCER	2.2+08	2.2+08	Jour	PL/B,740,298	15	R.Orlandi+	O2280
*	^{136}Xe,x	Many	?	2GERGSI	6.8+10	6.8+10	Jour	PR/C,92,024607	15	J.Alcantara-Nunez+	O1889

3 Lithium 7

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,inel	^{7}Li	CSP	2ZZZGEL	5.5+05	1.8+07	Jour	PR/C,93,024610	16	M.Nyman+	23288
*	p,n	^{7}Be	?	2GERPTB	1.9+06	1.9+06	Jour	PR/C,85,055809	12	C.Lederer+	O2230
*	^{98}Rb,el	^{7}Li	DA	2ZZZCER	2.4+08	2.4+08	Jour	PR/C,92,024322	15	S.Bottoni+	O2276
*	^{98}Rb,x+α	inclusive	CS	2ZZZCER	2.4+08	2.4+08	Jour	PR/C,92,024322	15	S.Bottoni+	O2276
*	^{98}Rb,x+α	inclusive	DA	2ZZZCER	2.4+08	2.4+08	Jour	PR/C,92,024322	15	S.Bottoni+	O2276
*	^{98}Rb,x+t	inclusive	CS	2ZZZCER	2.4+08	2.4+08	Jour	PR/C,92,024322	15	S.Bottoni+	O2276
*	^{98}Rb,x+t	inclusive	DA	2ZZZCER	2.4+08	2.4+08	Jour	PR/C,92,024322	15	S.Bottoni+	O2276

4 Beryllium 9

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,α	^{6}Li	DAP	2GERGAR	3.9+05	1.3+06	Jour	NIM/B,358,72	15	S.Krat+	O2268
*	p,d	^{8}Be	DAP	2GERGAR	3.9+05	4.1+06	Jour	NIM/B,358,72	15	S.Krat+	O2268
*	p,el	^{9}Be	DA	2GERGAR	4.9+05	4.1+06	Jour	NIM/B,358,72	15	S.Krat+	O2268
*	p,el	^{9}Be	?	2GERGAR	2.4+06	2.9+06	Jour	NIM/B,358,72	15	S.Krat+	O2268

5 Boron 11

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,p	^{11}Be	CS	2GERKIG	1.5+07	1.5+07	Rept	GKSS-86-E-29	86	R.Pepelnik+	21999

6 Carbon

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,x	^{7}Be	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
*	^{29}Ne,x	^{28}Ne	CS	2JPNIPC	7.0+09	7.0+09	Jour	PR/C,93,014613	16	N.Kobayashi+	E2495
*	^{29}Ne,x	^{28}Ne	CSP	2JPNIPC	7.0+09	7.0+09	Jour	PR/C,93,014613	16	N.Kobayashi+	E2495
*	^{29}Ne,x	^{28}Ne	DP	2JPNIPC			Jour	PR/C,93,014613	16	N.Kobayashi+	E2495

6 Carbon 12

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{12}C	CS	2JPNTOH	1.4+07	1.4+07	Rept	INDC(JPN)-136,383	90	M.Baba+	22188
	n,inel	^{12}C	CSP	2JPNTOH	1.4+07	1.4+07	Rept	INDC(JPN)-136,383	90	M.Baba+	22188
	n,n+2α	^{4}He	CS	2JPNTOH	1.4+07	1.4+07	Rept	INDC(JPN)-136,383	90	M.Baba+	22188
	n,x+α	inclusive	DAP	2BLGLVN	4.2+07	7.3+07	Jour	PR/C,53,1309	96	I.Slypen+	22704
	n,x+α	inclusive	DE	2BLGLVN	4.2+07	7.3+07	Jour	PR/C,53,1309	96	I.Slypen+	22704
	n,x+t	inclusive	DAP	2BLGLVN	4.2+07	7.3+07	Jour	PR/C,53,1309	96	I.Slypen+	22704
	n,x+t	inclusive	DE	2BLGLVN	4.2+07	7.3+07	Jour	PR/C,53,1309	96	I.Slypen+	22704
*	p,el		RP	2FR GAN	4.2+05	1.6+06	Jour	EPJ/A,51,25	15	S.Sambi+	O2273
	d,p	^{13}C	DAP	2GERKFK	5.1+07	5.1+07	Conf	70MADISON,,772	70	W.Fetscher+	O2261
	d,p	^{13}C	POD	2GERKFK	5.1+07	5.1+07	Conf	70MADISON,,772	70	W.Fetscher+	O2261

7 Nitrogen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,x	^{7}Be	CS	2JPNOSA	2.9+08	2.9+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287

7 Nitrogen 14

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,α	^{12}C	DAP	4RUSMOS	1.5+07	1.5+07	Jour	IZV,63,1037	99	A.V.Ignatenko+	F0836

8 Oxygen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,x	^{7}Be	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287

8 Oxygen 16

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{3}He,d	^{17}F	DAP	2GERMPH	1.8+07	2.0+07	Jour	NP/A,158,97	70	B.Mertens+	O2283
	^{3}He,d	^{17}F	DAP	4KASKAZ	2.2+07	2.2+07	Jour	IZV,66,60	02	S.V.Artemov+	F0784
	^{3}He,d	^{17}F	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

8 Oxygen 17

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,α		RP	2ITYLGS	1.9+05	1.9+05	Jour	EPJ/A,51,94	15	C.G.Bruno+	O2275

8 Oxygen 18

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,α		RP	2ITYLGS	1.5+05	1.5+05	Jour	EPJ/A,51,94	15	C.G.Bruno+	O2275
	^{3}He,d	^{19}F	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

9 Fluorine 18

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,α	^{15}O	CS	2ITYLNS	2.9+03	8.5+05	Jour	PR/C,92,015805	15	S.Cherubini+	O2274

9 Fluorine 19

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,α	^{16}O	CSP	2ITYPAD	1.7+05	6.0+05	Jour	PL/B,748,178	15	I.Lombardo+	O2278
*	p,α	^{16}O	DA	2ITYPAD	1.9+05	6.4+05	Jour	PL/B,748,178	15	I.Lombardo+	O2278
*	p,α	^{16}O	DAP	2ITYPAD	3.3+05	6.2+05	Jour	PL/B,748,178	15	I.Lombardo+	O2278
	^{3}He,d	^{20}Ne	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

11 Sodium 23

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{3}He,d	^{24}Mg	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282
*	α,p	^{26}Mg	CSP	2DENAAU	1.7+06	2.5+06	Jour	PRL,115,052701	15	A.M.Howard+	O2269
*	α,p	^{26}Mg	DAP	2DENAAU	1.8+06	2.1+06	Jour	PRL,115,052701	15	A.M.Howard+	O2269

12 Magnesium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,x	^{7}Be	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
*	n,x	^{22}Na	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
*	n,x	^{24}Na	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287

12 Magnesium 24

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{3}He,d	^{25}Al	DAP	2GERMPH	1.6+07	2.0+07	Jour	NP/A,158,97	70	B.Mertens+	O2283
	^{3}He,d	^{25}Al	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

12 Magnesium 25

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{3}He,d	^{26}Al	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

12 Magnesium 26

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{3}He,d	^{27}Al	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

13 Aluminium 27

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,α	^{24}Na	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,inel	^{27}Al	DAP	1USAKTY	3.5+06	3.5+06	Jour	NP/A,115,476	68	K.C.Chung+	11513
*	n,x	^{7}Be	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
*	n,x	^{22}Na	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
*	n,x	^{24}Na	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
	^{3}He,d	^{28}Si	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

14 Silicon

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,x	^{7}Be	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
*	n,x	^{22}Na	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
*	n,x	^{24}Na	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
	n,x+α	inclusive	KER	2BLGLVN	6.3+07	6.3+07	Jour	NSE,141,(1),55	02	S.Benck+	22807

14 Silicon 28

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,el		RP	2ZZZGEL	3.5+05	2.7+06	Jour	PR/C,36,585	87	H.Weigmann+	22072
n,inel		RP	2ZZZGEL	1.9+06	2.7+06	Jour	PR/C,36,585	87	H.Weigmann+	22072
^{3}He,d	^{29}P	DAP	2GERMPH	1.8+07	2.0+07	Jour	NP/A,158,97	70	B.Mertens+	O2283
^{3}He,d	^{29}P	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

14 Silicon 29

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
^{3}He,d	^{30}P	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

14 Silicon 30

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
^{3}He,d	^{31}P	DAP	2GERMPH	1.8+07	2.0+07	Jour	NP/A,158,97	70	B.Mertens+	O2283
^{3}He,d	^{31}P	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

15 Phosphorus 31

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,2n	^{30}P	?	2NOROSL	1.5+07	1.5+07	Jour	PR,137,B878	Feb 65	B.Grimeland+	20106
^{3}He,d	^{32}S	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

16 Sulphur 32

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
p,el	^{32}S	DA	2ITYPAD	4.0+06	5.5+06	Jour	NC/A,13,321	73	U.Abbondanno+	O2264
p,inel	^{32}S	DAP	2ITYPAD	4.0+06	5.5+06	Jour	NC/A,13,321	73	U.Abbondanno+	O2264
^{3}He,d	^{33}Cl	DAP	2GERMPH	1.8+07	2.0+07	Jour	NP/A,158,97	70	B.Mertens+	O2283
^{3}He,d	^{33}Cl	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

16 Sulphur 34

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
^{3}He,d	^{35}Cl	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

17 Chlorine 35

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{3}He,d	^{36}Ar	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

17 Chlorine 37

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{3}He,d	^{38}Ar	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

19 Potassium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,x	^{7}Be	CS	2JPNOSA	2.9+08	2.9+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
*	n,x	^{24}Na	CS	2JPNOSA	2.9+08	2.9+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287

19 Potassium 39

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{3}He,d	^{40}Ca	DAP	2FR PAR	2.5+07	2.5+07	Jour	NP/A,571,1	94	J.Vernotte+	O2282

20 Calcium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,x	^{7}Be	CS	2JPNOSA	2.9+08	2.9+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
*	n,x	^{22}Na	CS	2JPNOSA	3.7+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
*	n,x	^{24}Na	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287

22 Titanium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,x	^{44}Sc	CS	2FR NTE	6.2+06	3.3+07	Jour	ARI,103,160	15	C.Duchemin+	O2265
*	d,x	^{46}Sc	CS	2FR NTE	6.2+06	3.3+07	Jour	ARI,103,160	15	C.Duchemin+	O2265
*	d,x	^{47}Sc	CS	2FR NTE	6.2+06	3.3+07	Jour	ARI,103,160	15	C.Duchemin+	O2265
*	d,x	^{48}Sc	CS	2FR NTE	7.9+06	3.3+07	Jour	ARI,103,160	15	C.Duchemin+	O2265

22 Titanium 48

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,p	^{48}Sc	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,x	^{46}Sc	CS	2JPNJAE	2.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,x	^{47}Sc	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279

22 Titanium 50

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,el	^{50}Ti	DA	2GERKFK	1.0+08	1.0+08	Jour	ZP/A,313,111	83	R.Pesl+	O2262
	α,inel	^{50}Ti	DAP	2GERKFK	1.0+08	1.0+08	Jour	ZP/A,313,111	83	R.Pesl+	O2262

24 Chromium 50

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,x+α	inclusive	CS	2AUSIRK	1.4+07	1.4+07	Jour	ZP/A,301,327	81	C.Derndorfer+	21841
	n,x+α	inclusive	DAE	2AUSIRK	1.4+07	1.4+07	Jour	ZP/A,301,327	81	C.Derndorfer+	21841
	n,x+α	inclusive	DE	2AUSIRK	1.4+07	1.4+07	Jour	ZP/A,301,327	81	C.Derndorfer+	21841
	p,inel	^{50}Cr	DAP	2SF ABA	6.0+06	6.1+06	Jour	IZV,48,(10),1952	84	M.Brenner+	F0764

24 Chromium 52

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,el	^{52}Cr	DA	2GERKFK	1.0+08	1.0+08	Jour	ZP/A,313,111	83	R.Pesl+	O2262
	α,inel	^{52}Cr	DAP	2GERKFK	1.0+08	1.0+08	Jour	ZP/A,313,111	83	R.Pesl+	O2262

26 Iron

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,x	^{7}Be	CS	2JPNOSA	3.7+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
*	n,x	^{24}Na	CS	2JPNOSA	3.7+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287

27 Cobalt 59

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,2n	^{58}Co	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,2n+α	^{54}Mn	CS	2JPNJAE	2.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,3n	^{57}Co	CS	2JPNJAE	2.3+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279

	n,α	^{56}Mn	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,p	^{59}Fe	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279

28 Nickel

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,x	^{7}Be	CS	2JPNOSA	3.7+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287
*	n,x	^{24}Na	CS	2JPNOSA	2.9+08	3.7+08	Jour	RCA/S,1,123	11	K.Ninomiya+	23287

28 Nickel 58

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,2n	^{57}Ni	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,p	^{58}Co	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,x	^{56}Co	CS	2JPNJAE	2.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,x	^{57}Co	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279

28 Nickel 59

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,α	^{56}Fe	CS	2ZZZCER	1.8-01	4.3+02	Jour	NDS,120,208	14	C.Weiss+	23278
*	n,α	^{56}Fe	RI	2ZZZCER	1.7+02	2.4+02	Jour	NDS,120,208	14	C.Weiss+	23278

29 Copper 63

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,3n	^{61}Cu	CS	2JPNJAE	2.5+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279

29 Copper 65

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,α	^{62}Co	CS	2TUKCNA	1.4+07	1.5+07	Jour	ARI,99,86	15	A.Durusoy+	23270

32 Germanium 76

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,p	^{76}Ga	CSP	1USATNL	2.0+07	2.0+07	Jour	PR/C,93,014614	16	W.Tornow+	14448
*	n,p	^{76}Ga	?	1USATNL	2.0+07	2.0+07	Jour	PR/C,93,014614	16	W.Tornow+	14448

37 Rubidium 85

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,inel	^{85}Rb	DAP	1USATUL	3.7+05	2.2+06	Jour	PR/C,6,1686	Nov 72	R.P.Torti+	10216

39 Yttrium 89

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,2n	^{88}Y	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,3n	^{87}Y	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
*	p,γ	^{90}Zr	CSP	2GERKLN	3.6+06	4.6+06	Jour	PL/B,744,358	15	L.Netterdon+	O2271

41 Niobium 93

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,2n	^{92}Nb	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279

44 Ruthenium 96

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{97}Rh	CS	2GERGSI	9.0+06	1.1+07	Jour	PR/C,92,035803	15	B.Mei+	O2272

48 Cadmium 110

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,α	^{107}Pd	CS	2GERKIG	1.5+07	1.5+07	Rept	GKSS-85-E-24	85	B.Anders+	21976

56 Barium 130

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,2n	^{129}Ba	CS	2GERKIG	1.5+07	1.5+07	Rept	GKSS-86-E-29	86	R.Pepelnik+	21999

62 Samarium 144

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{145}Eu	CS	2JPNOSA	2.8+06	7.6+06	Jour	PR/C,93,025801	16	N.Kinoshita+	E2496

62 Samarium 151

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,0		RP	2ZZZCER			Jour	PR/C,73,034604	06	S.Marrone+	22893
*	n,γ	^{152}Sm	CS	2ZZZCER	6.7-01	9.9+05	Jour	PR/C,73,034604	06	S.Marrone+	22893

62 Samarium 154

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,inel	^{154}Sm	CSP	1CANALA	6.8+05	2.2+06	Jour	NP/A,211,493	Sep 73	S.A.Elbakr+	10362

64 Gadolinium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,tot		CS	2FR ILL	6.5-09	5.8-03	Jour	PL/B,752,212	16	J.Schroffenegger+	23285

64 Gadolinium 157

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,tot		CS	2FR ILL	5.8-10	5.8-03	Jour	PL/B,752,212	16	J.Schroffenegger+	23285

69 Thulium 169

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,2n	^{168}Tm	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,3n	^{167}Tm	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279

70 Ytterbium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,x	^{175}Yb	CS	2ZZZISP	7.7+06	1.8+07	Jour	ARI,69,37	11	S.Manenti+	O1877

73 Tantalum 181

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x+α	inclusive	DA	2ITYMIL	2.0+07	3.0+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DE	2ITYMIL	2.0+07	3.0+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263

76 Osmium 186

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{187}Os	CS	2ZZZCER	1.0+00	2.0+04	Jour	PR/C,82,015802	10	M.Mosconi+	22796

76 Osmium 187

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{188}Os	CS	2ZZZCER	1.0+00	1.0+04	Jour	PR/C,82,015802	10	M.Mosconi+	22796

76 Osmium 188

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{189}Os	CS	2ZZZCER	1.0+00	2.0+04	Jour	PR/C,82,015802	10	M.Mosconi+	22796

79 Gold 197

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,2n	^{196}Au	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,3n	^{195}Au	CS	2JPNJAE	1.8+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
	n,4n	^{194}Au	CS	2JPNJAE	2.5+07	3.0+07	Conf	96PRAHA,,465	96	Y.Uno+	23279
*	n,γ	^{198}Au	CS	2ZZZCER	1.0+00	5.0+03	Jour	PR/C,81,044616	10	C.Massimi+	23067
*	n,γ	^{198}Au	CS	2SPNSEU	Maxwl		Conf	2014DEBREC,(102)	14	P.Jimenez-Bonilla+	23282
*	n,γ	^{198}Au	CS	2ZZZGEL	Maxwl		Jour	PR/C,85,055810	12	G.Feinberg+	23284
	p,x+α	inclusive	DA	2ITYMIL	2.0+07	4.1+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DE	2ITYMIL	2.0+07	4.1+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263

82 Lead

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{29}Ne,x	^{28}Ne	CS	2JPNIPC	7.1+09	7.1+09	Jour	PR/C,93,014613	16	N.Kobayashi+	E2495
*	^{29}Ne,x	^{28}Ne	CSP	2JPNIPC	7.1+09	7.1+09	Jour	PR/C,93,014613	16	N.Kobayashi+	E2495

82 Lead 206

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,2n	^{205}Pb	CSP	2ZZZGEL		3.7+05	Jour	PR/C,91,064618	15	A.Negret+	23292
*	n,γ	^{207}Pb	CS	2ZZZGEL	3.0+00	6.2+00	Jour	PR/C,76,014605	07	A.Borella+	22921
*	n,inel	^{206}Pb	CS	2ZZZGEL		3.7+05	Jour	PR/C,91,064618	15	A.Negret+	23292
*	n,inel	^{206}Pb	CSP	2ZZZGEL		5.2+06	Jour	PR/C,91,064618	15	A.Negret+	23292
*	n,inel	^{206}Pb	DAP	2ZZZGEL		3.7+05	Jour	PR/C,91,064618	15	A.Negret+	23292
*	n,tot		CS	2ZZZGEL	3.0+00	8.0+00	Jour	PR/C,76,014605	07	A.Borella+	22921
	p,x+α	inclusive	DA	2ITYMIL	2.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DE	2ITYMIL	2.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263

82 Lead 207

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,2n	^{206}Pb	CSP	2ZZZGEL	8.3+06	1.8+07	Thes	MIHAILESCU	06	L.C.Mihailescu+	23286
*	n,2n	^{206}Pb	DAP	2ZZZGEL	8.3+06	1.6+07	Thes	MIHAILESCU	06	L.C.Mihailescu+	23286
*	n,inel	^{207}Pb	CS	2ZZZGEL	5.7+05	1.8+07	Thes	MIHAILESCU	06	L.C.Mihailescu+	23286
*	n,inel	^{207}Pb	CSP	2ZZZGEL	5.7+05	9.2+06	Thes	MIHAILESCU	06	L.C.Mihailescu+	23286
*	n,inel	^{207}Pb	DAP	2ZZZGEL	2.8+06	1.0+07	Thes	MIHAILESCU	06	L.C.Mihailescu+	23286
	p,x+α	inclusive	DA	2ITYMIL	3.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DE	2ITYMIL	3.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263

82 Lead 208

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x+α	inclusive	DA	2ITYMIL	3.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DE	2ITYMIL	3.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263

83 Bismuth 209

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x+α	inclusive	DA	2ITYMIL	2.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DE	2ITYMIL	2.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263

90 Thorium 232

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,fis	Many	CS	1USAFSU	9.5+06	1.1+07	Jour	JIN,30,3155	68	S.H.Freid+	O0621
	d,fis	Many	CS	1USAFSU	1.2+07	1.2+07	Jour	JIN,30,3155	68	S.H.Freid+	O0621

92 Uranium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,fis	^{95}Zr	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{103}Ru	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{110}Ag	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{111}Ag	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{115}Cd	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{125}Sn	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{122}Sb	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{124}Sb	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{126}Sb	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{127}Sb	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{121}Te	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{132}Te	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{131}I	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{127}Xe	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{136}Cs	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{137}Cs	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{140}Ba	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{139}Ce	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,fis	^{141}Ce	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,x	^{230}Pa	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,x	^{232}Pa	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,x	^{233}Pa	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266
*	p,x	^{237}U	CS	2FR SAT	2.1+08	2.5+09	Jour	JRN,305,345	15	S.A.M.Issa+	O2266

92 Uranium 235

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,fis	γ	FY	2FR ILL	2.5-02	2.5-02	Jour	EPJ/CS,93,02018	15	A.J.Pollitt+	23283
*	n,fis	γ	KE	2FR PAR	1.7+06	1.7+06	Jour	PR/C,92,034618	15	M.Lebois+	23299
*	n,fis	γ	?	2FR PAR	1.7+06	1.7+06	Jour	PR/C,92,034618	15	M.Lebois+	23299
*	^{3}He,2n	^{236}Pu	CS	2SF JYV	2.0+07	4.2+07	Jour	IZV,79,(7),941	15	J.Aaltonen+	O2270
*	^{3}He,4n	^{234}Pu	CS	2SF JYV	2.0+07	3.5+07	Jour	IZV,79,(7),941	15	J.Aaltonen+	O2270
*	^{3}He,n	^{237}Pu	CS	2SF JYV	2.0+07	4.2+07	Jour	IZV,79,(7),941	15	J.Aaltonen+	O2270
*	^{3}He,x	^{234}Np	CS	2SF JYV	2.0+07	4.2+07	Jour	IZV,79,(7),941	15	J.Aaltonen+	O2270
*	^{3}He,x	^{235}Np	CS	2SF JYV	2.0+07	4.2+07	Jour	IZV,79,(7),941	15	J.Aaltonen+	O2270
*	^{3}He,x	^{236}Np	CS	2SF JYV	2.0+07	4.2+07	Jour	IZV,79,(7),941	15	J.Aaltonen+	O2270
*	^{3}He,x	^{236}Pu	CS	2SF JYV	2.0+07	4.2+07	Jour	IZV,79,(7),941	15	J.Aaltonen+	O2270

92 Uranium 236

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,fis		CS	2ZZZCER	5.3+00	1.1+04	Jour	PR/C,84,044618	11	R.Sarmento+	23131
*	n,fis		?	2ZZZCER	2.0+00	5.1+05	Jour	PR/C,84,044618	11	R.Sarmento+	23131

92 Uranium 238

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,fis	γ	KE	2FR PAR	1.7+06	1.7+06	Jour	PR/C,92,034618	15	M.Lebois+	23299
	n,fis		?	2BLGMOL	5.0+05	5.0+05	Rept	IAEA-208,(2),291	78	A.Fabry+	20947

93 Neptunium 237

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		?	2BLGMOL	5.0+05	5.0+05	Rept	IAEA-208,(2),291	78	A.Fabry+	20947

94 Plutonium 238

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		NU	2FR GRE	2.5-02	2.5-02	Jour	NP/A,481,333	May 88	M.Haddad+	22087

94 Plutonium 240

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,fis		CS	2ZZZGEL	5.0+05	3.0+06	Jour	PR/C,92,014620	15	P.Salvador-Castineira+	23281

94 Plutonium 242

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,fis		CS	2ZZZGEL	3.0+05	3.0+06	Jour	PR/C,92,044606	15	P.Salvador-Castineira+	23280

95 Americium 241

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,2n	^{240}Am	CS	2GRCATH	1.0+07	1.7+07	Jour	PR/C,93,014610	16	A.Kalamara+	23289

98 Californium 252

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #

*	0,fis	γ	FY	2ZZZGEL	Spont	Jour	PR/C,92,014618	15	A.Oberstedt+	23197
*	0,fis	Many	FY	2ZZZGEL	Spont	Jour	PR/C,90,064611	14	A.Goeoek+	23268
*	0,fis	Many	KE	2ZZZGEL	Spont	Jour	PR/C,90,064611	14	A.Goeoek+	23268
*	0,fis	Many	NU	2ZZZGEL	Spont	Jour	PR/C,90,064611	14	A.Goeoek+	23268
*	0,fis		NUF	2ZZZGEL	Spont	Jour	PR/C,90,064611	14	A.Goeoek+	23268
*	0,fis	Many	NUF	2ZZZGEL	Spont	Jour	PR/C,90,064611	14	A.Goeoek+	23268
*	0,fis		NUF	2ZZZGEL	Spont	Jour	PR/C,90,064611	14	A.Goeoek+	23268
*	0,fis	Many	NUF	2ZZZGEL	Spont	Jour	PR/C,90,064611	14	A.Goeoek+	23268
*	0,fis	γ	PY	2ZZZGEL	Spont	Jour	PR/C,92,014618	15	A.Oberstedt+	23197
*	0,fis	*n*	KE	2ZZZGEL	Spont	Jour	PR/C,90,064611	14	A.Goeoek+	23268