EXFOR News (October 2019)

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, 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 the NRDC Coordinator (Naohiko Otsuka n.otsuka@iaea.org) for inclusion in the EXFOR News distribution list as well as any question on EXFOR.

[1] N. Otuka, E. Dupont, V. Semkova 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 $\mathrm{d}\Omega_1/\mathrm{d}\Omega_2/\mathrm{d}E'$	NUD	Delayed fission neutron multiplicity $\bar{\nu_d}$
D3E	Triple differential $\mathrm{d}\Omega/\mathrm{d}E'_1/\mathrm{d}E'_2$	NUF	Fragment neutrons
D4A	Quadruple diff. $\mathrm{d}\Omega_1/\mathrm{d}\Omega_2/\mathrm{d}E'_1/\mathrm{d}E'_2$	POL	Polarization
DA	Differential $\mathrm{d}/\mathrm{d}\Omega$	POD	Differential polarization
DAA	Double differential $\mathrm{d}\Omega_1/\mathrm{d}\Omega_2$	PY	Product yield (other than fission)
DAE	Double differential $\mathrm{d}\Omega/\mathrm{d}E'$	RI	Resonance integral
DAP	Partial differential $\mathrm{d}/\mathrm{d}\Omega$	RP	Resonance parameter
DAT	Temperature-dependent Legendre coefficient	RR	Reaction rate
DE	Differential $\mathrm{d}/\mathrm{d}E'$	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, $\mathrm{d}/\mathrm{d}\Omega$
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)

0 Neutron 1

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	n	DA	4RUSIFP	5.9+08	5.9+08	Jour	JET,4,303	57	B.M.Golovin+	41678

1 Hydrogen 1

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{7}Be,γ	^{8}B	?	2ITYFSN	8.1+05	8.1+05	Jour	EPJ/A,54,92	18	R.Buompane+	O2427
*	^{9}Be,el	^{1}H	?	2ITYLNS	1.5+07	5.1+07	Jour	PR/C,99,014615	19	N.Keeley+	O2428
	^{28}Si,tcc		?	1USABNL	2.8+10	2.8+10	Jour	NP/A,807,206	08	S.Cecchini+	D0946

1 Hydrogen 2

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	4ZZZDUB	5.5+09	8.3+09	Jour	YF,1,134	65	V.S.Pantuev+	40818

1 Hydrogen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{12}C,tcc		CS	2JPNIRS	3.5+09	3.5+09	Jour	NP/A,807,206	08	S.Cecchini+	D0946
	^{28}Si,tcc		CS	1USABNL	2.8+10	1.4+11	Jour	NP/A,807,206	08	S.Cecchini+	D0946
	^{28}Si,x	Many	CS	1USABNL	2.8+10	2.8+10	Jour	NP/A,807,206	08	S.Cecchini+	D0946
	^{56}Fe,tcc		CS	2JPNIRS	1.7+10	2.3+10	Jour	NP/A,807,206	08	S.Cecchini+	D0946
	^{56}Fe,tcc		CS	1USABNL	5.6+10	5.6+11	Jour	NP/A,807,206	08	S.Cecchini+	D0946
	^{56}Fe,x	Many	CS	1USABNL	5.6+10	5.6+10	Jour	NP/A,807,206	08	S.Cecchini+	D0946

2 Helium 4

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{15}N,el	^{4}He	?	2ITYLNS	1.8+06	5.9+06	Jour	PR/C,99,034301	19	M.Lacognata+	O2432

3 Lithium 6

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,x+α	inclusive	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563
	^{3}He,d	^{7}Be	DAE	1USACAL	1.1+07	1.1+07	Jour	PR,150,836	66	W.Whaling	C2391

	^{3}He,t	^{6}Be	DAE	1USACAL	1.1+07	1.1+07	Jour	PR,150,836	66	W.Whaling	C2391

3 Lithium 7

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	p,n	^{7}Be	PY	2ITYPAD	1.9+06	2.0+06	Jour	PR/C,99,034616	19	G.Martin-Hernandez+	O2433
*	^{12}C,el	^{7}Li	DA	3POLWWA	1.2+08	1.2+08	Jour	YFE,14,25	13	A.T.Rudchik+	D5107
*	^{12}C,inel	^{7}Li	DAP	3POLWWA	1.2+08	1.2+08	Jour	YFE,14,25	13	A.T.Rudchik+	D5107

4 Beryllium 9

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,2n	^{8}Be	CS	4RUSMOS	3.0+06	1.6+07	Jour	DOK,119,914	58	S.S.Vasil'Ev+	40712
	d,α	^{7}Li	CSP	2FR BRC	2.0+05	2.0+05	Rept	CEA-R-4070	71	J.Perchereau	F0498
	d,p	^{10}Be	CSP	2FR BRC	2.0+05	2.0+05	Rept	CEA-R-4070	71	J.Perchereau	F0498
	d,t	^{8}Be	CSP	2FR BRC	2.0+05	2.0+05	Rept	CEA-R-4070	71	J.Perchereau	F0498
*	d,x+n	inclusive	PY	1USABRK	1.6+07	1.6+07	Jour	NIM/A,877,359	18	K.P.Harrig+	C2390
	^{3}He,α	^{8}Be	DAP	2FR STR	4.0+06	5.0+06	Jour	JPR,39,805	78	B.Bilwes+	F0210

5 Boron 10

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,x+α	inclusive	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563
*	p,α	^{7}Be	CSP	2ITYCAT	3.0+03	2.2+06	Jour	PR/C,97,065801	18	A.Cvetinovic+	O2426

6 Carbon

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	^{14}N,tcc		CS	2GERGSI	1.3+10	1.3+10	Jour	PL/B,790,251	19	S.Bagchi+	D0941
*	^{15}N,tcc		CS	2GERGSI	1.2+10	1.2+10	Jour	PL/B,790,251	19	S.Bagchi+	D0941
*	^{17}N,tcc		CS	2GERGSI	1.6+10	1.6+10	Jour	PL/B,790,251	19	S.Bagchi+	D0941
*	^{18}N,tcc		CS	2GERGSI	1.7+10	1.7+10	Jour	PL/B,790,251	19	S.Bagchi+	D0941
*	^{19}N,tcc		CS	2GERGSI	1.7+10	1.7+10	Jour	PL/B,790,251	19	S.Bagchi+	D0941
*	^{20}N,tcc		CS	2GERGSI	1.8+10	1.8+10	Jour	PL/B,790,251	19	S.Bagchi+	D0941
*	^{21}N,tcc		CS	2GERGSI	1.8+10	1.8+10	Jour	PL/B,790,251	19	S.Bagchi+	D0941
*	^{22}N,tcc		CS	2GERGSI	1.9+10	1.9+10	Jour	PL/B,790,251	19	S.Bagchi+	D0941

6 Carbon 12

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,n+2α	^{4}He	CS	4RUSMOS	9.0+06	1.9+07	Jour	JET,6,1016	58	S.S.Vasil'Ev+	41676

	p,0		RP	1USACOL			Jour	PR,132,2212	63	N.Nikolic+	C2362
	p,el	^{12}C	DA	1USACOL	4.4+06	6.1+06	Jour	PR,132,2212	63	N.Nikolic+	C2362
*	p,γ	^{13}N	PY	4UZ NUU	1.9+05	6.5+05	Jour	NIM/A,825,17	16	S.V.Artemov+	D0953
	p,inel	^{12}C	DAP	1CANMCG	1.0+08	1.0+08	Jour	CJP,48,(2),201	70	Y.S.Horowitz+	C2389
	p,inel	^{12}C	DAP	1USACOL	5.3+06	6.1+06	Jour	PR,132,2212	63	N.Nikolic+	C2362
*	^{15}N,el	^{12}C	DA	3POLWWA	8.1+07	8.1+07	Jour	APP/B,50,753	19	A.T.Rudchik+	D5174
*	^{15}N,inel	^{12}C	DAP	3POLWWA	8.1+07	8.1+07	Jour	APP/B,50,753	19	A.T.Rudchik+	D5174
	^{28}Si,tcc		CS	1USABNL	2.8+10	2.8+10	Jour	NP/A,807,206	08	S.Cecchini+	D0946

6 Carbon 14

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	^{11}B,^{9}Be	^{16}N	DAP	3POLWWA	4.5+07	4.5+07	Jour	YFE,14,18	13	S.Yu.Mezhevych+	D5106

9 Fluorine 19

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,d	^{18}O	DAP	4RUSFTI	1.4+07	1.4+07	Jour	JET,12,395	61	G.E.Velyukhov+	41672

10 Neon 20

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,d	^{19}F	DAP	4RUSFTI	1.4+07	1.4+07	Jour	JET,12,395	61	G.E.Velyukhov+	41672

12 Magnesium 24

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,α	^{21}Ne	CS	4RUSLEB	1.4+07	1.4+07	Jour	JET,18,640	64	B.A.Benetskii+	41679
n,inel	^{24}Mg	CSP	4RUSLEB	1.4+07	1.4+07	Jour	JET,18,640	64	B.A.Benetskii+	41679
n,inel	^{24}Mg	DAP	4RUSLEB	1.4+07	1.4+07	Jour	JET,18,640	64	B.A.Benetskii+	41679
α,inel	^{24}Mg	DAP	2GERMPH	1.5+07	1.9+07	Jour	NP/A,142,113	70	K.A.Eberhard+	F0626

13 Aluminium 27

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,α	^{24}Na	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563
n,p	^{27}Mg	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563
d,x	^{24}Na	CS	1USAMIT	1.0+07	1.4+07	Jour	PR,71,187	47	E.T.Clarke	C2394
^{12}C,tcc		CS	2JPNIRS	3.5+09	3.5+09	Jour	NP/A,807,206	08	S.Cecchini+	D0946
^{28}Si,tcc		CS	1USABNL	2.8+10	8.4+10	Jour	NP/A,807,206	08	S.Cecchini+	D0946
^{56}Fe,tcc		CS	2JPNIRS	1.7+10	2.3+10	Jour	NP/A,807,206	08	S.Cecchini+	D0946

	^{56}Fe,tcc		CS	1USABNL	5.6+10	5.6+10	Jour	NP/A,807,206	08	S.Cecchini+	D0946

15 Phosphorus 31

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,d	^{30}Si	DAP	4RUSFTI	1.4+07	1.4+07	Jour	JET,12,395	61	G.E.Velyukhov+	41672

16 Sulphur 32

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,d	^{31}P	DAP	4RUSFTI	1.4+07	1.4+07	Jour	JET,12,395	61	G.E.Velyukhov+	41672

17 Chlorine 35

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,α	^{32}P	CS	1USAUCX	2.4+06	2.7+06	Jour	PR/C,99,044612	19	J.C.Batchelder+	14556
*	n,p	^{35}S	CS	1USAUCX	2.4+06	2.7+06	Jour	PR/C,99,044612	19	J.C.Batchelder+	14556

21 Scandium 45

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{46}Sc	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563

22 Titanium 46

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,p	^{46}Sc	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563

22 Titanium 47

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,p	^{47}Sc	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563

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	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563

23 Vanadium 51

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{19}F,x+n	inclusive	DA	3INDTRM	1.5+08	1.5+08	Jour	PR/C,97,034607	18	J.Acharya+	D6339
*	^{19}F,x+n	inclusive	DAE	3INDTRM	1.3+08	1.5+08	Jour	PR/C,97,034607	18	J.Acharya+	D6339
*	^{20}Ne,x	^{61}Co	CS	3INDVEC	1.4+08	1.4+08	Jour	EPJ/A,54,56	18	S.Ali+	D6327
*	^{20}Ne,x	^{60}Cu	CS	3INDVEC	1.4+08	1.4+08	Jour	EPJ/A,54,56	18	S.Ali+	D6327
*	^{20}Ne,x	^{61}Cu	CS	3INDVEC	1.4+08	1.4+08	Jour	EPJ/A,54,56	18	S.Ali+	D6327
*	^{20}Ne,x	^{62}Zn	CS	3INDVEC	1.4+08	1.4+08	Jour	EPJ/A,54,56	18	S.Ali+	D6327
*	^{20}Ne,x	^{63}Zn	CS	3INDVEC	1.4+08	1.4+08	Jour	EPJ/A,54,56	18	S.Ali+	D6327
*	^{20}Ne,x	^{65}Ga	CS	3INDVEC	1.4+08	1.4+08	Jour	EPJ/A,54,56	18	S.Ali+	D6327
*	^{20}Ne,x	^{66}Ge	CS	3INDVEC	1.4+08	1.4+08	Jour	EPJ/A,54,56	18	S.Ali+	D6327
*	^{20}Ne,x	^{67}Ge	CS	3INDVEC	1.4+08	1.4+08	Jour	EPJ/A,54,56	18	S.Ali+	D6327

24 Chromium 54

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,el	^{54}Cr	DA	4KASKAZ	3.8+07	3.8+07	Jour	VAT/Y,,(7/9),62	73	A.V.Yushkov+	D0942
	α,inel	^{54}Cr	DAP	4KASKAZ	3.8+07	3.8+07	Jour	VAT/Y,,(7/9),62	73	A.V.Yushkov+	D0942

26 Iron

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	3BZLIPE	5.5-01	6.5+00	Rept	IPEN-10	81	L.A.Vinhas+	31794
*	p,x	^{56}Co	CS	3INDTRM	5.9+06	2.0+07	Jour	EPJ/A,54,141	18	B.Lawriniang+	D6328
*	p,x	^{57}Co	CS	3INDTRM	5.9+06	2.0+07	Jour	EPJ/A,54,141	18	B.Lawriniang+	D6328

26 Iron 54

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,p	^{54}Mn	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563
	α,el	^{54}Fe	DA	4KASKAZ	3.8+07	3.8+07	Jour	VAT/Y,,(7/9),62	73	A.V.Yushkov+	D0942
	α,inel	^{54}Fe	DAP	4KASKAZ	3.8+07	3.8+07	Jour	VAT/Y,,(7/9),62	73	A.V.Yushkov+	D0942

26 Iron 58

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{59}Fe	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563

27 Cobalt 59

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{60}Co	RI	1USASTF	5.0-01		Conf	66SDIEGO,2,175	66	L.Lesage+	11754
	n,γ	^{60}Co	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563
	d,p	^{60}Co	CS	1USAPUP	4.7+06	1.4+07	Jour	PR,155,1352	67	J.B.Natowitz+	C2325

28 Nickel

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	4RUSFTI	1.4+07	1.4+07	Jour	NP/A,92,433	67	Yu.V.Dukarevich+	40813

28 Nickel 58

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{57}Ni	CS	2JPNJSR	1.2+07	2.2+07	Jour	PR/C,98,054619	18	H.Utsunomiya+	K2614
	n,p	^{58}Co	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563

28 Nickel 60

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{59}Ni	CS	2JPNJSR	1.2+07	2.0+07	Jour	PR/C,98,054619	18	H.Utsunomiya+	K2614
	α,el	^{60}Ni	DA	4KASKAZ	3.8+07	3.8+07	Jour	VAT/Y,,(7/9),62	73	A.V.Yushkov+	D0942
	α,inel	^{60}Ni	DAP	4KASKAZ	3.8+07	3.8+07	Jour	VAT/Y,,(7/9),62	73	A.V.Yushkov+	D0942

28 Nickel 61

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{60}Ni	CS	2JPNJSR	8.3+06	1.9+07	Jour	PR/C,98,054619	18	H.Utsunomiya+	K2614

28 Nickel 62

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,el	^{62}Ni	DA	4KASKAZ	3.8+07	3.8+07	Jour	VAT/Y,,(7/9),62	73	A.V.Yushkov+	D0942
	α,inel	^{62}Ni	DAP	4KASKAZ	3.8+07	3.8+07	Jour	VAT/Y,,(7/9),62	73	A.V.Yushkov+	D0942

28 Nickel 64

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{63}Ni	CS	2JPNJSR	9.7+06	1.6+07	Jour	PR/C,98,054619	18	H.Utsunomiya+	K2614

29 Copper

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{nat}Cu	DA	4RUSKUR	2.0+06	2.0+06	Jour	JET,6,228	58	Iu.A.Aleksandrov+	41677

29 Copper 63

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{64}Cu	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563

30 Zinc

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	4RUSFTI	1.4+07	1.4+07	Jour	NP/A,92,433	67	Yu.V.Dukarevich+	40813

30 Zinc 68

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,2n	^{67}Ga	TT	3HUNDEB	1.4+07	1.4+07	Jour	RCA,50,19	90	F.Tarkanyi+	D4004

31 Gallium 71

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{72}Ga	CS	3INDMNP	2.5-02	2.5-02	Jour	EPJ/A,55,91	19	P.Panikkath+	31793

32 Germanium 74

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{73}Ge	CS	2JPNJSR	1.0+07	1.3+07	Jour	PR/C,93,064302	16	T.Renstrom+	K2612

34 Selenium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,x	^{77}Br	CS	2GRCATH	2.0+06	6.0+06	Jour	PR/C,97,035806	18	V.Foteinou+	O2446

34 Selenium 74

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{75}Br	CS	2GRCATH	2.0+06	5.9+06	Jour	PR/C,97,035806	18	V.Foteinou+	O2446

34 Selenium 78

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{79}Br	CS	2GERTHS	1.7+06	3.0+06	Jour	PR/C,97,035806	18	V.Foteinou+	O2446

34 Selenium 80

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{81}Br	CS	2GERTHS	1.5+06	3.5+06	Jour	PR/C,97,035806	18	V.Foteinou+	O2446
*	p,n	^{80}Br	CS	2GRCATH	2.9+06	5.9+06	Jour	PR/C,97,035806	18	V.Foteinou+	O2446

34 Selenium 82

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,n	^{82}Br	CS	2GRCATH	2.0+06	5.9+06	Jour	PR/C,97,035806	18	V.Foteinou+	O2446
	d,2n	^{82}Br	CS	1USAWAS	3.7+06	9.6+06	Jour	PR,84,700	51	J.A.Miskel+	C2392

35 Bromine 81

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,p	^{82}Br	CS	1USAWAS	8.6+06	9.7+06	Jour	PR,84,700	51	J.A.Miskel+	C2392

37 Rubidium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x	^{81}Rb	TT	2JPNTOH	3.4+07	7.0+07	Jour	NIM/B,194,369	02	T.Ido+	D4114
	p,x	^{86}Rb	TT	2JPNTOH	3.4+07	7.0+07	Jour	NIM/B,194,369	02	T.Ido+	D4114

37 Rubidium 87

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,n	^{90}Y	CS	1USAFSU	1.1+07	1.8+07	Jour	PR,134,B559	64	C.Riley+	C2317

39 Yttrium 89

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,p	^{90}Y	CS	1USAPUP	2.6+06	1.4+07	Jour	PR,155,1352	67	J.B.Natowitz+	C2325
	d,p	^{90}Y	CS	1USAFSU	5.0+06	1.2+07	Jour	PR,134,B559	64	C.Riley+	C2317
	d,p	^{90}Y	CS	1USAPUP	5.2+06	1.4+07	Jour	PR,155,1352	67	J.B.Natowitz+	C2325
*	^{16}O,4n	^{101}Ag	CS	3INDNSD	1.0+08	1.0+08	Jour	PR/C,98,034603	18	M.Gull+	D6346
*	^{16}O,x	^{94}Tc	CS	3INDNSD	1.0+08	1.0+08	Jour	PR/C,98,034603	18	M.Gull+	D6346
*	^{16}O,x	^{95}Tc	CS	3INDNSD	1.0+08	1.0+08	Jour	PR/C,98,034603	18	M.Gull+	D6346
*	^{16}O,x	^{98}Rh	CS	3INDNSD	1.0+08	1.0+08	Jour	PR/C,98,034603	18	M.Gull+	D6346
*	^{16}O,x	^{99}Rh	CS	3INDNSD	1.0+08	1.0+08	Jour	PR/C,98,034603	18	M.Gull+	D6346
*	^{16}O,x	^{100}Rh	CS	3INDNSD	1.0+08	1.0+08	Jour	PR/C,98,034603	18	M.Gull+	D6346
*	^{16}O,x	^{99}Pd	CS	3INDNSD	1.0+08	1.0+08	Jour	PR/C,98,034603	18	M.Gull+	D6346
*	^{16}O,x	^{101}Pd	CS	3INDNSD	1.0+08	1.0+08	Jour	PR/C,98,034603	18	M.Gull+	D6346
*	^{19}F,x+n	inclusive	DA	3INDTRM	1.5+08	1.5+08	Jour	PR/C,97,034607	18	J.Acharya+	D6339
*	^{19}F,x+n	inclusive	DAE	3INDTRM	1.3+08	1.5+08	Jour	PR/C,97,034607	18	J.Acharya+	D6339

40 Zirconium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,x	^{90}Nb	CS	3INDTRM	1.1+07	1.9+07	Jour	EPJ/A,54,141	18	B.Lawriniang+	D6328
*	p,x	^{91}Nb	CS	3INDTRM	6.7+06	1.9+07	Jour	EPJ/A,54,141	18	B.Lawriniang+	D6328
*	p,x	^{92}Nb	CS	3INDTRM	6.7+06	1.9+07	Jour	EPJ/A,54,141	18	B.Lawriniang+	D6328

41 Niobium 93

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{94}Nb	RI	1USASTF	5.0-01		Conf	66SDIEGO,2,175	66	L.Lesage+	11754

42 Molybdenum

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ		RI	1USASTF	5.0-01		Conf	66SDIEGO,2,175	66	L.Lesage+	11754

42 Molybdenum 92

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,el	^{92}Mo	DA	4KASKAZ	3.8+07	3.8+07	Jour	VAT/Y,,(1/18),7	77	V.Vu.Gontchar+	D0947
	α,inel	^{92}Mo	DAP	4KASKAZ	3.8+07	3.8+07	Jour	VAT/Y,,(1/18),7	77	V.Vu.Gontchar+	D0947

42 Molybdenum 98

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,d	^{97}Mo	DAP	2GERLMU	2.4+07	2.4+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
*	d,p	^{99}Mo	DAP	2GERLMU	1.5+07	1.5+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
*	^{3}He,α	^{97}Mo	DAP	2GERLMU	3.6+07	3.6+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
*	^{3}He,d	^{99}Tc	DAP	2GERLMU	3.6+07	3.6+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445

42 Molybdenum 100

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,d	^{99}Mo	DAP	2GERLMU	2.4+07	2.4+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
*	d,p	^{101}Mo	DAP	2GERLMU	1.5+07	1.5+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
*	^{3}He,α	^{99}Mo	DAP	2GERLMU	3.6+07	3.6+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
*	^{3}He,d	^{101}Tc	DAP	2GERLMU	3.6+07	3.6+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
	α,el	^{100}Mo	DA	4KASKAZ	3.8+07	3.8+07	Jour	VAT/Y,,(1/18),7	77	V.Vu.Gontchar+	D0947
	α,inel	^{100}Mo	DAP	4KASKAZ	3.8+07	3.8+07	Jour	VAT/Y,,(1/18),7	77	V.Vu.Gontchar+	D0947

44 Ruthenium 100

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,d	^{99}Ru	DAP	2GERLMU	2.4+07	2.4+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
*	d,p	^{101}Ru	DAP	2GERLMU	1.5+07	1.5+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
*	^{3}He,α	^{99}Ru	DAP	2GERLMU	3.6+07	3.6+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
*	^{3}He,d	^{101}Rh	DAP	2GERLMU	3.6+07	3.6+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445

44 Ruthenium 102

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,d	^{101}Ru	DAP	2GERLMU	2.4+07	2.4+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
*	d,p	^{103}Ru	DAP	2GERLMU	1.5+07	1.5+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
*	^{3}He,α	^{101}Ru	DAP	2GERLMU	3.6+07	3.6+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445
*	^{3}He,d	^{103}Rh	DAP	2GERLMU	3.6+07	3.6+07	Jour	PR/C,96,054325	17	S.J.Freeman+	O2445

45 Rhodium 103

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{104}Rh	RI	1USASTF	5.0-01		Conf	66SDIEGO,2,175	66	L.Lesage+	11754
	d,p	^{104}Rh	CS	1USAPUP	5.6+06	1.4+07	Jour	PR,155,1352	67	J.B.Natowitz+	C2325

46 Palladium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ		RI	1USASTF	5.0-01		Conf	66SDIEGO,2,175	66	L.Lesage+	11754
	α,el	^{nat}Pd	DA	4KASKAZ	3.8+07	3.8+07	Jour	BAS,35,770	72	V.Yu.Gonchar+	D0948
	α,inel	^{nat}Pd	DAP	4KASKAZ	3.8+07	3.8+07	Jour	BAS,35,770	72	V.Yu.Gonchar+	D0948

46 Palladium 108

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{109}Pd	CS	1USAORU	Maxwl		Jour	PR/C,99,044313	19	K.S.Krane	14558
*	n,γ	^{109}Pd	RI	1USAORU		5.0-01	Jour	PR/C,99,044313	19	K.S.Krane	14558

46 Palladium 110

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{111}Pd	CS	1USAORU	Maxwl		Jour	PR/C,99,044313	19	K.S.Krane	14558
*	n,γ	^{111}Pd	RI	1USAORU		5.0-01	Jour	PR/C,99,044313	19	K.S.Krane	14558
	d,p	^{111}Pd	CS	1USAPUP	4.8+06	1.4+07	Jour	PR,155,1352	67	J.B.Natowitz+	C2325

47 Silver

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ		RI	1USASTF	5.0-01		Conf	66SDIEGO,2,175	66	L.Lesage+	11754
	n,tot		CS	4RUSFTI	1.4+07	1.4+07	Jour	NP/A,92,433	67	Yu.V.Dukarevich+	40813

47 Silver 107

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{108}Cd	CS	2GRCATH	2.2+06	4.0+06	Jour	PR/C,96,035806	17	A.Khaliel+	O2444

47 Silver 109

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{110}Cd	CS	2GRCATH	2.2+06	4.0+06	Jour	PR/C,96,035806	17	A.Khaliel+	O2444

48 Cadmium 114

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
d,p	^{115}Cd	CS	1USAPUP	5.1+06	1.4+07	Jour	PR,155,1352	67	J.B.Natowitz+	C2325

49 Indium

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ		RI	1USASTF	5.0-01		Conf	66SDIEGO,2,175	66	L.Lesage+	11754

49 Indium 115

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{116}In	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563
n,inel	^{115}In	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563

50 Tin

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,el	^{nat}Sn	DA	4RUSKUR	2.0+06	2.0+06	Jour	JET,6,228	58	Iu.A.Aleksandrov+	41677
n,tot		CS	4RUSFTI	1.4+07	1.4+07	Jour	NP/A,92,433	67	Yu.V.Dukarevich+	40813

50 Tin 112

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

*	^{7}Li,^{6}He	^{113}Sb	DAP	3INDTRM	3.0+07	3.0+07	Jour	PR/C,98,014609	18	D.Chattopadhyay+	D6344
*	^{7}Li,^{6}Li	^{113}Sn	DAP	3INDTRM	3.0+07	3.0+07	Jour	PR/C,98,014609	18	D.Chattopadhyay+	D6344
*	^{7}Li,^{8}Be	^{111}In	DAP	3INDTRM	3.0+07	3.0+07	Jour	PR/C,98,014609	18	D.Chattopadhyay+	D6344
*	^{7}Li,el	^{112}Sn	DA	3INDTRM	3.0+07	3.0+07	Jour	PR/C,98,014609	18	D.Chattopadhyay+	D6344
*	^{7}Li,x	^{8}Be	DAP	3INDTRM	3.0+07	3.0+07	Jour	PR/C,98,014609	18	D.Chattopadhyay+	D6344

50 Tin 124

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{125}Sn	CS	1USAORL	3.0+04	3.0+04	Jour	PR/C,99,041302	19	B.Manning+	14557

50 Tin 126

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{127}Sn	CS	1USAORL	3.0+04	3.0+04	Jour	PR/C,99,041302	19	B.Manning+	14557

50 Tin 128

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{129}Sn	CS	1USAORL	3.0+04	3.0+04	Jour	PR/C,99,041302	19	B.Manning+	14557

50 Tin 130

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{131}Sn	CS	1USAORL	3.0+04	3.0+04	Jour	PR/C,99,041302	19	B.Manning+	14557

50 Tin 132

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{133}Sn	CS	1USAORL	3.0+04	3.0+04	Jour	PR/C,99,041302	19	B.Manning+	14557

51 Antimony

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	4RUSFTI	1.4+07	1.4+07	Jour	NP/A,92,433	67	Yu.V.Dukarevich+	40813

52 Tellurium

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,tot		CS	4RUSFTI	1.4+07	1.4+07	Jour	NP/A,92,433	67	Yu.V.Dukarevich+	40813

55 Caesium 133

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
d,p	^{134}Cs	CS	1USAPUP	2.3+06	1.4+07	Jour	PR,155,1352	67	J.B.Natowitz+	C2325

60 Neodymium 142

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,α	^{139}Ce	DAP	3POLIPJ	1.4+07	1.8+07	Jour	NCL,42,425	85	W.Augustyniak+	31800
n,α	^{139}Ce	DE	3POLIPJ	1.4+07	1.8+07	Jour	NCL,42,425	85	W.Augustyniak+	31800

60 Neodymium 144

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,α	^{141}Ce	DE	3POLIPJ	1.4+07	1.8+07	Jour	NCL,42,425	85	W.Augustyniak+	31800

62 Samarium 152

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,0		RP	1CANCRC			Jour	CJP,39,1193	61	R.E.Chrien	14457
n,γ		RP	1CANCRC	8.0+00	8.0+00	Jour	CJP,39,1184	61	W.H.Walker+	14458
n,γ	^{153}Sm	CS	1CANCRC	Maxwl		Jour	CJP,39,1193	61	R.E.Chrien	14457
n,γ	^{153}Sm	RI	1CANCRC		5.0-01	Jour	CJP,39,1193	61	R.E.Chrien	14457
n,γ	^{153}Sm	RI	1CANCRC		5.0-01	Jour	CJP,39,1184	61	W.H.Walker+	14458
n,γ	^{153}Sm	?	1CANCRC	5.0-01		Jour	CJP,39,1193	61	R.E.Chrien	14457
n,γ	^{153}Sm	?	1CANCRC	5.0-01		Jour	CJP,39,1184	61	W.H.Walker+	14458

66 Dysprosium

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
* n,tot		CS	3KORPUE	2.8-02	1.0+02	Jour	KPS,64,1288	14	S.G.Shin+	30845

66 Dysprosium 162

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{161}Dy	CS	2JPNJSR	8.3+06	1.4+07	Jour	PR/C,98,054310	18	T.Renstrom+	K2613

66 Dysprosium 163

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{162}Dy	CS	2JPNJSR	6.5+06	1.3+07	Jour	PR/C,98,054310	18	T.Renstrom+	K2613

67 Holmium 165

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{166}Ho	RI	1USASTF	5.0-01		Conf	66SDIEGO,2,175	66	L.Lesage+	11754

70 Ytterbium 171

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	4ZZZDUB	7.9+00	2.6+02	Conf	81GRENOB,,230	81	F.Becvar+	41671

72 Hafnium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ		RI	1USASTF	5.0-01		Conf	66SDIEGO,2,175	66	L.Lesage+	11754

72 Hafnium 178

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{179}Hf	CS	1USAORU	Maxwl		Jour	PR/C,99,054311	19	K.S.Krane	14562
*	n,γ	^{179}Hf	RI	1USAORU	5.0-01		Jour	PR/C,99,054311	19	K.S.Krane	14562

73 Tantalum

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ		RI	1USASTF	5.0-01		Conf	66SDIEGO,2,175	66	L.Lesage+	11754

73 Tantalum 181

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,p	^{182}Ta	CS	1USAPUP	5.7+06	1.5+07	Jour	PR,82,459	51	K.-H.Sun+	C2393
	d,p	^{182}Ta	CS	1USAPUP	5.8+06	1.5+07	Jour	PR,155,1352	67	J.B.Natowitz+	C2325
*	^{19}F,x+n	inclusive	DA	3INDTRM	1.5+08	1.5+08	Jour	PR/C,97,034607	18	J.Acharya+	D6339
*	^{19}F,x+n	inclusive	DAE	3INDTRM	1.3+08	1.5+08	Jour	PR/C,97,034607	18	J.Acharya+	D6339

74 Tungsten

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
d,x	^{182}Re	TT	2BLGLVN	2.0+07	4.0+07	Jour	NIM/B,211,319	03	F.Tarkanyi+	D4141
d,x	^{183}Re	TT	2BLGLVN	2.0+07	4.0+07	Jour	NIM/B,211,319	03	F.Tarkanyi+	D4141
d,x	^{184}Re	TT	2BLGLVN	2.0+07	4.0+07	Jour	NIM/B,211,319	03	F.Tarkanyi+	D4141
d,x	^{186}Re	TT	2BLGLVN	2.0+07	4.0+07	Jour	NIM/B,211,319	03	F.Tarkanyi+	D4141

75 Rhenium

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ		RI	1USAFLA		5.0-01	Rept	AD-402668	Mar 63	R.A.Karam+	12179

75 Rhenium 187

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
d,p	^{188}Re	CS	1USAPUP	4.1+06	1.4+07	Jour	PR,155,1352	67	J.B.Natowitz+	C2325

78 Platinum

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ		RI	1USASTF	5.0-01		Conf	66SDIEGO,2,175	66	L.Lesage+	11754

78 Platinum 196

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
d,p	^{197}Pt	CS	1USAPUP	7.3+06	1.4+07	Jour	PR,155,1352	67	J.B.Natowitz+	C2325

78 Platinum 198

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,2n	^{198}Au	TT	2BLGVUB	1.5+07	1.5+07	Jour	RCA,92,223	04	F.Tarkanyi+	D4154

79 Gold 197

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{198}Au	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563

81 Thallium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	4RUSFTI	1.4+07	1.4+07	Jour	NP/A,92,433	67	Yu.V.Dukarevich+	40813

81 Thallium 203

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{202}Tl	CS	2JPNJSR	8.0+06	1.3+07	Jour	PR/C,99,024609	19	H.Utsunomiya+	K2615

81 Thallium 205

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{204}Tl	CS	2JPNJSR	7.9+06	1.3+07	Jour	PR/C,99,024609	19	H.Utsunomiya+	K2615

82 Lead

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{nat}Pb	DA	4RUSKUR	2.0+06	2.0+06	Jour	JET,6,228	58	Iu.A.Aleksandrov+	41677
	n,tot		CS	4RUSFTI	1.4+07	1.4+07	Jour	NP/A,92,433	67	Yu.V.Dukarevich+	40813

83 Bismuth 209

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{209}Bi	DA	4RUSKUR	2.0+06	2.0+06	Jour	JET,6,228	58	Iu.A.Aleksandrov+	41677

90 Thorium 230

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	4RUSITE		4.8+01	Conf	66PARIS,1,71	66	S.M.Kalebin+	41670
	n,el		RP	4RUSITE	1.4+00	4.8+01	Conf	66PARIS,1,71	66	S.M.Kalebin+	41670
	n,el	^{230}Th	CS	4RUSITE	2.5-02	2.5-02	Conf	66PARIS,1,71	66	S.M.Kalebin+	41670
	n,tot		CS	4RUSITE	2.5-02	2.5-02	Conf	66PARIS,1,71	66	S.M.Kalebin+	41670

90 Thorium 232

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		?	3RUMBUC	1.5+07	1.5+07	Jour	RRP,29,421	84	I.Garlea+	30813
*	p,fis	^{81}Ge	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,98,024612	18	V.Rakopoulos+	O2429
*	p,fis	^{96}Y	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,98,024612	18	V.Rakopoulos+	O2429
*	p,fis	^{97}Y	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,98,024612	18	V.Rakopoulos+	O2429
*	p,fis	^{128}Sn	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,98,024612	18	V.Rakopoulos+	O2429
*	p,fis	^{130}Sn	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,98,024612	18	V.Rakopoulos+	O2429
*	p,fis	^{129}Sb	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,98,024612	18	V.Rakopoulos+	O2429

92 Uranium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{nat}U	DA	4RUSKUR	2.0+06	2.0+06	Jour	JET,6,228	58	Iu.A.Aleksandrov+	41677
*	p,fis	^{81}Ge	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,98,024612	18	V.Rakopoulos+	O2429
*	p,fis	^{96}Y	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,98,024612	18	V.Rakopoulos+	O2429
*	p,fis	^{97}Y	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,98,024612	18	V.Rakopoulos+	O2429
*	p,fis	^{128}Sn	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,98,024612	18	V.Rakopoulos+	O2429
*	p,fis	^{130}Sn	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,98,024612	18	V.Rakopoulos+	O2429
*	p,fis	^{129}Sb	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,98,024612	18	V.Rakopoulos+	O2429

92 Uranium 233

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		ALF	1USAMTR	2.5-02	2.5-02	Priv	SMITH	Dec 82	J.R.Smith+	12318
	n,fis	Many	NU	4RUSKUR	Maxwl		Jour	NP,41,92	63	V.F.Apalin+	41674
	n,fis		NU	4RUSKUR	Maxwl		Jour	NP,41,92	63	V.F.Apalin+	41674

92 Uranium 235

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,fis	Many	FY	2JPNTOH		6.0+07	Jour	NSE,111,368	92	T.Kase+	K2600
	n,abs		ALF	1USAMTR	2.5-02	2.5-02	Priv	SMITH	Dec 82	J.R.Smith+	12318

	n,fis	Many	FY	3CPRAEP	2.2+07	2.2+07	Prog	INDC(CPR)-053,4	01	Feng Jing+	32791
	n,fis	Many	FY	4UZ UZB	2.5-02	2.5-02	Jour	SNP,36,788	83	I.I.Bakhromi+	31797
	n,fis	Many	FY	4UZ UZB	2.5-02	2.5-02	Jour	SNP,40,720	85	A.D.Belyaev+	31798
*	n,fis	Many	FY	1USALAS	Fast		Jour	NDS,111,2891	10	H.D.Selby+	14537
	n,fis	Many	KE	4UZ UZB	2.5-02	2.5-02	Jour	SNP,36,788	83	I.I.Bakhromi+	31797
	n,fis	Many	NU	4RUSKUR	Maxwl		Jour	NP,38,193	62	V.F.Apalin+	41673
	n,fis		NU	4RUSKUR	Maxwl		Jour	NP,38,193	62	V.F.Apalin+	41673
*	n,fis		?	2ZZZCER	1.8-02	1.8+05	Jour	EPJ/A,55,120	19	S.Amaducci+	23453
*	n,fis	Many	?	1USALAS	Fast		Jour	NDS,111,2891	10	H.D.Selby+	14537
	n,fis	^{4}He	CS	3INDTRM	3.0+06	3.0+06	Conf	65SALZBURG,2,397	65	V.A.Hattangadi+	33121
	n,fis	^{4}He	FY	3INDTRM	3.0+06	3.0+06	Conf	65SALZBURG,2,397	65	V.A.Hattangadi+	33121
	n,fis	^{4}He	?	3INDTRM	3.0+06	3.0+06	Conf	65SALZBURG,2,397	65	V.A.Hattangadi+	33121

92 Uranium 236

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,fis	^{237}U	?	1USASRL		5.0-01	Conf	68WASH,2,1271	68	E.J.Hennelly+	14565
n,γ	^{237}U	CS	1USASRL	2.5-02	2.5-02	Conf	68WASH,2,1271	68	E.J.Hennelly+	14565
n,γ	^{237}U	RI	1USASRL		5.0-01	Conf	68WASH,2,1271	68	E.J.Hennelly+	14565

92 Uranium 238

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
γ,fis	Many	CHG	2JPNTOH	1.5+07	3.0+07	Jour	RCA,80,171	98	N.Takahashi+	K2602
γ,fis	Many	CS	2JPNTOH		6.0+07	Jour	RCA,80,171	98	N.Takahashi+	K2602
γ,fis	Many	FY	2JPNTOH		6.0+07	Jour	NSE,111,368	92	T.Kase+	K2600
γ,fis	^{83}Br	FY	2JPNTOK		6.5+08	Jour	JIN,28,679	66	K.Sakamoto+	K2601
γ,fis	^{89}Sr	FY	2JPNTOK		6.5+08	Jour	JIN,28,679	66	K.Sakamoto+	K2601
γ,fis	^{111}Ag	FY	2JPNTOK		6.5+08	Jour	JIN,28,679	66	K.Sakamoto+	K2601
γ,fis	^{131}I	FY	2JPNTOK		6.5+08	Jour	JIN,28,679	66	K.Sakamoto+	K2601
γ,fis	^{132}I	FY	2JPNTOK		6.5+08	Jour	JIN,28,679	66	K.Sakamoto+	K2601
γ,fis	^{133}I	FY	2JPNTOK		6.5+08	Jour	JIN,28,679	66	K.Sakamoto+	K2601
γ,fis	^{134}I	FY	2JPNTOK		6.5+08	Jour	JIN,28,679	66	K.Sakamoto+	K2601
γ,fis	^{135}I	FY	2JPNTOK		6.5+08	Jour	JIN,28,679	66	K.Sakamoto+	K2601
γ,fis	^{140}Ba	FY	2JPNTOK		6.5+08	Jour	JIN,28,679	66	K.Sakamoto+	K2601
n,fis	Many	FY	4RUSRI	1.4+07	1.4+07	Jour	JET,15,1024	62	V.M.Adamov+	41680
n,fis		FY	4RUSRI	1.4+07	1.4+07	Jour	JET,15,1024	62	V.M.Adamov+	41680
n,fis	Many	FY	3CPRAEP	2.2+07	2.2+07	Prog	INDC(CPR)-056,2	01	Liu Yonghui+	32793
* n,fis	Many	FY	1USALAS	Fast		Jour	NDS,111,2891	10	H.D.Selby+	14537
n,fis	Many	KE	4RUSRI	1.4+07	1.4+07	Jour	JET,15,1024	62	V.M.Adamov+	41680
n,fis		?	3RUMBUC	1.5+07	1.5+07	Jour	RRP,29,421	84	I.Garlea+	30813
n,fis		?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563
* n,fis	Many	?	1USALAS	Fast		Jour	NDS,111,2891	10	H.D.Selby+	14537
n,γ	^{239}U	?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563

93 Neptunium 237

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,fis	Many	FY	2JPNTOH		6.0+07	Jour	NSE,111,368	92	T.Kase+	K2600
	n,fis		CS	1USASRL	2.5-02	2.5-02	Conf	68WASH,2,1271	68	E.J.Hennelly+	14565
	n,fis	Many	FY	3CPRIMP	1.5+07	1.5+07	Jour	HFH,13,54	91	Sun Tongyu+	32789
	n,fis		?	3RUMBUC	1.5+07	1.5+07	Jour	RRP,29,421	84	I.Garlea+	30813
	n,fis		?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563
	n,fis	^{134}I	FY	3CPRIMP	1.5+07	1.5+07	Jour	HFH,13,54	91	Sun Tongyu+	32789
	n,fis	^{138}Cs	FY	3CPRIMP	1.5+07	1.5+07	Jour	HFH,13,54	91	Sun Tongyu+	32789
	n,γ	^{238}Np	CS	1USASRL	2.5-02	2.5-02	Conf	68WASH,2,1271	68	E.J.Hennelly+	14565
*	n,γ	^{238}Np	RI	2JPNKTO		1.3-01	Jour	NST,56,493	19	S.Nakamura+	23535
	n,γ	^{238}Np	RI	1USASRL		5.0-01	Conf	68WASH,2,1271	68	E.J.Hennelly+	14565

94 Plutonium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	PU compound	DA	4RUSKUR	2.0+06	2.0+06	Jour	JET,6,228	58	Iu.A.Aleksandrov+	41677

94 Plutonium 239

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,fis	Many	FY	2JPNTOH		6.0+07	Jour	NSE,111,368	92	T.Kase+	K2600
	n,fis		CS	2ZZZGEL	2.2-02	3.0+04	Jour	ANE,7,495	80	C.Wagemans+	21704
	n,fis	Many	FY	4UZ UZB	2.5-02	2.5-02	Jour	SNP,40,720	85	A.D.Belyaev+	31798
	n,fis	Many	FY	4UZ UZB	2.5-02	2.5-02	Conf	83KIEV,2,254	83	I.I.Bakhromi+	31799
	n,fis	Many	FY	3INDTRM	2.5-02	2.5-02	Jour	RCA,37,63	84	H.C.Jain+	33118
	n,fis	Many	FY	4UZ UZB	3.0-01	3.0-01	Conf	83KIEV,2,254	83	I.I.Bakhromi+	31799
*	n,fis	Many	FY	1USALAS	Fast		Jour	NDS,111,2891	10	H.D.Selby+	14537
	n,fis	Many	NU	4RUSKUR	Maxwl		Jour	NP,41,92	63	V.F.Apalin+	41674
	n,fis		NU	4RUSKUR	Maxwl		Jour	NP,41,92	63	V.F.Apalin+	41674
	n,fis		?	3RUMBUC	1.5+07	1.5+07	Jour	RRP,29,421	84	I.Garlea+	30813
	n,fis	Many	?	3INDTRM	2.5-02	2.5-02	Jour	RCA,37,63	84	H.C.Jain+	33118
	n,fis		?	1USAINL	5.0+05	5.0+05	Rept	IAEA-208,(2),117	78	J.W.Rogers+	14563
*	n,fis	Many	?	1USALAS	Fast		Jour	NDS,111,2891	10	H.D.Selby+	14537

94 Plutonium 240

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		CS	4RUSFEI	1.4+05	1.5+07	Jour	JET,8,367	59	V.G.Nesterov+	41675

94 Plutonium 241

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis	Many	CHG	3INDTRM	2.5-02	2.5-02	Prog	BARC-1381,33	87	A.Goswami+	33124
	n,fis	Many	FY	3INDTRM	2.5-02	2.5-02	Prog	BARC-1381,25	87	A.V.R.Reddy+	33123
	n,fis	Many	?	3INDTRM	2.5-02	2.5-02	Conf	80WALTAI,,150	80	A.G.C.Nair+	33122
	n,fis	Many	?	3INDTRM	2.5-02	2.5-02	Prog	BARC-1381,25	87	A.V.R.Reddy+	33123
	n,fis	Many	?	3INDTRM	2.5-02	2.5-02	Prog	BARC-1381,33	87	A.Goswami+	33124

94 Plutonium 242

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,fis	Many	FY	1USABRK	Spont		Conf	98SEYSS,,254	Apr 98	M.Veselsky+	13747

95 Americium 241

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis	Many	FY	3INDTRM	2.5-02	2.5-02	Prog	BARC-1381,47	87	A.V.R.Reddy+	33125
	n,fis	Many	?	3INDTRM	2.5-02	2.5-02	Prog	BARC-1381,47	87	A.V.R.Reddy+	33125

95 Americium 243

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{244}Am	CS	2JPNJAE	9.9-03	2.0+02	Jour	NST,56,479	19	A.Kimura+	23534
*	n,tot		CS	2JPNJAE	4.2-03	1.0+02	Jour	NST,56,479	19	A.Kimura+	23534

97 Berkelium 249

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{48}Ca,3n	^{294}Ts	CS	2GERGSI	2.5+08	2.6+08	Jour	PR/C,99,054306	19	J.Khuyagbaatar+	D0944
*	^{48}Ca,4n	^{293}Ts	CS	2GERGSI	2.5+08	2.6+08	Jour	PR/C,99,054306	19	J.Khuyagbaatar+	D0944

98 Californium 252

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,fis	Many	CHG	1USABRK	Spont		Conf	73ROCH,2,435	73	H.Nifenecker	14539
	0,fis	Many	CHG	1USAUI	Spont		Jour	PL/B,66,326	77	R.J.Lipinski+	14542
	0,fis	Many	CHG	3INDTRM	Spont		Jour	NIM/B,51,102	90	M.N.Rao+	33120
	0,fis	γ	FY	1USAWAU	Spont		Prog	A-WAU-1990,7	90	C.A.Gossett+	14544
	0,fis	Many	FY	3INDTRM	Spont		Jour	RCA,54,163	91	A.Ramaswami+	33119

	0,fis	Many	NU	1USABRK	Spont	Conf	73ROCH,2,435	73	H.Nifenecker	14539
*	0,fis	Many	?	3CPRBHN	Spont	Jour	NIM/A,697,7	13	Taofeng Wang+	32708
	0,fis	^{1}H	FY	1USAASU	Spont	Jour	NSE,63,41	77	J.A.Adams+	14543
	0,fis	^{1}H	KE	1USAASU	Spont	Jour	NSE,63,41	77	J.A.Adams+	14543
	0,fis	^{1}H	?	1USAASU	Spont	Jour	NSE,63,41	77	J.A.Adams+	14543

102 Nobelium 252

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,fis		KE	1USAORL	Spont		Jour	BAP,21,970(AE10)	76	C.E.Bemis+	14541