EXFOR News (August 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 #
*	p,el	n	POD	2GERJUL	8.0+08	2.4+09	Jour	EPJ/A,54,225	18	S.Barsov+	O2425

1 Hydrogen 1

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,π^0	^{1}H	POD	4UKRKFT	9.8+08	1.2+09	Jour	ZET,66,68	74	A.I.Derebchinskii+	G4068
*	^{6}Li,p+d	^{4}He	CS	2ITYLNS	2.5+07	2.9+07	Jour	PR/C,95,054614	17	V.Soukeras+	O2411
*	^{6}Li,p+d	^{4}He	DA	2ITYLNS	2.5+07	2.9+07	Jour	PR/C,95,054614	17	V.Soukeras+	O2411
*	^{7}Li,p+t	^{4}He	CS	2ITYLNS	3.8+07	3.8+07	Jour	PR/C,95,044615	17	A.Pakou+	O2410
*	^{7}Li,p+t	^{4}He	DA	2ITYLNS	3.8+07	3.8+07	Jour	PR/C,95,044615	17	A.Pakou+	O2410
*	^{9}Be,el	^{1}H	?	2ITYLNS	1.5+07	5.1+07	Jour	PR/C,99,014615	19	N.Keeley+	O2402
*	^{11}Be,d	^{10}Be	?	2ZZZCER	3.1+07	3.1+07	Jour	JP/G,44,044009	17	J.G.Johansen+	O2413
*	^{12}C,x	^{6}He	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{6}Li	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{7}Li	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{7}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{9}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{8}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{11}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{11}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+α	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+d	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+^{3}He	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+p	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+t	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
	^{13}N,γ	^{14}O	CSP	2BLGLVN	5.8+06	8.2+06	Jour	PR/C,48,2057	93	P.Decrock+	O2025
*	^{17}Ne,inel	^{1}H	CSP	2GERGSI	8.5+09	8.5+09	Jour	PL/B,759,200	16	J.Marganiec+	O2403
*	^{136}Xe,x	Many	?	2GERGSI	2.7+10	2.7+10	Jour	PR/C,95,044606	17	C.Paradela+	O2407

1 Hydrogen 2

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,el	^{2}H	POD	2GERJUL	8.0+08	2.4+09	Jour	EPJ/A,54,225	18	S.Barsov+	O2425
	p,n+p	^{1}H	D3A	2JPNTOK	5.2+07	5.2+07	Jour	NP/A,203,388	73	J.Sanada+	E0064
	p,n+p	^{1}H	DAA	2JPNTOK	5.2+07	5.2+07	Jour	NP/A,203,388	73	J.Sanada+	E0064
*	d,el	^{2}H	DA	2NEDKVI	1.6+08	1.6+08	Jour	PR/C,99,014620	19	I.Ciepal+	O2397
*	d,n	^{3}He	DT	2NEDKVI	1.6+08	1.6+08	Jour	PR/C,99,014620	19	I.Ciepal+	O2397
*	^{11}Be,t	^{10}Be	?	2ZZZCER	3.1+07	3.1+07	Jour	JP/G,44,044009	17	J.G.Johansen+	O2413
*	^{60}Fe,p	^{61}Fe	?	2FR GAN	1.6+09	1.6+09	Jour	PR/C,95,035806	17	S.Giron+	O2405

1 Hydrogen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{17}Ne,inel	Polyethylene	CSP	2GERGSI	8.5+09	8.5+09	Jour	PL/B,759,200	16	J.Marganiec+	O2403

2 Helium 4

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,p	^{3}H	CS	1USAUI	6.7+07	6.7+07	Jour	PR/C,43,2052	91	R.T.Jones+	M0562
	γ,x+d	inclusive	DA	4UKRKFT	2.8+07	1.5+08	Jour	UFZ,25,1975	80	Yu.M.Arkatov+	M0052
	γ,x+n	inclusive	DA	4UKRKFT	2.8+07	1.5+08	Jour	UFZ,25,1975	80	Yu.M.Arkatov+	M0052
	γ,x+p	inclusive	DA	4UKRKFT	2.8+07	1.5+08	Jour	UFZ,25,1975	80	Yu.M.Arkatov+	M0052
*	^{15}N,0		RP	2ITYFSN			Jour	PR/C,95,045803	17	A.Dileva+	O2409

3 Lithium 6

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,el	^{6}Li	DA	2GRCATH	9.3+05	2.0+06	Jour	NIM/B,407,34	17	E.Ntemou+	O2414
	t,d	^{7}Li	CSP	1USANRL			Conf	61MANCH,,531	61	H.D.Holmgren+	A1458
	α,el	^{6}Li	DA	2JPNKTO	2.9+07	2.9+07	Jour	JPJ,24,1203	68	S.Matsuki	E2264
	α,inel	^{6}Li	DAP	2JPNKTO	2.9+07	2.9+07	Jour	JPJ,24,1203	68	S.Matsuki	E2264

3 Lithium 7

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,n	^{7}Be	CS	2ZZZCER	1.9+06	2.2+06	Jour	PRL,121,042701	18	L.Damone+	O2394
	α,el	^{7}Li	DA	2JPNKTO	2.9+07	2.9+07	Jour	JPJ,24,1203	68	S.Matsuki	E2264
	α,inel	^{7}Li	DAP	2JPNKTO	2.9+07	2.9+07	Jour	JPJ,24,1203	68	S.Matsuki	E2264

4 Beryllium 7

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{28}Si,el	^{7}Be	DA	2ITYPAD	1.3+07	2.2+07	Jour	PR/C,95,054609	17	O.Sgouros+	O2412

4 Beryllium 9

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{10}Be	CS	2AUSATI	2.5-02	2.5-02	Jour	PR/C,99,015804	19	A.Wallner+	23467

*	n,γ	^{10}Be	CS	2GERKFK	Maxwl	4.7+05	Jour	PR/C,99,015804	19	A.Wallner+	23467
*	n,γ	^{10}Be	CS	3AULCBR	Maxwl		Jour	PR/C,99,015804	19	A.Wallner+	23467
*	α,el	^{9}Be	DA	2SF JYV	6.3+07	6.3+07	Jour	JP/G,41,035102	14	S.M.Lukyanov+	O2194

5 Boron 10

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	n,α	^{7}Li	?	2ZZZGEL	2.3+05	3.0+06	Jour	NDS,119,104	14	R.Bevilacqua+	23409

5 Boron 11

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	d,el	^{11}B	DA	2SF JYV	2.2+07	2.2+07	Jour	PR/C,98,034602	18	T.L.Belyaeva+	O2417
*	d,p	^{12}B	DAP	2SF JYV	2.2+07	2.2+07	Jour	PR/C,98,034602	18	T.L.Belyaeva+	O2417

6 Carbon

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	p,x	^{7}Be	CS	2GERGER	1.0+08	1.0+08	Jour	NIM/B,440,75	19	C.Baumer+	O2424
*	p,x	^{11}C	CS	2GERGER	1.0+08	1.0+08	Jour	NIM/B,440,75	19	C.Baumer+	O2424
*	p,x+n	inclusive	DAE	2JPNTAK	2.0+07	7.8+07	Jour	NIM/A,920,22	19	D.Satoh+	E2594
*	p,x+n	inclusive	DAP	2JPNTAK	2.0+07	7.8+07	Jour	NIM/A,920,22	19	D.Satoh+	E2594
	p,x+π^-	inclusive	DAE	1USABRK	3.4+08	3.4+08	Jour	JPJ,8,571	53	S.Tokunaga+	E2202
	p,x+π^+	inclusive	DAE	1USABRK	3.4+08	3.4+08	Jour	JPJ,8,571	53	S.Tokunaga+	E2202
*	^{12}C,x	^{6}He	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{6}Li	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{7}Li	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{7}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{9}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{8}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{11}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}C	CS	2FR GAN	4.7+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x	^{10}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{11}C	CS	2FR GAN	4.7+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x	^{11}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{12}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+α	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+d	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+^{3}He	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+p	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+t	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{17}Ne,inel	$^{\rm nat}$C	CSP	2GERGSI	8.5+09	8.5+09	Jour	PL/B,759,200	16	J.Marganiec+	O2403
*	^{12}C,x	^{10}C	CS	2FR GAN	5.2+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x	^{11}C	CS	2FR GAN	5.2+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x	^{13}N	CS	2FR GAN	5.2+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406

*	^{12}C,x	^{14}O	CS	2FR GAN	5.2+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x	^{15}O	CS	2FR GAN	5.2+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406

6 Carbon 12

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	γ,x+p	inclusive	DAE	4UKRKFT		1.2+09	Jour	ZET,63,1955	72	S.G.Tonapetyan+	G4066
	γ,x+p	inclusive	DAE	4UKRKFT		3.4+08	Jour	ZET,66,(1),16	74	G.L.Bochek+	G4067
	γ,x+π^-	inclusive	DAE	4UKRKFT		3.4+08	Jour	ZET,66,(1),16	74	G.L.Bochek+	G4067
	γ,x+π^+	inclusive	DAE	4UKRKFT		3.4+08	Jour	ZET,66,(1),16	74	G.L.Bochek+	G4067
*	p,2p	^{11}B	CS	2GERGSI	4.0+08	4.0+08	Jour	PL/B,753,204	16	V.Panin+	O2398
*	p,2p	^{11}B	CSP	2GERGSI	4.0+08	4.0+08	Jour	PL/B,753,204	16	V.Panin+	O2398
	p,x+α	inclusive	POD	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	p,x+^{3}He	inclusive	POD	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	^{3}He,α	^{11}C	TT	2JPNIPC	6.4+06	3.9+07	Jour	RCA,29,57	81	T.Nozaki+	E2605
	^{3}He,n	^{14}O	TT	2JPNIPC	6.4+06	3.9+07	Jour	RCA,29,57	81	T.Nozaki+	E2605
	α,2n	^{14}O	TT	2JPNIPC	3.3+07	3.8+07	Jour	RCA,29,57	81	T.Nozaki+	E2605
	α,n+α	^{11}C	TT	2JPNIPC	2.9+07	3.8+07	Jour	RCA,29,57	81	T.Nozaki+	E2605
*	^{238}U,fis	Many	FY	2FR GAN	1.5+09	1.5+09	Jour	PR/C,97,054612	18	D.Ramos+	O2400

7 Nitrogen

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	^{12}C,x	^{10}C	CS	2FR GAN	2.6+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x	^{11}C	CS	2FR GAN	2.6+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x	^{13}N	CS	2FR GAN	2.6+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x	^{14}O	CS	2FR GAN	2.6+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406

7 Nitrogen 13

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	p,γ		RP	2BLGLVN	5.4+05	5.4+05	Jour	PR/C,48,2057	93	P.Decrock+	O2025
	p,γ	^{14}O	RR	2BLGLVN			Jour	PR/C,48,2057	93	P.Decrock+	O2025
	p,tot		RP	2BLGLVN	5.3+05	5.3+05	Jour	PR/C,48,2057	93	P.Decrock+	O2025

7 Nitrogen 14

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,α	^{11}B	CS	1USAWIS	1.3+06	1.7+06	Jour	PR,70,245	46	H.H.Barschall+	14523
	n,p	^{14}C	CS	1USAWIS	2.0+05	1.7+06	Jour	PR,70,245	46	H.H.Barschall+	14523
	p,α	^{11}C	TT	2JPNIPC	9.1+06	1.5+07	Jour	RCA,29,57	81	T.Nozaki+	E2605
	p,n	^{14}O	CS	2JPNIPC	6.7+06	1.4+07	Jour	RCA,29,57	81	T.Nozaki+	E2605
	p,n	^{14}O	TT	2JPNIPC	5.6+06	1.5+07	Jour	RCA,29,57	81	T.Nozaki+	E2605

8 Oxygen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{12}C,x	^{6}He	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{6}Li	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{7}Li	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{7}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{9}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{8}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{11}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}C	CS	2FR GAN	5.2+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x	^{10}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{11}C	CS	2FR GAN	5.2+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x	^{11}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{12}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{13}N	CS	2FR GAN	5.2+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x	^{14}O	CS	2FR GAN	5.2+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x	^{15}O	CS	2FR GAN	5.2+08	1.1+09	Jour	PR/C,95,044607	17	S.Salvador+	O2406
*	^{12}C,x+α	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+d	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+^{3}He	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+p	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+t	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408

10 Neon 22

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ		RP	2ITYLGS	7.1+04	2.6+05	Jour	PRL,121,172701	18	F.Ferraro+	O2419
*	p,γ	^{23}Na	CS	2ITYLGS	1.8+05	3.1+05	Jour	PRL,121,172701	18	F.Ferraro+	O2419

11 Sodium 23

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,el	^{23}Na	CS	1USAKTY	1.5+06	4.5+06	Jour	NP/A,939,121	15	J.R.Vanhoy+	14403
*	n,inel	^{23}Na	CS	1USAKTY	1.5+06	4.5+06	Jour	NP/A,939,121	15	J.R.Vanhoy+	14403
	n,sct	^{23}Na	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

13 Aluminium 27

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x	^{24}Na	CS	2SWDLND		7.6+08	Jour	ZP,262,15	73	A.Jaerund+	G0064
	γ,x	^{24}Na	CS	2SWDLND		9.6+08	Jour	ZP/A,273,97	75	B.Johnsson+	G0063

	n,sct	^{27}Al	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343
*	p,x	^{7}Be	CS	2GERGER	1.0+08	1.8+08	Jour	NIM/B,440,75	19	C.Baumer+	O2424
*	p,x	^{22}Na	CS	2GERGER	1.0+08	1.8+08	Jour	NIM/B,440,75	19	C.Baumer+	O2424
*	p,x	^{24}Na	CS	2GERGER	1.0+08	1.8+08	Jour	NIM/B,440,75	19	C.Baumer+	O2424
	p,x+α	inclusive	DAE	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	p,x+α	inclusive	POD	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	p,x+^{3}He	inclusive	DAE	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	p,x+^{3}He	inclusive	POD	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
*	p,x+n	inclusive	DAE	2JPNTAK	2.0+07	7.8+07	Jour	NIM/A,920,22	19	D.Satoh+	E2594
*	p,x+n	inclusive	DAP	2JPNTAK	2.0+07	7.8+07	Jour	NIM/A,920,22	19	D.Satoh+	E2594
	p,x+π^-	inclusive	DAE	1USABRK	3.4+08	3.4+08	Jour	JPJ,8,571	53	S.Tokunaga+	E2202
	p,x+π^+	inclusive	DAE	1USABRK	3.4+08	3.4+08	Jour	JPJ,8,571	53	S.Tokunaga+	E2202
*	^{12}C,x	^{6}He	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{6}Li	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{7}Li	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{7}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{9}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{8}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{11}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{11}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{12}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+α	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+d	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+^{3}He	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+p	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+t	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408

14 Silicon

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
γ,x	^{24}Na	CS	2SWDLND		1.0+09	Jour	ZP,262,15	73	A.Jaerund+	G0064

15 Phosphorus 31

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
γ,x	^{24}Na	CS	2SWDLND		8.1+08	Jour	ZP,262,15	73	A.Jaerund+	G0064

16 Sulphur

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
γ,x	^{24}Na	CS	2SWDLND		1.0+09	Jour	ZP,262,15	73	A.Jaerund+	G0064

17 Chlorine

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x	^{24}Na	CS	2SWDLND		7.5+08	Jour	ZP,262,15	73	A.Jaerund+	G0064

17 Chlorine 35

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{36}Cl	CS	2GERKFK			Jour	PR/C,99,015801	19	S.Pavetich+	23468
*	n,γ	^{36}Cl	CS	3ISLSOR			Jour	PR/C,99,015801	19	S.Pavetich+	23468
*	n,γ	^{36}Cl	CS	2AUSVIE	Maxwl		Jour	PR/C,99,015801	19	S.Pavetich+	23468

19 Potassium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x	^{24}Na	CS	2SWDLND		7.5+08	Jour	ZP,262,15	73	A.Jaerund+	G0064

20 Calcium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x	^{24}Na	CS	2SWDLND		1.0+09	Jour	ZP,262,15	73	A.Jaerund+	G0064
*	n,ths	^{nat}Ca	AMP	2UK NIN	2.5-02	2.5-02	Jour	NIM/A,927,443	19	L.A.Rodriguezpalomino+	23531
*	n,ths	^{nat}Ca	TSL	2UK NIN	2.5-02	2.5-02	Jour	NIM/A,927,443	19	L.A.Rodriguezpalomino+	23531
*	n,tot		CS	2UK NIN	6.2-02	9.4+01	Jour	NIM/A,927,443	19	L.A.Rodriguezpalomino+	23531

20 Calcium 40

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,p	^{39}K	DAP	3BULBLA		2.2+07	Jour	JET,15,236	62	T.N.Dragnev+	G0062

20 Calcium 43

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,n	^{43}Sc	CS	2SWTUBE	3.9+06	1.8+07	Jour	ARI,129,96	17	T.S.Carzaniga+	O2423

20 Calcium 44

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,2n	^{43}Sc	CS	2SWTUBE	1.5+07	1.8+07	Jour	ARI,129,96	17	T.S.Carzaniga+	O2423
*	p,n	^{44}Sc	CS	2SWTUBE	3.9+06	1.8+07	Jour	ARI,129,96	17	T.S.Carzaniga+	O2423
*	p,n	^{44}Sc	CS	2SWTUBE	4.4+06	1.8+07	Jour	ARI,143,18	19	T.S.Carzaniga+	O2422

20 Calcium 48

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,2n	^{47}Sc	CS	2SWTUBE	8.9+06	1.8+07	Jour	ARI,143,18	19	T.S.Carzaniga+	O2422
*	p,d	^{47}Ca	CS	2SWTUBE	1.2+07	1.8+07	Jour	ARI,143,18	19	T.S.Carzaniga+	O2422
*	p,n	^{48}Sc	CS	2SWTUBE	3.0+06	1.8+07	Jour	ARI,143,18	19	T.S.Carzaniga+	O2422

21 Scandium 45

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{45}Sc	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

22 Titanium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{12}C,x	^{6}He	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{6}Li	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{7}Li	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{7}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{9}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}Be	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{8}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{11}B	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{10}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{11}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x	^{12}C	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+α	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+d	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+^{3}He	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+p	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408
*	^{12}C,x+t	inclusive	DA	2FR GAN	6.0+08	6.0+08	Jour	PR/C,95,044602	17	C.Divay+	O2408

22 Titanium 46

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

*	p,α	^{43}Sc	CS	2SWTUBE	8.9+06	1.8+07	Jour	ARI,129,96	17	T.S.Carzaniga+	O2423

23 Vanadium 51

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
γ,x	^{24}Na	CS	2SWDLND		8.0+08	Jour	ZP,262,15	73	A.Jaerund+	G0064
n,0		RP	1USACOL		6.0+04	Conf	69MONTRL,,367	69	J.B.Garg+	14524
n,sct	^{51}V	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343
n,tot		CS	1USACOL	2.1+02	5.5+04	Conf	69MONTRL,,367	69	J.B.Garg+	14524

24 Chromium 52

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
d,n	^{53}Mn	CS	2JPNIPC	8.3+06	2.0+07	Jour	JMSJ,23,127	75	S.Shibata+	E2606

24 Chromium 53

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,sct	^{53}Cr	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343
d,n	^{54}Mn	CS	2JPNIPC	8.3+06	2.0+07	Jour	JMSJ,23,127	75	S.Shibata+	E2606

25 Manganese 55

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
γ,x	^{24}Na	CS	2SWDLND		1.0+09	Jour	ZP,262,15	73	A.Jaerund+	G0064
n,sct	^{55}Mn	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

26 Iron

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,x+n	inclusive	DAE	2JPNTAK	2.0+07	7.8+07	Jour	NIM/A,920,22	19	D.Satoh+	E2594
*	p,x+n	inclusive	DAP	2JPNTAK	2.0+07	7.8+07	Jour	NIM/A,920,22	19	D.Satoh+	E2594

26 Iron 54

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,el	^{54}Fe	DA	1USAKTY	2.0+06	6.0+06	Jour	NP/A,972,107	18	J.R.Vanhoy+	14451
*	n,inel	^{54}Fe	DAP	1USAKTY	2.2+06	6.0+06	Jour	NP/A,972,107	18	J.R.Vanhoy+	14451

26 Iron 56

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	4RUSKUR			Jour	PL,14,123	65	H.V.Muradyan	41665
*	n,inel	^{56}Fe	DAP	2ZZZGEL	2.0+06	6.0+06	Jour	PR/C,99,024601	19	E.Pirovano+	23365
*	n,inel	^{56}Fe	DAP	2GERZFK	2.0+06	6.0+06	Jour	PR/C,99,024601	19	E.Pirovano+	23365

27 Cobalt 56

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,0		NQ	4RUSFEI			Conf	2004SANTA,,931	04	B.V.Zhuravlev+	O1641

27 Cobalt 57

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,0		NQ	4RUSFEI			Conf	2004SANTA,,931	04	B.V.Zhuravlev+	O1641

27 Cobalt 59

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{58}Co	CS	3INDIND		1.5+07	Jour	RCA,106,345	18	R.Ghosh+	G0513
	γ,x	^{24}Na	CS	2SWDLND		1.0+09	Jour	ZP,262,15	73	A.Jaerund+	G0064
	n,sct	^{59}Co	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

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	3INDIND		1.5+07	Jour	RCA,106,345	18	R.Ghosh+	G0513
	p,x+α	inclusive	DAE	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	p,x+α	inclusive	POD	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	p,x+^{3}He	inclusive	DAE	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	p,x+^{3}He	inclusive	POD	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567

29 Copper

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x	^{24}Na	CS	2SWDLND		8.0+08	Jour	ZP,262,15	73	A.Jaerund+	G0064

n,sct	^{nat}Cu	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343
p,x+π^-	inclusive	DAE	1USABRK	3.4+08	3.4+08	Jour	JPJ,8,571	53	S.Tokunaga+	E2202
p,x+π^+	inclusive	DAE	1USABRK	3.4+08	3.4+08	Jour	JPJ,8,571	53	S.Tokunaga+	E2202

30 Zinc 67

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{67}Zn	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

31 Gallium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{nat}Ga	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

32 Germanium 74

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,sct	^{74}Ge	CS	2GERZFK	4.6+06	8.0+06	Jour	PR/C,98,064317	18	T.Shizuma+	G0060

33 Arsenic 75

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{75}As	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

34 Selenium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	α,x	^{77}Br	PY	2GERPTB	1.1+07	1.5+07	Jour	JP/G,44,075101	17	S.Fiebiger+	O2421
*	α,x	^{77}Kr	PY	2GERPTB	1.1+07	1.5+07	Jour	JP/G,44,075101	17	S.Fiebiger+	O2421
*	α,x	^{79}Kr	PY	2GERPTB	1.1+07	1.5+07	Jour	JP/G,44,075101	17	S.Fiebiger+	O2421
*	α,x	^{85}Kr	PY	2GERPTB	1.1+07	1.5+07	Jour	JP/G,44,075101	17	S.Fiebiger+	O2421

34 Selenium 74

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	α,n	^{77}Kr	CS	2GERPTB	1.1+07	1.5+07	Jour	JP/G,44,075101	17	S.Fiebiger+	O2421
*	α,p	^{77}Br	CS	2GERPTB	1.1+07	1.5+07	Jour	JP/G,44,075101	17	S.Fiebiger+	O2421

34 Selenium 76

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	α,n	^{79}Kr	CS	2GERPTB	1.1+07	1.5+07	Jour	JP/G,44,075101	17	S.Fiebiger+	O2421

34 Selenium 82

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	α,n	^{85}Kr	CS	2GERPTB	1.1+07	1.5+07	Jour	JP/G,44,075101	17	S.Fiebiger+	O2421

35 Bromine

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{nat}Br	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

38 Strontium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,x	^{85}Sr	CS	3KORPUE		6.5+07	Jour	RPC,149,54	18	V.D.Nguyen+	G3133

38 Strontium 88

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x+p	inclusive	DA	2JPNTOH	1.6+07	2.6+07	Jour	NP/A,239,397	75	K.Shoda+	M0598

39 Yttrium 89

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x+p	inclusive	DA	2JPNTOH	1.5+07	2.4+07	Jour	NP/A,239,397	75	K.Shoda+	M0598
	n,sct	^{89}Y	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

40 Zirconium 88

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{89}Zr	CS	1USAMIS	2.5-02	2.5-02	Jour	NAT,565,328	19	J.A.Shusterman+	14520

40 Zirconium 89

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{90}Zr	CS	1USAMIS	2.5-02	2.5-02	Jour	NAT,565,328	19	J.A.Shusterman+	14520

40 Zirconium 90

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
γ,x+p	inclusive	DA	2JPNTOH	1.5+07	2.4+07	Jour	NP/A,239,397	75	K.Shoda+	M0598
p,x+α	inclusive	DAE	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
p,x+α	inclusive	POD	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
p,x+^{3}He	inclusive	DAE	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
p,x+^{3}He	inclusive	POD	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567

40 Zirconium 91

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	4RUSKUR			Jour	PL,14,123	65	H.V.Muradyan	41665
*	α,γ	^{95}Mo	CS	2GERBOC	9.0+06	1.1+07	Jour	EPJ/P,133,332	18	S.V.Harissopulos	O2418

40 Zirconium 92

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	α,γ	^{96}Mo	CS	2GERBOC	9.0+06	1.1+07	Jour	EPJ/P,133,332	18	S.V.Harissopulos	O2418

40 Zirconium 94

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{95}Zr	CS	3AULCBR	2.5-02	2.5-02	Jour	PR/C,99,015804	19	A.Wallner+	23467

41 Niobium 90

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,0		NQ	4RUSFEI			Conf	2004SANTA,,931	04	B.V.Zhuravlev+	O1641

41 Niobium 93

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{93}Nb	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

42 Molybdenum

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,x	^{90}Mo	CS	3KORPUE		7.0+07	Jour	EPJ/A,52,195	16	H.Naik+	G3132
*	γ,x	^{99}Mo	CS	2GERZFK		1.6+07	Jour	EPJ/A,52,195	16	H.Naik+	G3132
*	γ,x	^{99}Mo	CS	3KORPUE		7.0+07	Jour	EPJ/A,52,195	16	H.Naik+	G3132

42 Molybdenum 92

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x+p	inclusive	DA	2JPNTOH	1.4+07	2.5+07	Jour	NP/A,239,397	75	K.Shoda+	M0598

43 Technetium 99

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,3n	^{97}Ru	TT	4RUSFVE	2.1+07	9.9+07	Jour	RCA,56,59	92	N.G.Zaitseva+	O0298
	p,x	^{95}Tc	TT	4RUSFVE	3.9+07	9.9+07	Jour	RCA,56,59	92	N.G.Zaitseva+	O0298
	p,x	^{96}Tc	TT	4RUSFVE	3.1+07	9.9+07	Jour	RCA,56,59	92	N.G.Zaitseva+	O0298

45 Rhodium 103

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,2n	^{101}Rh	CS	4RUSMOS	1.7+07	2.6+07	Jour	YF,82,196	19	V.V.Varlamov+	M0977
*	γ,2n	^{101}Rh	INT	4RUSMOS		2.6+07	Jour	YF,82,196	19	V.V.Varlamov+	M0977
*	γ,n	^{102}Rh	CS	4RUSMOS	9.2+06	2.6+07	Jour	YF,82,196	19	V.V.Varlamov+	M0977
*	γ,n	^{102}Rh	INT	4RUSMOS		2.6+07	Jour	YF,82,196	19	V.V.Varlamov+	M0977
*	γ,x+n	inclusive	CS	4RUSMOS	9.2+06	2.6+07	Jour	YF,82,196	19	V.V.Varlamov+	M0977
*	γ,x+n	inclusive	INT	4RUSMOS		2.6+07	Jour	YF,82,196	19	V.V.Varlamov+	M0977
	n,sct	^{103}Rh	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

46 Palladium 104

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,γ	^{105}Ag	CS	2GERBOC	2.8+06	7.1+06	Jour	PR/C,77,065801	08	A.Spyrou+	O1291

46 Palladium 105

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,γ	^{106}Ag	CS	2GERBOC	2.8+06	4.9+06	Jour	PR/C,77,065801	08	A.Spyrou+	O1291

46 Palladium 106

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,γ	^{107}Ag	CS	2GERBOC	2.6+06	4.7+06	Jour	PR/C,77,065801	08	A.Spyrou+	O1291

47 Silver 107

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{107}Ag	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

47 Silver 109

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{109}Ag	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

48 Cadmium 111

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,el	^{111}Cd	DA	2GERLMU	2.2+07	2.2+07	Jour	PR/C,98,044309	18	D.S.Jamieson+	O2420
*	d,el	^{111}Cd	POD	2GERLMU	2.2+07	2.2+07	Jour	PR/C,98,044309	18	D.S.Jamieson+	O2420
*	d,p	^{112}Cd	DAP	2GERLMU	2.2+07	2.2+07	Jour	PR/C,98,044309	18	D.S.Jamieson+	O2420

50 Tin

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ		SPC	4RUSRUS	2.5-02	2.5-02	Jour	JNE/A,12,47	60	L.V.Groshev+	41669

50 Tin 115

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

	n,γ	^{116}Sn	CS	4RUSRUS	2.5-02	2.5-02	Jour	JNE/A,12,47	60	L.V.Groshev+	41669

50 Tin 117

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{118}Sn	CS	4RUSRUS	2.5-02	2.5-02	Jour	JNE/A,12,47	60	L.V.Groshev+	41669

50 Tin 119

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{120}Sn	CS	4RUSRUS	2.5-02	2.5-02	Jour	JNE/A,12,47	60	L.V.Groshev+	41669
*	^{7}Li,fus		CS	2ITYLNS	1.6+07	2.8+07	Jour	PR/C,95,034617	17	M.Fisichella+	O2404
*	^{7}Li,x	^{120}Sb	CS	2ITYLNS	2.3+07	2.8+07	Jour	PR/C,95,034617	17	M.Fisichella+	O2404

50 Tin 120

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{6}Li,fus		CS	2ITYLNS	1.5+07	2.8+07	Jour	PR/C,95,034617	17	M.Fisichella+	O2404
*	^{6}Li,x	^{120}Sb	CS	2ITYLNS	2.1+07	2.8+07	Jour	PR/C,95,034617	17	M.Fisichella+	O2404

50 Tin 124

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	α,inel	^{124}Sn	DAA	2NEDKVI	1.4+08	1.4+08	Jour	PL/B,752,102	16	M.Spieker+	O2396
*	α,inel	^{124}Sn	DAP	2NEDKVI	1.4+08	1.4+08	Jour	PL/B,752,102	16	M.Spieker+	O2396

51 Antimony

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ		SPC	4RUSRUS	2.5-02	2.5-02	Jour	JNE/A,12,47	60	L.V.Groshev+	41669
	n,sct	^{nat}Sb	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

53 Iodine 127

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{127}I	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343
*	p,γ	^{128}Xe	CS	2GERBOC	4.0+06	5.9+06	Jour	EPJ/P,133,332	18	S.V.Harissopulos	O2418

54 Xenon 136

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,3n	^{134}Xe	CSP	1USALAS	9.4+05	6.7+07	Jour	PR/C,98,064606	18	S.J.Daugherty+	14515
*	n,5n	^{132}Xe	CSP	1USALAS	3.8+07	7.5+07	Jour	PR/C,98,064606	18	S.J.Daugherty+	14515
*	n,inel	^{136}Xe	CSP	1USALAS	7.4+05	9.5+07	Jour	PR/C,98,064606	18	S.J.Daugherty+	14515

55 Caesium 133

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,0		RP	1USARPI			Jour	NSE,193,269	19	R.C.Block+	14528
*	n,γ	^{134}Cs	CS	1USARPI	1.0-02	6.0+02	Jour	NSE,193,269	19	R.C.Block+	14528
*	n,γ	^{134}Cs	RI	1USARPI	5.0-01	2.0+07	Jour	NSE,193,269	19	R.C.Block+	14528
*	n,tot		CS	1USARPI	1.0-01	2.0+03	Jour	NSE,193,269	19	R.C.Block+	14528
*	p,γ	^{134}Ba	CS	2GERBOC	4.0+06	5.9+06	Jour	EPJ/P,133,332	18	S.V.Harissopulos	O2418

57 Lanthanum 139

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{139}La	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

58 Cerium 142

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{141}Ce	CS	3INDTRM		1.0+07	Jour	JRN,314,1983	17	R.Ghosh+	G0512

58 Cerium 143

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{144}Ce	CS	1CANCRC	2.5-02	2.5-02	Jour	CJC,34,238	56	L.P.Roy+	14525

59 Praseodymium 141

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{141}Pr	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

60 Neodymium 143

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,α		RP	4ZZZDUB	-6.0+00	7.0+02	Conf	70HELSINKI,1,669	70	Yu.P.Popov+	40225
	n,α		?	4ZZZDUB	-6.0+00	7.0+02	Conf	70HELSINKI,1,669	70	Yu.P.Popov+	40225

60 Neodymium 145

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,α		RP	4ZZZDUB	4.4+00	1.0+02	Conf	70HELSINKI,1,669	70	Yu.P.Popov+	40225
	n,α		?	4ZZZDUB	4.4+00	1.0+02	Conf	70HELSINKI,1,669	70	Yu.P.Popov+	40225

62 Samarium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{nat}Sm	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

62 Samarium 144

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	$n,2n$	^{143}Sm	CS	2TUKCNA	1.4+07	1.5+07	Jour	RCA,107,33	19	I.A.Reyhancan	23470

62 Samarium 147

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,α		RP	4ZZZDUB		2.0+02	Jour	NP/A,261,35	76	N.P.Balabanov+	41664
	n,α		RP	4ZZZDUB	1.8+01	2.2+02	Jour	NP/A,188,212	72	Yu.P.Popov+	41663
	n,α		RP	4ZZZDUB	3.4+00	1.8+02	Conf	70HELSINKI,1,669	70	Yu.P.Popov+	40225
	n,α		RP	4ZZZDUB	3.4+00	2.2+02	Jour	NP/A,188,212	72	Yu.P.Popov+	41663
	n,α		?	4ZZZDUB	3.4+00	1.8+02	Conf	70HELSINKI,1,669	70	Yu.P.Popov+	40225

62 Samarium 149

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,α		RP	4ZZZDUB		7.0+01	Jour	NP/A,261,35	76	N.P.Balabanov+	41664
	n,α		RP	4ZZZDUB	9.8-02	5.2+01	Conf	70HELSINKI,1,669	70	Yu.P.Popov+	40225
	n,α		?	4ZZZDUB	9.8-02	5.2+01	Conf	70HELSINKI,1,669	70	Yu.P.Popov+	40225

63 Europium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{nat}Eu	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

64 Gadolinium 160

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{159}Gd	CS	3INDTRM		1.0+07	Jour	JRN,314,1983	17	R.Ghosh+	G0512

66 Dysprosium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ		RI	1USARPI	5.0-01	2.0+07	Jour	EPJ/A,53,203	17	S.G.Shin+	14514

66 Dysprosium 160

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,0		RP	1USARPI			Jour	EPJ/A,53,203	17	S.G.Shin+	14514
*	n,γ	^{161}Dy	RI	1USARPI	5.0-01	2.0+07	Jour	EPJ/A,53,203	17	S.G.Shin+	14514

66 Dysprosium 161

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,0		RP	1USARPI			Jour	EPJ/A,53,203	17	S.G.Shin+	14514
*	n,γ	^{162}Dy	RI	1USARPI	5.0-01	2.0+07	Jour	EPJ/A,53,203	17	S.G.Shin+	14514

66 Dysprosium 162

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,0		RP	1USARPI			Jour	EPJ/A,53,203	17	S.G.Shin+	14514
*	n,γ	^{163}Dy	RI	1USARPI	5.0-01	2.0+07	Jour	EPJ/A,53,203	17	S.G.Shin+	14514

66 Dysprosium 163

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,0		RP	1USARPI			Jour	EPJ/A,53,203	17	S.G.Shin+	14514

*	n,γ	^{164}Dy	RI	1USARPI	5.0-01	2.0+07	Jour	EPJ/A,53,203	17	S.G.Shin+	14514

66 Dysprosium 164

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,0		RP	1USARPI			Jour	EPJ/A,53,203	17	S.G.Shin+	14514
*	n,γ	^{165}Dy	RI	1USARPI	5.0-01	2.0+07	Jour	EPJ/A,53,203	17	S.G.Shin+	14514

70 Ytterbium 168

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{167}Yb	CS	2GRCGRC		1.4+07	Jour	EPJ/A,54,153	18	E.Vagena+	G0061

70 Ytterbium 170

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{169}Yb	CS	2GRCGRC		1.4+07	Jour	EPJ/A,54,153	18	E.Vagena+	G0061

70 Ytterbium 176

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{175}Yb	CS	2GRCGRC		1.4+07	Jour	EPJ/A,54,153	18	E.Vagena+	G0061

72 Hafnium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{nat}Hf	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

72 Hafnium 179

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{180}Hf	CS	4RUSFTI	2.5+04	2.5+04	Jour	NP,6,561	58	V.S.Gvozdev+	41662

72 Hafnium 180

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,inel	^{180}Hf	CS	4RUSLIN	2.5-02	2.5-02	Jour	PL/B,106,383	81	I.A.Kondurov+	41666

73 Tantalum 181

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,sct	^{181}Ta	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

74 Tungsten 186

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,sct	^{186}W	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

75 Rhenium

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,sct	^{nat}Re	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

76 Osmium 184

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{185}Os	CS	1USABNL	2.5-02	2.5-02	Jour	CJP,36,1409	58	S.V.Nablo+	14527

76 Osmium 190

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{191}Os	CS	1USABNL	2.5-02	2.5-02	Jour	CJP,36,1409	58	S.V.Nablo+	14527

76 Osmium 192

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{193}Os	CS	1USABNL	2.5-02	2.5-02	Jour	CJP,36,1409	58	S.V.Nablo+	14527

79 Gold 197

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x+n	inclusive	DAE	4RUSLEB		1.4+07	Conf	60MOSCOW,,479	60	G.N.Zatsepina+	M0144
*	n,γ	^{198}Au	CS	2ITYPAD	3.0+04	3.0+04	Jour	PR/C,99,034616	19	G.Martin-Hernandez+	23536
*	n,γ	^{198}Au	CS	2SPNSEU	Maxwl		Jour	JP/CS,940,012044	18	P.Jimenez-Bonilla+	23466
	n,sct	^{197}Au	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

81 Thallium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,sct	^{nat}Tl	RI	1USAANL		5.0-01	Jour	PR,79,11	50	S.P.Harris+	11343

82 Lead

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,n		CS	4UKRUZH	9.0+06	2.0+07	Jour	ZET,46,1540	64	M.M.Dorosh+	G4065
*	p,x+n	inclusive	DAE	2JPNTAK	2.0+07	7.8+07	Jour	NIM/A,920,22	19	D.Satoh+	E2594
*	p,x+n	inclusive	DAP	2JPNTAK	2.0+07	7.8+07	Jour	NIM/A,920,22	19	D.Satoh+	E2594
*	^{17}Ne,inel	^{nat}Pb	CSP	2GERGSI	8.5+09	8.5+09	Jour	PL/B,759,200	16	J.Marganiec+	O2403

82 Lead 206

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,0		RP	2GERZFK			Jour	PR/C,98,064317	18	T.Shizuma+	G0060

82 Lead 208

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{8}He,^{6}He	^{210}Pb	CS	2FR GAN	1.6+07	2.2+07	Jour	PR/C,98,034615	18	G.Marquinez-Duran+	O2416
*	^{8}He,^{6}He	^{210}Pb	DA	2FR GAN	1.6+07	2.2+07	Jour	PR/C,98,034615	18	G.Marquinez-Duran+	O2416
*	^{8}He,^{7}He	^{209}Pb	CS	2FR GAN	1.6+07	2.2+07	Jour	PR/C,98,034615	18	G.Marquinez-Duran+	O2416
*	^{8}He,α	^{212}Pb	CS	2FR GAN	1.6+07	2.2+07	Jour	PR/C,98,034615	18	G.Marquinez-Duran+	O2416
*	^{8}He,α	^{212}Pb	DA	2FR GAN	1.6+07	2.2+07	Jour	PR/C,98,034615	18	G.Marquinez-Duran+	O2416
*	^{8}He,el	^{208}Pb	DA	2FR GAN	1.6+07	2.2+07	Jour	PR/C,98,034615	18	G.Marquinez-Duran+	O2416
*	^{8}He,fus		CS	2FR GAN	1.6+07	2.2+07	Jour	PR/C,98,034615	18	G.Marquinez-Duran+	O2416
*	^{8}He,non		CS	2FR GAN	1.6+07	2.2+07	Jour	PR/C,98,034615	18	G.Marquinez-Duran+	O2416

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	DAE	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	p,x+α	inclusive	POD	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	p,x+^{3}He	inclusive	DAE	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	p,x+^{3}He	inclusive	POD	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567

90 Thorium 232

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,fis	Many	FY	4UKRKFT		1.2+07	Jour	EPJ/A,49,51	13	V.V.Denyak+	G4069
*	n,fis		KE	1USALAS	2.1+06	1.0+08	Jour	EPJ/A,53,238	17	J.King+	14517
	p,x+α	inclusive	DAE	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	p,x+^{3}He	inclusive	DAE	2SWTVIL	7.2+07	7.2+07	Jour	NP/A,389,247	82	Z.Lewandowski+	O0567
	α,fis	Many	FY	2JPNOSA	8.0+07	8.0+07	Prog	NEANDC(J)-61/U,68	79	T.Nishi+	E2603

90 Thorium 233

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,fis	Many	FY	1USALAS	6.0+06	5.5+07	Jour	EPJ/A,53,238	17	J.King+	14517

92 Uranium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,fis	^{81}Ge	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,99,014617	19	V.Rakopoulos+	O2395
*	p,fis	^{119}Cd	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,99,014617	19	V.Rakopoulos+	O2395
*	p,fis	^{121}Cd	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,99,014617	19	V.Rakopoulos+	O2395
*	p,fis	^{123}Cd	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,99,014617	19	V.Rakopoulos+	O2395
*	p,fis	^{125}Cd	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,99,014617	19	V.Rakopoulos+	O2395
*	p,fis	^{127}Cd	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,99,014617	19	V.Rakopoulos+	O2395
*	p,fis	^{119}In	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,99,014617	19	V.Rakopoulos+	O2395
*	p,fis	^{121}In	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,99,014617	19	V.Rakopoulos+	O2395
*	p,fis	^{123}In	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,99,014617	19	V.Rakopoulos+	O2395
*	p,fis	^{125}In	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,99,014617	19	V.Rakopoulos+	O2395
*	p,fis	^{127}In	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,99,014617	19	V.Rakopoulos+	O2395
*	p,fis	^{129}Sb	FY	2SF JYV	2.5+07	2.5+07	Jour	PR/C,99,014617	19	V.Rakopoulos+	O2395

92 Uranium 233

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,fis	Many	FY	4UKRKFT		1.2+07	Jour	EPJ/A,49,51	13	V.V.Denyak+	G4069
*	d,p+fis	γ	FY	2NOROSL	1.2+07	1.2+07	Jour	PR/C,96,014601	17	S.J.Rose+	O2415

*	d,p+fis	γ	KE	2NOROSL	1.2+07	1.2+07	Jour	PR/C,96,014601	17	S.J.Rose+	O2415

92 Uranium 235

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	γ,fis	Many	FY	4UKRKFT		1.2+07	Jour	EPJ/A,49,51	13	V.V.Denyak+	G4069
*	n,fis		CS	1USARPI	1.0-02	3.0+03	Jour	NSE,187,291	17	Y.Danon+	14518
*	n,fis		KE	1USALAS	2.2+06	1.0+08	Jour	NP/A,970,65	18	R.Yanez+	14513
	n,fis		KE	2NORKJL	2.5-02	2.5-02	Jour	NP,45,72	63	K.Skarsvag+	22756
*	n,fis	^{84}Br	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{89}Rb	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{91}Sr	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{93}Y	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{94}Y	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{97}Zr	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{101}Mo	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{105}Ru	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{128}Sn	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{129}Sb	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{130}Sb	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{131}Sb	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{131}Te	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{134}Te	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{133}I	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{134}I	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{135}I	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{138}Xe	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{141}Ba	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{142}Ba	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,fis	^{142}La	FY	1USALAS	Fiss		Jour	NDS,155,86	19	B.D.Pierson+	14512
*	n,γ	^{236}U	CS	1USARPI	1.0-02	3.0+03	Jour	NSE,187,291	17	Y.Danon+	14518
*	p,2n	^{234}Np	CS	2SF HLS	9.0+06	1.6+07	Jour	NDS,119,237	14	E.Gromova+	O2399
*	p,γ	^{236}Np	CS	2SF HLS	6.5+06	1.6+07	Jour	NDS,119,237	14	E.Gromova+	O2399
*	p,n	^{235}Np	CS	2SF HLS	6.5+06	1.6+07	Jour	NDS,119,237	14	E.Gromova+	O2399
*	^{3}He,2n	^{236}Pu	CS	2SF HLS	2.0+07	4.2+07	Jour	NDS,119,237	14	E.Gromova+	O2399
*	^{3}He,4n	^{234}Pu	CS	2SF HLS	2.0+07	3.5+07	Jour	NDS,119,237	14	E.Gromova+	O2399
*	^{3}He,n	^{237}Pu	CS	2SF HLS	2.0+07	4.2+07	Jour	NDS,119,237	14	E.Gromova+	O2399
*	^{3}He,x	^{234}Np	CS	2SF HLS	2.0+07	4.2+07	Jour	NDS,119,237	14	E.Gromova+	O2399
*	^{3}He,x	^{235}Np	CS	2SF HLS	2.0+07	4.2+07	Jour	NDS,119,237	14	E.Gromova+	O2399
*	^{3}He,x	^{236}Np	CS	2SF HLS	2.0+07	4.2+07	Jour	NDS,119,237	14	E.Gromova+	O2399
*	^{3}He,x	^{236}Pu	CS	2SF HLS	2.0+07	4.2+07	Jour	NDS,119,237	14	E.Gromova+	O2399

92 Uranium 236

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	γ,fis	Many	FY	4UKRKFT		9.0+06	Jour	EPJ/A,49,51	13	V.V.Denyak+	G4069

92 Uranium 238

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,abs		CS	1CANCRC	5.9+06	8.0+06	Jour	NP/A,179,333	72	A.M.Khan+	M0504
*	γ,fis	Many	FY	4UKRKFT		9.0+06	Jour	EPJ/A,49,51	13	V.V.Denyak+	G4069
	γ,fis		NU	1CANCRC	8.0+06	8.0+06	Jour	NP/A,179,333	72	A.M.Khan+	M0504
	γ,n	^{237}U	CS	1CANCRC	5.6+06	8.0+06	Jour	NP/A,179,333	72	A.M.Khan+	M0504
	γ,x+n	inclusive	CS	1CANCRC	5.5+06	8.0+06	Jour	NP/A,179,333	72	A.M.Khan+	M0504
*	n,fis		CS	1USALAS	1.3+08	3.0+08	Thes	MILLER	15	Z.W.Miller+	14529
*	n,fis	Many	CS	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{92}Kr	CSP	1USALAS	1.2+06	7.0+07	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{94}Sr	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{96}Sr	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{98}Sr	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{100}Zr	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{102}Zr	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{104}Zr	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{104}Mo	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{106}Mo	CSP	1USALAS	1.5+06	7.0+07	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{128}Sn	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{132}Sn	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{134}Te	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{138}Te	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{138}Xe	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{140}Xe	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{144}Ba	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{146}Ba	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{148}Ba	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
*	n,fis	^{150}Ce	CSP	1USALAS	1.5+06	2.0+06	Jour	PR/C,99,024606	19	N.Fotiades+	14522
	p,fis		CS	1USAFSU	1.1+07	1.1+07	Jour	JIN,33,897	71	G.R.Choppin+	O0570

93 Neptunium 237

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{238}Np	CS	2JPNKTO	2.5-02	2.5-02	Jour	NST,56,493	19	S.Nakamura+	23535
*	n,γ	^{238}Np	RI	2JPNKTO		1.3-01	Jour	NST,56,493	19	S.Nakamura+	23535

94 Plutonium 239

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,p+fis	γ	FY	2NOROSL	1.2+07	1.2+07	Jour	PR/C,96,014601	17	S.J.Rose+	O2415
*	d,p+fis	γ	KE	2NOROSL	1.2+07	1.2+07	Jour	PR/C,96,014601	17	S.J.Rose+	O2415

94 Plutonium 240

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

	n,abs	CS	4RUSRUS	Maxwl	2.5-02	Jour	JNE,6,155	57	P.A.Krupchinsky	41667
	n,abs	RI	4RUSRUS		2.0-01	Jour	JNE,6,155	57	P.A.Krupchinsky	41667
	n,abs	RI	4RUSRUS	5.0-01		Jour	JNE,4,86	57	B.G.Erozolimsky+	41668
	n,abs	?	4RUSRUS	5.0-01		Jour	JNE,4,86	57	B.G.Erozolimsky+	41668
	n,fis	CS	1CANCRC	2.5-02	2.5-02	Jour	CJP,36,503	58	C.B.Bigham	14526
	n,fis	?	1CANCRC	2.5-02	2.5-02	Jour	CJP,36,503	58	C.B.Bigham	14526

94 Plutonium 242

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	n,fis		?	2GERZFK	5.0+05	1.0+07	Jour	PR/C,99,024604	19	T.Koegler+	23469

95 Americium 241

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	n,γ	^{242}Am	CS	2JPNJAE	1.0-02	1.0+02	Jour	NST,55,1198	18	K.Terada+	23445
*	n,tot		CS	2JPNJAE	4.3-03	1.0+01	Jour	NST,55,1198	18	K.Terada+	23445

98 Californium 252

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	0,fis	^{134}Sb	FY	1USAANL	Spont		Jour	PR/C,98,054307	18	K.Siegl+	14519