EXFOR News (January 2022)

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 (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, B. Pritychenko et al., Nucl.Data.Sheets **120**(2014)272.

Quantity codes

ALF	α-value ($\sigma_{\rm capt}/\sigma_{\rm fis}$)	KE	Kinetic energy
AMP	Scattering length	INT	Cross section integral over incident energy
CHG	Fragment charge	KER	Kerma factor
CS	Cross section	MAS	Fragment mass
CSP	Partial cross section	MFQ	Differential fission neutron multiplicity
CST	Temperature dependent cross section	MLT	Multiplicity
D3A	Triple differential $d\Omega_1/d\Omega_2/dE'$	NQ	Nuclear quantity
D3E	Triple differential $d\Omega/dE'_1/dE'_2$	NU	Fission neutron multiplicity $\bar{\nu}$
D4A	Quadruple diff. $d\Omega_1/d\Omega_2/dE'_1/dE'_2$	NUD	Delayed fission neutron multiplicity $\bar{\nu_d}$
DA	Differential $d/d\Omega$	POL	Polarization
DAA	Double differential $d\Omega_1/d\Omega_2$	POD	Differential polarization
DAE	Double differential $d\Omega/dE'$	PY	Product yield (other than fission)
DAP	Partial differential $d/d\Omega$	RI	Resonance integral
DAT	Temperature-dependent Legendre coefficient	RP	Resonance parameter
DE	Differential d/dE'	RR	Reaction rate
DEP	Energy spectrum for specific group	SIF	Self indication
DP	Diff. by linear momentum of outgoing part.	SPC	Gamma spectrum
DT	Diff. by 4-momentum transfer squared	TSL	Thermal scattering
ETA	η-value = $\bar{\nu}\sigma_{\rm fis}/(\sigma_{\rm capt}+\sigma_{\rm fis})$	TT	Thick target yield
EVL	Evaluation	TTD	Differential thick target yield, $d/d\Omega$
FY	Fission product yield	TTP	Partial thick target yield

Special codes in outgoing particle field

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

Special codes in incident energy field

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

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

1 Hydrogen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,ths	^{nat}H	CS	1USAANL			Jour	PR,71,666	47	E.Fermi+	12593
	$\bar{p}$,x+π^-	inclusive	?	1USABRK	7.5+07	2.0+08	Jour	PR,118,1371	60	L.E.Agnewjr+	C2652

1 Hydrogen 1

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{1}H	DA	1USALAS	1.6+06	3.0+07	Rept	AIP-1090,215	09	M.Devlin+	14159
	n,el	^{1}H	DA	1USABRK	9.0+07	9.0+07	Jour	PR,73,1114	48	J.Hadley+	14705
	π^-,el	^{1}H	DA	1USACHI	1.2+08	1.4+08	Jour	PR,91,155	53	H.L.Anderson+	C2635
	π^+,el	^{1}H	DA	1USACHI	1.7+08	2.1+08	Jour	PR,92,161	53	E.Fermi+	C2639
	π^+,el	^{1}H	DA	1USACHI	7.8+07	1.4+08	Jour	PR,91,155	53	H.L.Anderson+	C2635
	π^-,el	^{1}H	POD	4RUSITE			Jour	EPJ/C,45,383	06	I.G.Alekseev+	F1446
	π^-,γ	n	CS	1USACHI	1.2+08	1.2+08	Jour	PR,85,935	52	E.Fermi+	C2609
	π^-,non		CS	1USACHI	8.9+07	2.2+08	Jour	PR,85,934	52	H.L.Anderson+	C2608
	π^-,π^0	n	CS	1USACHI	1.2+08	1.2+08	Jour	PR,85,935	52	E.Fermi+	C2609
	π^-,π^0	n	CS	1USACHI	1.2+08	1.4+08	Jour	PR,91,155	53	H.L.Anderson+	C2635
	π^-,π^0	n	DA	1USACHI	1.2+08	1.4+08	Jour	PR,91,155	53	H.L.Anderson+	C2635
	π^-,x+γ	inclusive	CS	1USACHI	1.7+08	2.1+08	Jour	PR,92,161	53	E.Fermi+	C2639
	π^-,x+γ	inclusive	DA	1USACHI	1.7+08	2.1+08	Jour	PR,92,161	53	E.Fermi+	C2639
	p,el	^{1}H	DA	1USABRK	1.2+08	2.5+08	Jour	PR,83,923	51	O.Chamberlain+	C2606
	p,el	^{1}H	DA	1USABRK	2.2+08	3.3+08	Jour	PR,93,1424(1)	54	O.Chamberlain+	C2637
	p,el	^{1}H	DA	1USABRK	3.0+08	3.0+08	Jour	PR,95,1348	54	O.Chamberlain+	C2643
	p,el	^{1}H	DA	1USABRK	3.4+08	3.4+08	Jour	PR,83,923	51	O.Chamberlain+	C2606
	p,el	^{1}H	DA	1USABRK	3.5+08	3.5+08	Jour	PR,87,81	52	O.Chamberlain+	C2636
	p,el	^{1}H	DA	4ZZZDUB	6.2+09	6.2+09	Jour	ZET,46,1964	64	Z.M.Zlatanov+	F1442
	p,el	^{1}H	DA	4ZZZDUB	8.5+09	8.5+09	Jour	ZET,37,910	59	V.B.Lyubimov+	F1443
	p,el	^{1}H	POD	1USABRK	3.0+08	3.0+08	Jour	PR,95,1348	54	O.Chamberlain+	C2643
	$\bar{p}$,n	^{1}An	CS	1USABRK		4.4+08	Jour	PR,108,1557	57	J.Button+	C2650
*	d,n+p	^{1}H	D3A	2GERJUL	3.4+08	3.4+08	Jour	PR/C,101,044001	20	P.Adlarson+	O2525
*	^{9}Be,α	^{6}Li	?	2ITYLNS	2.4+07	2.4+07	Jour	PR/C,102,064622	20	V.Soukeras+	O2531
*	^{9}Be,d	^{8}Be	?	2ITYLNS	2.4+07	2.4+07	Jour	PR/C,102,064622	20	V.Soukeras+	O2531
*	^{9}Be,el	^{1}H	?	2ITYLNS	2.4+07	2.4+07	Jour	PR/C,102,064622	20	V.Soukeras+	O2531
*	^{9}Be,n	^{9}B	?	2ITYLNS	2.4+07	2.4+07	Jour	PR/C,102,064622	20	V.Soukeras+	O2531
*	^{9}Be,n+p+α	^{4}He	CS	2ITYLNS	2.4+07	5.1+07	Jour	PR/C,102,064622	20	V.Soukeras+	O2531
*	^{17}N,2p	^{16}C	?	2GERGSI	7.4+09	7.4+09	Jour	PL/B,809,135748	20	I.Syndikus+	O2523
*	^{19}N,2p	^{18}C	?	2GERGSI	8.2+09	8.2+09	Jour	PL/B,809,135748	20	I.Syndikus+	O2523
*	^{21}N,2p	^{20}C	?	2GERGSI	8.9+09	8.9+09	Jour	PL/B,809,135748	20	I.Syndikus+	O2523
*	^{136}Xe,x	Many	?	2GERGSI	1.4+11	1.4+11	Jour	EPJ/A,55,11	19	T.Gorbinet+	O2530

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	DA	4ZZZDUB	6.2+09	6.2+09	Jour	ZET,46,1964	64	Z.M.Zlatanov+	F1442

*	p,n+p	^{1}H	POD	2NEDKVI	1.4+08	1.4+08	Jour	EPJ/A,56,249	20	M.T.Bayat+	O2522
*	p,n+p	^{1}H	?	2NEDKVI	1.4+08	1.4+08	Jour	EPJ/A,56,249	20	M.T.Bayat+	O2522
	d,n	^{3}He	POD	4RUSFTI	4.7+06	5.6+06	Jour	ZET,47,767	64	N.P.Babenko+	F1441

1 Hydrogen

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,tot		CS	1USAANL	1.6-03	2.5-02	Jour	PR,70,815	46	H.L.Anderson+	14689
	n,el	Paraffin	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
	n,tot		CS	1USAANL	1.6-03	1.6-03	Jour	PR,70,815	46	H.L.Anderson+	14689

2 Helium 3

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	γ,p	^{2}H	CS	1USATNL	2.9+07	2.9+07	Jour	PR/C,103,034311	21	G.Laskaris+	L0271
*	γ,p	^{2}H	POD	1USATNL	2.9+07	2.9+07	Jour	PR/C,103,034311	21	G.Laskaris+	L0271

2 Helium 4

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	p,el	^{4}He	DA	1USABRK	3.2+08	3.2+08	Jour	PR,96,807(2)	54	O.Chamberlain+	C2644
	p,el	^{4}He	POD	1USABRK	3.2+08	3.2+08	Jour	PR,96,807(2)	54	O.Chamberlain+	C2644

3 Lithium

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,el	$^{\rm nat}$Li	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
	n,tot		CS	1USACOL	1.8-02	9.9+02	Jour	PR,70,154	46	W.W.Havensjr+	11139
	p,2p		DA	1USABRK	3.5+08	3.5+08	Jour	PR,87,81	52	O.Chamberlain+	C2636

3 Lithium 6

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,t	^{4}He	DA	1USALAS	2.3+06	7.5+06	Rept	AIP-1090,215	09	M.Devlin+	14159
*	p,γ	^{7}Be	CS	2ITYLGS	6.1+04	3.2+05	Jour	PR/C,102,052802(R)	20	D.Piatti+	O2521
*	d,el	^{6}Li	DA	4RUSEPA	3.0+06	1.0+07	Jour	IZV,84,1774	20	L.N.Generalov+	F1451
*	d,inel	^{6}Li	CSP	4RUSEPA	2.9+06	1.0+07	Jour	IZV,84,1774	20	L.N.Generalov+	F1451
*	d,inel	^{6}Li	DAP	4RUSEPA	4.0+06	1.0+07	Jour	IZV,84,1774	20	L.N.Generalov+	F1451
*	d,x+t	inclusive	CS	4RUSEPA	3.5+06	1.0+07	Jour	IZV,84,1774	20	L.N.Generalov+	F1451
*	d,x+t	inclusive	DA	4RUSEPA	3.5+06	1.0+07	Jour	IZV,84,1774	20	L.N.Generalov+	F1451

3 Lithium 7

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{8}Li	CS	2GERKFK	Maxwl		Jour	AJ,344,464	89	M.Wiescher+	22171
	n,γ	^{8}Li	?	2GERKFK			Jour	AJ,344,464	89	M.Wiescher+	22171
*	p,n+^{3}He	^{4}He	?	3INDTRM	2.1+07	2.1+07	Jour	PR/C,104,054606	21	C.V.Midhun+	D6404
*	d,el	^{7}Li	DA	4RUSEPA	3.0+06	1.0+07	Jour	IZV,84,1774	20	L.N.Generalov+	F1451
*	d,inel	^{7}Li	CSP	4RUSEPA	3.7+06	1.0+07	Jour	IZV,84,1774	20	L.N.Generalov+	F1451
*	d,inel	^{7}Li	DAP	4RUSEPA	3.8+06	1.0+07	Jour	IZV,84,1774	20	L.N.Generalov+	F1451
*	d,t	^{6}Li	CSP	4RUSEPA	3.7+06	1.0+07	Jour	IZV,84,1774	20	L.N.Generalov+	F1451
*	d,t	^{6}Li	DAP	4RUSEPA	3.8+06	1.0+07	Jour	IZV,84,1774	20	L.N.Generalov+	F1451
*	d,x+n	inclusive	TTD	4RUSFEI	2.9+06	2.9+06	Jour	EPJ/CS,146,11041	17	K.V.Mitrofanov+	F1444

4 Berylium 9

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,ths	^{9}Be	TSL	1USAANL			Jour	PR,72,408	47	E.Fermi+	14690
	n,tot		CS	1USAANL			Jour	PR,72,408	47	E.Fermi+	14690
	n,tot		CS	1USAANL	1.6-03	2.5-02	Jour	PR,70,815	46	H.L.Anderson+	14689
	p,2n	^{8}B	CS	1CANMNA	2.2+07	4.8+07	Jour	PR/C,10,50	74	N.E.Davison+	C2506
	p,x+n	inclusive	?	1USABRK	3.4+08	3.4+08	Jour	PR,81,687	51	W.J.Knox	C2607
	d,x+n	inclusive	?	1USABRK	1.9+08	1.9+08	Jour	PR,81,687	51	W.J.Knox	C2607
*	^{3}He,p	^{11}B	DAP	3CRORBZ	1.3+06	2.9+06	Jour	NIM/B,500-501,57	21	G.Provatas+	D0998
*	^{12}C,x	^{6}Li	DAE	4RUSITE	2.4+10	2.4+10	Jour	YF,82,(6),500	19	B.M.Abramov+	F1438
*	^{12}C,x	^{7}Be	DAE	4RUSITE	2.4+10	2.4+10	Jour	YF,82,(6),500	19	B.M.Abramov+	F1438
*	^{12}C,x+α	inclusive	DAE	4RUSITE	2.4+10	2.4+10	Jour	YF,82,(6),500	19	B.M.Abramov+	F1438
*	^{12}C,x+d	inclusive	DAE	4RUSITE	2.4+10	2.4+10	Jour	YF,82,(6),500	19	B.M.Abramov+	F1438
*	^{12}C,x+^{3}He	inclusive	DAE	4RUSITE	2.4+10	2.4+10	Jour	YF,82,(6),500	19	B.M.Abramov+	F1438
*	^{12}C,x+p	inclusive	DAE	4RUSITE	2.4+10	2.4+10	Jour	YF,82,(6),500	19	B.M.Abramov+	F1438
	^{132}Sn,x	Many	?	2GERGSI	1.3+11	1.3+11	Jour	PL/B,703,552	11	D.Perez-Loureiro+	O1956

5 Boron

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	1USACOL	5.4-02	1.0+02	Jour	PR,70,136	46	J.Rainwater+	11191

5 Boron 11

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{3}He,d	^{12}C	DAP	2SF JYV	2.5+07	2.5+07	Jour	PR/C,102,054612	20	A.S.Demyanova+	O2527

6 Carbon

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,el	^{nat}C	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
	n,el	^{nat}C	CS	1USAPTN	2.3+06	2.8+06	Jour	PR,57,669	40	M.R.Macphail	14675
	n,el	^{nat}C	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,inel	^{nat}C	CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,non		CS	1USAUCX	4.5+06	1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	$\bar{p}$,el	^{nat}C	DA	1USABRK	3.0+07	2.0+08	Jour	PR,118,1371	60	L.E.Agnewjr+	C2652
	$\bar{p}$,x	^{1}An	CS	1USABRK	4.3+08	4.3+08	Jour	PR,108,1557	57	J.Button+	C2650
	$\bar{p}$,x+π^-	inclusive	?	1USABRK	7.5+07	2.0+08	Jour	PR,118,1371	60	L.E.Agnewjr+	C2652
	n,ths	C compound	CS	1USAANL			Jour	PR,71,666	47	E.Fermi+	12593
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	$\bar{p}$,x	^{1}An	CS	1USABRK	4.6+08	4.6+08	Jour	PR,108,1557	57	J.Button+	C2650

6 Carbon 12

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{12}C	DA	2GERTHS	7.6+06	8.8+06	Jour	NIM/A,244,455	86	J.W.Hammer+	23737
	n,el	^{12}C	POD	2GERTHS	7.6+06	8.8+06	Jour	NIM/A,244,455	86	J.W.Hammer+	23737
	n,tot		CS	1USAANL	1.6-03	2.5-02	Jour	PR,70,815	46	H.L.Anderson+	14689
	n,tot		CST	1USAANL	1.6-03	1.6-03	Jour	PR,70,815	46	H.L.Anderson+	14689
	p,el	^{12}C	DA	1USABRK	2.9+08	2.9+08	Jour	PR,96,807(2)	54	O.Chamberlain+	C2644
*	p,el	^{12}C	DA	4RUSEPA	4.0+06	9.1+06	Jour	PAN,80,1539	17	L.N.Generalov+	F1449
	p,el	^{12}C	POD	1USABRK	2.9+08	2.9+08	Jour	PR,96,807(2)	54	O.Chamberlain+	C2644
	d,el	^{12}C	DA	1USABRK	1.7+08	1.7+08	Jour	PR,95,1104	54	O.Chamberlain+	C2645
*	^{3}He,t	^{12}N	DAP	2SF JYV	4.0+07	4.0+07	Jour	JEL,111,409	20	A.S.Demyanova+	O2529
*	^{12}C,p	^{23}Na	TTP	2ITYFSN	2.0+06	4.0+06	Jour	PR/C,97,065806	18	J.Zickefoose+	O2524
*	^{12}C,x+n	inclusive	TTD	3INDTRM	1.2+08	1.2+08	Jour	EPJ/A,56,80	20	V.Suman+	D6381
*	^{136}Xe,x	Many	?	2GERGSI	1.4+11	1.4+11	Jour	EPJ/A,55,11	19	T.Gorbinet+	O2530

7 Nitrogen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{nat}N	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696

7 Nitrogen 14

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{14}N	CS	1USAPTN	2.3+06	2.8+06	Jour	PR,57,669	40	M.R.Macphail	14675
	n,p	^{14}C	CS	2GERKFK	Maxwl		Jour	ZP/A,330,167	88	K.Brehm+	22078
	n,p	^{14}C	?	2GERKFK	Maxwl		Jour	ZP/A,330,167	88	K.Brehm+	22078

8 Oxygen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,non		CS	1USABRK	4.6+08	4.6+08	Jour	PR,108,1545	57	L.E.Agnew+	C2651
	$\bar{p}$,x+π^-	inclusive	?	1USABRK	4.6+08	4.6+08	Jour	PR,108,1545	57	L.E.Agnew+	C2651

8 Oxygen 16

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,α	^{13}N	DA	1USACLA	2.1+07	3.9+07	Jour	NP/A,163,378	71	S.N.Bunker+	C2618
	p,d	^{15}O	DA	1USACLA	2.1+07	4.0+07	Jour	NP/A,163,378	71	S.N.Bunker+	C2618
	p,d	^{15}O	DAP	1USACLA	2.1+07	3.9+07	Jour	NP/A,163,378	71	S.N.Bunker+	C2618
	p,el	^{16}O	DA	1USACLA	2.1+07	3.9+07	Jour	NP/A,163,378	71	S.N.Bunker+	C2618
	p,el	^{16}O	POD	1USACLA	2.1+07	3.0+07	Jour	NP/A,163,378	71	S.N.Bunker+	C2618
	p,inel	^{16}O	DAP	1USACLA	2.1+07	3.9+07	Jour	NP/A,163,378	71	S.N.Bunker+	C2618
	p,t	^{14}O	DA	1USACLA	3.2+07	4.0+07	Jour	NP/A,163,378	71	S.N.Bunker+	C2618

10 Neon 22

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{23}Ne	CS	2GERKFK	Maxwl		Jour	AJ,379,420	91	H.Beer+	22255
	n,γ	^{23}Ne	?	2GERKFK	Maxwl		Jour	AJ,379,420	91	H.Beer+	22255

11 Sodium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	NA compound	CS	1USAPTN	2.3+06	2.8+06	Jour	PR,57,669	40	M.R.Macphail	14675

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	1USAPTN	2.3+06	2.8+06	Jour	PR,57,669	40	M.R.Macphail	14675
*	p,0		RP	2ITYLGS			Jour	PL/B,795,122	19	A.Boeltzig+	O2520

12 Magnesium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{nat}Mg	CS	1USAPTN	2.3+06	2.8+06	Jour	PR,57,669	40	M.R.Macphail	14675

n,el	^{nat}Mg	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700

12 Magnesium 24

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	p,γ	^{25}Al	CS	1CANMCM	6.0+05	1.6+06	Jour	NP/A,242,519	75	H.P.Trautvetter+	C2509
	p,γ	^{25}Al	CSP	1CANMCM	2.1+05	2.3+06	Jour	NP/A,242,519	75	H.P.Trautvetter+	C2509
	p,γ	^{25}Al	DAP	1CANMCM	8.1+05	2.2+06	Jour	NP/A,242,519	75	H.P.Trautvetter+	C2509

13 Aluminium 27

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,el	^{27}Al	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
	n,el	^{27}Al	CS	1USAPTN	2.3+06	2.8+06	Jour	PR,57,669	40	M.R.Macphail	14675
	n,el	^{27}Al	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,inel	^{27}Al	CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,non		CS	1USAUCX	4.5+06	1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,ths	^{27}Al	TSL	1USAANL			Jour	PR,72,408	47	E.Fermi+	14690
	n,tot		CS	1USAANL			Jour	PR,72,408	47	E.Fermi+	14690
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	p,el	^{27}Al	DA	1USABRK	3.0+08	3.0+08	Jour	PR,95,1105	54	O.Chamberlain+	C2646
	p,el	^{27}Al	POD	1USABRK	3.0+08	3.0+08	Jour	PR,95,1105	54	O.Chamberlain+	C2646
	p,x+n	inclusive	?	1USABRK	3.4+08	3.4+08	Jour	PR,81,687	51	W.J.Knox	C2607
	d,x+n	inclusive	?	1USABRK	1.9+08	1.9+08	Jour	PR,81,687	51	W.J.Knox	C2607

14 Silicon 28

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	^{11}Li,non		CS	4ZZZDUB	7.6+07	2.8+08	Jour	PR/C,99,014609	19	Yu.E.Penionzhkevich+	F1445

14 Silicon 29

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	p,0		RP	1USAARL			Jour	PR/C,1,1982	70	C.P.Poirier+	C2612
	p,el	^{29}Si	DA	1USAARL	1.3+06	2.5+06	Jour	PR/C,1,1982	70	C.P.Poirier+	C2612
	p,γ	^{30}P	CS	1USAARL	1.3+06	2.3+06	Jour	PR/C,1,1982	70	C.P.Poirier+	C2612
	p,inel		RP	1USAARL	2.0+06	2.5+06	Jour	PR/C,1,1982	70	C.P.Poirier+	C2612

16 Sulphur

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,el	^{nat}S	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
	n,el	^{nat}S	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,inel	^{nat}S	CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USAANL	1.6-03	2.5-02	Jour	PR,70,815	46	H.L.Anderson+	14689

16 Sulphur 34

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{35}S	CS	2GERKFK			Jour	AJ,528,573	00	R.Reifarth+	22424

17 Chlorine

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,inel	^{nat}Cl	CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703

19 Potassium 41

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,α	^{38}Cl	CS	3INDTRM	1.5+07	1.5+07	Jour	CPH/C,46,014002	22	A.Gandhi+	33163

22 Titanium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	α,x	^{51}Cr	CS	4RUSTPI	6.5+06	2.5+07	Jour	ARI,166,109367	20	N.E.Villa+	F1450

24 Chromium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{nat}Cr	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,tot		CS	1USACOL	3.2+00	8.8+05	Jour	PR,92,702	53	E.Melkonian+	11670

25 Manganese 55

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{55}Mn	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,γ	^{56}Mn	CS	1USACOL	2.5-02	2.5-02	Jour	PR,55,1106(2)	39	H.L.Anderson+	14704
	n,tot		CS	1USACOL	1.7-02	1.1+04	Jour	PR,71,65	47	L.J.Rainwater+	11685
	n,tot		CS	1USAANL	3.0+02	3.0+02	Jour	PR,72,168(L4)	47	F.G.P.Seidl+	14694

26 Iron

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,el	^{nat}Fe	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
	n,el	^{nat}Fe	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,inel	^{nat}Fe	CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USASTF	1.0+00	1.0+00	Jour	PR,52,1023	37	N.E.Bradbury+	14695
	n,tot		CS	1USACOL	3.1-03	3.3+05	Jour	PR,83,1123	51	W.W.Havensjr+	11732

26 Iron 56

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{20}Ne,x	Many	CS	3INDVEC	1.5+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{6}Li	DA	3INDVEC	1.5+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{6}Li	DAE	3INDVEC	1.7+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{7}Li	DA	3INDVEC	1.5+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{7}Li	DAE	3INDVEC	1.7+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{7}Be	DA	3INDVEC	1.5+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{7}Be	DAE	3INDVEC	1.7+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{9}Be	DA	3INDVEC	1.5+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{9}Be	DAE	3INDVEC	1.7+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{10}B	DA	3INDVEC	1.5+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{10}B	DAE	3INDVEC	1.7+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{11}B	DA	3INDVEC	1.5+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{11}B	DAE	3INDVEC	1.7+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{11}C	DA	3INDVEC	1.5+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{11}C	DAE	3INDVEC	1.7+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{12}C	DA	3INDVEC	1.5+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{12}C	DAE	3INDVEC	1.7+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{13}C	DA	3INDVEC	1.5+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{13}C	DAE	3INDVEC	1.7+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{14}C	DA	3INDVEC	1.5+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{20}Ne,x	^{14}C	DAE	3INDVEC	1.7+08	1.7+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398

26 Iron 59

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{60}Fe	CS	2GERMUN	2.5-02	2.5-02	Rept	BLM-JB-1997,49	98	A.Elhardt+	23811
	n,γ	^{60}Fe	CS	2GERMUN	Maxwl		Jour	NP/A,723,343	03	K.Knie+	23795

26 Iron 60

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{61}Fe	CS	2GERKFK			Jour	PRL,102,151101	09	E.Uberseder+	23095
	n,γ	^{61}Fe	?	2GERKFK			Jour	PRL,102,151101	09	E.Uberseder+	23095

27 Cobalt 59

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	1USASTF	1.0+00	1.0+00	Jour	PR,52,1023	37	N.E.Bradbury+	14695
	n,tot		CS	1USABNL	1.0+02	1.7+02	Jour	PR,95,476	54	F.G.P.Seidl+	11671
	n,tot		CS	1USACOL	1.5-01	1.4+05	Jour	PR,71,174	47	C.S.Wu+	11751
	n,tot		CS	1USACOL	8.2+01	1.3+05	Jour	PR,83,1123	51	W.W.Havensjr+	11732

28 Nickel

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{nat}Ni	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,el	^{nat}Ni	DA	2GERTHS	5.3+06	7.8+06	Conf	94CRETE,,109	94	J.W.Hammer+	23738
	n,el	^{nat}Ni	POD	2GERTHS	5.3+06	7.8+06	Conf	94CRETE,,109	94	J.W.Hammer+	23738
	n,tot		CS	1USACOL	3.1-03	5.3+04	Jour	PR,83,1123	51	W.W.Havensjr+	11732
*	p,el	^{nat}Ni	DA	4RUSEPA	3.9+06	9.0+06	Jour	PAN,80,1539	17	L.N.Generalov+	F1449

28 Nickel 58

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x+n	inclusive	CS	3AULAML	1.2+07	2.4+07	Jour	NP/A,140,523	70	D.G.Owen+	M0600
*	^{16}O,x	Many	CS	3INDVEC	1.4+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{6}Li	DA	3INDVEC	1.4+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{6}Li	DAE	3INDVEC	1.6+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{7}Li	DA	3INDVEC	1.4+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{7}Li	DAE	3INDVEC	1.6+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{7}Be	DA	3INDVEC	1.4+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{7}Be	DAE	3INDVEC	1.6+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{9}Be	DA	3INDVEC	1.4+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{9}Be	DAE	3INDVEC	1.6+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{10}B	DA	3INDVEC	1.4+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398

*	^{16}O,x	^{10}B	DAE	3INDVEC	1.6+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{11}B	DA	3INDVEC	1.4+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{11}B	DAE	3INDVEC	1.6+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{11}C	DA	3INDVEC	1.4+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{11}C	DAE	3INDVEC	1.6+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{12}C	DA	3INDVEC	1.4+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{12}C	DAE	3INDVEC	1.6+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{13}C	DA	3INDVEC	1.4+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{13}C	DAE	3INDVEC	1.6+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{14}C	DA	3INDVEC	1.4+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398
*	^{16}O,x	^{14}C	DAE	3INDVEC	1.6+08	1.6+08	Jour	PR/C,103,034614	21	T.K.Rana+	D6398

28 Nickel 59

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,x+p	inclusive	CS	3INDTRM	1.2+07	1.6+07	Jour	PR/C,99,014611	19	J.Pandey+	33130

28 Nickel 60

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x+n	inclusive	CS	3AULAML	1.0+07	2.4+07	Jour	NP/A,140,523	70	D.G.Owen+	M0600

29 Copper

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,el	^{nat}Cu	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
	n,el	^{nat}Cu	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,inel	^{nat}Cu	CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	p,non		CS	1USABRK	4.1+08	4.1+08	Jour	PR,108,1545	57	L.E.Agnew+	C2651
	p,x+$\bar{p}$	inclusive	?	1USABRK	4.3+09	6.2+09	Jour	PR,100,947	55	O.Chamberlain+	C2647
	p,x+n	inclusive	?	1USABRK	3.4+08	3.4+08	Jour	PR,81,687	51	W.J.Knox	C2607
	$\bar{p}$,x+π^-	inclusive	?	1USABRK	4.1+08	4.1+08	Jour	PR,108,1545	57	L.E.Agnew+	C2651
	d,x+n	inclusive	?	1USABRK	1.9+08	1.9+08	Jour	PR,81,687	51	W.J.Knox	C2607
*	^{6}Li,x	^{62}Zn	CS	3INDTRM	3.6+07	4.3+07	Jour	EPJ/A,57,209	21	R.Kumar+	D6401
*	^{6}Li,x	^{63}Zn	CS	3INDTRM	2.2+07	4.3+07	Jour	EPJ/A,57,209	21	R.Kumar+	D6401
*	^{6}Li,x	^{65}Zn	CS	3INDTRM	2.2+07	4.3+07	Jour	EPJ/A,57,209	21	R.Kumar+	D6401
*	^{6}Li,x	^{65}Ga	CS	3INDTRM	3.7+07	4.3+07	Jour	EPJ/A,57,209	21	R.Kumar+	D6401
*	^{6}Li,x	^{66}Ga	CS	3INDTRM	2.2+07	4.3+07	Jour	EPJ/A,57,209	21	R.Kumar+	D6401
*	^{6}Li,x	^{67}Ga	CS	3INDTRM	2.2+07	4.3+07	Jour	EPJ/A,57,209	21	R.Kumar+	D6401
*	^{6}Li,x	^{68}Ga	CS	3INDTRM	2.2+07	4.3+07	Jour	EPJ/A,57,209	21	R.Kumar+	D6401
*	^{6}Li,x	^{66}Ge	CS	3INDTRM	2.2+07	4.3+07	Jour	EPJ/A,57,209	21	R.Kumar+	D6401
*	^{6}Li,x	^{67}Ge	CS	3INDTRM	2.2+07	4.3+07	Jour	EPJ/A,57,209	21	R.Kumar+	D6401
*	^{6}Li,x	^{69}Ge	CS	3INDTRM	2.2+07	4.3+07	Jour	EPJ/A,57,209	21	R.Kumar+	D6401

29 Copper 65

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,2n	^{64}Cu	CS	3INDTRM	1.5+07	1.5+07	Jour	CPH/C,46,014002	22	A.Gandhi+	33163
*	n,α	^{62}Co	CS	3INDTRM	1.5+07	1.5+07	Jour	CPH/C,46,014002	22	A.Gandhi+	33163

30 Zinc

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,el	^{nat}Zn	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
	n,el	^{nat}Zn	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,non		CS	1USAUCX	4.5+06	1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USACOL	2.6+02	1.6+05	Jour	PR,83,1123	51	W.W.Havensjr+	11732
	n,tot		CS	1USAUCX	4.5+06	1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USACOL	8.2-03	2.2+03	Jour	PR,83,1123	51	W.W.Havensjr+	11732

30 Zinc 64

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,n	^{64}Ga	CS	2SPNAUT	8.4+06	9.4+06	Jour	RPC,185,109485	21	A.Espinosarodriguez+	O2528
*	p,n	^{64}Ga	TT	2SPNAUT	8.2+06	1.0+07	Jour	RPC,185,109485	21	A.Espinosarodriguez+	O2528

30 Zinc 66

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,sct		RP	2GERZFK	3.4+06	1.1+07	Jour	PR/C,103,024312	21	R.Schwengner+	L0269
*	γ,sct	^{66}Zn	CS	1USATNL	5.4+06	1.1+07	Jour	PR/C,103,024312	21	R.Schwengner+	L0269
*	γ,sct	^{66}Zn	?	2GERZFK	1.0+06	1.1+07	Jour	PR/C,103,024312	21	R.Schwengner+	L0269

30 Zinc 68

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{35}Cl,fus		CS	3INDNSD	6.1+07	9.0+07	Jour	PR/C,102,064606	20	A.Chauhan+	D6393

31 Gallium

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,tot		CS	1USACOL	7.8-01	7.1+05	Jour	PR,92,702	53	E.Melkonian+	11670

31 Gallium 71

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{72}Ga	?	2GERKFK	Maxwl		Rept	KFK-3706	84	G.Walter+	22037

32 Germanium

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,tot		CS	1USACOL	1.4-02	3.4+05	Jour	PR,71,174	47	C.S.Wu+	11751

32 Germanium 74

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{75}Ge	?	2GERKFK	Maxwl		Rept	KFK-3706	84	G.Walter+	22037

32 Germanium 76

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{77}Ge	?	2GERKFK	Maxwl		Rept	KFK-3706	84	G.Walter+	22037

33 Arsenic 75

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{76}As	?	2GERKFK	Maxwl		Rept	KFK-3706	84	G.Walter+	22037

35 Bromine

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,tot		CS	1USACOL	2.6+01	1.3+06	Jour	PR,83,1123	51	W.W.Havensjr+	11732

35 Bromine 79

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{80}Br	?	2GERKFK	Maxwl		Rept	KFK-3706	84	G.Walter+	22037

35 Bromine 81

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{82}Br	?	2GERKFK	Maxwl		Rept	KFK-3706	84	G.Walter+	22037

35 Bromine 87

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{87}Kr	NUD	3ISLSOR	Decay		Prog	IA-1190,104	68	C.Braun+	30952

35 Bromine 88

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{88}Kr	NUD	3ISLSOR	Decay		Prog	IA-1190,104	68	C.Braun+	30952

35 Bromine 89

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{89}Kr	NUD	3ISLSOR	Decay		Prog	IA-1190,104	68	C.Braun+	30952

35 Bromine 90

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{90}Kr	NUD	3ISLSOR	Decay		Prog	IA-1190,104	68	C.Braun+	30952

36 Krypton 84

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{85}Kr	CS	2GERKFK	Maxwl		Jour	PR/C,35,936	87	F.Kaeppeler+	22145
n,γ	^{85}Kr	?	2GERKFK			Jour	PR/C,35,936	87	F.Kaeppeler+	22145

36 Krypton 86

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{87}Kr	CS	2GERKFK	Maxwl		Jour	PR/C,35,936	87	F.Kaeppeler+	22145
	n,γ	^{87}Kr	?	2GERKFK			Jour	PR/C,35,936	87	F.Kaeppeler+	22145
	n,γ	^{87}Kr	?	2GERKFK	Maxwl		Rept	KFK-3706	84	G.Walter+	22037

37 Rubidium 85

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{86}Rb	?	2GERKFK	Maxwl		Rept	KFK-3706	84	G.Walter+	22037

37 Rubidium 87

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,el	^{87}Rb	CS	1USATNL	5.1+06	9.5+06	Jour	PR/C,102,044327	20	J.Wilhelmy+	L0266
	n,γ	^{88}Rb	?	2GERKFK	Maxwl		Rept	KFK-3706	84	G.Walter+	22037

38 Strontium 84

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	4RUSKUR			Jour	EON,2,183	65	Yu.V.Adamchuk+	41232
	n,el		RP	4RUSKUR		3.4+03	Jour	EON,2,183	65	Yu.V.Adamchuk+	41232

38 Strontium 86

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	4RUSKUR			Jour	EON,2,183	65	Yu.V.Adamchuk+	41232
	n,el		RP	4RUSKUR		1.9+04	Jour	EON,2,183	65	Yu.V.Adamchuk+	41232
	n,γ	^{87}Sr	?	2GERKFK	Maxwl		Jour	AJ,355,348	90	F.Kaeppeler+	22177

38 Strontium 87

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	4RUSKUR			Jour	EON,2,183	65	Yu.V.Adamchuk+	41232
	n,el		RP	4RUSKUR		3.7+03	Jour	EON,2,183	65	Yu.V.Adamchuk+	41232

38 Strontium 88

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	4RUSKUR			Jour	EON,2,183	65	Yu.V.Adamchuk+	41232
	n,el		RP	4RUSKUR		2.4+04	Jour	EON,2,183	65	Yu.V.Adamchuk+	41232
	n,γ	^{89}Sr	?	2GERKFK	Maxwl		Jour	AJ,355,348	90	F.Kaeppeler+	22177

39 Yttrium 89

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{90}Y	?	2GERKFK	Maxwl		Jour	AJ,355,348	90	F.Kaeppeler+	22177

40 Zirconium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	1USACOL	5.5-01	2.2+03	Jour	PR,71,165	47	W.W.Havensjr+	12184

40 Zirconium 90

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,2n	^{89}Zr	CS	3INDTRM	1.4+07	2.0+07	Jour	JRN,328,71	21	M.Mehta+	33156
*	n,p	^{90}Y	CS	3INDTRM	1.1+07	2.0+07	Jour	JRN,328,71	21	M.Mehta+	33156

40 Zirconium 94

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{95}Zr	CS	2GERKFK	Maxwl		Jour	AJ,348,357	90	K.A.Toukan+	22182
	n,γ	^{95}Zr	?	2GERKFK	Maxwl		Jour	AJ,348,357	90	K.A.Toukan+	22182

40 Zirconium 96

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{97}Zr	CS	2GERKFK	Maxwl		Jour	AJ,348,357	90	K.A.Toukan+	22182
	n,γ	^{97}Zr	?	2GERKFK	Maxwl		Jour	AJ,348,357	90	K.A.Toukan+	22182
*	α,x	^{99}Mo	CS	4RUSTPI	9.8+06	2.4+07	Jour	ARI,166,109367	20	N.E.Villa+	F1450

41 Niobium 93

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	1USACOL	8.0-03	2.4+04	Jour	PR,71,174	47	C.S.Wu+	11751
*	^{12}C,^{11}B	^{94}Mo	DAP	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{12}C,^{13}C	^{92}Nb	DAP	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{12}C,^{14}C	^{91}Nb	DAP	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{12}C,el	^{93}Nb	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{12}C,inel	^{93}Nb	DAP	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{12}C,x	^{7}Li	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{12}C,x	^{9}Be	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{12}C,x	^{10}Be	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{12}C,x	^{10}B	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{12}C,x	^{11}B	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{12}C,x	^{13}C	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{12}C,x	^{13}N	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{12}C,x	^{15}N	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{13}C,^{14}C	^{92}Nb	DAP	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{13}C,el	^{93}Nb	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{13}C,x	^{6}Li	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{13}C,x	^{7}Li	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{13}C,x	^{9}Be	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{13}C,x	^{10}Be	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{13}C,x	^{11}B	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{13}C,x	^{12}B	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{13}C,x	^{12}C	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{13}C,x	^{14}C	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{13}C,x	^{14}N	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388
*	^{13}C,x	^{15}N	DA	3INDTRM	6.5+07	6.5+07	Jour	PR/C,102,024610	20	T.N.Nag+	D6388

42 Molybdenum 92

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,α	^{89}Zr	CS	3INDTRM	1.5+07	1.5+07	Jour	JRN,326,1383	20	A.M.Sunitha+	33153

42 Molybdenum 97

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,p	^{97}Nb	CS	3INDTRM	1.5+07	1.5+07	Jour	JRN,326,1383	20	A.M.Sunitha+	33153

42 Molybdenum 100

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,2n	^{99}Mo	CS	3INDTRM	1.4+07	1.4+07	Jour	IJP/A,58,351	20	S.P.Ram+	33164

44 Ruthenium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	1USACOL	1.3+00	4.0+05	Jour	PR,92,702	53	E.Melkonian+	11670

47 Silver

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	1USACOL	2.5-02	2.5-02	Jour	PR,70,154	46	W.W.Havensjr+	11139
	n,el	^{nat}Ag	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,tot		CS	1USACOL	1.5-02	1.8+03	Jour	PR,70,154	46	W.W.Havensjr+	11139
	n,tot		CS	1USABNL	2.8+01	9.7+01	Jour	PR,95,476	54	F.G.P.Seidl+	11671
	n,tot		CS	1USACOL	3.5+00	7.7+00	Jour	PR,70,154	46	W.W.Havensjr+	11139
	n,tot		CS	1USACOL	3.5+00	8.3+00	Jour	PR,71,65	47	L.J.Rainwater+	11685
	n,tot		CS	1USACOL	4.1+00	6.4+00	Jour	PR,83,1123	51	W.W.Havensjr+	11732
	n,tot		CS	1USACOL	9.8+00	2.5+05	Jour	PR,71,65	47	L.J.Rainwater+	11685
	p,non		CS	1USABRK	4.3+08	4.3+08	Jour	PR,108,1545	57	L.E.Agnew+	C2651
	p,x+n	inclusive	?	1USABRK	3.4+08	3.4+08	Jour	PR,81,687	51	W.J.Knox	C2607
	$\bar{p}$,x+π^-	inclusive	?	1USABRK	4.2+08	4.2+08	Jour	PR,108,1545	57	L.E.Agnew+	C2651
	d,x+n	inclusive	?	1USABRK	1.9+08	1.9+08	Jour	PR,81,687	51	W.J.Knox	C2607

47 Silver 107

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{108}Ag	?	2GERKFK	Maxwl		Jour	NIM/A,337,492	94	H.Beer+	22306
*	p,inel	^{107}Ag	DAP	3IRNNRT	1.2+06	2.7+06	Jour	NIM/B,502,18	21	T.Tajvidi+	D0999

47 Silver 109

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{110}Ag	?	2GERKFK	Maxwl		Jour	NIM/A,337,492	94	H.Beer+	22306
*	p,inel	^{109}Ag	DAP	3IRNNRT	1.2+06	2.7+06	Jour	NIM/B,502,18	21	T.Tajvidi+	D0999

48 Cadmium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	1USACOR			Jour	PR,59,332	41	C.P.Baker+	14687
	n,0		RP	1USACOR	2.5-02	2.5-02	Jour	PR,52,1228	37	J.G.Hoffman+	14699
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,abs		CS	3DDRROS	Maxwl		Rept	ZFK-132,18	67	K.Faehrmann	31809
	n,el	^{nat}Cd	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,inel	^{nat}Cd	CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702

	n,tot		CS	1USACOR	-2.2-02	4.6-01	Jour	PR,59,332	41	C.P.Baker+	14687
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USACOL	2.2-02	3.1+03	Jour	PR,71,65	47	L.J.Rainwater+	11685
	n,tot		CS	1USACOR	2.5-01	2.0+00	Jour	PR,59,332	41	C.P.Baker+	14687
	n,tot		CS	1USACOL	7.3-01	3.1+03	Jour	PR,71,65	47	L.J.Rainwater+	11685
*	p,x	^{111}Cd	CS	3INDTRM	9.0+06	2.2+07	Jour	EPJ/P,135,385	20	P.T.M.Shan+	D6394
*	p,x	^{109}In	CS	3INDTRM	9.0+06	2.2+07	Jour	EPJ/P,135,385	20	P.T.M.Shan+	D6394
*	p,x	^{110}In	CS	3INDTRM	9.0+06	2.2+07	Jour	EPJ/P,135,385	20	P.T.M.Shan+	D6394
*	p,x	^{111}In	CS	3INDTRM	9.0+06	2.2+07	Jour	EPJ/P,135,385	20	P.T.M.Shan+	D6394
*	p,x	^{112}In	CS	3INDTRM	9.0+06	2.2+07	Jour	EPJ/P,135,385	20	P.T.M.Shan+	D6394
*	p,x	^{113}In	CS	3INDTRM	9.0+06	2.2+07	Jour	EPJ/P,135,385	20	P.T.M.Shan+	D6394

48 Cadmium 106

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,x	^{105}Cd	CS	3INDTRM	1.3+07	2.2+07	Jour	EPJ/P,135,385	20	P.T.M.Shan+	D6394

48 Cadmium 112

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{113}Cd	CS	2JPNJAE	6.7+01	8.6+03	Jour	PR/C,103,045801	21	T.Hayakawa+	23743

48 Cadmium 114

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{115}Cd	CS	4ZZZDUB		5.0-01	Jour	NIM/B,502,46	21	Buiminhhue+	41740

48 Cadmium 116

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{117}Cd	CS	4ZZZDUB		5.0-01	Jour	NIM/B,502,46	21	Buiminhhue+	41740
*	p,2n	^{115}In	CS	3INDTRM	9.0+06	2.2+07	Jour	EPJ/P,135,385	20	P.T.M.Shan+	D6394
*	p,n	^{116}In	CS	3INDTRM	9.0+06	2.2+07	Jour	EPJ/P,135,385	20	P.T.M.Shan+	D6394

49 Indium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	1USACOL			Jour	PR,71,165	47	W.W.Havensjr+	12184
	n,tot		CS	1USACOL	5.1-02	6.8-01	Jour	PR,70,154	46	W.W.Havensjr+	11139
	n,tot		CS	1USACOL	8.6-01	2.5+05	Jour	PR,71,165	47	W.W.Havensjr+	12184

	n,tot		CS	1USACOL	8.7-01	2.1+00	Jour	PR,70,154	46	W.W.Havensjr+	11139
	n,tot		CS	1USACOL	9.3-01	2.1+00	Jour	PR,71,165	47	W.W.Havensjr+	12184

49 Indium 115

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	n,2n	^{114}In	CS	3INDTRM	1.4+07	1.5+07	Jour	JRN,326,637	20	A.M.Sunitha+	33152

50 Tin

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,el	^{nat}Sn	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
	n,el	^{nat}Sn	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,non		CS	1USAUCX	4.5+06	1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
*	n,x	^{111}In	CS	3INDTRM	1.4+07	1.4+07	Jour	EPJ/A,57,268	21	R.Pachuau+	33161
*	n,x	^{116}In	CS	3INDTRM	1.4+07	1.4+07	Jour	EPJ/A,57,268	21	R.Pachuau+	33161
*	n,x	^{117}In	CS	3INDTRM	1.4+07	1.4+07	Jour	EPJ/A,57,268	21	R.Pachuau+	33161
*	n,x	^{118}In	CS	3INDTRM	1.4+07	1.4+07	Jour	EPJ/A,57,268	21	R.Pachuau+	33161
*	n,x	^{111}Sn	CS	3INDTRM	1.4+07	1.4+07	Jour	EPJ/A,57,268	21	R.Pachuau+	33161
*	n,x	^{117}Sn	CS	3INDTRM	1.4+07	1.4+07	Jour	EPJ/A,57,268	21	R.Pachuau+	33161
*	n,x	^{123}Sn	CS	3INDTRM	1.4+07	1.4+07	Jour	EPJ/A,57,268	21	R.Pachuau+	33161

50 Tin 112

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	n,2n	^{111}Sn	CS	3INDTRM	1.4+07	1.4+07	Jour	EPJ/A,57,268	21	R.Pachuau+	33161
*	n,x	^{111}In	CS	3INDTRM	1.4+07	1.4+07	Jour	EPJ/A,57,268	21	R.Pachuau+	33161

50 Tin 117

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	p,0		RP	4RUSEPA			Jour	PAN,80,1539	17	L.N.Generalov+	F1449
*	p,el	^{117}Sn	DA	4RUSEPA	4.0+06	9.1+06	Jour	PAN,80,1539	17	L.N.Generalov+	F1449
*	p,x+n	inclusive	CS	4RUSEPA	4.0+06	8.8+06	Jour	PAN,80,1539	17	L.N.Generalov+	F1449
*	p,x+n	inclusive	DA	4RUSEPA	4.0+06	8.9+06	Jour	PAN,80,1539	17	L.N.Generalov+	F1449

50 Tin 118

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

*	n,p	^{118}In	CS	3INDTRM	1.4+07	1.4+07	Jour	EPJ/A,57,268	21	R.Pachuau+	33161

50 Tin 124

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	n,$2n$	^{123}Sn	CS	3INDTRM	1.4+07	1.4+07	Jour	EPJ/A,57,268	21	R.Pachuau+	33161

51 Antimony

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,abs		CS	1USACOL	2.5-02	2.5-02	Jour	PR,70,154	46	W.W.Havensjr+	11139
	n,non		CS	1USAUCX	4.5+06	1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USACOL	1.4-02	7.2+03	Jour	PR,70,154	46	W.W.Havensjr+	11139
	n,tot		CS	1USACOL	2.3+00	7.2+04	Jour	PR,71,65	47	L.J.Rainwater+	11685
	n,tot		CS	1USAUCX	4.5+06	1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703

53 Iodine 127

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,0		RP	1USACOR			Jour	PR,72,362	47	Wm.B.Jonesjr	14691
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,el	^{127}I	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
*	n,γ	^{128}I	CS	3INDTRM	6.0+05	2.5+06	Jour	EPJ/P,136,819	21	A.Gandhi+	33162
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USACOR	1.1+01	3.9+01	Jour	PR,72,362	47	Wm.B.Jonesjr	14691
	n,tot		CS	1USACOL	1.1-02	4.5+06	Jour	PR,71,174	47	C.S.Wu+	11751
	n,tot		CS	1USACOR	1.7-01	5.7+02	Jour	PR,72,362	47	Wm.B.Jonesjr	14691
	n,tot		CS	1USACOL	2.3+00	1.7+06	Jour	PR,71,174	47	C.S.Wu+	11751
	n,tot		CS	1USACOR	Maxwl	3.1+02	Jour	PR,72,362	47	Wm.B.Jonesjr	14691
*	p,n	^{127}Xe	CS	2SPNAUT	4.4+06	9.4+06	Jour	RPC,185,109485	21	A.Espinosarodriguez+	O2528
*	p,n	^{127}Xe	TT	2SPNAUT	4.2+06	1.0+07	Jour	RPC,185,109485	21	A.Espinosarodriguez+	O2528

53 Iodine 137

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	0,β^-	^{137}Xe	NUD	3ISLSOR	Decay		Prog	IA-1190,104	68	C.Braun+	30952

53 Iodine 138

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{138}Xe	NUD	3ISLSOR	Decay		Prog	IA-1190,104	68	C.Braun+	30952

53 Iodine 139

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{139}Xe	NUD	3ISLSOR	Decay		Prog	IA-1190,104	68	C.Braun+	30952

56 Barium 138

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{139}Ba	CS	2GERKFK	Maxwl		Jour	PR/C,21,534	80	H.Beer+	21647
n,γ	^{139}Ba	?	2GERKFK			Jour	PR/C,21,534	80	H.Beer+	21647

58 Cerium 140

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{141}Ce	CS	2GERKFK	Maxwl		Jour	PR/C,21,534	80	H.Beer+	21647
n,γ	^{141}Ce	?	2GERKFK			Jour	PR/C,21,534	80	H.Beer+	21647

58 Cerium 142

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{143}Ce	CS	2GERKFK	Maxwl		Jour	PR/C,21,534	80	H.Beer+	21647
n,γ	^{143}Ce	?	2GERKFK			Jour	PR/C,21,534	80	H.Beer+	21647
p,el	^{142}Ce	DA	1CANMON	9.5+06	1.2+07	Jour	PR/C,6,517	72	L.Lessard+	C2611
p,inel	^{142}Ce	DAP	1CANMON	9.5+06	1.2+07	Jour	PR/C,6,517	72	L.Lessard+	C2611
d,el	^{142}Ce	DA	1CANMON	1.3+07	1.3+07	Jour	PR/C,6,517	72	L.Lessard+	C2611
d,p	^{143}Ce	DAP	1CANMON	1.3+07	1.3+07	Jour	PR/C,6,517	72	L.Lessard+	C2611
d,t	^{141}Ce	DAP	1CANMON	1.3+07	1.3+07	Jour	PR/C,6,517	72	L.Lessard+	C2611

60 Neodymium 144

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
p,el	^{144}Nd	DA	1CANMON	9.3+06	1.3+07	Jour	NP/A,202,535	73	S.Gales+	C2510
p,inel	^{144}Nd	DAP	1CANMON	9.4+06	1.2+07	Jour	NP/A,202,535	73	S.Gales+	C2510
d,el	^{144}Nd	DA	1CANMON	1.3+07	1.3+07	Jour	NP/A,202,535	73	S.Gales+	C2510
d,p	^{145}Nd	DAP	1CANMON	1.3+07	1.3+07	Jour	NP/A,202,535	73	S.Gales+	C2510

	d,t	^{143}Nd	DAP	1CANMON	1.3+07	1.3+07	Jour	NP/A,202,535	73	S.Gales+	C2510

60 Neodymium 146

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{147}Nd	CS	2GERKFK	Maxwl		Jour	PR/C,51,1540	95	K.A.Toukan+	22305
	n,γ	^{147}Nd	?	2GERKFK	Maxwl		Jour	PR/C,51,1540	95	K.A.Toukan+	22305
*	n,p	^{146}Pr	CS	3INDTRM	1.5+07	1.5+07	Jour	JRN,326,1383	20	A.M.Sunitha+	33153

60 Neodymium 148

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,$2n$	^{147}Nd	CS	3INDTRM	1.5+07	1.5+07	Jour	JRN,326,1383	20	A.M.Sunitha+	33153
	n,γ	^{149}Nd	CS	2GERKFK	Maxwl		Jour	PR/C,51,1540	95	K.A.Toukan+	22305
	n,γ	^{149}Nd	?	2GERKFK	Maxwl		Jour	PR/C,51,1540	95	K.A.Toukan+	22305

60 Neodymium 150

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{151}Nd	CS	2GERKFK	Maxwl		Jour	PR/C,51,1540	95	K.A.Toukan+	22305
	n,γ	^{151}Nd	?	2GERKFK	Maxwl		Jour	PR/C,51,1540	95	K.A.Toukan+	22305

61 Promethium 147

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{148}Pm	?	2GERKFK	Maxwl		Rept	KFK-5180	93	Th.W.Gerstenhoefer	22376

62 Samarium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	3DDRROS	Maxwl		Rept	ZFK-132,18	67	K.Faehrmann	31809

62 Samarium 147

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,α		?	4UKRIJD	1.7+03	2.3+03	Conf	79RIGA,,294	79	Vokimtkhan+	40605
	n,γ	^{148}Sm	?	2GERKFK	Maxwl		Rept	KFK-5180	93	Th.W.Gerstenhoefer	22376

62 Samarium 149

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el		RP	4ZZZDUB	5.0+00	2.5+02	Rept	JINR-P3-6237	72	E.N.Karzhavina+	40098

62 Samarium 154

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{19}F,5n	^{168}Lu	CS	3INDNSD	8.2+07	1.1+08	Jour	IJP/A,58,386	20	A.Mahato+	D6299
*	^{19}F,6n	^{167}Lu	CS	3INDNSD	8.8+07	1.1+08	Jour	IJP/A,58,386	20	A.Mahato+	D6299
*	^{19}F,x	^{165}Tm	CS	3INDNSD	8.2+07	1.1+08	Jour	IJP/A,58,386	20	A.Mahato+	D6299
*	^{19}F,x	^{166}Tm	CS	3INDNSD	8.2+07	1.1+08	Jour	IJP/A,58,386	20	A.Mahato+	D6299

63 Europium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	3DDRROS	Maxwl		Rept	ZFK-132,18	67	K.Faehrmann	31809

63 Europium 151

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	3DDRROS	Maxwl		Rept	ZFK-132,18	67	K.Faehrmann	31809

64 Gadolinium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	3DDRROS	Maxwl		Rept	ZFK-132,18	67	K.Faehrmann	31809

64 Gadolinium 160

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,t	^{158}Gd	DAP	2GERMUN	2.2+07	2.2+07	Jour	PR/C,102,014308	20	A.I.Levon+	O2526

65 Terbium 159

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	$p,3n$	^{157}Dy	CS	1USABNL	2.0+07	3.5+07	Jour	ARI,22,789	71	E.Lebowitz+	C2613
*	^{20}Ne,x	^{172}Ta	CS	3INDVEC	1.2+08	1.6+08	Jour	IJP/A,57,570	19	R.Ali+	D6300
*	^{20}Ne,x	^{173}Ta	CS	3INDVEC	1.1+08	1.5+08	Jour	IJP/A,57,570	19	R.Ali+	D6300
*	^{20}Ne,x	^{175}Ta	CS	3INDVEC	9.5+07	1.3+08	Jour	IJP/A,57,570	19	R.Ali+	D6300
*	^{20}Ne,x	^{174}W	CS	3INDVEC	1.0+08	1.6+08	Jour	IJP/A,57,570	19	R.Ali+	D6300

66 Dysprosium 158

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	4UKRIFU	3.8+01	2.7+02	Jour	UFZ,14,1810	69	V.P.Vertebny+	40097

66 Dysprosium 160

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	4UKRIFU	1.9+00	8.5+01	Jour	UFZ,14,1810	69	V.P.Vertebny+	40097

66 Dysprosium 164

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,el		RP	1USATNL	4.0+06	4.9+06	Jour	PR/C,102,034323	20	O.Papst+	L0268
*	γ,el	^{164}Dy	POD	1USATNL	4.0+06	4.9+06	Jour	PR/C,102,034323	20	O.Papst+	L0268

67 Holmium 165

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{165}Ho	AMP	4ZZZDUB	3.9+00	5.0+02	Jour	YF,5,471	67	E.N.Karzhavina+	40032
	n,el	^{165}Ho	POT	4ZZZDUB	3.9+00	5.0+02	Jour	YF,5,471	67	E.N.Karzhavina+	40032

71 Lutetium 175

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{176}Lu	?	2GERKFK			Jour	PR/C,21,534	80	H.Beer+	21647
*	^{19}F,fis	Many	CS	3INDNSD	1.0+08	1.1+08	Jour	NP/A,1014,122236	21	I.M.Bhat+	D6402

71 Lutetium 176

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	3DDRROS	Maxwl		Rept	ZFK-132,18	67	K.Faehrmann	31809
	n,γ	^{177}Lu	CS	2GERKFK	Maxwl		Jour	PR/C,21,534	80	H.Beer+	21647
	n,γ	^{177}Lu	?	2GERKFK			Jour	PR/C,21,534	80	H.Beer+	21647

72 Hafnium 180

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{181}Hf	CS	2GERKFK			Jour	AAA,105,270	Sep 82	H.Beer+	21768

73 Tantalum

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	1USACOL	5.6+00	3.2+03	Jour	PR,92,702	53	E.Melkonian+	11670

73 Tantalum 180

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,2n	^{178}Ta	CS	4RUSRUS		2.0+07	Jour	FCY/L,18,249	21	V.A.Zheltonozhsky+	M1031

73 Tantalum 181

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,3n	^{178}Ta	CS	4ZZZDUB		5.5+07	Jour	FCY/L,18,249	21	V.A.Zheltonozhsky+	M1031
*	γ,4n	^{177}Ta	CS	4ZZZDUB		5.5+07	Jour	FCY/L,18,249	21	V.A.Zheltonozhsky+	M1031
*	γ,α	^{177}Lu	CS	4ZZZDUB		4.0+07	Jour	FCY/L,18,255	21	V.A.Zheltonozhsky+	M1032
*	n,γ	^{182}Ta	CS	2JPNKTO	2.5-02	2.5-02	Jour	NST,58,1061	21	S.Nakamura+	23742
	n,γ	^{182}Ta	CS	2GERKFK	Maxwl		Jour	PR/C,21,534	80	H.Beer+	21647
	n,γ	^{182}Ta	?	2GERKFK			Jour	PR/C,21,534	80	H.Beer+	21647
	n,tot		CS	1USACOL	2.3+00	3.9+05	Jour	PR,71,165	47	W.W.Havensjr+	12184
*	^{11}B,fis	Many	CS	3INDTAT	5.4+07	6.2+07	Jour	PR/C,103,014608	21	R.Prajapat+	D6396
*	^{11}B,fis	^{129}Sb	CS	3INDTAT	5.4+07	6.2+07	Jour	PR/C,103,014608	21	R.Prajapat+	D6396
*	^{11}B,x	Many	CS	3INDTAT	5.4+07	6.2+07	Jour	PR/C,103,014608	21	R.Prajapat+	D6396
*	^{18}O,x	Many	DA	4ZZZDUB	1.8+08	1.8+08	Jour	JP/CS,1555,012031	20	Yu.E.Penionzhkevich+	F1447

74 Tungsten

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

	n,el	^{nat}W	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
	n,tot		CS	1USACOL	1.5-02	1.2+05	Jour	PR,71,165	47	W.W.Havensjr+	12184

74 Tungsten 184

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,α	^{180}Hf	CS	4ZZZDUB		5.5+07	Jour	FCY/L,18,255	21	V.A.Zheltonozhsky+	M1032
	n,γ	^{185}W	CS	4RUSKUR	8.0+05	8.0+05	Jour	YF,4,515	66	A.A.Druzhinin+	40174

74 Tungsten 186

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,α	^{182}Hf	CS	4ZZZDUB		5.5+07	Jour	FCY/L,18,255	21	V.A.Zheltonozhsky+	M1032
	n,γ	^{187}W	CS	4RUSKUR	8.0+05	8.0+05	Jour	YF,4,515	66	A.A.Druzhinin+	40174

75 Rhenium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,x	^{182}Re	CS	4ARMJER		4.0+07	Jour	NIM/B,507,7	21	R.V.Avetisyan+	M1034
*	γ,x	^{183}Re	CS	4ARMJER		4.0+07	Jour	NIM/B,507,7	21	R.V.Avetisyan+	M1034
*	γ,x	^{184}Re	CS	4ARMJER		4.0+07	Jour	NIM/B,507,7	21	R.V.Avetisyan+	M1034
*	γ,x	^{186}Re	CS	4ARMJER		4.0+07	Jour	NIM/B,507,7	21	R.V.Avetisyan+	M1034
	n,tot		CS	1USACOL	1.4+00	4.5+06	Jour	PR,92,702	53	E.Melkonian+	11670

76 Osmium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	1USACOL	1.1-02	6.5+05	Jour	PR,71,174	47	C.S.Wu+	11751

76 Osmium 188

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	4UKRIFU			Jour	UFZ,14,1968	69	V.P.Vertebny+	40094

77 Iridium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	1USACOL	6.6-02	3.1+07	Jour	PR,71,65	47	L.J.Rainwater+	11685

78 Platinum

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	1USACOL	3.0+00	9.8+05	Jour	PR,71,165	47	W.W.Havensjr+	12184

79 Gold 197

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	1USACOL			Jour	PR,71,165	47	W.W.Havensjr+	12184
*	n,2n	^{196}Au	CS	3INDTRM	1.4+07	1.5+07	Jour	JRN,326,637	20	A.M.Sunitha+	33152
*	n,γ	^{198}Au	CS	2JPNJAE	1.8+04	1.6+05	Jour	NIM/A,1003,165318	21	G.Rovira+	23746
	n,tot		CS	1USALAS	-1.1-01	4.7-01	Jour	PR,72,729(1)	47	B.D.Mcdaniel+	14688
	n,tot		CS	1USACOL	2.2+00	7.9+00	Jour	PR,70,154	46	W.W.Havensjr+	11139
	n,tot		CS	1USABNL	2.5+01	5.7+02	Jour	PR,95,476	54	F.G.P.Seidl+	11671
	n,tot		CS	1USALAS	2.5-02	2.5-02	Jour	PR,72,729(1)	47	B.D.Mcdaniel+	14688
	n,tot		CS	1USACOL	2.7+00	7.8+00	Jour	PR,70,154	46	W.W.Havensjr+	11139
	n,tot		CS	1USACOL	4.0+00	9.0+00	Jour	PR,71,165	47	W.W.Havensjr+	12184
	n,tot		CS	1USACOL	4.5+00	5.3+00	Jour	PR,83,1123	51	W.W.Havensjr+	11732
	n,tot		RP	1USALAS	4.8+00	4.8+00	Jour	PR,72,729(1)	47	B.D.Mcdaniel+	14688
	p,γ	^{198}Hg	CSP	1CANQU	4.0+06	4.0+06	Jour	NP/A,441,397	85	D.S.Armstrong+	C2508
	p,γ	^{198}Hg	DE	1CANQU	4.0+06	4.0+06	Jour	NP/A,441,397	85	D.S.Armstrong+	C2508
*	^{9}Be,x	^{196}Au	CS	3INDTRM	3.2+07	4.5+07	Jour	PR/C,104,024615	21	M.Kaushik+	D6403
*	^{9}Be,x	^{198}Au	CS	3INDTRM	2.9+07	4.5+07	Jour	PR/C,104,024615	21	M.Kaushik+	D6403
*	^{9}Be,x	^{199}Tl	CS	3INDTRM	3.6+07	4.5+07	Jour	PR/C,104,024615	21	M.Kaushik+	D6403
*	^{9}Be,x	^{200}Tl	CS	3INDTRM	3.2+07	4.5+07	Jour	PR/C,104,024615	21	M.Kaushik+	D6403
	^{12}C,fis		DA	4RUSKUR	6.6+07	7.8+07	Jour	ZET,37,38	60	V.A.Druin+	F1440
	^{16}O,fis		DA	4RUSKUR	8.5+07	1.0+08	Jour	ZET,37,38	60	V.A.Druin+	F1440

80 Mercury

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,abs		CS	1USACOL	2.5-02	2.5-02	Jour	PR,70,154	46	W.W.Havensjr+	11139
	n,el	^{nat}Hg	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
	n,el	^{nat}Hg	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,inel	^{nat}Hg	CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USACOL	2.6-02	7.7+03	Jour	PR,70,154	46	W.W.Havensjr+	11139

80 Mercury 180

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	0,fis		CHG	2ZZZCER	Spont		Jour	PR/C,88,044321	13	J.Elseviers+	23799

*	0,fis	Many	FY	2ZZZCER	Spont		Jour	PR/C,88,044321	13	J.Elseviers+	23799
*	0,fis		FY	2ZZZCER	Spont		Jour	PR/C,88,044321	13	J.Elseviers+	23799
*	0,fis		KE	2ZZZCER	Spont		Jour	PR/C,88,044321	13	J.Elseviers+	23799
*	0,fis	Many	KE	2ZZZCER	Spont		Jour	PR/C,88,044321	13	J.Elseviers+	23799
*	0,fis		MAS	2ZZZCER	Spont		Jour	PR/C,88,044321	13	J.Elseviers+	23799

81 Thallium

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,tot		CS	1USACOL	1.4-02	4.4+05	Jour	PR,71,174	47	C.S.Wu+	11751

82 Lead

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,el	^{nat}Pb	CS	1USACOL	1.0+05	1.4+07	Jour	PR,45,586	34	J.R.Dunning	14696
	n,el	^{nat}Pb	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,inel	^{nat}Pb	CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,non		CS	1USAUCX	1.3+06	1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,ths	^{nat}Pb	TSL	1USAANL			Jour	PR,72,408	47	E.Fermi+	14690
	n,tot		CS	1USAANL			Jour	PR,72,408	47	E.Fermi+	14690
	n,tot		CS	1USACOL			Jour	PR,72,634	47	W.W.Havensjr+	14692
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,52,408	37	G.T.Seaborg+	14702
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CST	1USACOL			Jour	PR,72,634	47	W.W.Havensjr+	14692
	n,x+γ	inclusive	CSP	1USAUCX		1.3+07	Jour	PR,51,370(1)	37	G.E.Gibson+	14701
	p,non		CS	1USABRK	4.4+08	4.4+08	Jour	PR,108,1545	57	L.E.Agnew+	C2651
	$\bar{p}$,x	^{1}An	CS	1USABRK	4.3+08	4.3+08	Jour	PR,108,1557	57	J.Button+	C2650
*	p,x	^{207}Bi	CS	4RUSITE	3.8+07	2.6+09	Jour	NIM/A,984,164635	20	Yu.E.Titarenko+	F1448
	$\bar{p}$,x+π^-	inclusive	?	1USABRK	4.4+08	4.4+08	Jour	PR,108,1545	57	L.E.Agnew+	C2651
	d,x+n	inclusive	?	1USABRK	1.9+08	3.4+08	Jour	PR,81,687	51	W.J.Knox	C2607

82 Lead 204

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	d,x	Many	CS	4ZZZDUB	4.4+09	4.4+09	Jour	JP/G,46,095103	19	A.R.Balabekyan+	F1439

82 Lead 206

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	p,x	^{207}Bi	CS	4RUSITE	3.8+07	2.6+09	Jour	NIM/A,984,164635	20	Yu.E.Titarenko+	F1448
*	d,x	Many	CS	4ZZZDUB	4.4+09	4.4+09	Jour	JP/G,46,095103	19	A.R.Balabekyan+	F1439
*	d,x	^{126}Sb	CS	4ZZZDUB	4.4+09	4.4+09	Jour	JP/G,46,095103	19	A.R.Balabekyan+	F1439

82 Lead 207

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,el	^{207}Pb	DA	1CANCRC	1.4+07	1.5+07	Jour	PR/C,10,632	74	K.Ramavataram+	C2507
	p,inel	^{207}Pb	DA	1CANCRC	1.4+07	1.5+07	Jour	PR/C,10,632	74	K.Ramavataram+	C2507
	p,inel	^{207}Pb	DAP	1CANCRC	1.4+07	1.5+07	Jour	PR/C,10,632	74	K.Ramavataram+	C2507
*	p,x	^{207}Bi	CS	4RUSITE	3.8+07	2.6+09	Jour	NIM/A,984,164635	20	Yu.E.Titarenko+	F1448
*	d,x	Many	CS	4ZZZDUB	4.4+09	4.4+09	Jour	JP/G,46,095103	19	A.R.Balabekyan+	F1439
*	d,x	^{126}Sb	CS	4ZZZDUB	4.4+09	4.4+09	Jour	JP/G,46,095103	19	A.R.Balabekyan+	F1439

82 Lead 208

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,x	^{207}Bi	CS	4RUSITE	3.8+07	2.6+09	Jour	NIM/A,984,164635	20	Yu.E.Titarenko+	F1448
*	d,x	Many	CS	4ZZZDUB	4.4+09	4.4+09	Jour	JP/G,46,095103	19	A.R.Balabekyan+	F1439
*	d,x	^{126}Sb	CS	4ZZZDUB	4.4+09	4.4+09	Jour	JP/G,46,095103	19	A.R.Balabekyan+	F1439

83 Bismuth 209

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,el	^{209}Bi	CS	1USANYU	2.5-02	2.5-02	Jour	PR,50,133	36	A.C.G.Mitchell+	14700
	n,non		CS	1USAUCX	4.5+06	1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,ths	^{209}Bi	TSL	1USAANL			Jour	PR,72,408	47	E.Fermi+	14690
	n,tot		CS	1USAANL			Jour	PR,72,408	47	E.Fermi+	14690
	n,tot		CS	1USAUCX		1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
	n,tot		CS	1USAANL	1.6-03	2.5-02	Jour	PR,70,815	46	H.L.Anderson+	14689
	n,tot		CS	1USAUCX	4.5+06	1.3+07	Jour	PR,53,795	38	D.C.Grahame+	14703
*	p,x	^{207}Bi	CS	4RUSITE	3.8+07	2.6+09	Jour	NIM/A,984,164635	20	Yu.E.Titarenko+	F1448

88 Radium 226

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		RI	4RUSITE	3.0+01	9.5+02	Jour	AE,42,505	77	R.N.Ivanov+	40377

90 Thorium 232

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,fis		CS	1USAWES	6.3+06	6.3+06	Jour	PR,59,57	41	R.O.Haxby+	L0270
	n,fis	Many	CHG	1USAARK	1.5+07	1.5+07	Jour	JIN,35,1443	73	S.A.Rao+	13313
	n,fis	Many	FY	2FR GRE	1.4+07	1.4+07	Thes	CHAUVIN	73	C.Chauvin	23818

	n,fis	Many	FY	3MORMOH	1.5+07	1.5+07	Jour	ARI,46,423	95	A.Chouak+	31813
	n,fis	Many	FY	3ISLSOR	5.5-01		Jour	PR/C,16,266	77	T.Izak-Biran+	30425
	n,fis	Many	FY	2FR GRE	Fast		Thes	CHAUVIN	73	C.Chauvin	23819
	n,fis	Many	?	2UK DUR	1.5+07	1.5+07	Jour	RCA,9,90	68	S.J.Lyle+	23803
	n,fis	Many	?	2UK KEN	3.0+06	3.0+06	Jour	RCA,9,90	68	S.J.Lyle+	23803
	n,fis	^{105}Ru	?	2FR GRE	1.4+07	1.4+07	Thes	CHAUVIN	73	C.Chauvin	23818
	n,fis	^{105}Ru	?	2FR GRE	Fast		Thes	CHAUVIN	73	C.Chauvin	23819
	n,fis	^{115}Ag	FY	3BZLIEN	1.5+07	1.5+07	Prog	INDC(SEC)-35,53	73	A.M.Dossantos+	31840
	n,fis	^{129}Sn	?	2FR GRE	1.4+07	1.4+07	Thes	CHAUVIN	73	C.Chauvin	23818
	n,fis	^{129}Sb	?	2FR GRE	1.4+07	1.4+07	Thes	CHAUVIN	73	C.Chauvin	23818
	n,tot		CS	1USABNL	1.4+01	1.9+02	Jour	PR,95,476	54	F.G.P.Seidl+	11671
*	p,fis	Many	CS	4RUSJIA	2.1+07	1.4+08	Jour	JRN,324,1435	20	O.N.Libanova+	F1436
*	p,fis	^{77}Ge	CS	4RUSJIA	2.1+07	1.4+08	Jour	JRN,324,1435	20	O.N.Libanova+	F1436
*	p,fis	^{82}Br	CS	4RUSJIA	5.8+07	1.4+08	Jour	JRN,324,1435	20	O.N.Libanova+	F1436
*	p,fis	^{95}Nb	CS	4RUSJIA	2.1+07	1.4+08	Jour	JRN,324,1435	20	O.N.Libanova+	F1436
*	p,fis	^{111}Ag	CS	4RUSJIA	2.1+07	1.4+08	Jour	JRN,324,1435	20	O.N.Libanova+	F1436
*	p,fis	^{113}Ag	CS	4RUSJIA	2.1+07	1.4+08	Jour	JRN,324,1435	20	O.N.Libanova+	F1436
*	p,fis	^{124}Sb	CS	4RUSJIA	2.1+07	1.4+08	Jour	JRN,324,1435	20	O.N.Libanova+	F1436
*	p,fis	^{126}Sb	CS	4RUSJIA	2.1+07	1.4+08	Jour	JRN,324,1435	20	O.N.Libanova+	F1436
*	p,fis	^{128}Sb	CS	4RUSJIA	2.1+07	1.4+08	Jour	JRN,324,1435	20	O.N.Libanova+	F1436
*	p,fis	^{130}I	CS	4RUSJIA	2.1+07	1.4+08	Jour	JRN,324,1435	20	O.N.Libanova+	F1436
	p,x	^{225}Ac	CS	4RUSJIA	9.0+07	1.4+08	Jour	RDC,53,73	11	B.L.Zhuikov+	F1437
	p,x	^{227}Th	CS	4RUSJIA	9.0+07	1.4+08	Jour	RDC,53,73	11	B.L.Zhuikov+	F1437

92 Uranium

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,fis	Many	FY	2UK HAR	2.5-02	2.5-02	Jour	PR,92,1072(2)	53	W.H.Hardwick	23804

92 Uranium 232

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	n,fis	Many	CHG	3INDTRM	2.5-02	2.5-02	Jour	ARI,173,109718	21	H.Naik+	33157
*	n,fis	Many	FY	3INDTRM	2.5-02	2.5-02	Jour	ARI,173,109718	21	H.Naik+	33157

92 Uranium 233

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,fis	Many	FY	1CANMCM	2.5-02	2.5-02	Jour	CJP,48,1708	70	B.L.Tracy+	13277
	n,fis	Many	FY	3ISLSOR	Maxwl		Prog	IA-1168,67(1)	68	C.Lee+	30949
	n,fis		KE	2FR ILL	2.5-02	2.5-02	Jour	ZP/A,351,281	95	U.Graf+	23797
	n,fis	Many	KE	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	n,fis		MAS	2FR ILL	2.5-02	2.5-02	Jour	ZP/A,351,281	95	U.Graf+	23797
	n,fis		?	2FR SAC	1.5+03	2.0+06	Conf	58GENEVA,15,418	58	M.F.Netter+	23805
	n,fis	Many	?	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	n,fis	^{4}He	FY	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	n,fis	^{6}He	FY	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800

92 Uranium 234

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis	Many	FY	1USALRL	1.5+07	1.5+07	Jour	PR/C,6,1821	72	D.R.Nethaway+	13345

92 Uranium 235

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		ALF	2UK DOU	1.5+06	1.5+06	Conf	71CANT,,147	71	E.A.C.Crouch	23812
	n,fis	Many	FY	2UK DOU	1.5+06	1.5+06	Conf	71CANT,,147	71	E.A.C.Crouch	23812
	n,fis	Many	FY	1CANMCM	2.5-02	2.5-02	Jour	CJP,48,1708	70	B.L.Tracy+	13277
	n,fis	Many	FY	1USAMIT	2.5-02	2.5-02	Jour	JRN/L,166,(3),187	92	H.N.Erten	14641
	n,fis	Many	FY	2UK HAR	2.5-02	2.5-02	Conf	55GENEVA,5,141	55	G.J.Littler	23806
	n,fis	Many	FY	2FR ILL	2.5-02	2.5-02	Jour	NP/A,341,388	80	M.Asghar+	23815
*	n,fis	Many	FY	2FR ILL	5.0-03	5.0-03	Jour	EPJ/CS,93,02020	15	T.Materna+	23798
	n,fis	Many	FY	2GERKFK	Fiss		Prog	KFK-1272-1,(121-14)	72	W.Scholtyssek	23817
	n,fis	Many	FY	3ISLSOR	Maxwl		Jour	PR/C,6,618	72	B.Ehrenberg+	30953
	n,fis	Many	FY	3ISLSOR	Maxwl		Prog	INDC(SEC)-61,183	77	H.Feldstein+	30953
	n,fis	Many	FY	3ISLHEB	Maxwl		Thes	VENEZIA	73	A.Venezia	30964
	n,fis	Many	FY	3CZRUJF	Maxwl		Jour	CZC,23,1886	58	J.Maly+	31841
	n,fis	Many	KE	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	n,fis		KE	3CZRUJF	Maxwl		Jour	CZJ/B,31,1273	81	R.Bayer+	31805
	n,fis	Many	?	2GERKFK			Prog	KFK-1272-1,(121-14)	72	W.Scholtyssek	23817
	n,fis		?	2FR SAC	1.5+03	2.5+06	Conf	58GENEVA,15,418	58	M.F.Netter+	23805
	n,fis	Many	?	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	n,fis	Many	?	3ISLSOR	Maxwl		Prog	IA-1190,104	68	C.Braun+	30952
	n,fis	^{3}H	FY	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	n,fis	^{4}He	CS	3INDTRM	3.0+06	3.0+06	Jour	NP/A,112,241	68	D.M.Nadkarni	30093
	n,fis	^{4}He	FY	3INDTRM	2.0+06	4.0+06	Conf	70MADURAI,2,73	70	D.M.Nadkarni+	31839
	n,fis	^{4}He	FY	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	n,fis	^{6}He	FY	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	n,fis	^{77}Ga	FY	2GERMNZ	2.5-02	2.5-02	Prog	MAINZ-1980,76	81	R.Sehr+	23816
	n,fis	^{77}Ge	FY	2GERMNZ	2.5-02	2.5-02	Prog	MAINZ-1980,76	81	R.Sehr+	23816
	n,fis	^{99}Tc	FY	1USAANL	Fast		Prog	ANL-6900,337	64	R.J.Meyer+	13350
	n,fis	^{130}Sb	FY	1USAMIT	2.5-02	2.5-02	Jour	JRN/L,166,(3),187	92	H.N.Erten	14641
	n,fis	^{132}Sb	FY	1USAMIT	2.5-02	2.5-02	Jour	JRN/L,166,(3),187	92	H.N.Erten	14641
	n,fis	^{134}I	FY	1USAMIT	2.5-02	2.5-02	Jour	JRN/L,166,(3),187	92	H.N.Erten	14641
	n,fis	^{136}I	FY	1USAMIT	2.5-02	2.5-02	Jour	JRN/L,166,(3),187	92	H.N.Erten	14641
	n,fis	^{134}Cs	FY	2SWDAE	2.5-02	2.5-02	Jour	NAT,211,618	66	I.O.Anderson+	23801

92 Uranium 236

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis	Many	FY	1USALRL	1.5+07	1.5+07	Jour	PR/C,6,1821	72	D.R.Nethaway+	13345
	n,fis	^{126}Sb	?	1USALRL	1.5+07	1.5+07	Jour	PR/C,6,1821	72	D.R.Nethaway+	13345

92 Uranium 238

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,fis		CS	1USAWES	6.3+06	6.3+06	Jour	PR,59,57	41	R.O.Haxby+	L0270
	γ,fis		?	1USAWES	6.3+06	6.3+06	Jour	PR,59,57	41	R.O.Haxby+	L0270
	n,abs		ALF	2UK DOU	1.5+06	1.5+06	Conf	71CANT,,147	71	E.A.C.Crouch	23812
*	n,fis		CS	2UK NPL	1.8+06	2.4+06	Jour	EPJ/CS,146,04050	17	P.Salvador-Castineira+	23736
	n,fis	Many	FY	2FR PAR	1.0+07	1.0+07	Jour	NIM/B,247,205	06	F.Hosni+	23796
	n,fis	Many	FY	3MORMOH	1.5+07	1.5+07	Conf	86HARROG,1,129	86	K.Embarch+	31810
	n,fis		?	2FR SAC	2.5+06	2.5+06	Conf	58GENEVA,15,418	58	M.F.Netter+	23805
	n,fis	^{126}Sb	FY	3INDBHU	1.4+07	1.4+07	Jour	NIM/B,24-25,501	87	S.Ram+	30768
	n,γ	^{239}U	CS	1USACOL	2.5-02	2.5-02	Jour	PR,55,1106(2)	39	H.L.Anderson+	14704
	p,x+n	inclusive	?	1USABRK	3.4+08	3.4+08	Jour	PR,81,687	51	W.J.Knox	C2607
	d,x+n	inclusive	?	1USABRK	1.9+08	1.9+08	Jour	PR,81,687	51	W.J.Knox	C2607
	α,fis		CS	1USABRK	3.8+08	3.8+08	Jour	PR,74,1189	48	P.R.O'Connor+	C2605
	α,x	Many	?	1USABRK	3.8+08	3.8+08	Jour	PR,74,1189	48	P.R.O'Connor+	C2605
	^{12}C,fis		DA	4RUSKUR	7.8+07	7.8+07	Jour	ZET,37,38	60	V.A.Druin+	F1440

93 Neptunium 237

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,0		RP	2JPNJAE			Jour	NST,57,24	20	G.Rovira+	23745
*	n,fis		CS	2UK NPL	5.7+05	2.4+06	Jour	EPJ/CS,146,04050	17	P.Salvador-Castineira+	23736
*	n,γ	^{238}Np	CS	2JPNJAE	1.0-02	4.9+02	Jour	NST,57,24	20	G.Rovira+	23745

94 Plutonium 238

	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	Jour	ARI,173,109718	21	H.Naik+	33157
*	n,fis	Many	FY	3INDTRM	2.5-02		Jour	ANE,162,108493	21	H.Naik+	33160
*	n,fis	Many	FY	3INDTRM	2.5-02	2.5-02	Jour	ARI,173,109718	21	H.Naik+	33157
*	n,fis		MAS	3INDTRM	2.5-02		Jour	ANE,162,108493	21	H.Naik+	33160

94 Plutonium 239

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,abs		ALF	2UK DOU	1.5+06	1.5+06	Conf	71CANT,,147	71	E.A.C.Crouch	23812
	n,fis	Many	FY	1CANMCM	2.5-02	2.5-02	Jour	CJP,48,1708	70	B.L.Tracy+	13277
	n,fis	Many	FY	2FR ILL	2.5-02	2.5-02	Prog	MAINZ-1987,18	88	W.Ditz+	23808
	n,fis	Many	FY	2FR ILL	2.5-02	2.5-02	Jour	NP/A,341,388	80	M.Asghar+	23815
	n,fis	Many	KE	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	n,fis	Many	KE	2FR ILL	2.5-02	2.5-02	Prog	MAINZ-1986,16	87	A.Srivastava+	23810
	n,fis		?	2FR SAC	1.5+03	2.0+06	Conf	58GENEVA,15,418	58	M.F.Netter+	23805
	n,fis	Many	?	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800

	n,fis	Many	?	2FR ILL	2.5-02	2.5-02	Prog	MAINZ-1987,18	88	W.Ditz+	23808
	n,fis	^{3}H	FY	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	n,fis	^{4}He	FY	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	n,fis	^{6}He	FY	2ITYPAV	2.5-02	2.5-02	Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	n,fis	^{97}Y	CS	2FR ILL	2.5-02	2.5-02	Prog	MAINZ-1986,16	87	A.Srivastava+	23810
	n,fis	^{134}I	CS	2FR ILL	2.5-02	2.5-02	Prog	MAINZ-1986,16	87	A.Srivastava+	23810
	n,sct	^{239}Pu	DAP	2ZZZGEL	1.9+05	3.8+05	Jour	ZP,228,286	69	H.-H.Knitter+	20136

95 Americium 241

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{242}Am	CS	2GERKFK	1.5-02	2.9+04	Jour	NSE,81,396	82	K.Wisshak+	21690

95 Americium 242

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis	Many	?	2FR ILL	2.5-02	2.5-02	Jour	NC/A,110,1089	97	F.Goennenwein+	23807

95 Americium 243

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis	Many	FY	2FR ILL	2.5-02	2.5-02	Jour	NP/A,341,388	80	M.Asghar+	23815
*	n,γ	^{244}Am	CS	2ZZZCER		7.6-01	Jour	PR/C,90,034608	14	E.Mendoza+	23254
*	n,γ	^{244}Am	CS	2JPNKTO	2.5-02	2.5-02	Jour	NST,58,259	21	S.Nakamura+	23744
*	n,γ	^{244}Am	RI	2JPNKTO		1.3-01	Jour	NST,58,259	21	S.Nakamura+	23744

96 Curium 244

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	0,fis	Many	CHG	3INDTRM	Spont		Jour	ARI,173,109718	21	H.Naik+	33157
*	0,fis	Many	FY	3INDTRM	Spont		Jour	ARI,173,109718	21	H.Naik+	33157
*	n,fis	Many	FY	3INDTRM	2.5-02		Jour	EPJ/A,57,176	21	H.Naik+	33159
*	n,fis		MAS	3INDTRM	2.5-02		Jour	EPJ/A,57,176	21	H.Naik+	33159

98 Californium 249

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis	Many	FY	2FR ILL	2.5-02	2.5-02	Prog	MAINZ-1989,20	90	H.R.Faust+	23809
	n,fis	Many	KE	2FR ILL	2.5-02	2.5-02	Prog	MAINZ-1989,20	90	H.R.Faust+	23809

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,fis	γ	FY	2NEDKVI	Spont		Jour	PRL,68,3145	92	H.Vanderploeg+	23739
	0,fis	γ	FY	2JPNTIT	Spont		Jour	JPJ/S,58,620	89	J.Kasagi+	23740
	0,fis	Many	FY	2ZZZGEL	Spont		Prog	NEANDC(E)-242,36	82	Ch.Straede+	23802
	0,fis	Many	FY	2UK MAN	Spont		Rept	AIP-481,283	99	A.G.Smith+	23813
	0,fis	γ	FY	4ZZZDUB	Spont		Conf	2004PETERH,,343	04	L.Krupa+	23814
	0,fis	Many	FY	4ZZZDUB	Spont		Conf	2004PETERH,,343	04	L.Krupa+	23814
	0,fis	Many	FY	2FR ILL	Spont		Jour	NP/A,341,388	80	M.Asghar+	23815
	0,fis	Many	FY	3CZRUJF	Spont		Jour	CZJ/B,31,1273	81	R.Bayer+	31805
	0,fis	Many	FY	3CZRUJF	Spont		Conf	92BERNKAST,,481	92	Z.Dlouhy+	31811
*	0,fis	Many	FY	3INDTRM	Spont		Jour	NSE,195,717	21	H.Naik+	33158
	0,fis		KE	2ITYPAV	Spont		Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	0,fis	Many	KE	2ITYPAV	Spont		Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	0,fis	γ	KE	4ZZZDUB	Spont		Conf	2004PETERH,,343	04	L.Krupa+	23814
	0,fis	Many	KE	3CZRUJF	Spont		Jour	CZJ/B,31,1273	81	R.Bayer+	31805
	0,fis	Many	KE	3CZRUJF	Spont		Conf	92BERNKAST,,481	92	Z.Dlouhy+	31811
*	0,fis		MAS	3INDTRM	Spont		Jour	NSE,195,717	21	H.Naik+	33158
	0,fis		MFQ	3DDRTUD	Spont		Jour	SNP,47,403	88	D.Seeliger+	31804
	0,fis		NU	4ZZZDUB	Spont		Conf	2004PETERH,,343	04	L.Krupa+	23814
	0,fis	Many	?	4ZZZDUB	Spont		Conf	2004PETERH,,343	04	L.Krupa+	23814
	0,fis	Many	?	3CZRUJF	Spont		Jour	CZJ/B,31,1273	81	R.Bayer+	31805
	0,fis	Many	?	3CZRUJF	Spont		Conf	92BERNKAST,,481	92	Z.Dlouhy+	31811
	0,fis	^{1}H	FY	3POLIBJ	Spont		Jour	NP/A,439,28	85	A.J.Kordyasz+	31803
	0,fis	^{1}H	?	3POLIBJ	Spont		Jour	NP/A,439,28	85	A.J.Kordyasz+	31803
	0,fis	^{2}H	?	3POLIBJ	Spont		Jour	NP/A,439,28	85	A.J.Kordyasz+	31803
	0,fis	^{3}H	FY	3POLIBJ	Spont		Jour	NP/A,439,28	85	A.J.Kordyasz+	31803
	0,fis	^{3}H	KE	2ITYPAV	Spont		Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	0,fis	^{3}H	?	3POLIBJ	Spont		Jour	NP/A,439,28	85	A.J.Kordyasz+	31803
	0,fis	^{4}He	FY	3POLIBJ	Spont		Jour	NP/A,439,28	85	A.J.Kordyasz+	31803
	0,fis	^{4}He	KE	2ITYPAV	Spont		Jour	NC/A,11,716	72	M.Cambiaghi+	23800
	0,fis	^{4}He	?	3POLIBJ	Spont		Jour	NP/A,439,28	85	A.J.Kordyasz+	31803
	0,fis	^{6}He	KE	2ITYPAV	Spont		Jour	NC/A,11,716	72	M.Cambiaghi+	23800