EXFOR News (February 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, JAEA, JCPRG and CDFE.

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

[1] N. Otuka, 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 dΩ_1/dΩ_2/dE'	NUD	Delayed fission neutron multiplicity $\bar{\nu_d}$
D3E	Triple differential dΩ/dE'_1/dE'_2	NUF	Fragment neutrons
D4A	Quadruple diff. dΩ_1/dΩ_2/dE'_1/dE'_2	POL	Polarization
DA	Differential d/dΩ	POD	Differential polarization
DAA	Double differential dΩ_1/dΩ_2	PY	Product yield (other than fission)
DAE	Double differential dΩ/dE'	RI	Resonance integral
DAP	Partial differential d/dΩ	RP	Resonance parameter
DAT	Temperature-dependent Legendre coefficient	RR	Reaction rate
DE	Differential d/dE'	SIF	Self indication
DEP	Energy spectrum for specific group	SPC	Gamma spectrum
DP	Diff. by linear momentum of outgoing part.	TSL	Thermal scattering
DT	Diff. by 4-momentum transfer squared	TT	Thick target yield
ETA	η-value $\bar{\nu}\sigma_{\rm fis}/(\sigma_{\rm capt}+\sigma_{\rm fis})$	TTD	Differential thick target yield, d/dΩ
EVL	Evaluation	TTP	Partial thick target yield

Special codes in outgoing particle field

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

Special codes in incident energy field

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

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

1 Hydrogen 1

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,el	^{1}H	POD	2GERJUL	1.1+09	1.2+09	Jour	PR/C,90,035204	14	P.Adlarson+	23407
	^{16}O,x	Many	CS	4ZZZDUB			Jour	JEL,81,140	05	E.Kh.Bazarov+	O0033

1 Hydrogen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,tot		CS	2UK NIN	2.3-03	9.3+01	Jour	NIM/A,870,84	17	L.A.Rodriguezpalomino+	23402
*	n,tot		CS	2UK NIN	1.1-03	9.0+01	Jour	NIM/A,870,84	17	L.A.Rodriguezpalomino+	23402

2 Helium 3

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,el	^{3}He	DA	4RUSKUR	5.5+06	9.6+06	Jour	ZET,37,663	59	K.P.Artemov+	F1361

2 Helium 4

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,el	^{4}He	DT	4RUSLIN	7.0+08	9.9+08	Jour	YF,47,1185	88	G.N.Velichko+	O1276

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+	O2370
	d,t	^{5}Li	DAP	4RUSKUR	2.0+07	2.0+07	Jour	ZET,37,54	59	N.A.Vlasov+	F1369

3 Lithium 7

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,inel	^{7}Li	DAP	2SPNAUT	8.2+05	5.0+06	Jour	NIM/B,406,161	17	D.Bachillerperea+	O2339
*	p,n	^{7}Be	DAP	2SPNAUT	2.4+06	5.0+06	Jour	NIM/B,406,161	17	D.Bachillerperea+	O2339
*	d,el	^{7}Li	DA	2GRCATH	1.5+06	2.0+06	Jour	NIM/B,414,99	18	K.Preketes-Sigalas+	O2375
	d,t	^{6}Li	DAP	4RUSKUR	2.0+07	2.0+07	Jour	ZET,37,54	59	N.A.Vlasov+	F1369

4 Beryllium 9

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x+d	inclusive	DAE	4RUSITE	1.3+09	1.3+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360
	p,x+n	inclusive	DAE	4ZZZDUB	6.8+08	6.8+08	Jour	ZET,32,962	57	V.Kiselev+	F1364
	p,x+p	inclusive	DAE	4RUSITE	1.3+09	1.3+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360
	p,x+t	inclusive	DAE	4RUSITE	1.3+09	1.3+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360
	d,t	^{8}Be	DAP	4RUSKUR	2.0+07	2.0+07	Jour	ZET,37,54	59	N.A.Vlasov+	F1369
	d,x+n	inclusive	PY	3CPRAEP	2.0+05	3.0+06	Conf	2006CAPE,,(58)	06	Yubin Zou+	S0215
	d,x+n	inclusive	PY	3CPRBJG	3.5+05	2.0+06	Jour	CST,42,1069	08	Guo Ji-Mei+	S0093
	d,x+n	inclusive	?	3CPRAEP	2.0+05	3.0+06	Conf	2006CAPE,,(58)	06	Yubin Zou+	S0215

5 Boron 10

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,α	^{7}Li	CS	3CPRBJG	4.0+06	5.0+06	Jour	PR/C,96,044621	17	Zhimin Wang+	32771
*	n,t+α	^{4}He	CS	3CPRBJG	4.0+06	5.0+06	Jour	PR/C,96,044621	17	Zhimin Wang+	32771

5 Boron 11

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{12}C,el	^{11}B	DA	3CPRAEP	2.6+07	2.6+07	Jour	PR/C,90,067601	14	E.T.Li+	S0198

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	KER	2SWDUPP	9.5+07	9.5+07	Jour	PR/C,74,054002	06	P.Mermod+	23030
	n,tot		CS	2UK HAR	1.0+06	9.0+06	Rept	EANDC(UK)-94AL	68	K.M.Diment+	21096
	n,x+α	inclusive	KER	2SWDUPP	9.6+07	9.6+07	Jour	NP/A,747,152	05	B.E.Bergenwall+	22888
	n,x+d	inclusive	KER	2SWDUPP	9.6+07	9.6+07	Jour	NP/A,747,152	05	B.E.Bergenwall+	22888
	n,x+^{3}He	inclusive	KER	2SWDUPP	9.6+07	9.6+07	Jour	NP/A,747,152	05	B.E.Bergenwall+	22888
	n,x+p	inclusive	KER	2SWDUPP	9.6+07	9.6+07	Jour	NP/A,747,152	05	B.E.Bergenwall+	22888
	n,x+t	inclusive	KER	2SWDUPP	9.6+07	9.6+07	Jour	NP/A,747,152	05	B.E.Bergenwall+	22888
	d,t	^{11}C	DAP	4RUSKUR	2.0+07	2.0+07	Jour	ZET,37,1187	59	N.A.Vlasov+	F1362
	α,p	^{15}N	DA	4RUSFTI	1.4+07	1.5+07	Conf	60MOSCOW,,123	60	T.V.Tsaryova+	F1356
*	^{17}C,sct	^{12}C	DAP	3CPRIMP	6.8+08	6.8+08	Jour	EPJ/A,54,35	18	Yu-Shou Song+	S0216
*	^{14}O,x	^{11}C	CS	3CPRIMP	4.3+09	4.3+09	Jour	PR/C,90,037601	14	Z.Y.Sun+	S0202
*	^{14}O,x	^{12}N	CS	3CPRIMP	4.3+09	4.3+09	Jour	PR/C,90,037601	14	Z.Y.Sun+	S0202
*	^{14}O,x	^{13}N	CS	3CPRIMP	4.3+09	4.3+09	Jour	PR/C,90,037601	14	Z.Y.Sun+	S0202

6 Carbon 13

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,p	^{14}C	DAP	4RUSMOS	1.5+07	1.5+07	Jour	YF,81,174	18	L.I.Galanina+	F1368

6 Carbon 14

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{12}C,^{10}Be	^{16}O	DAP	2SF JYV	2.2+07	2.5+07	Jour	IZV,80,958	16	S.Yu.Torilov+	O2338

7 Nitrogen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,el	^{nat}N	DA	2GRCATH	9.9+05	2.2+06	Jour	NIM/B,410,29	17	M.Kokkoris+	O2371

8 Oxygen 16

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{16}O	KER	2SWDUPP	9.5+07	9.5+07	Jour	PR/C,74,054002	06	P.Mermod+	23030
	n,inel	^{16}O	KER	2SWDUPP	9.5+07	9.5+07	Jour	PR/C,74,054002	06	P.Mermod+	23030

9 Fluorine 19

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{20}F	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387
*	p,inel	^{19}F	DAP	2SPNAUT	8.2+05	3.2+06	Jour	NIM/B,406,161	17	D.Bachillerperea+	O2339
*	d,el	^{19}F	DA	2GRCATH	9.1+05	2.0+06	Jour	NIM/B,396,1	17	V.Foteinou+	O2335
	d,t	^{18}F	DAP	4RUSKUR	2.0+07	2.0+07	Jour	ZET,37,1187	59	N.A.Vlasov+	F1362

11 Sodium 23

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{24}Na	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387
	n,tot		RP	2UK HAR	2.8+03	2.8+03	Conf	55GENEVA,4,110	55	E.R.Rae	22527

12 Magnesium 24

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{25}Mg	SPC	2SWDFOA	4.7+04	4.7+04	Jour	PS,4,95	71	G.Nystroem+	20248
	p,inel	^{24}Mg	DAP	4ZZZDUB	2.4+06	4.1+06	Jour	PL/B,53,(5),445	75	S.L.Golubev+	F1366

13 Aluminium 27

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,$2n$	^{26}Al	CS	3CPRLNZ	1.5+07	1.5+07	Jour	CPL,15,8	98	Zhao Qiang+	32764
	n,p	^{27}Mg	CS	2GERMUN	Fiss		Thes	GRYNTAKIS	Mar 76	E.M.Gryntakis	23373
	p,el	^{27}Al	DA	4RUSMOS	6.6+06	6.6+06	Conf	60MOSCOW,,201	60	S.S.Vasil'Ev+	F1357
	p,inel	^{27}Al	CS	4RUSMOS	6.6+06	6.6+06	Conf	60MOSCOW,,201	60	S.S.Vasil'Ev+	F1357
	p,inel	^{27}Al	DAP	4RUSMOS	6.6+06	6.6+06	Conf	60MOSCOW,,201	60	S.S.Vasil'Ev+	F1357
	p,x+d	inclusive	DAE	4RUSITE	1.3+09	1.3+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360
	p,x+p	inclusive	DAE	4RUSITE	1.3+09	1.3+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360
	p,x+t	inclusive	DAE	4RUSITE	1.3+09	1.3+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360
	d,t	^{26}Al	DAP	4RUSKUR	1.9+07	1.9+07	Jour	ZET,37,1187	59	N.A.Vlasov+	F1362
	α,el	^{27}Al	DA	4RUSFTI	9.0+06	1.2+07	Jour	ZET,41,49	61	M.P.Konstantinov+	F1358
	α,p	^{30}Si	DAP	4RUSFTI	1.0+07	1.5+07	Conf	60MOSCOW,,123	60	T.V.Tsaryova+	F1356

14 Silicon 28

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{29}Si	SPC	2SWDFOA	6.8+04	6.8+04	Jour	PS,4,95	71	G.Nystroem+	20248
	n,inel	^{28}Si	DAP	2UK BIA	1.4+07	1.4+07	Jour	ARI,26,71	75	K.A.Connell+	20866
*	p,x+p	inclusive	POD	4RUSLIN	1.0+09	1.0+09	Jour	JEL,106,(2),69	17	O.V.Miklukho+	F1328
	d,p	^{29}Si	?	4RUSRI	1.7+06	4.8+06	Jour	ZET,31,719	56	Yu.A.Nemilov+	F1367

15 Phosphorus 31

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{32}P	SPC	2SWDFOA	2.7+04	2.7+04	Jour	PS,4,95	71	G.Nystroem+	20248
	d,p	^{32}P	DAP	4RUSMOS	4.0+06	4.0+06	Jour	ZET,31,25	56	I.B.Teplov	F1363

16 Sulphur 32

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{33}S	SPC	2SWDFOA	3.0+04	3.0+04	Jour	PS,4,95	71	G.Nystroem+	20248
	n,inel	^{32}S	DAP	2UK BIA	1.4+07	1.4+07	Jour	ARI,26,71	75	K.A.Connell+	20866

17 Chlorine 35

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,p	^{36}Cl	DAP	4RUSMOS	4.0+06	4.0+06	Jour	ZET,31,25	56	I.B.Teplov	F1363

17 Chlorine 37

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{38}Cl	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387

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+	O2372

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+	O2372
*	p,n	^{44}Sc	CS	2SWTUBE	3.9+06	1.8+07	Jour	ARI,129,96	17	T.S.Carzaniga+	O2372

21 Scandium 45

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{46}Sc	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387

22 Titanium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x	^{48}V	CS	3CPRAEP	7.5+06	2.2+07	Rept	INDC(CPR)-44,17	98	Zhao Wenrong+	S0212
	d,x	^{48}V	CS	3CPRAEP	4.5+06	2.2+07	Rept	INDC(CPR)-44,17	98	Zhao Wenrong+	S0212

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+	O2372

22 Titanium 48

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,inel	^{48}Ti	DAP	2UK BIA	1.4+07	1.4+07	Jour	ARI,26,71	75	K.A.Connell+	20866

23 Vanadium 51

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,el	^{51}V	DA	4RUSMOS	3.5+06	6.2+06	Jour	VMU,12,398	71	E.A.Romanovskii+	F1365

24 Chromium 50

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,inel	^{50}Cr	DAP	2UK ALD	9.3+05	3.1+06	Rept	AWRE-O-41/71	71	R.E.Coles	20452
	p,el	^{50}Cr	DA	4RUSMOS	4.3+06	6.2+06	Jour	VMU,12,398	71	E.A.Romanovskii+	F1365

24 Chromium 52

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,el	^{52}Cr	DA	4RUSMOS	3.9+06	6.2+06	Jour	VMU,12,398	71	E.A.Romanovskii+	F1365

24 Chromium 53

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,el	^{53}Cr	DA	4RUSMOS	3.9+06	6.2+06	Jour	VMU,12,398	71	E.A.Romanovskii+	F1365

24 Chromium 54

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,el	^{54}Cr	DA	4RUSMOS	3.0+06	6.2+06	Jour	VMU,12,398	71	E.A.Romanovskii+	F1365

25 Manganese 55

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{56}Mn	CS	3INDPOO	1.0+03	4.0+06	Jour	NSE,187,302	17	Mehdis.Barough+	33112

26 Iron

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,tot		CS	2GERZFK	1.5+05	8.0+06	Jour	EPJ/A,54,81	18	R.Beyer+	23415
*	p,x	^{54}Mn	CS	2GERJUL	5.8+06	1.6+07	Jour	RCA,105,985	17	Md.S.Uddin+	O2373
*	p,x	^{56}Co	CS	2GERJUL	5.1+06	1.6+07	Jour	RCA,105,985	17	Md.S.Uddin+	O2373
*	p,x	^{57}Co	CS	2GERJUL	2.4+06	1.6+07	Jour	RCA,105,985	17	Md.S.Uddin+	O2373
*	p,x	^{58}Co	CS	2GERJUL	2.4+06	1.6+07	Jour	RCA,105,985	17	Md.S.Uddin+	O2373

26 Iron 54

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{55}Fe	CS	2AUSATI	2.5-02	2.5-02	Jour	PR/C,96,025808	17	A.Wallner+	23394
*	n,inel	^{54}Fe	DAP	2GERZFK	1.5+06	7.8+06	Jour	EPJ/A,54,58	18	R.Beyer+	23411

26 Iron 56

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,inel	^{56}Fe	CSP	2GERZFK	8.5+05	2.1+06	Jour	NP/A,927,41	14	R.Beyer+	23134
*	n,inel	^{56}Fe	DAP	2GERZFK			Jour	EPJ/A,54,58	18	R.Beyer+	23411
*	p,x+p	inclusive	POD	4RUSLIN	1.0+09	1.0+09	Jour	JEL,106,(2),69	17	O.V.Miklukho+	F1328

26 Iron 57

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,2n	^{56}Fe	CSP	2ZZZGEL		7.8+06	Jour	PR/C,96,024620	17	A.Negret+	23392
	n,γ	^{58}Fe	CS	2GERKFK	2.5-02	2.5-02	Conf	69STUDSVIK,,35	69	W.Michaelis+	23372
*	n,inel	^{57}Fe	CS	2ZZZGEL	2.0+05	1.4+07	Jour	PR/C,96,024620	17	A.Negret+	23392
*	n,inel	^{57}Fe	CSP	2ZZZGEL		1.4+06	Jour	PR/C,96,024620	17	A.Negret+	23392

27 Cobalt 59

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,2n	^{58}Co	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419
*	n,3n	^{57}Co	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419
*	n,4n	^{56}Co	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419
*	n,x	^{52}Mn	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419
*	n,x	^{54}Mn	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419

28 Nickel 58

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,p	^{58}Co	CS	3INDTRM	5.9+06	1.6+07	Jour	NSE,179,423	15	B.S.Shivashankar+	33094

28 Nickel 60

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,p	^{60}Co	CS	2GERMUN	Fiss		Thes	GRYNTAKIS	Mar 76	E.M.Gryntakis	23373

28 Nickel 61

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{62}Ni	CS	2GERKFK	2.5-02	2.5-02	Conf	69STUDSVIK,,35	69	W.Michaelis+	23372

29 Copper

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,x	^{51}Cr	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{52}Mn	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{54}Mn	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{56}Co	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{57}Co	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{58}Co	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
	p,x+d	inclusive	DAE	4RUSITE	1.3+09	1.3+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360
	p,x+p	inclusive	DAE	4RUSITE	1.3+09	1.3+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360
	p,x+t	inclusive	DAE	4RUSITE	1.3+09	1.3+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360

29 Copper 63

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,n+p	^{61}Ni	CS	1USAGGA	1.7+07	2.5+07	Jour	PR,176,1366	68	R.E.Sund+	L0013
*	^{7}Li,^{6}He	^{64}Zn	DAP	3CPRAEP	1.3+07	3.1+07	Jour	PR/C,95,034616	17	L.Yang+	S0210
*	^{7}Li,el	^{63}Cu	DA	3CPRAEP	1.3+07	3.1+07	Jour	PR/C,95,034616	17	L.Yang+	S0210

29 Copper 65

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{66}Cu	CS	3INDPOO	1.0+03	4.0+06	Jour	NSE,187,302	17	Mehdis.Barough+	33112

30 Zinc 64

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{65}Zn	?	2BLGGHT	5.0-01		Jour	JRN,82,169	84	A.Simonits+	23389

30 Zinc 66

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{67}Zn	CS	2GERKFK	2.5-02	2.5-02	Conf	69STUDSVIK,,35	69	W.Michaelis+	23372

30 Zinc 67

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{68}Zn	CS	2GERKFK	2.5-02	2.5-02	Conf	69STUDSVIK,,35	69	W.Michaelis+	23372

30 Zinc 68

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{69}Zn	?	2BLGGHT	5.0-01		Jour	JRN,82,169	84	A.Simonits+	23389
*	$p,2n$	^{67}Ga	CS	2FR NTE	3.6+07	7.0+07	Jour	NIM/B,415,41	18	G.Pupillo+	O2374
*	$p,2p$	^{67}Cu	CS	2FR NTE	3.6+07	7.0+07	Jour	NIM/B,415,41	18	G.Pupillo+	O2374
*	$p,3n$	^{66}Ga	CS	2FR NTE	3.6+07	7.0+07	Jour	NIM/B,415,41	18	G.Pupillo+	O2374

31 Gallium 69

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{70}Ga	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387

31 Gallium 79

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	$0,\beta^-$	^{79}Ge	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347

31 Gallium 80

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,β^-	^{80}Ge	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347

31 Gallium 81

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,β^-	^{81}Ge	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347

31 Gallium 82

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,β^-	^{82}Ge	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347

31 Gallium 83

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,β^-	^{83}Ge	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347

32 Germanium 74

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{75}Ge	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387

32 Germanium 76

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{77}Ge	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387

33 Arsenic 75

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{76}As	CS	2UK LON	Maxwl		Jour	JRN,189,51	95	M.U.Rajput+	23388
	n,γ	^{76}As	RI	2SWDAE		5.0-01	Rept	AE-351	69	E.K.Sokolowski+	22615
	n,γ	^{76}As	RI	2UK LON	4.0-01		Jour	JRN,189,51	95	M.U.Rajput+	23388
*	α,2n	^{77}Br	CS	2BLGVUB	1.4+07	3.7+07	Jour	RCA,105,431	17	K.Breunig+	O2337

*	α,3n	^{76}Br	CS	2BLGVUB	2.6+07	3.7+07	Jour	RCA,105,431	17	K.Breunig+	O2337
*	α,n	^{78}Br	CS	2BLGVUB	8.8+06	3.8+07	Jour	RCA,105,431	17	K.Breunig+	O2337
*	α,x	^{74}As	CS	2BLGVUB	1.6+07	3.7+07	Jour	RCA,105,431	17	K.Breunig+	O2337

33 Arsenic 85

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{85}Se	NUD	2UK HAR	Decay		Jour	JIN,30,1649	68	L.Tomlinson+	23349
0,β^-	^{85}Se	NUD	2FR ILL	Decay		Jour	ZP/A,287,45	78	J.Crancon+	23352

33 Arsenic 86

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{86}Se	NUD	2FR ILL	Decay		Jour	ZP/A,287,45	78	J.Crancon+	23352

33 Arsenic 87

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{87}Se	NUD	2FR ILL	Decay		Jour	ZP/A,287,45	78	J.Crancon+	23352

34 Selenium 74

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{75}Se	CS	2UK LON	Maxwl		Jour	JRN,189,51	95	M.U.Rajput+	23388
n,γ	^{75}Se	RI	2UK LON	4.0-01		Jour	JRN,189,51	95	M.U.Rajput+	23388

34 Selenium 76

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{77}Se	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387

34 Selenium 87

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{87}Br	NUD	2GERMNZ	Decay		Jour	JIN,32,3713	70	J.-V.Kratz+	22047
0,β^-	^{87}Br	NUD	2UK HAR	Decay		Jour	JIN,30,1995	68	L.Tomlinson+	23350
0,β^-	^{87}Br	NUD	2BLGMOL	Decay		Jour	JIN,32,705	70	P.Delmarmol+	23353
0,β^-	^{87}Br	NUD	2UK HAR	Decay		Jour	JIN,33,3609	71	L.Tomlinson+	23354

$0,\beta^-$	^{87}Br	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

34 Selenium 88

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{88}Br	NUD	2GERMNZ	Decay		Jour	JIN,32,3713	70	J.-V.Kratz+	22047
$0,\beta^-$	^{88}Br	NUD	2BLGMOL	Decay		Jour	JIN,32,705	70	P.Delmarmol+	23353
$0,\beta^-$	^{88}Br	NUD	2UK HAR	Decay		Jour	JIN,33,3609	71	L.Tomlinson+	23354
$0,\beta^-$	^{88}Br	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

34 Selenium 89

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{88}Br	NUD	2UK HAR	Decay		Jour	JIN,33,3609	71	L.Tomlinson+	23354

34 Selenium 91

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{91}Br	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355

35 Bromine 87

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{87}Kr	NUD	2GERMNZ	Decay		Jour	RCA,25,1	78	K.L.Kratz	21058
$0,\beta^-$	^{87}Kr	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{87}Kr	NUD	2BLGMOL	Decay		Jour	RCA,16,4	71	P.Delmarmol+	23356
$0,\beta^-$	^{87}Kr	NUD	2GERMNZ	Decay		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
$0,\beta^-$	^{87}Kr	NUD	2GERMNZ	Decay		Jour	NP/A,229,179	74	K.-L.Kratz+	23358
$0,\beta^-$	^{87}Kr	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

35 Bromine 88

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{88}Kr	NUD	2GERMNZ	Decay		Jour	RCA,25,1	78	K.L.Kratz	21058
$0,\beta^-$	^{88}Kr	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{88}Kr	NUD	2GERMNZ	Decay		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
$0,\beta^-$	^{88}Kr	NUD	2GERMNZ	Decay		Jour	NP/A,229,179	74	K.-L.Kratz+	23358
$0,\beta^-$	^{88}Kr	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

35 Bromine 89

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{89}Kr	NUD	2GERMNZ	Decay		Jour	RCA,25,1	78	K.L.Kratz	21058
$0,\beta^-$	^{89}Kr	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{89}Kr	NUD	2SWDSWR	Decay		Jour	ZP/A,295,331	80	K.Aleklett+	23348
$0,\beta^-$	^{89}Kr	NUD	2GERMNZ	Decay		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
$0,\beta^-$	^{89}Kr	NUD	2GERMNZ	Decay		Jour	NP/A,229,179	74	K.-L.Kratz+	23358
$0,\beta^-$	^{89}Kr	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

35 Bromine 90

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{87}Kr	NUD	2GERMNZ	Decay		Jour	RCA,25,1	78	K.L.Kratz	21058
$0,\beta^-$	^{90}Kr	NUD	2SWDSWR	Decay		Jour	ZP/A,295,331	80	K.Aleklett+	23348
$0,\beta^-$	^{90}Kr	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355
$0,\beta^-$	^{90}Kr	NUD	2GERMNZ	Decay		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
$0,\beta^-$	^{90}Kr	NUD	2GERMNZ	Decay		Jour	NP/A,229,179	74	K.-L.Kratz+	23358
$0,\beta^-$	^{90}Kr	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

35 Bromine 91

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{91}Kr	NUD	2GERMNZ	Decay		Jour	RCA,25,1	78	K.L.Kratz	21058
$0,\beta^-$	^{91}Kr	NUD	2SWDSWR	Decay		Jour	ZP/A,295,331	80	K.Aleklett+	23348
$0,\beta^-$	^{91}Kr	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355
$0,\beta^-$	^{91}Kr	NUD	2GERMNZ	Decay		Jour	NP/A,229,179	74	K.-L.Kratz+	23358
$0,\beta^-$	^{91}Kr	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

35 Bromine 92

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{92}Kr	NUD	2GERMNZ	Decay		Jour	RCA,25,1	78	K.L.Kratz	21058
$0,\beta^-$	^{92}Kr	NUD	2FR ILL	Decay		Jour	ZP/A,287,45	78	J.Crancon+	23352
$0,\beta^-$	^{92}Kr	NUD	2GERMNZ	Decay		Jour	NP/A,229,179	74	K.-L.Kratz+	23358

36 Krypton 92

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{92}Rb	NUD	2FR GRE	Decay		Jour	JIN,37,1563	75	M.Asghar+	23359

36 Krypton 93

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{93}Rb	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355
$0,\beta^-$	^{93}Rb	NUD	2FR GRE	Decay		Jour	JIN,37,1563	75	M.Asghar+	23359

36 Krypton 94

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{94}Rb	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355

37 Rubidium 85

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{86}Rb	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387

37 Rubidium 92

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{92}Sr	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{92}Sr	NUD	2FR GRE	Decay		Jour	JIN,37,1563	75	M.Asghar+	23359

37 Rubidium 93

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{93}Sr	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{93}Sr	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355
$0,\beta^-$	^{93}Sr	NUD	2GERMNZ	Decay		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
$0,\beta^-$	^{93}Sr	NUD	2FR GRE	Decay		Jour	JIN,37,1563	75	M.Asghar+	23359
$0,\beta^-$	^{93}Sr	NUD	2FR PAR	Decay		Jour	JIN,31,577	69	I.Amarel+	23360
$0,\beta^-$	^{93}Sr	NUD	2BLGLVN	Decay		Jour	NP/A,222,621	74	E.Roeckl+	23361
$0,\beta^-$	^{93}Sr	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362
$0,\beta^-$	^{93}Sr	?	2FR PAR	Decay		Jour	JIN,31,577	69	I.Amarel+	23360

37 Rubidium 94

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{94}Sr	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{94}Sr	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355
$0,\beta^-$	^{94}Sr	NUD	2GERMNZ	Decay		Jour	RCA,18,123	72	H.-D.Shuessler+	23357

$0,\beta^-$	^{94}Sr	NUD	2FR PAR	Decay	Jour	JIN,31,577	69	I.Amarel+	23360
$0,\beta^-$	^{94}Sr	NUD	2BLGLVN	Decay	Jour	NP/A,222,621	74	E.Roeckl+	23361
$0,\beta^-$	^{94}Sr	NUD	2GERMNZ	Decay	Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

37 Rubidium 95

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{95}Sr	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{95}Sr	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355
$0,\beta^-$	^{95}Sr	NUD	2FR PAR	Decay		Jour	JIN,31,577	69	I.Amarel+	23360
$0,\beta^-$	^{95}Sr	NUD	2BLGLVN	Decay		Jour	NP/A,222,621	74	E.Roeckl+	23361
$0,\beta^-$	^{95}Sr	?	2FR PAR	Decay		Jour	JIN,31,577	69	I.Amarel+	23360

37 Rubidium 96

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{96}Sr	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{96}Sr	NUD	2FR PAR	Decay		Jour	JIN,31,577	69	I.Amarel+	23360
$0,\beta^-$	^{96}Sr	NUD	2BLGLVN	Decay		Jour	NP/A,222,621	74	E.Roeckl+	23361
$0,\beta^-$	^{96}Sr	?	2FR PAR	Decay		Jour	JIN,31,577	69	I.Amarel+	23360

37 Rubidium 97

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{97}Sr	NUD	2FR PAR	Decay		Jour	JIN,31,577	69	I.Amarel+	23360
$0,\beta^-$	^{97}Sr	NUD	2BLGLVN	Decay		Jour	NP/A,222,621	74	E.Roeckl+	23361
$0,\beta^-$	^{97}Sr	?	2FR PAR	Decay		Jour	JIN,31,577	69	I.Amarel+	23360

37 Rubidium 98

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{98}Sr	NUD	2BLGLVN	Decay		Jour	NP/A,222,621	74	E.Roeckl+	23361

37 Rubidium 99

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{98}Sr	NUD	2GERMNZ	Decay		Jour	ZP/A,289,219	79	P.Peuser+	21581

38 Strontium 87

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{88}Sr	CS	2GERKFK	2.5-02	2.5-02	Conf	69STUDSVIK,,35	69	W.Michaelis+	23372

38 Strontium 99

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	$0,\beta^-$	^{99}Y	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355

39 Yttrium 89

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{17}F,el	^{89}Y	DA	3CPRIMP	5.0+07	5.9+07	Jour	PR/C,97,044618	18	G.L.Zhang+	S0217

39 Yttrium 98

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	$0,\beta^-$	^{98}Zr	NUD	2GERMNZ	Decay		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
	$0,\beta^-$	^{98}Zr	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

39 Yttrium 99

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	$0,\beta^-$	^{99}Zr	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355

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	2UK LON	Maxwl		Jour	JRN,189,51	95	M.U.Rajput+	23388
	n,γ	^{95}Zr	RI	2UK LON	4.0-01		Jour	JRN,189,51	95	M.U.Rajput+	23388

42 Molybdenum

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x	^{99}Mo	CS	3CPRAEP	1.5+07	2.2+07	Rept	INDC(CPR)-44,17	98	Zhao Wenrong+	S0212
	p,x	^{95}Tc	CS	3CPRAEP	6.8+06	2.2+07	Rept	INDC(CPR)-44,17	98	Zhao Wenrong+	S0212

p,x	^{96}Tc	CS	3CPRAEP	6.8+06	2.2+07	Rept	INDC(CPR)-44,17	98	Zhao Wenrong+	S0212
d,x	^{99}Mo	CS	3CPRAEP	6.5+06	2.2+07	Rept	INDC(CPR)-44,17	98	Zhao Wenrong+	S0212
d,x	^{95}Tc	CS	3CPRAEP	6.5+06	2.2+07	Rept	INDC(CPR)-44,17	98	Zhao Wenrong+	S0212
d,x	^{96}Tc	CS	3CPRAEP	6.5+06	2.2+07	Rept	INDC(CPR)-44,17	98	Zhao Wenrong+	S0212

42 Molybdenum 95

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{96}Mo	CS	2GERKFK	2.5-02	2.5-02	Conf	69STUDSVIK,,35	69	W.Michaelis+	23372

42 Molybdenum 97

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{98}Mo	CS	2GERKFK	2.5-02	2.5-02	Conf	69STUDSVIK,,35	69	W.Michaelis+	23372

42 Molybdenum 98

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{99}Mo	?	2BLGGHT	5.0-01		Jour	JRN,82,169	84	A.Simonits+	23389

42 Molybdenum 100

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{101}Mo	?	2BLGGHT	5.0-01		Jour	JRN,82,169	84	A.Simonits+	23389

44 Ruthenium 96

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{97}Ru	CS	2NORKJL	2.5-02	2.5-02	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
n,γ	^{97}Ru	RI	2NORKJL		5.0-01	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
n,γ	^{97}Ru	?	2BLGGHT	5.0-01		Jour	JRN,82,169	84	A.Simonits+	23389

44 Ruthenium 102

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{103}Ru	CS	2NORKJL	2.5-02	2.5-02	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
n,γ	^{103}Ru	RI	2NORKJL		5.0-01	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
n,γ	^{103}Ru	?	2BLGGHT	5.0-01		Jour	JRN,82,169	84	A.Simonits+	23389

44 Ruthenium 104

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{105}Ru	CS	2NORKJL	2.5-02	2.5-02	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
n,γ	^{105}Ru	RI	2NORKJL		5.0-01	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
n,γ	^{105}Ru	?	2BLGGHT	5.0-01		Jour	JRN,82,169	84	A.Simonits+	23389

46 Palladium 106

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{107}Pd	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387

46 Palladium 108

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{109}Pd	CS	2NORKJL	2.5-02	2.5-02	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
n,γ	^{109}Pd	RI	2NORKJL		5.0-01	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
n,γ	^{109}Pd	?	2BLGGHT	5.0-01		Jour	JRN,82,169	84	A.Simonits+	23389
n,γ	^{109}Pd	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387

47 Silver 107

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
α,x	^{109}Cd	CS	3CPRSIU	2.0+07	2.6+07	Jour	CST,28,513	94	He Fuqing+	S0034

48 Cadmium 106

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$n,2n$	^{105}Cd	CS	3CPRLNZ	1.3+07	1.5+07	Rept	INDC(CPR)-34,13	95	Kong Xiangzhong+	32760

48 Cadmium 110

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$n,2n$	^{109}Cd	CS	3CPRLNZ	1.3+07	1.5+07	Rept	INDC(CPR)-34,13	95	Kong Xiangzhong+	32760

48 Cadmium 111

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,p	^{111}Ag	CS	3CPRLNZ	1.3+07	1.5+07	Rept	INDC(CPR)-34,13	95	Kong Xiangzhong+	32760

48 Cadmium 116

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,$2n$	^{115}Cd	CS	3CPRLNZ	1.3+07	1.5+07	Rept	INDC(CPR)-34,13	95	Kong Xiangzhong+	32760

49 Indium 115

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{116}In	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387

49 Indium 127

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{127}Sn	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
0,β^-	^{127}Sn	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347

49 Indium 128

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{128}Sn	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347

49 Indium 129

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{129}Sn	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
0,β^-	^{129}Sn	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347

49 Indium 130

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{130}Sn	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347

49 Indium 131

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{131}Sn	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347

49 Indium 132

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{132}Sn	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347

50 Tin 122

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{123}Sn	?	2BLGGHT	5.0-01		Jour	JRN,82,169	84	A.Simonits+	23389

50 Tin 124

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{125}Sn	?	2BLGGHT	5.0-01		Jour	JRN,82,169	84	A.Simonits+	23389

50 Tin 134

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{134}Sb	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355

51 Antimony 134

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{134}Te	NUD	2GERMNZ	Decay		Jour	JIN,39,753	77	W.Rudolph+	20879
$0,\beta^-$	^{134}Te	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{134}Te	NUD	2UK HAR	Decay		Jour	JIN,30,1649	68	L.Tomlinson+	23349

51 Antimony 135

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

0,β^-	^{135}Te	NUD	2GERMNZ	Decay	Jour	JIN,39,753	77	W.Rudolph+	20879
0,β^-	^{135}Te	NUD	2SWDSWR	Decay	Jour	ZP/A,294,233	80	E.Lund+	23347
0,β^-	^{135}Te	NUD	2UK HAR	Decay	Jour	JIN,30,1649	68	L.Tomlinson+	23349
0,β^-	^{135}Te	NUD	2FR ILL	Decay	Jour	ZP/A,287,45	78	J.Crancon+	23352

51 Antimony 136

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
0,β^-	^{136}Te	NUD	2GERMNZ	Decay		Jour	JIN,39,753	77	W.Rudolph+	20879
0,β^-	^{136}Te	NUD	2FR ILL	Decay		Jour	ZP/A,287,45	78	J.Crancon+	23352

52 Tellurium 136

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
0,β^-	^{136}I	NUD	2GERMNZ	Decay		Jour	JIN,39,753	77	W.Rudolph+	20879
0,β^-	^{136}I	NUD	2FR ILL	Decay		Jour	ZP/A,287,45	78	J.Crancon+	23352
0,β^-	^{136}I	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

52 Tellurium 137

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
0,β^-	^{137}I	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355
0,β^-	^{137}I	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

52 Tellurium 138

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
0,β^-	^{138}I	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355

53 Iodine 127

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
p,3n	^{125}Xe	CS	2UK HAR	2.1+07	1.6+08	Jour	ARI,29,29	78	D.B.Syme+	R0007
p,7n	^{121}Xe	CS	2UK HAR	5.2+07	1.6+08	Jour	ARI,29,29	78	D.B.Syme+	R0007

53 Iodine 137

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{137}Xe	NUD	2GERMNZ	Decay		Jour	RCA,25,1	78	K.L.Kratz	21058
$0,\beta^-$	^{137}Xe	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{137}Xe	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355
$0,\beta^-$	^{137}Xe	NUD	2BLGMOL	Decay		Jour	RCA,16,4	71	P.Delmarmol+	23356
$0,\beta^-$	^{137}Xe	NUD	2GERMNZ	Decay		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
$0,\beta^-$	^{137}Xe	NUD	2GERMNZ	Decay		Jour	NP/A,229,179	74	K.-L.Kratz+	23358
$0,\beta^-$	^{137}Xe	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

53 Iodine 138

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{138}Xe	NUD	2GERMNZ	Decay		Jour	RCA,25,1	78	K.L.Kratz	21058
$0,\beta^-$	^{138}Xe	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{138}Xe	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355
$0,\beta^-$	^{138}Xe	NUD	2GERMNZ	Decay		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
$0,\beta^-$	^{138}Xe	NUD	2GERMNZ	Decay		Jour	NP/A,229,179	74	K.-L.Kratz+	23358
$0,\beta^-$	^{138}Xe	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

53 Iodine 139

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{139}Xe	NUD	2GERMNZ	Decay		Jour	RCA,25,1	78	K.L.Kratz	21058
$0,\beta^-$	^{139}Xe	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{139}Xe	NUD	2SWDSWR	Decay		Jour	ZP/A,295,331	80	K.Aleklett+	23348
$0,\beta^-$	^{139}Xe	NUD	2FR ILL	Decay		Jour	NP/A,247,359	75	M.Asghar+	23355
$0,\beta^-$	^{139}Xe	NUD	2GERMNZ	Decay		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
$0,\beta^-$	^{139}Xe	NUD	2GERMNZ	Decay		Jour	NP/A,229,179	74	K.-L.Kratz+	23358
$0,\beta^-$	^{139}Xe	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

53 Iodine 140

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{140}Xe	NUD	2GERMNZ	Decay		Jour	RCA,25,1	78	K.L.Kratz	21058
$0,\beta^-$	^{140}Xe	NUD	2SWDSWR	Decay		Jour	ZP/A,295,331	80	K.Aleklett+	23348
$0,\beta^-$	^{140}Xe	NUD	2GERMNZ	Decay		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
$0,\beta^-$	^{140}Xe	NUD	2GERMNZ	Decay		Jour	NP/A,229,179	74	K.-L.Kratz+	23358
$0,\beta^-$	^{140}Xe	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

53 Iodine 141

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{141}Xe	NUD	2GERMNZ	Decay		Jour	RCA,25,1	78	K.L.Kratz	21058
$0,\beta^-$	^{141}Xe	NUD	2SWDSWR	Decay		Jour	ZP/A,295,331	80	K.Aleklett+	23348
$0,\beta^-$	^{141}Xe	NUD	2GERMNZ	Decay		Jour	NP/A,229,179	74	K.-L.Kratz+	23358
$0,\beta^-$	^{141}Xe	NUD	2GERMNZ	Decay		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362

54 Xenon 141

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{141}Cs	NUD	2FR GRE	Decay		Jour	JIN,37,1563	75	M.Asghar+	23359

54 Xenon 142

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{142}Cs	NUD	2FR GRE	Decay		Jour	JIN,37,1563	75	M.Asghar+	23359

55 Caesium 133

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{134}Cs	CS	2UK LON	Maxwl		Jour	JRN,189,51	95	M.U.Rajput+	23388
n,γ	^{134}Cs	RI	2UK LON	4.0-01		Jour	JRN,189,51	95	M.U.Rajput+	23388

55 Caesium 137

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{138}Cs	CS	2JPNJAE	2.5-02	2.5-02	Jour	NST,27,577	90	H.Harada+	22174
n,γ	^{138}Cs	CS	2JPNJAE	2.5-02	2.5-02	Jour	NST,30,1099	93	T.Sekine+	22737

55 Caesium 141

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
$0,\beta^-$	^{141}Ba	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
$0,\beta^-$	^{141}Ba	NUD	2FR GRE	Decay		Jour	JIN,37,1563	75	M.Asghar+	23359

55 Caesium 142

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{142}Ba	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
0,β^-	^{142}Ba	NUD	2FR GRE	Decay		Jour	JIN,37,1563	75	M.Asghar+	23359

55 Caesium 143

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{143}Ba	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
0,β^-	^{143}Ba	NUD	2FR PAR	Decay		Jour	JIN,31,577	69	I.Amarel+	23360

55 Caesium 144

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{144}Ba	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
0,β^-	^{144}Ba	NUD	2FR PAR	Decay		Jour	JIN,31,577	69	I.Amarel+	23360
0,β^-	^{144}Ba	?	2FR PAR	Decay		Jour	JIN,31,577	69	I.Amarel+	23360

55 Caesium 145

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{145}Ba	NUD	2SWDSWR	Decay		Jour	ZP/A,294,233	80	E.Lund+	23347
0,β^-	^{145}Ba	NUD	2FR ILL	Decay		Jour	ZP/A,287,45	78	J.Crancon+	23352
0,β^-	^{145}Ba	NUD	2BLGLVN	Decay		Jour	NP/A,222,621	74	E.Roeckl+	23361

55 Caesium 146

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,β^-	^{146}Ba	NUD	2BLGLVN	Decay		Jour	NP/A,222,621	74	E.Roeckl+	23361

57 Lanthanum 139

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{140}La	CS	3INDMNP	2.5-02	2.5-02	Jour	EPJ/A,53,46	17	Priyadapanikkath+	33109
*	n,γ	^{140}La	RI	3INDMNP		5.5-01	Jour	EPJ/A,53,46	17	Priyadapanikkath+	33109

58 Cerium 136

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{137}Ce	CS	2GERKFK	Maxwl		Jour	PR/C,53,1397	96	F.Kappeler+	23420

58 Cerium 138

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{139}Ce	CS	2GERKFK	Maxwl		Jour	PR/C,53,1397	96	F.Kappeler+	23420

58 Cerium 140

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{141}Ce	CS	3INDMNP	2.5-02	2.5-02	Jour	EPJ/A,53,46	17	Priyadapanikkath+	33109
	n,γ	^{141}Ce	CS	2GERKFK	Maxwl		Jour	PR/C,53,1397	96	F.Kappeler+	23420
*	n,γ	^{141}Ce	RI	3INDMNP		5.5-01	Jour	EPJ/A,53,46	17	Priyadapanikkath+	33109

58 Cerium 142

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{143}Ce	CS	2GERKFK	Maxwl		Jour	PR/C,53,1397	96	F.Kappeler+	23420

63 Europium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,tot		CS	2JPNJAE	1.6-03	2.3-02	Rept	INDSWG-90,2	65	Y.Ohno+	23384

63 Europium 151

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,0		RP	2JPNKTO			Jour	NST,55,900	18	J.Lee+	23416
*	n,γ	^{152}Eu	CS	2JPNKTO	2.5-02	2.5-02	Jour	NST,54,1046	17	J.Lee+	23181
*	n,γ	^{152}Eu	CS	2JPNKTO	5.3-03	1.1+02	Jour	NST,55,900	18	J.Lee+	23416
*	n,γ	^{152}Eu	RI	2JPNKTO	5.0-01	1.0+07	Jour	NST,54,1046	17	J.Lee+	23181
	n,tot		CS	2JPNJAE	1.6-03	2.2-02	Rept	INDSWG-90,2	65	Y.Ohno+	23384

63 Europium 153

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,0		RP	2JPNKTO			Jour	NST,55,900	18	J.Lee+	23416
*	n,2n	^{152}Eu	CS	3CPRNPC		1.5+07	Jour	PR/C,96,044617	17	Junhua Luo+	32772
*	n,γ	^{154}Eu	CS	2JPNKTO	2.5-02	2.5-02	Jour	NST,54,1046	17	J.Lee+	23181
*	n,γ	^{154}Eu	CS	2JPNKTO	5.6-03	1.1+02	Jour	NST,55,900	18	J.Lee+	23416
*	n,γ	^{154}Eu	RI	2JPNKTO	5.0-01	1.0+07	Jour	NST,54,1046	17	J.Lee+	23181

64 Gadolinium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,x	^{153}Gd	CS	2FR NTE	1.6+07	3.3+07	Jour	ARI,118,281	16	C.Duchemin+	O2334
*	d,x	^{159}Gd	CS	2FR NTE	1.1+07	3.3+07	Jour	ARI,118,281	16	C.Duchemin+	O2334
*	d,x	^{151}Tb	CS	2FR NTE	2.2+07	3.0+07	Jour	ARI,118,281	16	C.Duchemin+	O2334
*	d,x	^{152}Tb	CS	2FR NTE	1.1+07	3.3+07	Jour	ARI,118,281	16	C.Duchemin+	O2334
*	d,x	^{153}Tb	CS	2FR NTE	1.1+07	3.3+07	Jour	ARI,118,281	16	C.Duchemin+	O2334
*	d,x	^{154}Tb	CS	2FR NTE	1.1+07	3.3+07	Jour	ARI,118,281	16	C.Duchemin+	O2334
*	d,x	^{155}Tb	CS	2FR NTE	1.1+07	3.3+07	Jour	ARI,118,281	16	C.Duchemin+	O2334
*	d,x	^{156}Tb	CS	2FR NTE	1.1+07	3.3+07	Jour	ARI,118,281	16	C.Duchemin+	O2334
*	d,x	^{160}Tb	CS	2FR NTE	1.1+07	3.3+07	Jour	ARI,118,281	16	C.Duchemin+	O2334

65 Terbium 159

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,tot		CS	2AUSATI	1.8-02	1.8-02	Rept	INDC(AUS)-006,8	81	K.P.Schneider+	23379

66 Dysprosium

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,tot		CS	2JPNJAE	6.1-04	4.9-02	Rept	INDSWG-90,2	65	Y.Ohno+	23384

67 Holmium 165

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,tot		CS	2AUSATI	1.8-02	1.8-02	Rept	INDC(AUS)-006,8	81	K.P.Schneider+	23379

68 Erbium

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

	n,tot		CS	2JPNJAE	6.4-04	2.3-02	Rept	INDSWG-90,2	65	Y.Ohno+	23384

68 Erbium 162

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,2n	^{161}Er	CS	2GRCATH	1.1+07	1.9+07	Jour	PR/C,98,014622	18	E.Georgali+	23418

68 Erbium 166

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{167}Er	CS	2GERKFK	2.5-02	2.5-02	Conf	69STUDSVIK,,35	69	W.Michaelis+	23372

68 Erbium 168

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,2n	^{167}Er	?	2GERKIG	1.5+07	1.5+07	Conf	82ANTWER,,859	82	B.Anders+	21818

70 Ytterbium 174

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{175}Yb	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387

70 Ytterbium 176

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
α,2n	^{178}Hf	CS	4KASKAZ	2.2+07	4.5+07	Jour	JP/G,18,393	92	Yu.Ts.Oganessian+	F1359
α,2n	^{178}Hf	?	4KASKAZ	2.7+07	4.6+07	Jour	JP/G,18,393	92	Yu.Ts.Oganessian+	F1359

72 Hafnium 178

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{179}Hf	?	2AUSATI	5.5-01		Jour	JRN,169,159	93	S.Roth+	23387

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	?	2BLGGHT	5.0-01		Jour	JRN,82,169	84	A.Simonits+	23389

73 Tantalum

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x+d	inclusive	DAE	4RUSITE	1.3+09	1.3+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360
	p,x+p	inclusive	DAE	4RUSITE	1.3+09	1.3+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360
	p,x+t	inclusive	DAE	4RUSITE	1.3+09	1.3+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360

74 Tungsten

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,tot		CS	2GERZFK	1.5+05	8.1+06	Jour	EPJ/A,54,81	18	R.Beyer+	23415
*	p,x	^{160}Er	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{161}Er	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{163}Tm	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{165}Tm	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{166}Tm	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{166}Yb	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{169}Yb	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{169}Lu	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{170}Lu	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{171}Lu	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{172}Lu	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{173}Lu	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{170}Hf	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{171}Hf	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{172}Hf	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{173}Hf	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{175}Hf	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{181}Hf	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{173}Ta	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{175}Ta	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{176}Ta	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{182}Ta	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{183}Ta	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{184}Ta	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{176}W	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{177}W	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{181}Re	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{183}Re	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207

74 Tungsten 183

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,p	^{183}Ta	CS	3INDBDA	Fiss		Jour	ARI,127,150	17	Rajnikantmakwana+	33107

74 Tungsten 184

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	$n,2n$	^{183}W	?	2GERKIG	1.5+07	1.5+07	Conf	82ANTWER,,859	82	B.Anders+	21818
*	n,p	^{184}Ta	CS	3INDBDA	Fiss		Jour	ARI,127,150	17	Rajnikantmakwana+	33107

77 Iridium 191

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{192}Ir	CS	2NORKJL	2.5-02	2.5-02	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
n,γ	^{192}Ir	RI	2NORKJL		5.0-01	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383

77 Iridium 193

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{194}Ir	CS	2NORKJL	2.5-02	2.5-02	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
n,γ	^{194}Ir	RI	2NORKJL		5.0-01	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383

78 Platinum 194

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{195}Pt	CS	2NORKJL	2.5-02	2.5-02	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
n,γ	^{195}Pt	RI	2NORKJL		5.0-01	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383

78 Platinum 196

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{197}Pt	CS	2NORKJL	2.5-02	2.5-02	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
n,γ	^{197}Pt	RI	2NORKJL		5.0-01	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383

78 Platinum 198

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{199}Pt	CS	2NORKJL	2.5-02	2.5-02	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383
	n,γ	^{199}Pt	RI	2NORKJL		5.0-01	Prog	INDC(SEC)-62,151	77	J.P.Rambaek+	23383

79 Gold 197

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	$n,2n$	^{196}Au	CS	2GRCATH	1.5+07	2.1+07	Jour	PR/C,97,034615	18	A.Kalamara+	23396
*	n,tot		CS	2GERZFK	1.5+05	8.1+06	Jour	EPJ/A,54,81	18	R.Beyer+	23415

80 Mercury 196

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,p	^{196}Au	CS	3CPRLNZ	1.4+07	1.5+07	Rept	INDC(CPR)-34,16	95	Yuan Junqian+	32761
	n,x	^{195}Au	CS	3CPRLNZ	1.4+07	1.5+07	Rept	INDC(CPR)-34,16	95	Yuan Junqian+	32761

80 Mercury 198

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,p	^{198}Au	?	3CPRLNZ	1.4+07	1.5+07	Rept	INDC(CPR)-34,16	95	Yuan Junqian+	32761

80 Mercury 199

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,p	^{199}Au	?	3CPRLNZ	1.4+07	1.5+07	Rept	INDC(CPR)-34,16	95	Yuan Junqian+	32761

80 Mercury 210

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	$0,\beta^-$	^{210}Tl	NUD	2GERGSI	Decay		Jour	PRL,117,012501	16	R.Caballero-Folch+	23395

80 Mercury 211

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	$0,\beta^-$	^{211}Tl	NUD	2GERGSI	Decay		Jour	PRL,117,012501	16	R.Caballero-Folch+	23395

81 Thallium 211

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	0,β^-	^{211}Pb	NUD	2GERGSI	Decay		Jour	PRL,117,012501	16	R.Caballero-Folch+	23395

81 Thallium 212

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	0,β^-	^{212}Pb	NUD	2GERGSI	Decay		Jour	PRL,117,012501	16	R.Caballero-Folch+	23395

81 Thallium 213

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	0,β^-	^{213}Pb	NUD	2GERGSI	Decay		Jour	PRL,117,012501	16	R.Caballero-Folch+	23395

81 Thallium 214

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	0,β^-	^{214}Pb	NUD	2GERGSI	Decay		Jour	PRL,117,012501	16	R.Caballero-Folch+	23395

81 Thallium 215

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	0,β^-	^{215}Pb	NUD	2GERGSI	Decay		Jour	PRL,117,012501	16	R.Caballero-Folch+	23395

81 Thallium 216

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	0,β^-	^{216}Pb	NUD	2GERGSI	Decay		Jour	PRL,117,012501	16	R.Caballero-Folch+	23395

82 Lead

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,x	^{91}Sr	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207

*	p,x	^{95}Zr	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{97}Zr	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{95}Nb	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{96}Nb	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{99}Mo	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{182}Os	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{183}Os	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{186}Ir	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{188}Pt	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{189}Pt	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{191}Pt	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{192}Au	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{193}Au	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{194}Au	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{196}Au	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{198}Au	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{199}Au	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{192}Hg	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{193}Hg	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{197}Hg	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{203}Hg	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{198}Tl	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{199}Tl	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{200}Tl	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{201}Tl	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{202}Tl	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{198}Pb	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{200}Pb	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{201}Pb	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{202}Pb	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{203}Pb	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{204}Bi	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
*	p,x	^{205}Bi	CS	3CPRIMP	2.5+08	2.5+08	Jour	JP/G,42,125102	15	Y.Q.Ju+	S0207
	p,x+n	inclusive	DAE	4RUSITE	6.0+08	1.2+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360
	p,x+p	inclusive	DAE	4RUSITE	6.0+08	1.6+09	Conf	96SAROV,,120	96	I.A.Vorontsov+	F1360

82 Lead 208

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{7}Li,^{6}He	^{209}Bi	DAP	3CPRAEP	2.1+07	2.9+07	Jour	PRL,119,042503	17	L.Yang+	S0214
*	^{7}Li,el	^{208}Pb	DA	3CPRAEP	2.1+07	2.4+07	Jour	PRL,119,042503	17	L.Yang+	S0214

83 Bismuth 209

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,4n	^{206}Bi	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419
*	n,5n	^{205}Bi	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419
*	n,6n	^{204}Bi	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419
*	n,7n	^{203}Bi	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419
*	n,8n	^{202}Bi	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419
*	n,9n	^{201}Bi	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419

	n,γ	^{210}Bi	CS	2FR ILL	Maxwl		Conf	2002PRUHON,,734	02	A.Letourneau+	23377
*	n,x	^{183}Os	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419
*	n,x	^{200}Pb	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419
*	n,x	^{201}Pb	CS	2JPNOSA	3.9+08	3.9+08	Jour	RPD,161,139	14	H.Yashima+	23419
	^{6}He,4n	^{211}At	CS	4ZZZDUB	2.4+07	4.6+07	Jour	KSO,,(4/67),21	94	A.S.Fomichev+	O1365

89 Actinium 227

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{228}Ac	CS	2GERJUL	2.5-02	2.5-02	Jour	RRL,18,259	74	H.F.Aly+	23378
	n,γ	^{228}Ac	RI	2GERJUL		5.0-01	Jour	RRL,18,259	74	H.F.Aly+	23378

90 Thorium 232

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,fis	Many	FY	2BLGLVN	9.0+06	4.0+07	Jour	PR/C,83,054603	11	I.V.Ryzhov+	23119
*	n,fis	^{138}Xe	CS	3CPRNPC	1.4+07	1.5+07	Jour	EPJ/A,50,164	14	Q.Wang+	32745
*	n,fis	^{138}Cs	CS	3CPRNPC	1.4+07	1.5+07	Jour	EPJ/A,50,164	14	Q.Wang+	32745
*	n,γ	^{233}Th	CS	3CPRNPC	1.4+06	1.4+06	Jour	NTC,37,030602	14	Wang Qiang+	32725

92 Uranium 233

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,2n	^{232}U	CS	2GERMUN	Fiss		Thes	GRYNTAKIS	Mar 76	E.M.Gryntakis	23373
	n,fis		RI	2UK HAR		5.3-01	Conf	58GENEVA,16,233	58	C.G.Campbell+	23370
	n,fis		?	3CPRAEP	3.0+04	1.8+07	Jour	CST,9,133	75	Yan Wuguang+	32625
	n,fis		?	2UK HAR	5.3-01		Conf	58GENEVA,16,233	58	C.G.Campbell+	23370

92 Uranium 234

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,fis		CS	2GRCATH	4.2+05	1.0+07	Jour	EPJ/A,54,7	18	A.Stamatopoulos+	23393
*	p,t	^{232}U	DAP	2GERLMU	2.5+07	2.5+07	Jour	YFE,17,215	16	A.I.Levon+	O2336

92 Uranium 235

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis	Many	CHG	2GERMNZ	Maxwl		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
	n,fis	Many	FY	2UK HAR	2.5-02	2.5-02	Jour	JIN,33,3609	71	L.Tomlinson+	23354
	n,fis	Many	FY	3CPRAEP	2.5-02	2.5-02	Jour	CST,34,(S1),170	00	Yang Yi+	32762
	n,fis	Many	NUD	2GERMNZ	2.5-02	2.5-02	Jour	JIN,32,3713	70	J.-V.Kratz+	22047

n,fis	Many	NUD	2UK HAR	2.5-02	2.5-02	Jour	JIN,30,1649	68	L.Tomlinson+	23349
n,fis	Many	NUD	2UK HAR	2.5-02	2.5-02	Jour	JIN,30,1125	68	L.Tomlinson+	23351
n,fis	Many	NUD	2UK HAR	2.5-02	2.5-02	Jour	JIN,33,3609	71	L.Tomlinson+	23354
n,fis	Many	NUD	2BLGMOL	2.5-02	2.5-02	Jour	RCA,16,4	71	P.Delmarmol+	23356
n,fis		NUD	2BLGMOL	2.5-02	2.5-02	Jour	RCA,16,4	71	P.Delmarmol+	23356
n,fis	Many	NUD	2FR PAR	2.5-02	2.5-02	Jour	JIN,31,577	69	I.Amarel+	23360
n,fis	Many	NUD	2GERMNZ	2.5-02	2.5-02	Conf	69VIENNA,,591	69	H.D.Schuessler+	23362
n,fis		NUD	2GERMNZ	Maxwl		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
n,fis	Many	NUD	2GERMNZ	Maxwl		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
n,fis		NUD	2GERMNZ	Maxwl		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
n,fis	Many	NUD	2GERMNZ	Maxwl		Jour	NP/A,229,179	74	K.-L.Kratz+	23358
n,fis		NUD	2GERMNZ	Maxwl		Conf	69VIENNA,,591	69	H.D.Schuessler+	23362
n,fis		RI	2UK HAR		5.3-01	Conf	58GENEVA,16,233	58	C.G.Campbell+	23370
n,fis	Many	?	2GERMNZ	Maxwl		Jour	RCA,18,123	72	H.-D.Shuessler+	23357
n,fis	Many	?	2GERMNZ	Maxwl		Jour	NP/A,229,179	74	K.-L.Kratz+	23358
n,fis	^{85}As	?	2GERMNZ	2.5-02	2.5-02	Conf	69VIENNA,,591	69	H.D.Schuessler+	23362
n,fis	^{87}As	?	2GERMNZ	Maxwl		Jour	JIN,35,1407	73	J.-V.Kratz+	20521
n,fis	^{87}Se	FY	2UK HAR	2.5-02	2.5-02	Jour	JIN,30,1995	68	L.Tomlinson+	23350
n,fis	^{87}Se	FY	2BLGMOL	2.5-02	2.5-02	Jour	JIN,32,705	70	P.Delmarmol+	23353
n,fis	^{87}Se	NUD	2UK HAR	2.5-02	2.5-02	Jour	JIN,30,1995	68	L.Tomlinson+	23350
n,fis	^{87}Se	NUD	2BLGMOL	2.5-02	2.5-02	Jour	JIN,32,705	70	P.Delmarmol+	23353
n,fis	^{87}Se	?	2BLGMOL	2.5-02	2.5-02	Jour	JIN,32,705	70	P.Delmarmol+	23353
n,fis	^{88}Se	?	2BLGMOL	2.5-02	2.5-02	Jour	JIN,32,705	70	P.Delmarmol+	23353
n,fis	^{87}Br	NUD	2BLGMOL	2.5-02	2.5-02	Jour	RCA,16,4	71	P.Delmarmol+	23356
n,fis	^{88}Br	?	2BLGMOL	2.5-02	2.5-02	Jour	RCA,16,4	71	P.Delmarmol+	23356
n,fis	^{137}I	FY	2BLGMOL	2.5-02	2.5-02	Jour	RCA,16,4	71	P.Delmarmol+	23356
n,fis	^{137}I	?	2BLGMOL	2.5-02	2.5-02	Jour	RCA,16,4	71	P.Delmarmol+	23356

92 Uranium 238

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	n,fis	Many	CHG	2FR PAR	1.7+06	1.7+06	Jour	PRL,118,222501	17	J.N.Wilson+	23403
	n,fis		CS	3CPRAEP	1.4+07	1.5+07	Jour	CST,14,201	80	Hu Zhongkang+	32766
*	n,fis		CS	2GERJUL	2.1+06	2.1+06	Jour	JRN,314,1471	17	A.Hable+	23390
*	n,fis	Many	FY	2FR PAR	1.7+06	1.7+06	Jour	PRL,118,222501	17	J.N.Wilson+	23403
*	n,fis	Many	FY	2BLGLVN	9.0+06	4.0+07	Jour	PR/C,83,054603	11	I.V.Ryzhov+	23119
	n,γ	^{239}U	CS	1USAMHG	9.7+05	9.7+05	Jour	NSE,110,282	92	E.Quang+	13190
	n,γ	^{239}U	CS	2UK LON	Maxwl		Jour	JRN,189,51	95	M.U.Rajput+	23388
	n,γ	^{239}U	RI	2UK LON	4.0-01		Jour	JRN,189,51	95	M.U.Rajput+	23388

93 Neptunium 237

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	n,fis		CS	2GERJUL	2.1+06	2.1+06	Jour	JRN,314,1471	17	A.Hable+	23390

94 Plutonium 239

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		RI	2UK HAR		5.3-01	Conf	58GENEVA,16,233	58	C.G.Campbell+	23370
	n,fis		?	3CPRAEP	3.0+04	1.7+07	Jour	CST,15,12	81	Deng Xinlu+	32724
	n,fis		?	2UK HAR	5.3-01		Conf	58GENEVA,16,233	58	C.G.Campbell+	23370
	n,tot		RP	2FR SAC	7.8+00	2.0+02	Conf	65SALZBURG,1,205	65	G.Desaussure+	23371

94 Plutonium 241

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		INT	2ZZZGEL	1.0-02	2.0+01	Conf	91JUELIC,,35	91	C.Wagemans+	22193

94 Plutonium 242

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,fis		CS	2FR BRC	1.0+06	1.9+06	Jour	PR/C,96,054604	17	P.Marini+	23391
*	n,fis		CS	2GERJUL	2.1+06	2.1+06	Jour	JRN,314,1471	17	A.Hable+	23390

95 Americium 241

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis	Many	FY	2UK HAR	Maxwl		Jour	JIN,4,1	57	J.G.Cuninghame	23408
	n,fis		NU	2UK HAR	Maxwl		Jour	JIN,4,1	57	J.G.Cuninghame	23408
	n,fis	^{136}Cs	FY	2UK HAR	Maxwl		Jour	JIN,4,1	57	J.G.Cuninghame	23408