EXFOR News (March 2015)

New experimental data available from Nuclear Reaction Data Centres

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

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

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

Quantity codes

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

Special codes in outgoing particle field

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

Special codes in incident energy field

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

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

1 Hydrogen 1

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,el	^{1}H	CS	4ZZZDUB			Jour	FCY/L,11,(2/186),186	14	Yu.A.Troyan+	41602
	n,tot		CS	4ZZZDUB			Jour	NP/B,99,445	75	A.Abdivaliev+	41603
*	d,el	^{1}H	POD	2JPNIPC	5.9+08	5.9+08	Jour	PR/C,89,064007	14	K.Sekiguchi+	E2452
*	d,x+η	inclusive	CS	2GERJUL	9.8+08	9.8+08	Jour	EPJ/A,50,100	14	P.Adlarson+	O2225
*	d,x+η	inclusive	DA	2GERJUL	9.8+08	1.0+09	Jour	EPJ/A,50,100	14	P.Adlarson+	O2225
*	d,x+η	inclusive	?	2GERJUL			Jour	EPJ/A,50,100	14	P.Adlarson+	O2225
*	^{12}C,x	^{6}He	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{6}Li	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{7}Li	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{7}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{9}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{8}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{11}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{11}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{12}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+α	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+d	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+^{3}He	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+p	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+t	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{17}F,0		RP	2JPNIPC			Jour	PR/C,90,025803	14	J.Hu+	E2461
*	^{17}F,el	^{1}H	?	2JPNIPC	1.8+06	3.4+06	Jour	PR/C,90,025803	14	J.Hu+	E2461
	^{17}F,el	^{1}H	?	3CPRIMP	2.7+08	2.7+08	Jour	PHE,26,594	02	Luzhaohui+	S0101
	^{18}Ne,el	^{1}H	?	3CPRIMP	3.2+08	3.2+08	Jour	PHE,26,594	02	Luzhaohui+	S0101
*	^{25}Al,0		RP	2JPNIPC			Jour	PR/C,90,035805	14	H.S.Jung+	E2463
*	^{25}Al,el	^{1}H	?	2JPNIPC	1.2+06	2.7+06	Jour	PR/C,90,035805	14	H.S.Jung+	E2463
*	^{208}Pb,fis		?	2GERGSI	7.7+10	1.3+11	Jour	EPJ/CS,62,07009	13	J.L.Rodriguez-Sanchez+	O2179

1 Hydrogen 2

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,γ	^{3}He	CS	2SWTETH	2.1+06	1.2+07	Jour	HPA,40,946	67	W.Woelfli+	O2214
*	d,n	^{3}He	CS	2AUSVIE	4.5+07	2.0+08	Rept	INDC(AUS)-0019	15	M.Drosg+	D0756
*	d,n	^{3}He	DA	2AUSVIE	1.8+03	1.0+08	Rept	INDC(AUS)-0019	15	M.Drosg+	D0756
*	d,p	^{3}H	CS	2GERBOC	7.4+07	1.5+09	Jour	NP/A,758,146	05	A.Rinollo+	O2217
*	^{11}Be,p	^{12}Be	?	2ZZZCER	3.1+07	3.1+07	Jour	PR/C,88,044619	13	J.G.Johansen+	O2181
*	^{34}Si,p	^{35}Si	DAP	2FR GAN	7.0+08	7.0+08	Jour	PRL,112,042502	14	G.Burgunder+	O2220

1 Hydrogen 3

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,n	^{3}He	DA	2AUSVIE	1.0+06	3.2+08	Rept	INDC(AUS)-0019	15	M.Drosg+	D0756
*	d,n	^{4}He	CS	2AUSVIE	4.5+07	4.0+08	Rept	INDC(AUS)-0019	15	M.Drosg+	D0756
*	d,n	^{4}He	DA	2AUSVIE	1.0+04	4.0+08	Rept	INDC(AUS)-0019	15	M.Drosg+	D0756

2 Helium 3

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,n+p	^{3}He	?	2ITYPAD	2.3+07	2.3+07	Jour	JP/G,14,L235	88	M.Bruno+	O2172
*	α,γ	^{7}Be	CS	2ITYLGS	9.2+04	1.3+05	Jour	EPJ/CS,66,07009	14	C.Gustavino+	O2188

2 Helium 4

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{12}C,el	^{4}He	DA	2GERBOC	2.1+06	3.4+06	Jour	ZP/A,308,73	82	K.U.Kettner+	O2206
	^{12}C,γ	^{16}O	CSP	2GERBOC	1.3+06	3.4+06	Jour	ZP/A,308,73	82	K.U.Kettner+	O2206
*	^{68}Ni,inel	^{4}He	?	2FR GAN	3.4+09	3.4+09	Jour	PRL,113,032504	14	M.Vandebrouck+	O2228

3 Lithium 6

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,el	^{6}Li	DA	1USATNL	8.6+07	8.6+07	Jour	PR/C,90,027603	14	L.S.Myers+	L0195
*	γ,n	^{5}Li	CS	1USATNL	8.0+06	3.5+07	Jour	PR/C,90,014613	14	W.A.Wurtz+	L0194
*	γ,n	^{5}Li	CSP	1USATNL	8.0+06	3.5+07	Jour	PR/C,90,014613	14	W.A.Wurtz+	L0194
*	γ,non		CS	1USATNL	8.0+06	3.5+07	Jour	PR/C,90,014613	14	W.A.Wurtz+	L0194
*	γ,p	^{5}He	CSP	1USATNL	1.5+07	3.5+07	Jour	PR/C,90,014613	14	W.A.Wurtz+	L0194
	d,el	^{6}Li	DA	4RUSKUR	1.5+07	1.5+07	Jour	JPR/C,32,C6-163	71	V.I.Chuev+	F1243
*	^{3}He,n	^{8}B	DAP	2ITYPAD	5.8+06	5.8+06	Jour	EPJ/CS,66,03048	14	M.Cinausero+	O2187

3 Lithium 7

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,α	^{4}He	CS	2ITYLNS	1.0+04	3.7+05	Jour	AJ,562,1076	01	M.Lattuada+	O2211
*	p,n	^{7}Be	MLT	2GERPTB	1.9+06	1.9+06	Jour	PR/C,85,055809	12	C.Lederer+	O2230
	p,x+n	inclusive	PY	2JPNJAE	4.3+07	6.8+07	Jour	NSE,124,228	96	N.Nakao+	E2460
	t,α	^{6}He	DAP	4RUSEPA	1.3+05	4.8+05	Jour	IZV,51,(5),930	87	S.N.Abramovich+	F0050
	t,x+n	inclusive	DA	4RUSEPA	1.3+05	2.8+05	Jour	IZV,51,(5),930	87	S.N.Abramovich+	F0050
	α,t	^{8}Be	DAP	4RUSMOS	2.1+07	2.5+07	Jour	IZV,38,(12),2567	74	T.A.Dmitrieva+	F0056

4 Beryllium 7

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{8}B	CS	2GERGSI	1.6+05	3.0+06	Jour	PR/C,73,015806	06	F.Schuemann+	O2213

4 Beryllium 9

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{9}Be	POD	1USATNL	8.9+06	1.5+07	Jour	PR/C,28,1498	Oct 83	C.E.Floyd+	12844
	n,inel	^{9}Be	POD	1USATNL	8.9+06	1.5+07	Jour	PR/C,28,1498	Oct 83	C.E.Floyd+	12844
	p,el	^{9}Be	POD	4UKRKFT	2.2+06	2.8+06	Jour	IZV,37,(8),1729	73	Yu.G.Mashkarov+	F0212
	p,inel	^{9}Be	DAP	4RUSMOS	6.4+06	6.5+06	Jour	IZV,35,(11),2364	71	S.S.Vasilev+	F0137
	d,el	^{9}Be	POD	4UKRKFT	2.0+06	2.8+06	Jour	IZV,47,(11),2271	83	A.S.Deineko+	F0324
	d,p	^{10}Be	POD	4UKRKFT	1.5+06	3.8+06	Jour	IZV,44,(12),2652	80	A.S.Deineko+	F0269
	d,p	^{10}Be	POD	4UKRKFT	2.0+06	2.8+06	Jour	IZV,48,(5),1000	84	A.S.Deineko+	F0409
	d,x+n	inclusive	PY	3CPRAEP	1.4+07	2.2+07	Jour	CNST,5,193	94	Wangxiaozhong+	S0094
*	α,^{6}He	^{7}Be	DAP	2SF JYV	6.3+07	6.3+07	Jour	JP/G,41,035102	14	S.M.Lukyanov+	O2194
	α,d	^{11}B	CSP	4RUSMOS	3.0+07	3.0+07	Jour	IZV,48,(1),155	84	O.I.Vasil'Eva+	F0255
*	α,^{3}He	^{10}Be	DAP	2SF JYV	6.3+07	6.3+07	Jour	JP/G,41,035102	14	S.M.Lukyanov+	O2194
*	α,inel	^{9}Be	DAP	2SF JYV	6.3+07	6.3+07	Jour	JP/G,41,035102	14	S.M.Lukyanov+	O2194
	α,t	^{10}B	CSP	4RUSMOS	3.0+07	3.0+07	Jour	IZV,48,(1),155	84	O.I.Vasil'Eva+	F0255
*	α,t	^{10}B	DAP	2SF JYV	6.3+07	6.3+07	Jour	JP/G,41,035102	14	S.M.Lukyanov+	O2194
	^{6}He,x+α	inclusive	DA	3CPRIMP	1.5+08	1.5+08	Jour	PHE,27,206	03	Lizhihuan+	S0103
	^{6}He,x+α	inclusive	DAE	3CPRIMP	1.5+08	1.5+08	Jour	PHE,27,206	03	Lizhihuan+	S0103
	^{17}N,X+^{6}Li	^{7}Be	CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,25,834	01	Wanghongwei+	S0081
	^{17}N,X+^{7}Li	^{7}Be	CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,25,834	01	Wanghongwei+	S0081
	^{17}N,X+^{8}Li	^{7}Be	CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,25,834	01	Wanghongwei+	S0081
	^{17}N,X+α	^{10}B	CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,25,834	01	Wanghongwei+	S0081
	^{17}N,x	Many	DA	3CPRIMP	5.7+08	5.7+08	Jour	PHE,25,834	01	Wanghongwei+	S0081

5 Boron

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,n		MLT	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
	α,n		MLT	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
	α,n		?	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757

5 Boron 10

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,^{5}He	^{7}Be	DAP	4UKRIJD	1.4+07	1.4+07	Jour	IZV,47,(5),943	83	V.N.Dobrikov+	F0267
	α,d	^{12}C	DAP	3CPRNRS	3.1+07	3.1+07	Jour	PHE,8,199	84	Kongxiangjing+	S0078
	α,p	^{13}C	DAP	3CPRNRS	3.1+07	3.1+07	Jour	PHE,8,199	84	Kongxiangjing+	S0078
	α,t	^{11}C	DAP	4RUSMOS	2.5+07	2.5+07	Jour	IZV,38,(12),2567	74	T.A.Dmitrieva+	F0056
	α,t	^{11}C	DAP	3CPRNRS	3.1+07	3.1+07	Jour	PHE,8,199	84	Kongxiangjing+	S0078

5 Boron 11

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,α	^{8}Be	POD	4UKRKFT	2.6+06	2.7+06	Jour	IZV,39,(8),1736	75	Yu.G.Mashkarov+	F0349
	α,d	^{13}C	DAP	3CPRNRS	3.1+07	3.1+07	Jour	PHE,8,199	84	Kongxiangjing+	S0078
*	α,inel	^{11}B	DAP	2SF JYV	6.5+07	6.5+07	Jour	EPJ/CS,66,03007	14	A.N.Danilov+	O2192
	α,p	^{14}C	DAP	3CPRNRS	3.1+07	3.1+07	Jour	PHE,8,199	84	Kongxiangjing+	S0078
	α,t	^{12}C	DAP	4RUSMOS	1.4+07	2.5+07	Jour	IZV,38,(12),2567	74	T.A.Dmitrieva+	F0056
	α,t	^{12}C	DAP	3CPRNRS	3.1+07	3.1+07	Jour	PHE,8,199	84	Kongxiangjing+	S0078

6 Carbon

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,non		CS	4UKRIFU	1.4+07	1.4+07	Jour	UFZ,3,190	58	V.I.Strizhak+	32239

6 Carbon 12

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,α	^{9}Be	?	1USALRL	1.4+07	1.4+07	Jour	NSE,87,41	May 84	R.C.Haight+	12899
	n,n+2α	^{4}He	KER	1USALRL	1.4+07	1.4+07	Jour	NSE,87,41	May 84	R.C.Haight+	12899
	t,^{6}He	^{9}B	DAP	2UK DAR	3.8+07	3.8+07	Jour	JP/G,15,353	89	P.J.Simmonds+	O2204
	t,^{6}Li	^{9}Be	DAP	2UK DAR	3.8+07	3.8+07	Jour	JP/G,15,353	89	P.J.Simmonds+	O2204
	t,^{7}Li	^{8}Be	DAP	2UK DAR	3.8+07	3.8+07	Jour	JP/G,15,353	89	P.J.Simmonds+	O2204
	^{3}He,^{6}Li	^{9}B	DAP	2UK BIR	3.3+07	3.3+07	Jour	JP/G,15,353	89	P.J.Simmonds+	O2204
	^{3}He,^{6}Li	^{9}B	POD	2UK BIR	3.3+07	3.3+07	Jour	JP/G,15,353	89	P.J.Simmonds+	O2204
	^{3}He,^{7}Be	^{8}Be	DAP	2UK BIR	3.3+07	3.3+07	Jour	JP/G,15,353	89	P.J.Simmonds+	O2204
	^{3}He,^{7}Be	^{8}Be	POD	2UK BIR	3.3+07	3.3+07	Jour	JP/G,15,353	89	P.J.Simmonds+	O2204
*	α,inel	^{12}C	DAP	2SF JYV	6.5+07	6.5+07	Jour	EPJ/CS,66,03007	14	A.N.Danilov+	O2192
*	^{9}Be,el	^{12}C	DA	3CPRAEP	4.0+07	4.0+07	Jour	PR/C,87,017601	13	Z.H.Li+	S0075
*	^{12}C,x	^{6}He	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{6}Li	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{7}Li	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{7}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{9}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{8}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{11}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{11}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{12}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+α	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+d	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+^{3}He	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+p	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+t	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{18}O,^{14}C	^{16}O	DAP	2ITYLNS	8.4+07	8.4+07	Jour	PR/C,88,054601	13	M.Cavallaro+	O2173

*	^{18}O,^{14}C	^{16}O	DAP	2ITYLNS	8.4+07	8.4+07	Jour	EPJ/CS,66,03017	14	M.Cavallaro+	O2191
	^{17}F,non		CS	3CPRIMP	5.1+08	5.1+08	Jour	PHE,26,35	02	Zhanghuyong+	S0097
	^{18}F,non		CS	3CPRIMP	5.4+08	5.4+08	Jour	PHE,26,35	02	Zhanghuyong+	S0097
	^{19}F,non		CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,26,35	02	Zhanghuyong+	S0097
	^{20}F,non		CS	3CPRIMP	6.0+08	6.0+08	Jour	PHE,26,35	02	Zhanghuyong+	S0097
	^{21}F,non		CS	3CPRIMP	6.3+08	6.3+08	Jour	PHE,26,35	02	Zhanghuyong+	S0097
*	^{238}U,^{6}He	^{244}Cm	DA	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,^{6}He	^{244}Cm	?	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,2α	^{242}Pu	?	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,^{7}Li	^{243}Am	?	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,^{10}Be	^{240}Pu	DA	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,^{10}Be	^{240}Pu	?	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,^{9}Be	^{241}Pu	DA	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,^{9}Be	^{241}Pu	?	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,^{11}B	^{239}Np	DA	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,^{11}B	^{239}Np	?	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,^{13}C	^{237}U	?	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,^{14}C	^{236}U	DA	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,^{14}C	^{236}U	?	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,α	^{246}Cm	?	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,el	^{12}C	DA	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,el	^{12}C	?	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,inel	^{12}C	DAP	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183
*	^{238}U,inel	^{12}C	?	2FR GAN	1.5+09	1.5+09	Jour	PR/C,89,024614	14	C.Rodriguez-Tajes+	O2183

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	p,γ		RP	2BLGNAM	5.1+05	5.1+05	Jour	JP/CS,202,012015	10	G.Genard+	O2212
*	p,γ	^{14}N	CS	2BLGNAM	2.2+05	5.6+05	Jour	JP/CS,202,012015	10	G.Genard+	O2212
*	p,γ	^{14}N	CSP	2BLGNAM	2.2+05	5.6+05	Jour	JP/CS,202,012015	10	G.Genard+	O2212
	p,tot		RP	2NEDUTR	1.8+06	1.8+06	Jour	PR/C,24,2443	81	W.Biesiot+	O2223
	t,^{6}He	^{10}B	DAP	2UK DAR	3.8+07	3.8+07	Jour	JP/G,15,353	89	P.J.Simmonds+	O2204
	t,^{6}Li	^{10}Be	DAP	2UK DAR	3.8+07	3.8+07	Jour	JP/G,15,353	89	P.J.Simmonds+	O2204
	t,^{7}Li	^{9}Be	DAP	2UK DAR	3.8+07	3.8+07	Jour	JP/G,15,353	89	P.J.Simmonds+	O2204
	t,^{8}Li	^{8}Be	DAP	2UK DAR	3.8+07	3.8+07	Jour	JP/G,15,353	89	P.J.Simmonds+	O2204
	^{3}He,^{6}Li	^{10}B	DAP	2UK BIR	3.3+07	3.3+07	Jour	JP/G,15,353	89	P.J.Simmonds+	O2204
	α,n	^{16}O	MLT	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
	α,n	^{16}O	?	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
	α,t	^{14}N	DAP	4RUSMOS	1.9+07	2.5+07	Jour	IZV,38,(12),2567	74	T.A.Dmitrieva+	F0056
*	^{9}Be,^{8}Li	^{14}N	DAP	3CPRAEP	4.0+07	4.0+07	Jour	PR/C,87,017601	13	Z.H.Li+	S0075
*	^{9}Be,el	^{13}C	DA	3CPRAEP	4.0+07	4.0+07	Jour	PR/C,87,017601	13	Z.H.Li+	S0075
*	^{18}O,^{14}C	^{17}O	DAP	2ITYLNS	8.4+07	8.4+07	Jour	PR/C,88,054601	13	M.Cavallaro+	O2173

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	^{16}O,el	^{14}C	CS	2ITYPAD	3.8+07	5.4+07	Jour	JP/G,16,1517	90	U.Abbondanno+	O2198
	^{16}O,el	^{14}C	DA	2ITYPAD	3.8+07	5.4+07	Jour	JP/G,16,1517	90	U.Abbondanno+	O2198

7 Nitrogen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,non		CS	4UKRIFU	1.4+07	1.4+07	Jour	UFZ,3,190	58	V.I.Strizhak+	32239
	α,el		RP	3CPRBJG	3.6+06	4.9+06	Jour	CPL,9,176	92	Dingfurong+	S0070
	α,el	^{nat}N	DA	3CPRBJG	2.0+06	5.0+06	Jour	CPL,9,176	92	Dingfurong+	S0070

7 Nitrogen 14

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,α	^{12}C	DAP	2GERMPH	2.0+06	1.2+07	Thes	CHAUDHRI	64	M.Chaudhri	O2222

7 Nitrogen 15

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{16}O	CS	2ITYLGS	7.3+04	3.7+05	Jour	AAA,533,A66	11	A.Caciolli+	O2205

8 Oxygen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,n		MLT	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
*	^{12}C,x	^{6}He	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{6}Li	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{7}Li	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{7}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{9}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{8}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{11}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{11}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{12}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+α	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+d	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+^{3}He	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+p	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+t	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
	α,n		MLT	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
	α,n		?	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757

8 Oxygen 16

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,el	^{16}O	DA	1USATNL	8.6+07	8.6+07	Jour	PR/C,90,027603	14	L.S.Myers+	L0195
	γ,x+n	inclusive	CSP	1USALRL	2.1+07	2.6+07	Jour	PRL,15,976	Dec 65	J.T.Caldwell+	L0036
	γ,x+n	inclusive	INT	1USALRL		2.6+07	Jour	PRL,15,976	Dec 65	J.T.Caldwell+	L0036

8 Oxygen 17

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{18}F	CSP	2ITYLGS	1.7+05	3.7+05	Jour	PR/C,89,015803	14	A.Dileva+	O2098

8 Oxygen 18

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,n	^{17}O	CSP	1CANOTC	1.4+07	2.6+07	Jour	PR/C,36,1243	87	J.W.Jury+	M0879
	γ,n	^{17}O	DAP	1CANOTC	1.4+07	2.0+07	Jour	PR/C,36,1243	87	J.W.Jury+	M0879

9 Fluorine

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,n		MLT	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
	α,n		?	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757

9 Fluorine 19

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,α	^{16}O	CSP	2ITYNAP	5.8+05	9.8+05	Jour	JP/G,40,125102	13	I.Lombardo+	O2174
	p,α	^{16}O	CSP	2ITYPAD	8.0+02	8.6+02	Jour	NCL,11,33	74	R.Caracciolo+	O2207
*	p,α	^{16}O	DA	2ITYNAP	5.5+05	1.0+06	Jour	JP/G,40,125102	13	I.Lombardo+	O2174
*	p,α	^{16}O	DAP	2ITYNAP	6.0+05	1.0+06	Jour	JP/G,40,125102	13	I.Lombardo+	O2174
	p,α	^{16}O	DAP	2ITYPAD	8.4+05	8.6+05	Jour	NCL,11,33	74	R.Caracciolo+	O2207
	p,el	^{19}F	DA	2ITYPAD	6.6+05	1.8+06	Jour	NCL,11,33	74	R.Caracciolo+	O2207
*	p,inel	^{19}F	DAP	3CRORBZ	1.9+06	3.1+06	Jour	NIM/B,342,266	15	I.Zamboni+	D0754
	α,n	^{22}Na	MLT	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757

11 Sodium 23

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,α	^{20}Ne	CSP	2FR SAC	5.9+05	1.6+06	Jour	JRC,67,135	81	P.Trocellier+	O2210

	p,α	^{20}Ne	MLT	2FR SAC	1.0+06	1.8+06	Jour	JRC,67,135	81	P.Trocellier+	O2210
	p,inel	^{23}Na	CSP	2FR SAC	1.3+06	1.6+06	Jour	JRC,67,135	81	P.Trocellier+	O2210
	p,inel	^{23}Na	MLT	2FR SAC	1.0+06	1.8+06	Jour	JRC,67,135	81	P.Trocellier+	O2210

12 Magnesium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n		CS	1USATNL	1.1+07	1.3+07	Jour	PR/C,89,055802	14	R.J.Deboer+	L0197
	d,x	^{22}Na	CS	4RUSKUR	2.6+06	1.4+07	Jour	AE,2,(2),169	57	N.A.Vlasov+	F1220
	d,x	^{22}Na	TT	4RUSKUR	1.4+07	1.4+07	Jour	AE,2,(2),169	57	N.A.Vlasov+	F1220
	α,n		MLT	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
	α,n		?	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757

12 Magnesium 24

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,inel	^{24}Mg	DAP	3CRORBZ	1.9+06	3.1+06	Jour	NIM/B,342,266	15	I.Zamboni+	D0754
*	d,p	^{25}Mg	DAP	2GRCATH	1.3+06	2.0+06	Jour	NIM/B,319,34	14	V.Paneta+	O2177

12 Magnesium 25

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,α	^{23}Na	CSP	3CHFTHU	2.0+06	3.0+06	Jour	NP/A,102,537	67	W.N.Wang+	S0074
	d,α	^{23}Na	DAP	3CHFTHU	2.0+06	3.0+06	Jour	NP/A,102,537	67	W.N.Wang+	S0074
	α,n	^{28}Si	CS	3AULAML	1.6+06	5.4+06	Jour	NP/A,405,170	83	M.R.Anderson+	D0755
	α,n	^{28}Si	RR	3AULAML	Maxwl		Jour	NP/A,405,170	83	M.R.Anderson+	D0755

12 Magnesium 26

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,0		RP	1USATNL			Jour	PR/C,89,055802	14	R.J.Deboer+	L0197
*	γ,n	^{25}Mg	CS	1USATNL	1.1+07	1.3+07	Jour	PR/C,89,055802	14	R.J.Deboer+	L0197
	α,n	^{29}Si	CS	3AULAML	1.6+06	5.2+06	Jour	NP/A,405,170	83	M.R.Anderson+	D0755

13 Aluminium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,n		MLT	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
	α,n		?	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757

13 Aluminium 27

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,non		CS	4UKRIFU	1.4+07	1.4+07	Jour	UFZ,3,190	58	V.I.Strizhak+	32239
*	p,inel	^{27}Al	DAP	2SPNAUT	2.5+06	4.1+06	Jour	NIM/B,332,355	14	M.Chiari+	O2226
	α,n	^{30}P	MLT	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
	α,n	^{30}P	?	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
*	^{12}C,x	^{6}He	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{6}Li	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{7}Li	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{7}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{9}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{8}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{11}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{11}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{12}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+α	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+d	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+^{3}He	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+p	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+t	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{19}F,x	Many	DA	3CPRAEP	1.1+08	1.2+08	Jour	PHE,29,1142	05	Hanjianlong+	S0108

14 Silicon

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,n		MLT	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
	α,n		?	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
*	^{8}He,non		CS	3CPRIMP	2.1+08	2.9+08	Jour	PHE,29,944	05	Lichen+	S0107
*	^{8}He,x	^{6}He	CS	3CPRIMP	2.5+08	2.5+08	Jour	PHE,31,52	07	Lichen+	S0110
*	^{8}He,x+α	inclusive	CS	3CPRIMP	2.5+08	2.5+08	Jour	PHE,31,52	07	Lichen+	S0110
	^{7}Be,non		CS	3CPRIMP	2.1+08	2.1+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{9}Be,non		CS	3CPRIMP	2.7+08	2.7+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{11}Be,non		CS	3CPRIMP	3.3+08	3.3+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{12}Be,non		CS	3CPRIMP	3.6+08	3.6+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{14}Be,non		CS	3CPRIMP	4.2+08	4.2+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{8}B,non		CS	3CPRIMP	2.4+08	2.4+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{8}B,non		CS	3CPRIMP	4.3+08	4.3+08	Jour	PHE,25,1165	01	Wangquanjin+	S0086
	^{10}B,non		CS	3CPRIMP	3.0+08	3.0+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{10}B,non		CS	3CPRIMP	3.0+08	3.0+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{11}B,non		CS	3CPRIMP	3.3+08	3.3+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{11}B,non		CS	3CPRIMP	3.3+08	3.3+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{12}B,non		CS	3CPRIMP	3.6+08	3.6+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{12}B,non		CS	3CPRIMP	3.6+08	3.6+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{13}B,non		CS	3CPRIMP	3.9+08	3.9+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{14}B,non		CS	3CPRIMP	4.2+08	4.2+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{15}B,non		CS	3CPRIMP	4.5+08	4.5+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{9}C,non		CS	3CPRIMP	2.7+08	2.7+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{9}C,non		CS	3CPRIMP	5.5+08	5.5+08	Jour	PHE,25,1165	01	Wangquanjin+	S0086

	^{11}C,non		CS	3CPRIMP	3.3+08	3.3+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{11}C,non		CS	3CPRIMP	3.3+08	3.3+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{12}C,non		CS	3CPRIMP	3.6+08	3.6+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{12}C,non		CS	3CPRIMP	3.6+08	3.6+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{13}C,non		CS	3CPRIMP	3.9+08	3.9+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{13}C,non		CS	3CPRIMP	3.9+08	3.9+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{14}C,non		CS	3CPRIMP	4.2+08	4.2+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{14}C,non		CS	3CPRIMP	4.2+08	4.2+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{12}N,non		CS	3CPRIMP	3.6+08	3.6+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{12}N,non		CS	3CPRIMP	3.6+08	3.6+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{13}N,non		CS	3CPRIMP	3.9+08	3.9+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{13}N,non		CS	3CPRIMP	3.9+08	3.9+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{14}N,non		CS	3CPRIMP	4.2+08	4.2+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{14}N,non		CS	3CPRIMP	4.2+08	4.2+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{15}N,non		CS	3CPRIMP	4.5+08	4.5+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{15}N,non		CS	3CPRIMP	4.5+08	4.5+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{14}O,non		CS	3CPRIMP	4.2+08	4.2+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{14}O,non		CS	3CPRIMP	4.2+08	4.2+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{15}O,non		CS	3CPRIMP	4.5+08	4.5+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{15}O,non		CS	3CPRIMP	4.5+08	4.5+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{16}O,non		CS	3CPRIMP	4.8+08	4.8+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{16}O,non		CS	3CPRIMP	4.8+08	4.8+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{17}O,non		CS	3CPRIMP	5.1+08	5.1+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{17}O,non		CS	3CPRIMP	5.1+08	5.1+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{17}F,non		CS	3CPRIMP	5.1+08	5.1+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{17}F,non		CS	3CPRIMP	5.1+08	5.1+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{18}F,non		CS	3CPRIMP	5.4+08	5.4+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{18}F,non		CS	3CPRIMP	5.4+08	5.4+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{19}F,non		CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{19}F,non		CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{17}Ne,non		CS	3CPRIMP	5.1+08	5.1+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{17}Ne,non		CS	3CPRIMP	5.1+08	5.1+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{18}Ne,non		CS	3CPRIMP	5.4+08	5.4+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{18}Ne,non		CS	3CPRIMP	5.4+08	5.4+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{19}Ne,non		CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{19}Ne,non		CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{20}Ne,non		CS	3CPRIMP	6.0+08	6.0+08	Jour	PHE,26,683	02	Lijiaxing+	S0102
	^{20}Ne,non		CS	3CPRIMP	6.0+08	6.0+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	α,n		MLT	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757
	α,n		?	2ZZZGEL	4.0+06	5.5+06	Jour	ANE,10,541	83	G.J.H.Jacobs+	D0757

14 Silicon 28

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{12}N,non		CS	3CPRIMP	6.5+08	6.5+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
	^{17}Ne,non		CS	3CPRIMP	9.4+08	9.4+08	Jour	PHE,28,1256	04	Lijiaxing+	S0105
*	^{28}Si,fus		CS	2ITYPAD	2.3+07	3.6+07	Jour	PR/C,90,044608	14	G.Montagnoli+	D0750

14 Silicon 30

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{28}Si,fus		CS	2ITYPAD	2.4+07	3.6+07	Jour	PR/C,90,044608	14	G.Montagnoli+	D0750

17 Chlorine 35

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,α		RP	2NEDUTR	8.7+05	2.9+06	Jour	NP/A,110,17	68	B.Bosnjakovic+	O2215

18 Argon 40

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{41}Ar	CS	1USATNL	3.7+05	1.5+07	Jour	PL/B,736,361	14	M.Bhike+	14398

20 Calcium 40

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ		RP	2GERZFK	1.8+06	1.8+06	Jour	PR/C,89,045802	14	K.Schmidt+	O2197
*	α,p		?	2GERZFK			Jour	PR/C,89,045802	14	K.Schmidt+	O2197

20 Calcium 48

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	α,inel	^{48}Ca	DAA	2NEDKVI	1.4+08	1.4+08	Jour	PL/B,730,288	14	V.Derya+	O2175

22 Titanium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,x	^{43}Sc	CS	2JPNIPC	1.4+07	2.4+07	Jour	NDS,119,252	14	M.U.Khandaker+	E2462
*	d,x	^{44}Sc	CS	2JPNIPC	3.1+06	2.4+07	Jour	NDS,119,252	14	M.U.Khandaker+	E2462
*	d,x	^{46}Sc	CS	2JPNIPC	3.1+06	2.4+07	Jour	NDS,119,252	14	M.U.Khandaker+	E2462
*	d,x	^{47}Sc	CS	2JPNIPC	3.1+06	2.4+07	Jour	NDS,119,252	14	M.U.Khandaker+	E2462
*	d,x	^{48}Sc	CS	2JPNIPC	3.1+06	2.4+07	Jour	NDS,119,252	14	M.U.Khandaker+	E2462
*	d,x	^{48}V	CS	2JPNIPC	3.1+06	2.4+07	Jour	NDS,119,252	14	M.U.Khandaker+	E2462
*	^{12}C,x	^{6}He	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{6}Li	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{7}Li	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{7}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{9}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218

*	^{12}C,x	^{10}Be	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{8}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{11}B	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{10}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{11}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x	^{12}C	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+α	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+d	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+^{3}He	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+p	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218
*	^{12}C,x+t	inclusive	DA	2FR GAN	1.1+09	1.1+09	Jour	PR/C,89,064615	14	J.Dudouet+	O2218

22 Titanium 44

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	α,p	^{47}V	CS	2ZZZCER	4.2+06	4.2+06	Jour	PL/B,731,358	14	V.Margerin+	O2193

22 Titanium 48

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x+n	inclusive	CS	2ITYTUP	1.2+07	2.4+07	Jour	NC/B,48,460	67	S.Costa+	M0888

23 Vanadium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,x	^{54}Mn	TT	4RUSFEI	6.5+06	4.0+07	Jour	AE,21,(1),52	66	N.N.Krasnov+	F1224

23 Vanadium 51

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,x+α	inclusive	DA	4UKRKFT	1.5+07	1.5+07	Jour	VAT/F,1/18,15	77	G.P.Dolya+	41306
	α,n	^{54}Mn	TT	4RUSFEI	4.2+07	4.2+07	Jour	AE,21,(1),52	66	N.N.Krasnov+	F1224

24 Chromium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	$^{\rm nat}$Cr	DA	1USAANL	1.6+06	2.2+07	Jour	JP/G,23,197	97	A.B.Smith+	13630
*	p,x	^{48}V	CS	2GERJUL	2.2+07	4.2+07	Jour	RCA,101,491	13	M.Buchholz+	O2176
*	p,x	^{48}Cr	CS	2GERJUL	3.3+07	4.2+07	Jour	RCA,101,491	13	M.Buchholz+	O2176
*	p,x	^{49}Cr	CS	2GERJUL	1.7+07	4.2+07	Jour	RCA,101,491	13	M.Buchholz+	O2176

*	p,x	^{51}Cr	CS	2GERJUL	1.7+07	4.5+07	Jour	RCA,101,491	13	M.Buchholz+	O2176
*	p,x	^{51}Cr	?	2GERJUL	8.2+06	1.7+07	Jour	RCA,101,491	13	M.Buchholz+	O2176
*	p,x	^{52}Mn	CS	2GERJUL	7.7+06	4.5+07	Jour	RCA,101,491	13	M.Buchholz+	O2176
*	p,x	^{52}Mn	?	2GERJUL	8.2+06	1.7+07	Jour	RCA,101,491	13	M.Buchholz+	O2176
	p,x	^{54}Mn	TT	4RUSFEI	4.3+06	2.2+07	Jour	AE,21,(1),52	66	N.N.Krasnov+	F1224
	d,x	^{54}Mn	TT	4RUSFEI	1.2+06	2.1+07	Jour	AE,21,(1),52	66	N.N.Krasnov+	F1224
	α,x	^{54}Mn	TT	4RUSFEI	1.3+07	4.2+07	Jour	AE,21,(1),52	66	N.N.Krasnov+	F1224

25 Manganese 55

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,x+α	inclusive	DA	4UKRKFT	1.5+07	1.5+07	Jour	VAT/F,1/18,15	77	G.P.Dolya+	41306
p,x	^{54}Mn	TT	4RUSFEI	9.9+06	2.2+07	Jour	AE,21,(1),52	66	N.N.Krasnov+	F1224

26 Iron

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ		CS	1USAORL	1.1+03	1.3+03	Conf	94GATLIN,1,99	May 94	R.R.Spencer+	13601
n,inel	^{nat}Fe	DAP	1USAORL	8.5+05	2.1+06	Jour	NSE,63,418	Aug 77	W.E.Kinney+	10682
n,non		CS	4UKRIFU	1.4+07	1.4+07	Jour	UFZ,3,190	58	V.I.Strizhak+	32239
d,x	^{54}Mn	TT	4RUSFEI	3.7+06	2.1+07	Jour	AE,21,(1),52	66	N.N.Krasnov+	F1224

26 Iron 54

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
d,α	^{52}Mn	CS	4RUSKUR	4.6+06	1.4+07	Jour	AE,2,(2),169	57	N.A.Vlasov+	F1220
d,α	^{52}Mn	TT	4RUSKUR	1.4+07	1.4+07	Jour	AE,2,(2),169	57	N.A.Vlasov+	F1220
d,n	^{55}Co	CS	4RUSKUR	3.0+06	1.4+07	Jour	AE,2,(2),169	57	N.A.Vlasov+	F1220
d,n	^{55}Co	TT	4RUSKUR	1.4+07	1.4+07	Jour	AE,2,(2),169	57	N.A.Vlasov+	F1220
^{7}Li,^{6}He	^{55}Co	DAP	2UK UK	5.0+07	5.0+07	Jour	JP/G,18,L197	92	O.Karban+	O2201
^{7}Li,^{6}He	^{55}Co	POD	2UK UK	5.0+07	5.0+07	Jour	JP/G,18,L197	92	O.Karban+	O2201

27 Cobalt 59

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,x+α	inclusive	DA	4UKRKFT	1.5+07	1.5+07	Jour	VAT/F,1/18,15	77	G.P.Dolya+	41306

28 Nickel

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
p,x	Many	CS	4ZZZDUB	8.1+09	8.1+09	Jour	JP/G,16,45	90	P.Kozma+	F1223

	d,x	Many	CS	4ZZZDUB	7.3+09	7.3+09	Jour	JP/G,16,45	90	P.Kozma+	F1223

28 Nickel 58

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	1USAORL			Conf	77GEEL,,530	Dec 77	F.G.Perey+	12733
*	^{6}He,el	^{58}Ni	DA	3BZLUSP	1.2+07	2.2+07	Jour	PL/B,732,228	14	V.Morcelle+	D0748
*	^{7}Be,x+α	inclusive	DA	2ITYPAD	2.2+07	2.2+07	Jour	EPJ/CS,66,03060	14	M.Mazzocco+	O2186
*	^{7}Be,x+^{3}He	inclusive	DA	2ITYPAD	2.2+07	2.2+07	Jour	EPJ/CS,66,03060	14	M.Mazzocco+	O2186

29 Copper

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x	Many	CS	4RUSJIA	6.8+08	6.8+08	Jour	AE,2,(4),345	57	A.K.Lavrukhina+	F1235
	p,x	Many	CS	4ZZZDUB	8.2+09	8.2+09	Jour	CZJ/B,38,(12),1317	88	P.Kozma+	F1242
	p,x	^{43}Sc	?	4RUSJIA	6.8+08	6.8+08	Jour	AE,2,(4),345	57	A.K.Lavrukhina+	F1235
	d,x	Many	CS	4ZZZDUB	7.3+09	7.3+09	Jour	CZJ/B,38,(12),1317	88	P.Kozma+	F1242
*	d,x	^{59}Fe	CS	2JPNIPC	1.9+07	2.3+07	Jour	JRN,302,759	14	M.U.Khandaker+	E2467
*	d,x	^{60}Co	CS	2JPNIPC	1.3+07	2.3+07	Jour	JRN,302,759	14	M.U.Khandaker+	E2467
*	d,x	^{64}Cu	CS	2JPNIPC	9.0+06	2.3+07	Jour	JRN,302,759	14	M.U.Khandaker+	E2467
*	d,x	^{62}Zn	CS	2JPNIPC	1.9+07	2.3+07	Jour	JRN,302,759	14	M.U.Khandaker+	E2467
*	d,x	^{65}Zn	CS	2JPNIPC	9.0+06	2.3+07	Jour	JRN,302,759	14	M.U.Khandaker+	E2467
*	α,el	^{nat}Cu	DA	2SPNAUT	7.8+06	1.0+07	Jour	NIM/B,332,191	14	A.Climent-Font+	O2227

29 Copper 63

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,p	^{64}Cu	CS	3CHLSAN	2.4+06	2.4+06	Jour	NIM/B,227,385	05	J.R.Morales+	D0763
	α,n	^{66}Ga	CS	4RUSFTI	9.9+06	1.9+07	Jour	AE,77,(1),81	94	V.A.Didik+	F1233

29 Copper 65

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,2n	^{65}Zn	CS	4RUSFEI	6.2+06	2.1+07	Jour	AE,18,(2),184	65	P.P.Dmitriev+	F1221
	d,2n	^{65}Zn	TT	4RUSFEI	2.0+07	2.0+07	Jour	AE,18,(2),184	65	P.P.Dmitriev+	F1221
	α,2n	^{67}Ga	CS	4RUSFTI	1.7+07	2.0+07	Jour	AE,77,(1),81	94	V.A.Didik+	F1233

30 Zinc

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,x+n	inclusive	CS	2ITYTUP	1.2+07	2.4+07	Jour	NC/B,48,460	67	S.Costa+	M0888

	n,non		CS	4UKRIFU	1.4+07	1.4+07	Jour	UFZ,3,190	58	V.I.Strizhak+	32239
*	p,x	^{67}Ga	CS	3CHLSAN	1.7+06	2.4+06	Jour	NIM/B,344,59	15	J.A.Wachter+	D0762
*	α,el	^{nat}Zn	DA	2SPNAUT	7.3+06	1.0+07	Jour	NIM/B,332,191	14	A.Climent-Font+	O2227

30 Zinc 64

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{65}Zn	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
*	^{6}Li,fus		CS	2ITYLNS	9.0+06	2.9+07	Jour	PR/C,87,064614	14	A.Dipietro+	O2185
*	^{7}Li,fus		CS	2ITYLNS	8.9+06	2.8+07	Jour	PR/C,87,064614	14	A.Dipietro+	O2185

30 Zinc 66

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,2n	^{66}Ga	CS	4RUSKUR	8.7+06	1.4+07	Jour	AE,2,(2),169	57	N.A.Vlasov+	F1220
	d,2n	^{66}Ga	TT	4RUSKUR	1.4+07	1.4+07	Jour	AE,2,(2),169	57	N.A.Vlasov+	F1220

30 Zinc 68

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{69}Zn	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
	n,γ	^{69}Zn	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749

31 Gallium 69

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,2n	^{71}As	CS	4RUSFTI	1.6+07	1.9+07	Jour	AE,77,(1),81	94	V.A.Didik+	F1233
	α,n	^{72}As	CS	4RUSFTI	7.4+06	2.0+07	Jour	AE,77,(1),81	94	V.A.Didik+	F1233

31 Gallium 71

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{72}Ga	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
	n,γ	^{72}Ga	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749
	α,n	^{74}As	CS	4RUSFTI	7.0+06	2.0+07	Jour	AE,77,(1),81	94	V.A.Didik+	F1233

32 Germanium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x	^{74}As	CS	4ZZZDUB	1.2+08	6.6+08	Jour	ZET,44,(6),1800	63	Wangchuan-Peng+	F1222
	p,x	^{76}As	CS	4ZZZDUB	1.2+08	6.6+08	Jour	ZET,44,(6),1800	63	Wangchuan-Peng+	F1222
	p,x	^{77}As	CS	4ZZZDUB	1.2+08	6.6+08	Jour	ZET,44,(6),1800	63	Wangchuan-Peng+	F1222
	p,x	^{78}As	CS	4ZZZDUB	1.2+08	6.6+08	Jour	ZET,44,(6),1800	63	Wangchuan-Peng+	F1222

32 Germanium 70

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,^{3}He	^{69}Ga	DAP	2GERKRU	5.2+07	5.2+07	Jour	JP/G,18,525	92	G.Rau+	O2202
	d,^{3}He	^{69}Ga	POD	2GERKRU	5.2+07	5.2+07	Jour	JP/G,18,525	92	G.Rau+	O2202

32 Germanium 74

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{84}Kr,5n	^{153}Er	CS	2FR PAR	3.2+08	3.5+08	Jour	CR/B,273,505	71	R.Bimbot+	O2216
	^{84}Kr,6n	^{152}Er	CS	2FR PAR	3.7+08	3.7+08	Jour	CR/B,273,505	71	R.Bimbot+	O2216

34 Selenium 78

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,p	^{78}As	CS	3INDPOO	1.4+07	1.5+07	Jour	PR/C,90,064609	14	F.M.D.Attar+	33080

34 Selenium 80

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,p	^{80}As	CS	3INDPOO	1.4+07	1.5+07	Jour	PR/C,90,064609	14	F.M.D.Attar+	33080

35 Bromine 81

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{82}Br	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

37 Rubidium 85

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{86}Rb	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

37 Rubidium 87

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{88}Rb	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

38 Strontium 84

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{85}Sr	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

38 Strontium 86

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{87}Sr	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

39 Yttrium 89

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{90}Y	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
	n,γ	^{90}Y	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749
*	p,γ	^{90}Zr	CS	2GERKLN	3.6+06	4.6+06	Jour	NIM/A,754,94	14	L.Netterdon+	O2203

39 Yttrium 100

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,B-	^{100}Zr	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

39 Yttrium 101

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,B-	^{101}Zr	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

39 Yttrium 102

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,B-	^{102}Zr	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

39 Yttrium 103

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,B-	^{103}Zr	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

40 Zirconium 94

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{95}Zr	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
	n,γ	^{95}Zr	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749

40 Zirconium 96

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{97}Zr	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
	n,γ	^{97}Zr	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749

41 Niobium 93

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{94}Nb	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
	n,γ	^{94}Nb	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749
*	p,x	^{87}Y	CS	4RUSJIA	1.4+08	3.2+08	Jour	IZV,76,(11),1330	12	E.S.Kylosova+	F1226
	^{19}F,x	Many	DA	3CPRAEP	1.0+08	1.1+08	Jour	PHE,26,239	02	Tianwendong+	S0099

41 Niobium 104

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,B-	^{104}Mo	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540
	0,B-	^{104}Mo	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

41 Niobium 105

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,B-	^{105}Mo	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

41 Niobium 106

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,B-	^{106}Mo	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

41 Niobium 107

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,B-	^{107}Mo	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

41 Niobium 108

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,B-	^{108}Mo	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

41 Niobium 109

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,B-	^{109}Mo	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

41 Niobium 110

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,B-	^{110}Mo	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

42 Molybdenum 96

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	*d,p*	^{97}Mo	DAP	2UK ALD	1.2+07	1.2+07	Jour	IMP/E,20,(12),2427	11	M.S.Chowdhury+	O2195

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	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

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	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

43 Technetium 109

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,B-	^{109}Ru	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

43 Technetium 110

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,B-	^{110}Ru	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

43 Technetium 111

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,B-	^{111}Ru	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

43 Technetium 112

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,B-	^{112}Ru	NUD	2GERMNZ	Spont		Jour	PRL,77,458	96	T.Mehren+	O0540

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	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
n,γ	^{97}Ru	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749

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	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
n,γ	^{105}Ru	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749

45 Rhodium 103

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
p,inel	^{103}Rh	MLT	2BLGNAM	1.2+06	2.5+06	Jour	JRC,24,437	75	G.Deconninck+	O2208

46 Palladium 104

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
p,inel	^{104}Pd	MLT	2BLGNAM	1.6+06	2.9+06	Jour	JRC,24,437	75	G.Deconninck+	O2208

46 Palladium 108

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
p,inel	^{108}Pd	MLT	2BLGNAM	1.6+06	2.9+06	Jour	JRC,24,437	75	G.Deconninck+	O2208

46 Palladium 110

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
p,inel	^{110}Pd	MLT	2BLGNAM	1.9+06	2.9+06	Jour	JRC,24,437	75	G.Deconninck+	O2208

47 Silver 107

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
p,inel	^{107}Ag	MLT	2BLGNAM	1.3+06	2.5+06	Jour	JRC,24,437	75	G.Deconninck+	O2208
α,x	^{109}Cd	CS	4RUSFEI	1.5+07	4.2+07	Jour	AE,22,(4),310	67	P.P.Dmitriev+	F1240
α,x	^{109}Cd	TT	4RUSFEI	1.7+07	4.0+07	Jour	AE,22,(4),310	67	P.P.Dmitriev+	F1240

47 Silver 109

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

	p,inel	^{109}Ag	MLT	2BLGNAM	1.3+06	2.5+06	Jour	JRC,24,437	75	G.Deconninck+	O2208
	p,n	^{109}Cd	CS	4RUSFEI	3.6+06	2.1+07	Jour	AE,22,(4),310	67	P.P.Dmitriev+	F1240
	p,n	^{109}Cd	TT	4RUSFEI	4.5+06	2.2+07	Jour	AE,22,(4),310	67	P.P.Dmitriev+	F1240
	d,2n	^{109}Cd	CS	4RUSFEI	4.4+06	2.1+07	Jour	AE,22,(4),310	67	P.P.Dmitriev+	F1240
	d,2n	^{109}Cd	TT	4RUSFEI	5.5+06	2.1+07	Jour	AE,22,(4),310	67	P.P.Dmitriev+	F1240

48 Cadmium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,non		CS	4UKRIFU	1.4+07	1.4+07	Jour	UFZ,3,190	58	V.I.Strizhak+	32239

48 Cadmium 111

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,el	^{111}Cd	DA	2GERLMU	2.2+07	2.2+07	Jour	EPJ/CS,66,02056	14	D.S.Jamieson+	O2190
*	d,el	^{111}Cd	POD	2GERLMU	2.2+07	2.2+07	Jour	EPJ/CS,66,02056	14	D.S.Jamieson+	O2190
*	d,p	^{112}Cd	DAP	2GERLMU	2.2+07	2.2+07	Jour	EPJ/CS,66,02056	14	D.S.Jamieson+	O2190
*	d,p	^{112}Cd	POD	2GERLMU	2.2+07	2.2+07	Jour	EPJ/CS,66,02056	14	D.S.Jamieson+	O2190

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	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

50 Tin

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,non		CS	4UKRIFU	1.4+07	1.4+07	Jour	UFZ,3,190	58	V.I.Strizhak+	32239

50 Tin 112

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,2n	^{110}Sn	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889
	n,γ	^{113}Sn	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
	n,γ	^{113}Sn	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749

50 Tin 116

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,n	^{116}Sb	CS	4UKRUFT	5.8+06	8.2+06	Jour	YF,11,(5),953	70	A.P.Klucharev+	F1227

50 Tin 117

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,n	^{117}Sb	CS	4UKRUFT	2.9+06	8.4+06	Jour	YF,11,(5),953	70	A.P.Klucharev+	F1227

50 Tin 118

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,p	^{117}In	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889
	p,n	^{118}Sb	CS	4UKRUFT	4.5+06	8.4+06	Jour	YF,11,(5),953	70	A.P.Klucharev+	F1227

50 Tin 119

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,n	^{119}Sb	CS	4UKRUFT	5.6+06	8.4+06	Jour	YF,11,(5),953	70	A.P.Klucharev+	F1227

50 Tin 120

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,n	^{120}Sb	CS	4UKRUFT	3.5+06	8.4+06	Jour	YF,11,(5),953	70	A.P.Klucharev+	F1227

50 Tin 122

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{123}Sn	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
	p,n	^{122}Sb	CS	4UKRUFT	3.5+06	8.3+06	Jour	YF,11,(5),953	70	A.P.Klucharev+	F1227

50 Tin 124

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,n	^{123}Sn	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889
	n,γ	^{125}Sn	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

n,γ	^{125}Sn	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749

51 Antimony 121

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{122}Sb	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
	n,γ	^{122}Sb	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749

51 Antimony 123

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{124}Sb	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
	n,γ	^{124}Sb	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749

52 Tellurium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,x	^{126}Sb	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889
*	γ,x	^{127}Sb	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889
*	γ,x	^{129}Sb	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889
*	γ,x	^{119}Te	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889
*	γ,x	^{121}Te	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889
*	γ,x	^{123}Te	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889
*	γ,x	^{129}Te	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889

52 Tellurium 122

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,n	^{125}Xe	DAP	2UK LVP	1.8+07	1.8+07	Jour	JP/G,9,1245	83	A.D.Irving+	O2200
	α,n	^{125}Xe	POD	2UK LVP	1.8+07	1.8+07	Jour	JP/G,9,1245	83	A.D.Irving+	O2200

52 Tellurium 126

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	α,n	^{129}Xe	DAP	2UK LVP	1.6+07	1.6+07	Jour	JP/G,5,1595	79	A.D.Irving+	O2199
	α,n	^{129}Xe	POD	2UK LVP	1.6+07	1.6+07	Jour	JP/G,5,1595	79	A.D.Irving+	O2199

52 Tellurium 128

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
α,n	^{131}Xe	DAP	2UK LVP	1.6+07	1.6+07	Jour	JP/G,5,1595	79	A.D.Irving+	O2199
α,n	^{131}Xe	POD	2UK LVP	1.6+07	1.6+07	Jour	JP/G,5,1595	79	A.D.Irving+	O2199

53 Iodine 127

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{128}I	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
n,γ	^{128}I	?	3HUNKFI	5.5-01		Jour	JRC,54,377	79	L.Moens+	31749

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	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
p,x	^{123}Xe	CS	4RUSLIN	1.0+09	1.0+09	Jour	RRL,36,(2-3),125	78	E.G.Alekseev+	F1234
p,x	^{125}Xe	CS	4RUSLIN	1.0+09	1.0+09	Jour	RRL,36,(2-3),125	78	E.G.Alekseev+	F1234

56 Barium

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
p,x	^{123}Xe	CS	4RUSLIN	1.0+09	1.0+09	Jour	RRL,36,(2-3),125	78	E.G.Alekseev+	F1234
p,x	^{125}Xe	CS	4RUSLIN	1.0+09	1.0+09	Jour	RRL,36,(2-3),125	78	E.G.Alekseev+	F1234

57 Lanthanum

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
p,x	^{123}Xe	CS	4RUSLIN	1.0+09	1.0+09	Jour	RRL,36,(2-3),125	78	E.G.Alekseev+	F1234
p,x	^{125}Xe	CS	4RUSLIN	1.0+09	1.0+09	Jour	RRL,36,(2-3),125	78	E.G.Alekseev+	F1234

62 Samarium 152

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{153}Sm	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

62 Samarium 154

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{155}Sm	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

63 Europium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,x	^{147}Gd	CS	2GERJUL	3.5+07	4.5+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	p,x	^{147}Gd	?	2GERJUL	3.1+07	4.5+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	p,x	^{149}Gd	CS	2GERJUL	1.8+07	4.5+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	p,x	^{149}Gd	?	2GERJUL	3.1+07	3.6+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	p,x	^{151}Gd	CS	2GERJUL	1.6+07	4.5+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
	p,x	^{151}Gd	TT	4RUSFEI	2.0+07	2.0+07	Jour	AE,27,(3),208	69	N.A.Konyakhin+	F1231
*	p,x	^{151}Gd	?	2GERJUL	3.1+07	3.6+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	p,x	^{153}Gd	CS	2GERJUL	1.6+07	4.5+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
	p,x	^{153}Gd	TT	4RUSFEI	2.0+07	2.0+07	Jour	AE,27,(3),208	69	N.A.Konyakhin+	F1231
*	p,x	^{153}Gd	?	2GERJUL	3.1+07	3.6+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	d,x	^{146}Gd	CS	2GERJUL	5.2+07	7.1+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	d,x	^{146}Gd	?	2GERJUL	2.2+07	7.1+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	d,x	^{147}Gd	CS	2GERJUL	3.9+07	7.1+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	d,x	^{147}Gd	?	2GERJUL	2.2+07	7.1+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	d,x	^{149}Gd	CS	2GERJUL	2.3+07	7.1+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	d,x	^{149}Gd	?	2GERJUL	2.2+07	7.1+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	d,x	^{151}Gd	CS	2GERJUL	2.3+07	7.1+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
	d,x	^{151}Gd	TT	4RUSFEI	2.0+07	2.0+07	Jour	AE,27,(3),208	69	N.A.Konyakhin+	F1231
*	d,x	^{151}Gd	?	2GERJUL	2.2+07	7.1+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
*	d,x	^{153}Gd	CS	2GERJUL	2.3+07	7.1+07	Jour	ARI,91,8	14	M.Buchholz+	O2221
	d,x	^{153}Gd	TT	4RUSFEI	2.0+07	2.0+07	Jour	AE,27,(3),208	69	N.A.Konyakhin+	F1231
*	d,x	^{153}Gd	?	2GERJUL	2.2+07	7.1+07	Jour	ARI,91,8	14	M.Buchholz+	O2221

63 Europium 151

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,2n	^{151}Gd	CS	4RUSFEI	4.1+06	2.1+07	Jour	AE,27,(3),208	69	N.A.Konyakhin+	F1231

63 Europium 153

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,2n	^{153}Gd	CS	4RUSFEI	4.1+06	2.1+07	Jour	AE,27,(3),208	69	N.A.Konyakhin+	F1231

64 Gadolinium 155

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ		RP	4ZZZDUB	1.7+03	8.4+04	Conf	75KIEV,4,55	75	L.Aldea+	41601
	n,γ	^{156}Gd	?	4ZZZDUB	2.0+00	8.4+04	Conf	75KIEV,4,55	75	L.Aldea+	41601

64 Gadolinium 157

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{158}Gd	?	4ZZZDUB	2.0+00	8.5+01	Conf	75KIEV,4,55	75	L.Aldea+	41601

66 Dysprosium 164

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{165}Dy	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

67 Holmium 165

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{166}Ho	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

70 Ytterbium 168

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	α,γ	^{172}Hf	CS	2GERPTB	1.3+07	1.5+07	Jour	NP/A,916,149	13	L.Netterdon+	O2178
*	α,n	^{171}Hf	CS	2GERPTB	1.3+07	1.5+07	Jour	NP/A,916,149	13	L.Netterdon+	O2178

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	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

71 Lutetium 176

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	$n,0$		RP	3BZLIPE			Prog	INDC(SEC)-28,34	72	S.B.Herdade	31748

72 Hafnium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,x	^{179}Lu	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889
*	γ,x	^{173}Hf	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889
*	γ,x	^{175}Hf	CS	4ARMJER		4.0+07	Jour	YF,77,1378	14	A.S.Danagulyan+	M0889

72 Hafnium 179

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{180}Hf	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

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	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

73 Tantalum 181

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,el	^{181}Ta	CS	2GERZFK	2.4+06	7.5+06	Jour	PR/C,90,044301	14	A.Makinaga+	M0886
*	p,x	^{177}Lu	CS	4RUSJIA	1.4+08	3.2+08	Jour	IZV,76,(11),1330	12	E.S.Kylosova+	F1226
	α,n	^{184}Re	CS	4ZZZDUB	1.8+07	1.8+07	Jour	IZV,68,(2),167	04	Yu.P.Gangrsky+	F1241

74 Tungsten

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,x	^{187}W	CS	2ZZZISP	6.6+06	1.7+07	Jour	RCA,102,669	14	S.Manenti+	O2224
*	d,x	^{187}W	TT	2ZZZISP	1.1+07	1.7+07	Jour	RCA,102,669	14	S.Manenti+	O2224
*	d,x	^{181}Re	CS	2ZZZISP	1.4+07	1.7+07	Jour	RCA,102,669	14	S.Manenti+	O2224
*	d,x	^{181}Re	TT	2ZZZISP	1.5+07	1.7+07	Jour	RCA,102,669	14	S.Manenti+	O2224
*	d,x	^{182}Re	CS	2ZZZISP	7.7+06	1.7+07	Jour	RCA,102,669	14	S.Manenti+	O2224
*	d,x	^{182}Re	TT	2ZZZISP	1.1+07	1.7+07	Jour	RCA,102,669	14	S.Manenti+	O2224
*	d,x	^{183}Re	CS	2ZZZISP	6.6+06	1.7+07	Jour	RCA,102,669	14	S.Manenti+	O2224
*	d,x	^{183}Re	TT	2ZZZISP	1.1+07	1.7+07	Jour	RCA,102,669	14	S.Manenti+	O2224
*	d,x	^{184}Re	CS	2ZZZISP	6.6+06	1.7+07	Jour	RCA,102,669	14	S.Manenti+	O2224
*	d,x	^{184}Re	TT	2ZZZISP	1.1+07	1.7+07	Jour	RCA,102,669	14	S.Manenti+	O2224
*	d,x	^{186}Re	CS	2ZZZISP	6.6+06	1.7+07	Jour	RCA,102,669	14	S.Manenti+	O2224
*	d,x	^{186}Re	TT	2ZZZISP	1.1+07	1.7+07	Jour	RCA,102,669	14	S.Manenti+	O2224

74 Tungsten 186

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{187}W	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
*	d,x	^{187}W	TT	2ZZZISP	1.3+07	1.3+07	Jour	RCA,102,669	14	S.Manenti+	O2224
*	d,x	^{186}Re	TT	2ZZZISP	1.3+07	1.3+07	Jour	RCA,102,669	14	S.Manenti+	O2224

75 Rhenium 185

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{186}Re	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
*	^{3}He,d	^{186}Os	DAP	2GERLMU	3.0+07	3.0+07	Jour	PR/C,82,034321	10	A.A.Phillips+	O2229

75 Rhenium 187

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{188}Re	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
*	^{3}He,d	^{188}Os	DAP	2GERLMU	3.0+07	3.0+07	Jour	PR/C,82,034321	10	A.A.Phillips+	O2229

76 Osmium 190

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,2n	^{190}Ir	CS	4ZZZDUB	1.4+07	1.4+07	Jour	IZV,68,(2),167	04	Yu.P.Gangrsky+	F1241

77 Iridium 193

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{194}Ir	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750

78 Platinum

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		?	1USABRK	8.4+07	8.4+07	Jour	PR,73,1135	48	E.L.Kelly+	14401

78 Platinum 194

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,inel	^{194}Pt	MLT	2BLGNAM	1.4+06	2.4+06	Jour	JRC,24,437	75	G.Deconninck+	O2208

78 Platinum 195

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,inel	^{195}Pt	MLT	2BLGNAM	1.4+06	2.4+06	Jour	JRC,24,437	75	G.Deconninck+	O2208

78 Platinum 196

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,inel	^{196}Pt	MLT	2BLGNAM	1.4+06	2.4+06	Jour	JRC,24,437	75	G.Deconninck+	O2208
	d,2n	^{196}Au	CS	4ZZZDUB	1.3+07	1.3+07	Jour	IZV,68,(2),167	04	Yu.P.Gangrsky+	F1241

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	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
	p,inel	^{198}Pt	MLT	2BLGNAM	1.9+06	2.4+06	Jour	JRC,24,437	75	G.Deconninck+	O2208

79 Gold 197

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		?	1USABRK	8.4+07	8.4+07	Jour	PR,73,1135	48	E.L.Kelly+	14401
	p,inel	^{197}Au	MLT	2BLGNAM	1.5+06	2.4+06	Jour	JRC,24,437	75	G.Deconninck+	O2208
*	p,x	^{194}Ir	CS	4RUSJIA	1.4+08	3.2+08	Jour	IZV,76,(11),1330	12	E.S.Kylosova+	F1226
*	p,x	^{196}Au	CS	4RUSJIA	1.4+08	3.2+08	Jour	IZV,76,(11),1330	12	E.S.Kylosova+	F1226
*	p,x	^{193}Hg	CS	4RUSJIA	1.4+08	3.2+08	Jour	IZV,76,(11),1330	12	E.S.Kylosova+	F1226
*	p,x	^{195}Hg	CS	4RUSJIA	1.4+08	3.2+08	Jour	IZV,76,(11),1330	12	E.S.Kylosova+	F1226
*	^{12}C,x+α	inclusive	DA	2ITYLNS	7.4+08	7.4+08	Jour	APP/B,45,565	14	S.Tropea+	O2219
	^{17}N,X+^{6}Li	^{7}Be	CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,25,834	01	Wanghongwei+	S0081
	^{17}N,X+^{7}Li	^{7}Be	CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,25,834	01	Wanghongwei+	S0081
	^{17}N,X+^{8}Li	^{7}Be	CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,25,834	01	Wanghongwei+	S0081
	^{17}N,X+α	^{10}B	CS	3CPRIMP	5.7+08	5.7+08	Jour	PHE,25,834	01	Wanghongwei+	S0081
	^{17}N,x	Many	DA	3CPRIMP	5.7+08	5.7+08	Jour	PHE,25,834	01	Wanghongwei+	S0081

80 Mercury

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		?	1USABRK	8.4+07	8.4+07	Jour	PR,73,1135	48	E.L.Kelly+	14401
	n,non		CS	4UKRIFU	1.4+07	1.4+07	Jour	UFZ,3,190	58	V.I.Strizhak+	32239

80 Mercury 200

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,el	^{200}Hg	DA	2GERLMU	2.2+07	2.2+07	Jour	EPJ/CS,66,02088	14	E.T.Rand+	O2189
*	d,t	^{199}Hg	DAP	2GERLMU	2.2+07	2.2+07	Jour	EPJ/CS,66,02088	14	E.T.Rand+	O2189

81 Thallium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		?	1USABRK	8.4+07	8.4+07	Jour	PR,73,1135	48	E.L.Kelly+	14401

82 Lead

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		?	1USABRK	8.4+07	8.4+07	Jour	PR,73,1135	48	E.L.Kelly+	14401
	n,non		CS	4UKRIFU	1.4+07	1.4+07	Jour	UFZ,3,190	58	V.I.Strizhak+	32239

82 Lead 206

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		?	1USABRK	8.4+07	8.4+07	Jour	PR,73,1135	48	E.L.Kelly+	14401

82 Lead 208

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,el	^{208}Pb	POD	1USATNL	1.0+07	1.4+07	Jour	PR/C,28,1498	Oct 83	C.E.Floyd+	12844
	n,fis		?	1USABRK	8.4+07	8.4+07	Jour	PR,73,1135	48	E.L.Kelly+	14401
	n,inel	^{208}Pb	POD	1USATNL	1.0+07	1.0+07	Jour	PR/C,28,1498	Oct 83	C.E.Floyd+	12844
*	p,inel	^{208}Pb	DAP	2GERMPH	1.5+07	1.6+07	Jour	EPJ/A,50,92	14	A.Heusler+	O2171
	^{6}Li,d+α	^{208}Pb	?	2GERKFK	1.6+08	1.6+08	Jour	PR/C,44,2195	91	J.Kiener+	O2209
	^{6}Li,inel	^{208}Pb	DAP	2GERKFK	1.6+08	1.6+08	Jour	PR/C,44,2195	91	J.Kiener+	O2209

83 Bismuth 209

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		?	1USABRK	8.4+07	8.4+07	Jour	PR,73,1135	48	E.L.Kelly+	14401
	n,non		CS	4UKRIFU	1.4+07	1.4+07	Jour	UFZ,3,190	58	V.I.Strizhak+	32239

90 Thorium 232

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{233}Th	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
*	p,fis		FY	4KASKAZ	1.0+07	3.0+07	Jour	NP/A,824,1	09	S.I.Mulgin+	D0697
*	p,fis		KE	4KASKAZ	1.0+07	3.0+07	Jour	NP/A,824,1	09	S.I.Mulgin+	D0697

92 Uranium 234

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	d,t	^{233}U	DAP	2GERLMU	2.2+07	2.2+07	Jour	PR/C,84,014334	11	T.Kotthaus+	O2231
*	d,t	^{233}U	POD	2GERLMU	2.2+07	2.2+07	Jour	PR/C,84,014334	11	T.Kotthaus+	O2231

92 Uranium 235

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis	^{nat}G	FY	3INDTRM	2.5-02	2.5-02	Jour	PR,177,1776	69	S.S.Kapoor+	33072
*	p,fis	Many	FY	4KASKAZ	1.0+07	1.2+07	Jour	NP/A,824,1	09	S.I.Mulgin+	D0697
*	p,fis		FY	4KASKAZ	1.0+07	3.0+07	Jour	NP/A,824,1	09	S.I.Mulgin+	D0697
*	p,fis	Many	KE	4KASKAZ	1.0+07	1.2+07	Jour	NP/A,824,1	09	S.I.Mulgin+	D0697
*	p,fis		KE	4KASKAZ	1.0+07	3.0+07	Jour	NP/A,824,1	09	S.I.Mulgin+	D0697
	^{3}He,n	^{237}Pu	CS	4ZZZDUB	1.7+07	4.2+07	Conf	91VILLIG,,82	91	A.D.Gedeonov+	F1244
	^{3}He,x	^{236}Pu	CS	4ZZZDUB	1.7+07	4.2+07	Conf	91VILLIG,,82	91	A.D.Gedeonov+	F1244

92 Uranium 238

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{239}U	?	3HUNKFI			Jour	JRN,81,397	84	A.Simonits+	31750
*	p,fis		?	4RUSLIN	1.0+09	1.0+09	Prog	ISINN-19,19	12	A.S.Egorov+	F1237

93 Neptunium 238

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	0,0		NQ	2NOROSL	Spont		Jour	PR/C,89,044323	14	T.G.Tornyi+	O2196

94 Plutonium 240

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	1USAORL			Conf	82ANTWER,,961	Sep 82	J.A.Harvey+	13733
	n,tot		CS	1USAORL	9.0-01	1.2+00	Conf	82ANTWER,,961	Sep 82	J.A.Harvey+	13733

94 Plutonium 242

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,t	^{240}Pu	CSP	2GERLMU	2.4+07	2.4+07	Jour	PR/C,88,041303	13	M.Spieker+	O2180
*	p,t	^{240}Pu	DAP	2GERLMU	2.4+07	2.4+07	Jour	PR/C,88,041303	13	M.Spieker+	O2180

98 Californium 252

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,fis	^{nat}G	FY	3INDTRM	Spont		Jour	PR,166,1190	68	S.S.Kapoor+	33071
	0,fis	^{nat}G	KE	3INDTRM	Spont		Jour	PR,166,1190	68	S.S.Kapoor+	33071
	n,γ	^{253}Cf	CS	4RUSNIR	2.5-02	2.5-02	Conf	73KIEV,2,120	73	V.A.Anufriev+	41600

98 Californium 253

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{254}Cf	CS	4RUSNIR	2.5-02	2.5-02	Conf	73KIEV,2,120	73	V.A.Anufriev+	41600

98 Californium 254

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{255}Cf	?	4RUSNIR	2.5-02	2.5-02	Conf	73KIEV,2,120	73	V.A.Anufriev+	41600

99 Einsteinium 253

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{254}Es	CS	4RUSNIR	2.5-02	2.5-02	Conf	73KIEV,2,120	73	V.A.Anufriev+	41600

99 Einsteinium 254

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{255}Es	?	4RUSNIR	2.5-02	2.5-02	Conf	73KIEV,2,120	73	V.A.Anufriev+	41600

100 Fermium 254

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{255}Fm	?	4RUSNIR	2.5-02	2.5-02	Conf	73KIEV,2,120	73	V.A.Anufriev+	41600