

Japan Charged-Particle Nuclear Reaction Data Group (JCPRG)

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<http://www.jcprg.org/exfor/>

Quantity code

ALF	Alpha	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	Nu
D3A	Triple differential $d\Omega_1/d\Omega_2/dE'$	NUD	Nu delayed
D3E	Triple differential $d\Omega/dE'_1/dE'_2$	NUF	Fragment neutrons
D4A	Quadruple diff. $d\Omega_1/d\Omega_2/dE'_1/dE'_2$	POL	Polarization
DA	Differential $d/d\Omega$	POD	Differential polarization
DAA	Double differential $d\Omega_1/d\Omega_2$	PY	Product yield (other than fission)
DAE	Double differential $d\Omega/dE'$	RI	Resonance integral
DAP	Partial differential $d/d\Omega$	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	Eta	TTD	Differential thick target yield, $d/d\Omega$
EVL	Evaluation	TT	Partial thick target yield

Special codes in outgoing particle field

abs	Absorption	fus	Fusion	non	Nonelastic	ths	Thermal scattering
el	Elastic	inel	Inelastic	sct	Scattering	tot	Total
f	Fission	incl	Inclusive	tcc	Total charge changing		

Special codes in incident energy field

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

1 Hydrogen 1											
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>p,el</i>	¹ H	DA	2GERJUL	2.4+08	2.6+09	Jour	EPJ/A,22,125		04	D.Albers+	O1203
<i>p,el</i>	¹ H	POD	2GERJUL	4.4+08	2.5+09	Jour	EPJ/A,23,351		05	M.Altmeier+	O0681
<i>d,el</i>	¹ H	DA	2GERKFK	5.2+07		Jour	NP/A,111,265		68	F.Hinterberger+	D0225
²⁰⁸ Pb,f		?	2GERGSI	5.0+08		Jour	NP/A,747,227		05	B.Fernandez-Dominguez+	O1228
²⁰⁸ Pb,f	Many	?	2GERGSI	5.0+08		Jour	NP/A,747,227		05	B.Fernandez-Dominguez+	O1228
²⁰⁸ Pb,x	Many	?	2GERGSI	9.9+08		Jour	PR/C,70,064608		04	A.Kelic+	O1183

1 Hydrogen 2											
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>p,el</i>	² H	POD	2SWTPSI	2.2+07		Jour	JP/G,21,1363		95	M.Clajus+	O1218
<i>d,p</i>	³ H	CS	2GERBOC	4.1+03	1.5+04	Jour	EPJ/A,19,283		04	F.Raiola+	O1220
²⁰⁸ Pb,x	Many	?	2GERGSI	2.0+09		Jour	PR/C,70,064608		04	A.Kelic+	O1183

2 Helium 3											
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>d,el</i>	³ He	DA	2GERKFK	5.2+07		Jour	NP/A,111,265		68	F.Hinterberger+	D0225
<i>d,p</i>	⁴ He	POD	2SWTZUR	2.0+06	1.1+07	Jour	NP/A,165,505		71	W.Gruebler+	D0267

2 Helium 4											
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>d,el</i>	⁴ He	DA	2GERKFK	5.2+07		Jour	NP/A,111,265		68	F.Hinterberger+	D0225
<i>d,el</i>	⁴ He	POD	2SWTZUR	3.0+06	1.1+07	Jour	NP/A,134,686		69	W.Gruebler+	D0262

3 Lithium 6											
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,0</i>		RP	2UK HAR	0.0+00		Prog	AERE-PR/NP-14,20		68	K.M.Diment+	22529
<i>p,³He</i>	⁴ He	CS	2ITYLNS	4.7+04	2.4+06	Jour	PR/C,67,065803		03	A.Tumino+	O1221
<i>p,³He</i>	⁴ He	DA	2GERJUL	2.2+07	4.0+07	Jour	PL/B,52,36		74	K.Schenk+	D0242
<i>d,el</i>	⁶ Li	DA	2NEDGRN	1.7+08		Jour	PR/C,70,067601		04	A.Korff+	O1239
<i>d,inel</i>	⁶ Li	DAP	2NEDGRN	1.7+08		Jour	PR/C,70,067601		04	A.Korff+	O1239

3 Lithium 7

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α,γ		RP	3HUNDEB	5.2+05	7.1+05	Jour	EPJ/A,21,355	04	Gy.Gyurky+	O1194

4 Beryllium 9

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$n,3n$	${}^7\text{Be}$	CS	2BLGLVN	2.9+07	6.7+07	Jour	NIM/A,404,143	98	P.Duhamel+	22721

5 Boron

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,x	${}^{11}\text{C}$	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234

5 Boron 10

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
n,α	${}^7\text{Li}$	CSP	2ZZZGEL	1.5+06	5.6+06	Priv	GIORGINIS	Jan 05	G.Giorginis+	22854
n,α	${}^7\text{Li}$?	2ZZZGEL	1.5+06	5.6+06	Priv	GIORGINIS	Jan 05	G.Giorginis+	22854

5 Boron 11

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,α	${}^8\text{Be}$?	2GERMST	1.1+05	1.1+06	Jour	ZP/A,327,341	87	H.W.Becker+	A0413
p,el	${}^{11}\text{B}$	DA	2GERMST	1.2+05	1.1+06	Jour	ZP/A,327,341	87	H.W.Becker+	A0413
p,el	${}^{11}\text{B}$	DA	2NEDGRN	1.5+08		Jour	PR/C,67,054320	03	V.M.Hannen+	O1177
p,el	${}^{11}\text{B}$	POD	2NEDGRN	1.5+08		Jour	PR/C,67,054320	03	V.M.Hannen+	O1177
p,el	${}^{11}\text{B}$	POD	2NEDGRN	1.5+08		Jour	PR/C,67,054321	03	V.M.Hannen+	O1178
p,inel	${}^{11}\text{B}$	DAP	2NEDGRN	1.5+08		Jour	PR/C,67,054320	03	V.M.Hannen+	O1177
p,inel	${}^{11}\text{B}$	POD	2NEDGRN	1.5+08		Jour	PR/C,67,054320	03	V.M.Hannen+	O1177
p,inel	${}^{11}\text{B}$	POD	2NEDGRN	1.5+08		Jour	PR/C,67,054321	03	V.M.Hannen+	O1178
$\alpha,{}^7\text{Li}$	${}^8\text{Be}$	DAP	4UKRIJI	2.7+07		Jour	NC/A,108,901	95	F.Bonsignore+	O1213

6 Carbon

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
n,x	${}^{10}\text{Be}$	CS	2SWTZUR	1.5+07		Jour	RCA,88,829	00	F.Sudbrock+	22722
p,x	${}^{13}\text{N}$	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234

6 Carbon 12

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,el	¹² C	DA	2NEDGRN	1.5+08		Jour	PR/C,67,054320	03	V.M.Hannen+	O1177
<i>p</i> ,el	¹² C	POD	2NEDGRN	1.5+08		Jour	PR/C,67,054320	03	V.M.Hannen+	O1177
<i>p</i> ,el	¹² C	POD	2NEDGRN	1.5+08		Jour	PR/C,67,054321	03	V.M.Hannen+	O1178
<i>p</i> ,inel	¹² C	DAP	2NEDGRN	1.5+08		Jour	PR/C,67,054320	03	V.M.Hannen+	O1177
<i>d</i> ,el	¹² C	DA	2GERMPH	1.2+07		Jour	ZP,161,509	61	R.Jahr+	D0241
<i>d</i> ,el	¹² C	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225
<i>d</i> ,inel	¹² C	DAP	2GERMPH	1.2+07		Jour	ZP,161,509	61	R.Jahr+	D0241
<i>t</i> ,α	¹¹ B	DAP	2UK UK	3.3+07		Jour	JP/G,13,1531	87	P.B.Foot+	O1216
³ He,α	¹¹ C	DAP	2FR CSN	2.2+08		Jour	PL/B,52,39	74	E.Gerlic+	D0243
¹² B,x	¹¹ B	CS	2FR GAN	7.7+08		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
¹³ B,x	¹² B	CS	2FR GAN	7.0+08		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
¹⁴ B,x	¹³ B	CS	2FR GAN	7.0+08		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
¹⁵ B,x	¹⁴ B	CS	2FR GAN	6.4+08		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
¹⁴ C,x	¹³ C	CS	2FR GAN	9.4+08		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
¹⁵ C,x	¹⁴ C	CS	2FR GAN	9.3+08		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
¹⁶ C,x	¹⁵ C	CS	2FR GAN	8.8+08		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
¹⁷ C,x	¹⁶ C	CS	2FR GAN	8.3+08		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
¹⁸ C,x	¹⁷ C	CS	2FR GAN	7.7+08		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
¹⁷ N,x	¹⁶ N	CS	2FR GAN	1.1+09		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
¹⁸ N,x	¹⁷ N	CS	2FR GAN	1.1+09		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
¹⁹ N,x	¹⁸ N	CS	2FR GAN	1.0+09		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
²⁰ N,x	¹⁹ N	CS	2FR GAN	9.6+08		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
²¹ N,x	²⁰ N	CS	2FR GAN	9.0+08		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
¹⁹ O,x	¹⁸ O	CS	2FR GAN	1.3+09		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
²⁰ O,x	¹⁹ O	CS	2FR GAN	1.2+09		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
²¹ O,x	²⁰ O	CS	2FR GAN	1.2+09		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
²² O,x	²¹ O	CS	2FR GAN	1.1+09		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
²² F,x	²¹ F	CS	2FR GAN	1.4+09		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
²³ F,x	²² F	CS	2FR GAN	1.4+09		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
²⁴ F,x	²³ F	CS	2FR GAN	1.3+09		Jour	PR/C,69,044603	04	E.Sauvan+	A0688
²⁵ F,x	²⁴ F	CS	2FR GAN	1.2+09		Jour	PR/C,69,044603	04	E.Sauvan+	A0688

6 Carbon 13

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,α	¹⁰ Be	CS	2SWTZUR	1.5+07		Jour	RCA,88,829	00	F.Sudbrock+	22722

7 Nitrogen

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,x	¹⁰ Be	CS	2SWTZUR	1.5+07		Jour	RCA,88,829	00	F.Sudbrock+	22722
<i>p</i> ,x	¹¹ C	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234

7 Nitrogen 14

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>d,α</i>	¹² C	DAP	2FR SAC	5.0+05	2.0+06	Jour	NIM/B,219,140		04	S.Pellegrino+	O1196
<i>d,el</i>	¹⁴ N	DA	2GERKFK	5.2+07		Jour	NP/A,111,265		68	F.Hinterberger+	D0225
<i>d,p</i>	¹⁵ N	DAP	2FR SAC	5.0+05	2.0+06	Jour	NIM/B,219,140		04	S.Pellegrino+	O1196

7 Nitrogen 15

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>α,⁷Li</i>	¹² C	DAP	4UKRIJI	2.7+07		Jour	NC/A,108,901		95	F.Bonsignore+	O1213

8 Oxygen

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,x</i>	¹⁰ Be	CS	2SWTZUR	1.5+07		Jour	RCA,88,829		00	F.Sudbrock+	22722
<i>p,x</i>	¹³ N	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447		85	V.A.Kuz'Menko+	O1234

8 Oxygen 16

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,α</i>	¹³ C	DAP	2FR BOR	1.5+07		Jour	NP/A,116,(1),196		Jul 68	B.Leroux+	21461
<i>d,el</i>	¹⁶ O	DA	2NEDGRN	1.7+08		Jour	PR/C,70,067601		04	A.Korff+	O1239
<i>d,el</i>	¹⁶ O	DA	2GERKFK	5.2+07		Jour	NP/A,111,265		68	F.Hinterberger+	D0225
<i>d,inel</i>	¹⁶ O	DAP	2NEDGRN	1.7+08		Jour	PR/C,70,067601		04	A.Korff+	O1239
<i>³He,α</i>	¹⁵ O	DAP	2FR CSN	2.2+08		Jour	PL/B,52,39		74	E.Gerlic+	D0243

9 Fluorine 19

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>α,⁷Li</i>	¹⁶ O	DAP	4UKRIJI	2.7+07		Jour	NC/A,108,901		95	F.Bonsignore+	O1213

10 Neon 20

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>d,el</i>	²⁰ Ne	DA	2GERKFK	5.2+07		Jour	NP/A,111,265		68	F.Hinterberger+	D0225

10 Neon 22										
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	²² Ne	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225

11 Sodium 23										
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,abs</i>		CS	2UK HAR	Maxwl		Jour	PNE,3,242	59	D.Jowitt+	21470
<i>p,0</i>		RP	2PRTJES	0.0+00		Jour	NIM/B,219/220,307	04	R.Mateus+	O1201
<i>p,inel</i>	²³ Na	CSP	2PRTJES	1.3+06	2.4+06	Jour	NIM/B,219/220,307	04	R.Mateus+	O1201

12 Magnesium 24										
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	^{nat} Mg	DA	2GERMPH	1.2+07		Jour	ZP,161,509	61	R.Jahr+	D0241

12 Magnesium 24										
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	²⁴ Mg	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225
<i>d,inel</i>	²⁴ Mg	DAP	2GERMPH	1.2+07		Jour	ZP,161,509	61	R.Jahr+	D0241
³ He, ⁷ Be	²⁰ Ne	DAP	2GERHAM	4.1+07		Jour	NC/A,98,707	87	Md.A.Rahman	O1212
¹⁶ O, <i>el</i>	²⁴ Mg	DA	3AULCBR	3.4+07	4.9+07	Jour	JP/G,12,383	86	J.Nurzynski+	A0694
¹⁶ O, <i>inel</i>	²⁴ Mg	DAP	3AULCBR	3.4+07	5.0+07	Jour	JP/G,12,383	86	J.Nurzynski+	A0694

13 Aluminium 27										
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,2n</i>	²⁶ Al	CS	2AUSIRK	1.4+07	1.5+07	Jour	EPJ/A,17,285	03	A.Wallner+	22864
<i>n,2n</i>	²⁶ Al	CS	4RUSRI	1.4+07	1.5+07	Jour	EPJ/A,17,285	03	A.Wallner+	22864
<i>n,2n</i>	²⁶ Al	CS	2SWTZUR	1.5+07		Jour	RCA,88,829	00	F.Sudbrock+	22722
<i>n,2n</i>	²⁶ Al	CS	2JPNJAE	1.5+07		Jour	EPJ/A,17,285	03	A.Wallner+	22864
<i>n,2n</i>	²⁶ Al	CS	2GERTUE	1.7+07	1.9+07	Jour	EPJ/A,17,285	03	A.Wallner+	22864
<i>n,el</i>	²⁷ Al	DA	2UK HAR	6.0+06		Jour	NP/A,113,(3),564	Jul 68	J.Martin+	22588
<i>n,inel</i>	²⁷ Al	CSP	2UK HAR	6.0+06		Jour	NP/A,113,(3),564	Jul 68	J.Martin+	22588
<i>n,inel</i>	²⁷ Al	DAP	2UK HAR	6.0+06		Jour	NP/A,113,(3),564	Jul 68	J.Martin+	22588
<i>n,p</i>	²⁷ Mg	CS	2JPNOSA	1.3+07	1.5+07	Jour	NIM/A,496,183	03	K.Kawade+	22860
<i>d,α</i>	²⁵ Mg	DAP	3CHFSHI	0.0+00	5.9+09	Jour	JP/G,9,545	83	S.C.Yeh+	O1208
<i>d,el</i>	²⁷ Al	DA	2GERMPH	1.2+07		Jour	ZP,159,149	60	A.Doehring+	D0269
<i>d,el</i>	²⁷ Al	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225
<i>d,el</i>	²⁷ Al	DA	2GERJUL	5.9+07	8.5+07	Jour	PR/C,38,1153	88	J.Bojowald+	D0238
<i>d,el</i>	²⁷ Al	DA	3POLIFJ	9.8+06	1.3+07	Jour	PL,2,121	62	A.Strzalkowski	D0237

<i>d</i> ,inel	²⁷ Al	DAP	2GERMPH	1.2+07		Jour	ZP,159,149	60	A.Doehring+	D0269
<i>d</i> ,p	²⁸ Al	DAP	3CHFSHI	0.0+00	2.7+09	Jour	JP/G,9,545	83	S.C.Yeh+	O1208

14 Silicon

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,inel	^{nat} Si	CS	2JPNJAE	3.5+06	4.8+06	Conf	61VIENNA,1,75	Aug 61	K.Tsukada+	20341
<i>n</i> ,el	^{nat} Si	DA	2UK HAR	6.0+06		Jour	NP/A,113,(3),564	Jul 68	J.Martin+	22588

14 Silicon 28

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,inel	²⁸ Si	CSP	2JPNJAE	3.5+06	4.8+06	Conf	61VIENNA,1,75	Aug 61	K.Tsukada+	20341
<i>n</i> ,inel	²⁸ Si	CSP	2UK HAR	6.0+06		Jour	NP/A,113,(3),564	Jul 68	J.Martin+	22588
<i>n</i> ,inel	²⁸ Si	DAP	2UK HAR	6.0+06		Jour	NP/A,113,(3),564	Jul 68	J.Martin+	22588
<i>d</i> ,el	²⁸ Si	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227
<i>d</i> ,el	²⁸ Si	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225
<i>d</i> ,el	²⁸ Si	DA	3AULCBR	7.0+06	1.1+07	Jour	NP/A,181,280	72	A.Djaloeis+	D0229
<i>d</i> ,el	²⁸ Si	POD	2UK BIR	1.2+07		Jour	NP/A,146,193	70	J.A.R.Griffith+	D0250
<i>d</i> ,el	²⁸ Si	POD	3AULCBR	7.0+06		Jour	NP/A,181,280	72	A.Djaloeis+	D0229
⁶ Li, α	incl	CS	2GRCIOA	7.5+06	1.3+07	Jour	PRL,90,202701	03	A.Pakou+	A0690
⁶ Li, α	incl	DA	2GRCIOA	7.5+06	1.3+07	Jour	PRL,90,202701	03	A.Pakou+	A0690
⁶ Li,el	²⁸ Si	DA	2GRCATH	7.5+06	1.3+07	Jour	PL/B,556,21	03	A.Pakou+	A0686
⁷ Li,el	²⁸ Si	DA	2GRCATH	8.0+06	1.6+07	Jour	PR/C,69,054602	04	A.Pakou+	A0685

14 Silicon 29

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d</i> ,el	²⁹ Si	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227

14 Silicon 30

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d</i> ,el	³⁰ Si	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227

15 Phosphorus 31

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,el	³¹ P	CS	2JPNJAE	3.5+06	4.8+06	Conf	61VIENNA,1,75	Aug 61	K.Tsukada+	20341
<i>n</i> ,el	³¹ P	DA	2UK HAR	6.0+06		Jour	NP/A,113,(3),564	Jul 68	J.Martin+	22588
<i>n</i> ,inel	³¹ P	CS	2JPNJAE	3.8+06	4.8+06	Conf	61VIENNA,1,75	Aug 61	K.Tsukada+	20341

<i>n</i> ,inel	³¹ P	CSP	2UK HAR	6.0+06		Jour	NP/A,113,(3),564	Jul 68	J.Martin+	22588
<i>n</i> ,inel	³¹ P	DAP	2UK HAR	6.0+06		Jour	NP/A,113,(3),564	Jul 68	J.Martin+	22588

16 Sulphur

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,el	^{nat} S	CS	2JPNJAE	3.5+06	4.8+06	Conf	61VIENNA,1,75	Aug 61	K.Tsukada+	20341
<i>n</i> ,el	^{nat} S	DA	2UK HAR	6.0+06		Jour	NP/A,113,(3),564	Jul 68	J.Martin+	22588
<i>p</i> ,x	³⁴ Cl	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
<i>d</i> ,el	^{nat} S	DA	3POLIFJ	1.1+07	1.3+07	Jour	PL,2,121	62	A.Strzalkowski	D0237

16 Sulphur 32

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,inel	³² S	CSP	2JPNJAE	3.5+06	4.5+06	Conf	61VIENNA,1,75	Aug 61	K.Tsukada+	20341
<i>n</i> ,inel	³² S	CSP	2UK HAR	6.0+06		Jour	NP/A,113,(3),564	Jul 68	J.Martin+	22588
<i>n</i> ,inel	³² S	DAP	2UK HAR	6.0+06		Jour	NP/A,113,(3),564	Jul 68	J.Martin+	22588
<i>d</i> ,el	³² S	DA	2NEDGRN	1.7+08		Jour	PR/C,70,067601	04	A.Korff+	O1239
<i>d</i> ,el	³² S	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225
<i>d</i> , ² He	³² P	DAP	2NEDGRN	1.7+08		Jour	PR/C,69,064325	04	E.W.Grewe+	O1175
<i>d</i> ,inel	³² S	DAP	2NEDGRN	1.7+08		Jour	PR/C,70,067601	04	A.Korff+	O1239

18 Argon 38

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d</i> ,el	³⁸ Ar	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227

18 Argon 40

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,abs		CS	4RUSLIN	1.0+06		Jour	JP/G,9,43	83	L.V.Bakanov+	O1207
<i>d</i> ,el	⁴⁰ Ar	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227
<i>d</i> ,el	⁴⁰ Ar	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225

19 Potassium 39

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> , α	³⁶ Cl	CS	2SWTZUR	1.5+07		Jour	RCA,88,829	00	F.Sudbrock+	22722

20 Calcium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,x</i>	⁴⁴ Sc	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
<i>d,el</i>	^{nat} Ca	DA	3POLIFJ	1.2+07	1.3+07	Jour	PL,2,121	62	A.Strzalkowski	D0237

20 Calcium 40

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁴⁰ Ca	DA	2FR GRE	3.0+07		Jour	NP/A,220,381	74	R.Roche+	D0231
<i>d,el</i>	⁴⁰ Ca	DA	2FR SAT	7.0+08		Jour	PL/B,156,185	85	Nguyenvansen+	D0240
<i>d,el</i>	⁴⁰ Ca	POD	2FR GRE	3.0+07		Jour	NP/A,220,381	74	R.Roche+	D0231
<i>d,el</i>	⁴⁰ Ca	POD	2FR SAT	7.0+08		Jour	PL/B,156,185	85	Nguyenvansen+	D0240

20 Calcium 42

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁴² Ca	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227

20 Calcium 44

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁴⁴ Ca	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227

20 Calcium 48

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁴⁸ Ca	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227

22 Titanium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,x</i>	³⁶ Cl	CS	1USAHRV	1.5+08	3.3+07	Jour	NIM/B,172,861	00	D.Fink+	O1233
<i>d,el</i>	^{nat} Ti	DA	2GERMPH	1.2+07		Jour	ZP,161,509	61	R.Jahr+	D0241
<i>d,el</i>	^{nat} Ti	DA	3POLIFJ	1.3+07		Jour	PL,2,121	62	A.Strzalkowski	D0237
²⁰⁸ Pb,x	Many	CS	2GERGSI	2.1+11		Jour	PR/C,70,064608	04	A.Kelic+	O1183

22 Titanium 46

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d</i> ,el	⁴⁶ Ti	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227

22 Titanium 48

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d</i> ,el	⁴⁸ Ti	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227
<i>d</i> ,el	⁴⁸ Ti	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225
<i>d</i> ,inel	⁴⁸ Ti	DAP	2GERMPH	1.2+07		Jour	ZP,161,509	61	R.Jahr+	D0241

22 Titanium 50

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d</i> ,el	⁵⁰ Ti	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227
<i>d</i> ,el	⁵⁰ Ti	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225

23 Vanadium 50

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d</i> ,el	⁵⁰ V	DA	2NEDGRN	1.7+08		Jour	PR/C,70,067601	04	A.Korff+	O1239

23 Vanadium 51

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d</i> ,el	⁵¹ V	DA	2NEDGRN	1.2+08		Jour	PR/C,70,067601	04	A.Korff+	O1239
¹² C,x	²⁴ Na	CS	3INDTRM	8.3+07	3.4+07	Jour	PRM,49,623	97	M.Ismail+	A0692
¹² C,x	⁵⁴ Mn	CS	3INDTRM	8.3+07	4.0+07	Jour	PRM,49,623	97	M.Ismail+	A0692
¹² C,x	⁵⁶ Co	CS	3INDTRM	8.3+07	5.1+07	Jour	PRM,49,623	97	M.Ismail+	A0692
¹² C,x	⁵⁷ Co	CS	3INDTRM	8.3+07	3.4+07	Jour	PRM,49,623	97	M.Ismail+	A0692
¹² C,x	⁵⁸ Co	CS	3INDTRM	8.3+07	3.4+07	Jour	PRM,49,623	97	M.Ismail+	A0692

24 Chromium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,x	⁵² Mn	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234

24 Chromium 50

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,inel</i>	⁵⁰ Cr	CSP	2SF ABA	5.6+06	6.2+06	Jour	JP/G,9,683	83	M.Brenner+	O1209
<i>d,el</i>	⁵⁰ Cr	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227
<i>d,el</i>	⁵⁰ Cr	DA	2UK LVP	7.0+06	1.0+07	Jour	NP,56,422	64	P.T.Andrews+	D0248

24 Chromium 52

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁵² Cr	DA	2UK LVP	7.0+06	1.1+07	Jour	NP,56,422	64	P.T.Andrews+	D0248
<i>d,el</i>	⁵² Cr	POD	2UK BIR	1.2+07		Jour	NP/A,146,193	70	J.A.R.Griffith+	D0250
<i>d,p</i>	⁵³ Cr	DAP	2UK LVP	1.1+07	9.1+06	Jour	NP,86,65	66	J.L.Alty+	D0247

24 Chromium 53

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁵³ Cr	DA	2UK LVP	7.0+06	1.0+07	Jour	NP,56,422	64	P.T.Andrews+	D0248

24 Chromium 54

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁵⁴ Cr	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227
<i>d,el</i>	⁵⁴ Cr	DA	2UK LVP	7.0+06	1.0+07	Jour	NP,56,422	64	P.T.Andrews+	D0248

26 Iron

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,α</i>	incl	CS	2SWDUPP	9.6+07		Jour	PR/C,70,(1),014607	04	V.Blideanu+	22831
<i>n,d</i>	incl	CS	2SWDUPP	9.6+07		Jour	PR/C,70,(1),014607	04	V.Blideanu+	22831
<i>n,γ</i>		CS	2UK HAR	1.1+03	9.6+04	Priv	MOXON	Mar 64	M.C.Moxon	22564
<i>n,p</i>	incl	CS	2SWDUPP	9.6+07		Jour	PR/C,70,(1),014607	04	V.Blideanu+	22831
<i>n,t</i>	incl	CS	2SWDUPP	9.6+07		Jour	PR/C,70,(1),014607	04	V.Blideanu+	22831
<i>n,x</i>	³ He	CS	2SWDUPP	9.6+07		Jour	PR/C,70,(1),014607	04	V.Blideanu+	22831
<i>p,x</i>	⁵³ Mn	CS	2GERMUN	1.7+07	2.6+09	Jour	NIM/B,172,806	00	S.Merchel+	O1229

26 Iron 54

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁵⁴ Fe	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225

26 Iron 56

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,p</i>	⁵⁶ Mn	CS	2BLGLVN	2.8+07		Jour	NIM/A,404,143	98	P.Duhamel+	22721
<i>d,el</i>	⁵⁶ Fe	DA	2GERMPH	1.2+07		Jour	ZP,161,509	61	R.Jahr+	D0241
<i>d,el</i>	⁵⁶ Fe	DA	2FR GRE	3.0+07		Jour	NP/A,220,381	74	R.Roche+	D0231
<i>d,el</i>	⁵⁶ Fe	POD	2UK BIR	1.2+07		Jour	NP/A,146,193	70	J.A.R.Griffith+	D0250
<i>d,el</i>	⁵⁶ Fe	POD	2FR GRE	3.0+07		Jour	NP/A,220,381	74	R.Roche+	D0231
<i>d,inel</i>	⁵⁶ Fe	DAP	2GERMPH	1.2+07		Jour	ZP,161,509	61	R.Jahr+	D0241

27 Cobalt 59

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>α,2n</i>	⁶¹ Cu	CS	3INDVEC	1.7+07	4.9+07	Jour	IMP/E,13,585	04	M.Afzalansari+	O1238
<i>α,2n+α</i>	⁵⁷ Co	CS	3INDVEC	2.3+07	4.9+07	Jour	IMP/E,13,585	04	M.Afzalansari+	O1238
<i>α,3n+α</i>	⁵⁶ Co	CS	3INDVEC	4.0+07	4.9+07	Jour	IMP/E,13,585	04	M.Afzalansari+	O1238
<i>α,n+2p</i>	⁶⁰ Co	CS	3INDVEC	4.0+07	4.9+07	Jour	IMP/E,13,585	04	M.Afzalansari+	O1238
<i>α,n+α</i>	⁵⁸ Co	CS	3INDVEC	1.7+07	4.9+07	Jour	IMP/E,13,585	04	M.Afzalansari+	O1238
<i>α,x</i>	⁵¹ Cr	CS	3INDVEC	7.4+07	1.0+08	Jour	NIM/B,24/25,484	87	J.Ramarao+	O1210
<i>α,x</i>	⁵² Mn	CS	3INDVEC	6.4+07	1.1+08	Jour	NIM/B,24/25,484	87	J.Ramarao+	O1210
<i>α,x</i>	⁵⁴ Mn	CS	3INDVEC	3.8+07	1.1+08	Jour	NIM/B,24/25,484	87	J.Ramarao+	O1210
<i>α,x</i>	⁵⁹ Fe	CS	3INDVEC	5.3+07	1.1+08	Jour	NIM/B,24/25,484	87	J.Ramarao+	O1210
<i>α,x</i>	⁵⁶ Co	CS	3INDVEC	4.2+07	1.1+08	Jour	NIM/B,24/25,484	87	J.Ramarao+	O1210
<i>α,x</i>	⁵⁷ Co	CS	3INDVEC	2.9+07	1.1+08	Jour	NIM/B,24/25,484	87	J.Ramarao+	O1210
<i>α,x</i>	⁵⁸ Co	CS	3INDVEC	2.0+07	1.1+08	Jour	NIM/B,24/25,484	87	J.Ramarao+	O1210
<i>α,x</i>	⁶⁰ Co	CS	3INDVEC	3.9+07	1.1+08	Jour	NIM/B,24/25,484	87	J.Ramarao+	O1210
<i>α,x</i>	⁵⁶ Ni	CS	3INDVEC	8.8+07	1.1+08	Jour	NIM/B,24/25,484	87	J.Ramarao+	O1210
<i>α,x</i>	⁵⁷ Ni	CS	3INDVEC	7.0+07	1.1+08	Jour	NIM/B,24/25,484	87	J.Ramarao+	O1210

28 Nickel

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,x</i>	⁵³ Mn	CS	2GERMUN	3.4+07	2.6+09	Jour	NIM/B,172,806	00	S.Merchel+	O1229
<i>p,x</i>	⁶⁰ Fe	CS	2GERMUN	3.4+07	2.6+09	Jour	NIM/B,172,806	00	S.Merchel+	O1229
<i>p,x</i>	⁶⁰ Cu	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
<i>d,el</i>	^{nat} Ni	DA	2GERMPH	1.2+07		Jour	ZP,161,509	61	R.Jahr+	D0241

28 Nickel 58

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,d</i>	⁵⁷ Ni	DAP	2NEDENT	2.5+07		Jour	JP/G,15,1715	89	J.H.Polane+	O1217
<i>p,d</i>	⁵⁷ Ni	POD	2NEDENT	2.5+07		Jour	JP/G,15,1715	89	J.H.Polane+	O1217
<i>p,γ</i>	⁵⁹ Cu	CS	4UKRKFT	1.3+06	2.7+06	Conf	74KHARKV,,352	74	G.A.Krivososov+	A0696

<i>d,el</i>	⁵⁸ Ni	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227
<i>d,el</i>	⁵⁸ Ni	DA	2FR SAT	2.0+08	7.0+08	Jour	PL/B,156,185	85	Nguyenvansen+	D0240
<i>d,el</i>	⁵⁸ Ni	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225
<i>d,el</i>	⁵⁸ Ni	POD	2UK BIR	1.2+07		Jour	NP/A,146,193	70	J.A.R.Griffith+	D0250
<i>d,el</i>	⁵⁸ Ni	POD	2FR SAT	2.0+08	7.0+08	Jour	PL/B,156,185	85	Nguyenvansen+	D0240
<i>d,inel</i>	⁵⁸ Ni	DAP	2GERMPH	1.2+07		Jour	ZP,161,509	61	R.Jahr+	D0241

28 Nickel 60

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,γ</i>	⁶¹ Cu	CS	4UKRKFT	2.4+06	3.0+06	Conf	74KHARKV,,352	74	G.A.Krivososov+	A0696
<i>d,el</i>	⁶⁰ Ni	DA	2GERMPH	1.2+07		Jour	NP/A,143,113	70	W.Fitz+	D0227

28 Nickel 61

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,γ</i>	⁶² Cu	CS	4UKRKFT	1.1+06	2.9+06	Conf	74KHARKV,,352	74	G.A.Krivososov+	A0696

28 Nickel 62

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,γ</i>	⁶³ Cu	CSP	4UKRKFT	1.4+06	3.0+06	Conf	74KHARKV,,353	74	O.I.Ekhichev+	A0697

28 Nickel 64

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁶⁴ Ni	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225

29 Copper

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,x</i>	⁶³ Zn	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
<i>d,el</i>	^{nat} Cu	DA	2GERMPH	1.2+07		Jour	ZP,161,509	61	R.Jahr+	D0241

29 Copper 63

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,d</i>	⁶² Ni	CSP	2ITYMIL	1.4+07		Jour	NP/A,93,209	67	G.Chursin+	22563

		30		Zinc		67					
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max	Ref Vol Page					
p,n	^{67}Ga	CS	3HUNDEB	1.9+06	2.6+07	Priv	TAKACS		Jan 05	S.Takacs+	D4147

		30		Zinc		68					
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max	Ref Vol Page					
n,d	^{67}Cu	CSP	2ITYMIL	1.4+07		Jour	NP/A,93,209		67	G.Chursin+	22563
n,d	^{67}Cu	DAP	2ITYMIL	1.4+07		Jour	NP/A,93,209		67	G.Chursin+	22563
$p,2n$	^{67}Ga	CS	3HUNDEB	1.2+07	4.5+07	Priv	TAKACS		Jan 05	S.Takacs+	D4147

		30		Zinc		70					
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max	Ref Vol Page					
p,γ	incl	CSP	4RUSSUL	6.0+06		Conf	74KHARKV,,349		74	A.E.Antropov+	A0700

		31		Gallium							
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max	Ref Vol Page					
p,x	^{69}Ge	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447		85	V.A.Kuz'Menko+	O1234

		31		Gallium		71					
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max	Ref Vol Page					
n,γ	^{72}Ga	CS	2TUKANR	Maxwl		Jour	NIM/A,501,524		03	M.Karadag+	22861
n,γ	^{72}Ga	RI	2TUKANR	5.5-01		Jour	NIM/A,501,524		03	M.Karadag+	22861

		32		Germanium							
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max	Ref Vol Page					
p,x	^{70}As	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447		85	V.A.Kuz'Menko+	O1234
p,x	^{72}As	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447		85	V.A.Kuz'Menko+	O1234
p,x	^{76}As	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447		85	V.A.Kuz'Menko+	O1234

32 Germanium 70

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁷⁰ Ge	DA	2NEDGRN	1.7+08		Jour	PR/C,70,067601	04	A.Korff+	O1239
<i>d,inel</i>	⁷⁰ Ge	DAP	2NEDGRN	1.7+08		Jour	PR/C,70,067601	04	A.Korff+	O1239

32 Germanium 72

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁷² Ge	DA	2NEDGRN	1.7+08		Jour	PR/C,70,067601	04	A.Korff+	O1239
<i>d,inel</i>	⁷² Ge	DAP	2NEDGRN	1.7+08		Jour	PR/C,70,067601	04	A.Korff+	O1239

33 Arsenic 75

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,γ</i>	⁷⁶ As	CS	2TUKANR	Maxwl		Jour	NIM/A,501,524	03	M.Karadag+	22861
<i>n,γ</i>	⁷⁶ As	RI	2TUKANR	5.5-01		Jour	NIM/A,501,524	03	M.Karadag+	22861

34 Selenium 76

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁷⁶ Se	POD	2SWTZUR	1.2+07		Jour	PL/B,67,23	77	J.Nurzynski+	D0251

34 Selenium 78

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁷⁸ Se	POD	2SWTZUR	1.2+07		Jour	PL/B,67,23	77	J.Nurzynski+	D0251

34 Selenium 80

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁸⁰ Se	POD	2SWTZUR	1.2+07		Jour	PL/B,67,23	77	J.Nurzynski+	D0251

34 Selenium 82

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	⁸² Se	POD	2SWTZUR	1.2+07		Jour	PL/B,67,23	77	J.Nurzynski+	D0251

35 Bromine 79

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,inel	⁷⁹ Br	CS	2JPNJAE	2.5+06	3.1+06	Jour	ANE,32,	05	T.Shimizu+	22851

36 Krypton

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> , γ		CS	2GERKFK	1.0+04	2.0+05	Prog	EANDC(E)-157,46	72	B.Leugers+	22621
<i>p</i> ,x	⁸¹ Rb	CS	3HUNDEB	1.4+07	8.0+07	Priv	TAKACS	Jan 05	S.Takacs+	D4147

36 Krypton 82

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,2 <i>n</i>	⁸¹ Rb	CS	3HUNDEB	1.4+07	2.9+07	Priv	TAKACS	Jan 05	S.Takacs+	D4147

37 Rubidium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,x	⁸⁵ Sr	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
<i>p</i> ,x	⁸⁷ Sr	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234

37 Rubidium 85

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,x	⁸¹ Rb	CS	2GERJUL	4.2+07	1.0+08	Jour	RCA,92,449	04	S.Kastleiner+	D0259
<i>p</i> ,x	⁸² Rb	CS	2GERJUL	3.5+07	1.0+08	Jour	RCA,92,449	04	S.Kastleiner+	D0259
<i>p</i> ,x	⁸³ Rb	CS	2GERJUL	2.5+07	1.0+08	Jour	RCA,92,449	04	S.Kastleiner+	D0259
<i>p</i> ,x	⁸⁴ Rb	CS	2GERJUL	1.8+07	1.0+08	Jour	RCA,92,449	04	S.Kastleiner+	D0259

38 Strontium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,x	⁸⁶ Y	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
<i>p</i> ,x	⁸⁷ Y	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234

39 Yttrium

89

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,n</i>	⁸⁹ Zr	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
<i>d,el</i>	⁸⁹ Y	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225
<i>d,el</i>	⁸⁹ Y	DA	2GERJUL	5.9+07	8.5+07	Jour	PR/C,38,1153	88	J.Bojowald+	D0238

40 Zirconium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,x</i>	⁹⁰ Nb	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234

40 Zirconium

90

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,inel</i>	⁹⁰ Zr	CS	2JPNJAE	2.5+06	3.1+06	Jour	ANE,32,	05	T.Shimizu+	22851
<i>d,el</i>	⁹⁰ Zr	DA	2NEDGRN	1.8+08		Jour	PR/C,70,067601	04	A.Korff+	O1239
<i>d,el</i>	⁹⁰ Zr	DA	2FR GRE	2.9+07		Jour	NP/A,220,381	74	R.Roche+	D0231
<i>d,el</i>	⁹⁰ Zr	POD	2FR GRE	2.9+07		Jour	NP/A,220,381	74	R.Roche+	D0231
<i>d,inel</i>	⁹⁰ Zr	DAP	2NEDGRN	1.8+08		Jour	PR/C,70,067601	04	A.Korff+	O1239

41 Niobium

93

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,n</i>	⁹³ Mo	CS	4KASKAZ	2.9+07	8.1+06	Conf	74KHARKV,,356	74	B.G.Kiselev+	A0695
<i>p,n</i>	⁹³ Mo	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
<i>p,n+α</i>	⁸⁹ Zr	CS	4KASKAZ	2.9+07	5.5+06	Conf	74KHARKV,,356	74	B.G.Kiselev+	A0695
<i>p,x</i>	⁹² Nb	CS	4KASKAZ	2.9+07	1.3+07	Conf	74KHARKV,,356	74	B.G.Kiselev+	A0695
<i>d,el</i>	⁹³ Nb	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225
<i>d,el</i>	⁹³ Nb	POD	2UK BIR	1.2+07		Jour	NP/A,146,193	70	J.A.R.Griffith+	D0250

42 Molybdenum

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,x</i>	⁹⁵ Tc	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234

42 Molybdenum

95

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

p,n	^{95}Tc	CS	4RUSSUL	5.6+06	7.2+06	Jour	JP/G,24,2261	98	H.Bitao+	O1215
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43

Technetium

99

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
n,γ	^{100}Tc	CS	2JPNTIT	1.2+04	5.4+05	Jour	NST,40,(2),61	Feb 03	T.Matsumoto+	22850
n,γ	^{100}Tc	MLT	2JPNTIT	4.9+04	5.4+05	Jour	NST,40,(2),61	Feb 03	T.Matsumoto+	22850

44

Ruthenium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,x	^{99}Rh	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234

44

Ruthenium

104

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,n	^{104}Rh	CS	4RUSSUL	6.4+06	7.0+06	Jour	JP/G,24,2261	98	H.Bitao+	O1215

45

Rhodium

103

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
n,el	^{103}Rh	CS	2GERKFK	1.5-01		Conf	67KARLSR,,9	Nov 67	W.Poenitz	22511
d,el	^{103}Rh	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225
$\alpha,2n$	^{105}Ag	CS	2UK HAR	1.8+07	5.7+07	Jour	JIN,41,2227	81	G.W.A.Newton+	O1214
$\alpha,3n$	^{104}Ag	CS	2UK HAR	2.9+07	8.1+07	Jour	JIN,41,2227	81	G.W.A.Newton+	O1214
$\alpha,4n$	^{103}Ag	CS	2UK HAR	4.4+07	8.1+07	Jour	JIN,41,2227	81	G.W.A.Newton+	O1214
$\alpha,5n$	^{102}Ag	CS	2UK HAR	5.5+07	8.1+07	Jour	JIN,41,2227	81	G.W.A.Newton+	O1214
α,n	^{106}Ag	CS	2UK HAR	1.7+07	2.5+07	Jour	JIN,41,2227	81	G.W.A.Newton+	O1214
$^{12}\text{C},x$	^{104}Ag	CS	3INDTRM	8.4+07	7.2+07	Jour	PR/C,59,2923	99	B.Bindukumar+	A0682
$^{12}\text{C},x$	^{105}Ag	CS	3INDTRM	8.4+07	6.3+07	Jour	PR/C,59,2923	99	B.Bindukumar+	A0682
$^{12}\text{C},x$	^{106}Ag	CS	3INDTRM	8.4+07	5.5+07	Jour	PR/C,59,2923	99	B.Bindukumar+	A0682
$^{12}\text{C},x$	^{108}In	CS	3INDTRM	8.4+07	5.5+07	Jour	PR/C,59,2923	99	B.Bindukumar+	A0682
$^{12}\text{C},x$	^{109}In	CS	3INDTRM	8.4+07	5.0+07	Jour	PR/C,59,2923	99	B.Bindukumar+	A0682
$^{12}\text{C},x$	^{110}In	CS	3INDTRM	8.4+07	5.0+07	Jour	PR/C,59,2923	99	B.Bindukumar+	A0682
$^{12}\text{C},x$	^{111}In	CS	3INDTRM	8.4+07	5.0+07	Jour	PR/C,59,2923	99	B.Bindukumar+	A0682
$^{12}\text{C},x$	^{110}Sn	CS	3INDTRM	8.4+07	5.5+07	Jour	PR/C,59,2923	99	B.Bindukumar+	A0682
$^{12}\text{C},x$	^{111}Sn	CS	3INDTRM	8.4+07	5.5+07	Jour	PR/C,59,2923	99	B.Bindukumar+	A0682

46

Palladium

105

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,n	^{105}Ag	CSP	4RUSSUL	6.0+06		Conf	74KHARKV,,345	74	P.Makhu+	A0699

47

Silver

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,x	^{107}Cd	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
d,el	^{nat}Ag	POD	2UK BIR	1.2+07		Jour	NP/A,146,193	70	J.A.R.Griffith+	D0250
α,x	^{110}In	CS	3ARGCNE	5.4+07	2.1+07	Jour	JRN,89,531	85	C.Wasilevsky+	O1235

47

Silver

107

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$\alpha,2n$	^{109}In	CS	3ARGCNE	5.4+07	2.1+07	Jour	JRN,89,531	85	C.Wasilevsky+	O1235
$\alpha,3n$	^{108}In	CS	3ARGCNE	5.4+07	3.0+07	Jour	JRN,89,531	85	C.Wasilevsky+	O1235
$\alpha,4n$	^{107}In	CS	3ARGCNE	5.4+07	3.8+07	Jour	JRN,89,531	85	C.Wasilevsky+	O1235

47

Silver

109

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$\alpha,2n$	^{111}In	CS	3ARGCNE	5.4+07	2.1+07	Jour	JRN,89,531	85	C.Wasilevsky+	O1235
α,n	^{112}In	CS	3ARGCNE	5.0+07	2.1+07	Jour	JRN,89,531	85	C.Wasilevsky+	O1235

48

Cadmium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$n,0$		RP	2JPNJAE	0.0+00		Conf	68WASH,2,789(E14)	Mar 68	A.Asami+	21326
p,n	^{116}In	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
p,x	^{110}In	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
p,x	^{111}In	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
p,x	^{112}In	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234
p,x	^{113}In	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234

48

Cadmium

111

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,n	^{111}In	CS	3HUNDEB	2.1+06	4.4+07	Priv	TAKACS	Jan 05	S.Takacs+	D4147

48

Cadmium

112

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
$p,2n$	^{111}In	CS	3HUNDEB	9.4+06	3.7+07	Priv	TAKACS		Jan 05	S.Takacs+	D4147

49

Indium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
d,el	^{nat}In	POD	2UK BIR	1.2+07		Jour	NP/A,146,193		70	J.A.R.Griffith+	D0250

50

Tin

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
p,x	^{116}Sb	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447		85	V.A.Kuz'Menko+	O1234
p,x	^{117}Sb	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447		85	V.A.Kuz'Menko+	O1234

50

Tin

116

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
d,el	^{116}Sn	DA	2NEDGRN	1.8+08		Jour	PR/C,70,067601		04	A.Korff+	O1239
$d,inel$	^{116}Sn	DAP	2NEDGRN	1.8+08		Jour	PR/C,70,067601		04	A.Korff+	O1239

50

Tin

120

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
d,el	^{120}Sn	DA	2GERJUL	5.9+07	8.5+07	Jour	PR/C,38,1153		88	J.Bojowald+	D0238

52

Tellurium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
p,x	^{128}I	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447		85	V.A.Kuz'Menko+	O1234

52

Tellurium

123

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

<i>p,n</i>	¹²³ I	CS	3HUNDEB	4.5+06	2.0+07	Priv	TAKACS	Jan 05	S.Takacs+	D4147
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Tellurium

124

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,2n</i>	¹²³ I	CS	3HUNDEB	1.2+07	3.1+07	Priv	TAKACS	Jan 05	S.Takacs+	D4147
<i>p,n</i>	¹²⁴ I	CS	3HUNDEB	5.8+06	3.1+07	Priv	TAKACS	Jan 05	S.Takacs+	D4147

53

Iodine

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,x</i>	Many	CS	4ZZZDUB	6.6+08		Conf	2001TSUKUB,1,272	01	V.S.Pronskikh+	O1174

53

Iodine

127

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,3n</i>	¹²⁵ Xe	CS	3HUNDEB	1.8+07	1.0+08	Priv	TAKACS	Jan 05	S.Takacs+	D4147
<i>p,5n</i>	¹²³ Xe	CS	3HUNDEB	3.8+07	1.0+08	Priv	TAKACS	Jan 05	S.Takacs+	D4147
<i>p,n</i>	¹²⁷ Xe	MLT	4UKRKFT	9.1+06		Jour	JRN,89,447	85	V.A.Kuz'Menko+	O1234

53

Iodine

129

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,x</i>	Many	CS	4ZZZDUB	6.6+08		Conf	2001TSUKUB,1,272	01	V.S.Pronskikh+	O1174

54

Xenon

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,tot</i>		CS	2GERKFK	1.0+04	2.0+05	Prog	EANDC(E)-157,46	72	B.Leugers+	22621

54

Xenon

124

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,2n</i>	¹²³ Cs	CS	3HUNDEB	1.5+07	4.4+07	Priv	TAKACS	Jan 05	S.Takacs+	D4147

60 Neodymium 143

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
n,γ	^{144}Nd	CS	2JPNTIT	2.2+04	5.5+05	Jour	NST,36,(10),855		Oct 99	T.Veerapasspong+	22784
n,γ	^{144}Nd	MLT	2JPNTIT	5.0+04	5.5+05	Jour	NST,36,(10),855		Oct 99	T.Veerapasspong+	22784

60 Neodymium 145

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
n,γ	^{146}Nd	CS	2JPNTIT	1.4+04	5.5+05	Jour	NST,36,(10),855		Oct 99	T.Veerapasspong+	22784
n,γ	^{146}Nd	MLT	2JPNTIT	5.0+04	5.5+05	Jour	NST,36,(10),855		Oct 99	T.Veerapasspong+	22784

60 Neodymium 146

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
n,γ	^{147}Nd	CS	2JPNTIT	2.9+04	5.5+05	Jour	NST,36,(10),855		Oct 99	T.Veerapasspong+	22784
n,γ	^{147}Nd	MLT	2JPNTIT	5.0+04	5.5+05	Jour	NST,36,(10),855		Oct 99	T.Veerapasspong+	22784

62 Samarium 147

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
n,γ	^{148}Sm	CS	2JPNTIT	1.2+04	5.4+05	Jour	NST,36,(10),865		Oct 99	B.Diamet+	22783
n,γ	^{148}Sm	MLT	2JPNTIT	5.0+04	5.5+05	Jour	NST,36,(10),865		Oct 99	B.Diamet+	22783

62 Samarium 148

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
n,γ	^{149}Sm	CS	2JPNTIT	1.2+04	5.5+05	Jour	NST,36,(10),865		Oct 99	B.Diamet+	22783
n,γ	^{149}Sm	MLT	2JPNTIT	5.0+04	5.5+05	Jour	NST,36,(10),865		Oct 99	B.Diamet+	22783

62 Samarium 149

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
n,γ	^{150}Sm	CS	2JPNTIT	1.3+04	5.4+05	Jour	NST,36,(10),865		Oct 99	B.Diamet+	22783
n,γ	^{150}Sm	MLT	2JPNTIT	5.0+04	5.5+05	Jour	NST,36,(10),865		Oct 99	B.Diamet+	22783

62 Samarium 150

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,γ</i>	¹⁵¹ Sm	CS	2JPNTIT	2.2+04	5.4+05	Jour	NST,36,(10),865	Oct 99	B.Diamet+	22783
<i>n,γ</i>	¹⁵¹ Sm	MLT	2JPNTIT	5.0+04	5.5+05	Jour	NST,36,(10),865	Oct 99	B.Diamet+	22783

62 Samarium 152

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,γ</i>	¹⁵³ Sm	CS	2JPNTIT	2.0+04	5.5+05	Jour	NST,36,(10),865	Oct 99	B.Diamet+	22783
<i>n,γ</i>	¹⁵³ Sm	MLT	2JPNTIT	5.0+04	5.5+05	Jour	NST,36,(10),865	Oct 99	B.Diamet+	22783

62 Samarium 154

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,γ</i>	¹⁵⁵ Sm	CS	2JPNTIT	2.2+04	5.5+05	Jour	NST,36,(10),865	Oct 99	B.Diamet+	22783
<i>n,γ</i>	¹⁵⁵ Sm	MLT	2JPNTIT	5.0+04	5.5+05	Jour	NST,36,(10),865	Oct 99	B.Diamet+	22783

64 Gadolinium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,γ</i>		CS	2UK HAR	Maxwl		Rept	AERE-R/R-2516	59	D.Jowitt+	22590

66 Dysprosium 161

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,γ</i>	¹⁶² Dy	CS	2JPNTIT	1.5+04	8.5+04	Thes	KIM	03	G.Kim	22844

66 Dysprosium 162

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,γ</i>	¹⁶³ Dy	CS	2JPNTIT	1.5+04	8.5+04	Thes	KIM	03	G.Kim	22844

66 Dysprosium 163

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,γ</i>	¹⁶⁴ Dy	CS	2JPNTIT	1.5+04	7.5+04	Conf	2002DUBNA,,249	May 02	G.Kim+	22683

n,γ ^{164}Dy CS 2JPNITIT 1.5+04 8.5+04 Thes KIM 03 G.Kim 22844

66 Dysprosium 164

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
n,γ	^{165}Dy	CS	2JPNITIT	1.5+04	8.5+04	Thes	KIM	03	G.Kim	22844
n,γ	^{165}Dy	CS	2JPNKTO	Maxwl		Jour	NIM/A,462,442	01	Hyun-Jecho+	22862
n,γ	^{165}Dy	RI	2JPNKTO	5.0-01		Jour	NIM/A,462,442	01	Hyun-Jecho+	22862

70 Ytterbium 174

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$^{16}\text{O},\text{el}$	^{174}Yb	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{16}\text{O},\text{x}$	^{11}B	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{16}\text{O},\text{x}$	^{12}C	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{16}\text{O},\text{x}$	^{13}C	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{16}\text{O},\text{x}$	^{14}C	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{16}\text{O},\text{x}$	^{15}N	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{16}\text{O},\text{x}$	^{15}O	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{16}\text{O},\text{x}$	^{17}O	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{16}\text{O},\text{x}$	Many	CS	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{18}\text{O},\text{el}$	^{174}Yb	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{18}\text{O},\text{x}$	^{11}B	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{18}\text{O},\text{x}$	^{12}C	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{18}\text{O},\text{x}$	^{13}C	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{18}\text{O},\text{x}$	^{14}C	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{18}\text{O},\text{x}$	^{15}N	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{18}\text{O},\text{x}$	^{17}N	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{18}\text{O},\text{x}$	^{16}O	DA	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693
$^{18}\text{O},\text{x}$	Many	CS	3INDTRM	8.3+07		Jour	PR/C,64,014609	01	P.K.Sahu+	A0693

72 Hafnium 180

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
n,γ	^{181}Hf	CS	2JPNKTO	Maxwl		Jour	NIM/A,462,442	01	Hyun-Jecho+	22862
n,γ	^{181}Hf	RI	2JPNKTO	5.0-01		Jour	NIM/A,462,442	01	Hyun-Jecho+	22862

73 Tantalum 180

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
n,γ	^{181}Ta	CS	2GERKFK	Maxwl	1.0+05	Jour	PR/C,69,(5),055801	04	K.Wisshak+	22801
n,γ	^{181}Ta	?	2GERKFK	1.0+04	1.0+05	Jour	PR/C,69,(5),055801	04	K.Wisshak+	22801

73

Tantalum

181

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
n,γ	¹⁸² Ta	CS	2GERKFK	1.0+04	1.0+05	Jour	PR/C,69,(5),055801	04	K.Wisshak+	22801
n,γ	¹⁸² Ta	?	2GERKFK	1.0+04	1.0+05	Jour	PR/C,69,(5),055801	04	K.Wisshak+	22801
d,el	¹⁸¹ Ta	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225
¹² C, $3n$	¹⁹⁰ Au	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹² C, $4n$	¹⁸⁹ Au	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹² C, $5n$	¹⁸⁸ Au	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹² C, $6n$	¹⁸⁷ Au	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹² C, x	¹⁸² Re	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹² C, x	¹⁸³ Re	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹² C, x	¹⁸⁴ Re	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹² C, x	¹⁸⁵ Ir	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹² C, x	¹⁸⁶ Ir	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹² C, x	¹⁸⁷ Ir	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹³ C, $4n$	¹⁹⁰ Au	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹³ C, $5n$	¹⁸⁹ Au	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹³ C, $6n$	¹⁸⁸ Au	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹³ C, x	¹⁸² Ta	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹³ C, x	¹⁸³ Re	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹³ C, x	¹⁸⁴ Re	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹³ C, x	¹⁸⁵ Ir	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹³ C, x	¹⁸⁶ Ir	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691
¹³ C, x	¹⁸⁷ Ir	CS	3INDTRM	8.2+07		Jour	NP/A,739,229	04	K.Surendrababu+	A0691

74

Tungsten

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,x	Many	CS	4ZZZDUB	2.7+08	6.3+08	Jour	NIM/A,527,609	04	S.A.Karamian+	O0800
p,x	¹⁷¹ Lu	CS	4ZZZDUB	6.3+08		Jour	NIM/A,527,609	04	S.A.Karamian+	O0800
p,x	¹⁷⁸ Hf	CS	4ZZZDUB	6.3+08		Jour	NIM/A,527,609	04	S.A.Karamian+	O0800
p,x	¹⁷⁹ Hf	CS	4ZZZDUB	6.3+08		Jour	NIM/A,527,609	04	S.A.Karamian+	O0800

74

Tungsten

186

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,x	Many	CS	4ZZZDUB	2.7+08	6.3+08	Jour	NIM/A,527,609	04	S.A.Karamian+	O0800
p,x	¹⁷¹ Lu	CS	4ZZZDUB	6.3+08		Jour	NIM/A,527,609	04	S.A.Karamian+	O0800
p,x	¹⁷⁸ Hf	CS	4ZZZDUB	6.3+08		Jour	NIM/A,527,609	04	S.A.Karamian+	O0800
p,x	¹⁷⁹ Hf	CS	4ZZZDUB	6.3+08		Jour	NIM/A,527,609	04	S.A.Karamian+	O0800

78

Platinum

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

<i>p,n</i>	Many	CS	4RUSSUL	1.0+07		Conf	88BAKU,,311	88	V.O.Sergeev	O1224
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78 Platinum 194

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					

<i>α,d</i>	¹⁹⁶ Au	DAP	2GERMUN	3.6+07		Jour	PR/C,70,014610	04	H.F.Wirth+	O1219
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78 Platinum 195

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					

³ He, <i>d</i>	¹⁹⁶ Au	DAP	2GERMUN	3.6+07		Jour	PR/C,70,014610	04	H.F.Wirth+	O1219
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79 Gold 197

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					

<i>n,incl</i>	¹⁹⁷ Au	CS	2JPNJAE	2.5+06	3.1+06	Jour	ANE,32,	05	T.Shimizu+	22851
<i>d,el</i>	¹⁹⁷ Au	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225
<i>d,t</i>	¹⁹⁶ Au	DAP	2GERMUN	2.5+07		Jour	PR/C,70,014610	04	H.F.Wirth+	O1219
<i>α,2n</i>	¹⁹⁹ Tl	CS	3INDVEC	3.8+07	1.9+07	Jour	NIM/A,242,286	86	H.D.Bhardwaj+	O1206
<i>α,3n</i>	¹⁹⁸ Tl	CS	3INDVEC	3.8+07	2.6+07	Jour	NIM/A,242,286	86	H.D.Bhardwaj+	O1206
<i>α,n</i>	²⁰⁰ Tl	CS	3INDVEC	3.8+07	1.5+07	Jour	NIM/A,242,286	86	H.D.Bhardwaj+	O1206

80 Mercury 198

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					

<i>d,α</i>	¹⁹⁶ Au	DAP	2GERMUN	1.8+07		Jour	PR/C,70,014610	04	H.F.Wirth+	O1219
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81 Thallium 203

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					

<i>p,2n</i>	²⁰² Pb	CS	3HUNDEB	9.5+06	2.7+07	Priv	TAKACS	Jan 05	S.Takacs+	D4147
<i>p,3n</i>	²⁰¹ Pb	CS	3HUNDEB	1.8+07	3.6+07	Priv	TAKACS	Jan 05	S.Takacs+	D4147
<i>p,4n</i>	²⁰⁰ Pb	CS	3HUNDEB	2.8+07	3.6+07	Priv	TAKACS	Jan 05	S.Takacs+	D4147

82 Lead

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					

<i>n,α</i>	incl	CS	2SWDUPP	9.6+07		Jour	PR/C,70,(1),014607	04	V.Blideanu+	22831
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¹¹ B,x	²³³ Pa	CS	3INDTRM	5.5+07	7.2+07	Jour	PR/C,59,3224	99	G.K.Gubbi+	A0689
¹⁴ N,f		CS	3INDNSD	9.2+07	7.3+07	Jour	PR/C,69,064603	04	Bivashr.Behera+	A0687
¹⁴ N,f		DA	3INDNSD	9.2+07	7.3+07	Jour	PR/C,69,064603	04	Bivashr.Behera+	A0687

92 Uranium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,α</i>	incl	CS	2SWDUPP	9.6+07		Jour	PR/C,70,(1),014607	04	V.Blideanu+	22831
<i>n,d</i>	incl	CS	2SWDUPP	9.6+07		Jour	PR/C,70,(1),014607	04	V.Blideanu+	22831
<i>n,f</i>	Many	FY	2SF JYV	1.5+07		Jour	EPJ/A,17,57	03	L.Stroe+	22863
<i>n,f</i>	Many	CHG	2SF JYV	1.5+07		Jour	EPJ/A,17,57	03	L.Stroe+	22863
<i>n,p</i>	incl	CS	2SWDUPP	9.6+07		Jour	PR/C,70,(1),014607	04	V.Blideanu+	22831
<i>n,t</i>	incl	CS	2SWDUPP	9.6+07		Jour	PR/C,70,(1),014607	04	V.Blideanu+	22831

92 Uranium 233

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,f</i>	Many	KE	2FR ILL	2.5-02		Jour	NP/A,736,55	04	H.R.Faust+	22849

92 Uranium 235

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
¹¹ B,f		CS	3INDNSD	7.4+07	5.1+07	Jour	PR/C,69,064603	04	Bivashr.Behera+	A0687
¹¹ B,f		DA	3INDNSD	7.2+07	5.1+07	Jour	PR/C,69,064603	04	Bivashr.Behera+	A0687

92 Uranium 238

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,2n</i>	²³⁷ U	CS	2UK ALD	7.0+06		Jour	NP,65,236	Mar 65	R.Batchelor+	21019
<i>n,el</i>	²³⁸ U	CS	2UK ALD	2.0+06	7.0+06	Jour	NP,65,236	Mar 65	R.Batchelor+	21019
<i>n,el</i>	²³⁸ U	DA	2UK ALD	2.0+06		Jour	NP,65,236	Mar 65	R.Batchelor+	21019
<i>n,f</i>	Many	FY	2BLGLVN	2.0+07		Jour	EPJ/A,9,385	00	G.Lhersonneau+	22723
<i>n,f</i>	Many	CHG	2BLGLVN	2.0+07		Jour	EPJ/A,9,385	00	G.Lhersonneau+	22723
<i>n,inel</i>	²³⁸ U	CSP	2UK ALD	2.0+06		Jour	NP,65,236	Mar 65	R.Batchelor+	21019
<i>n,non</i>		CS	2UK ALD	3.0+06	7.0+06	Jour	NP,65,236	Mar 65	R.Batchelor+	21019
<i>n,non</i>		?	2UK ALD	3.0+06	7.0+06	Jour	NP,65,236	Mar 65	R.Batchelor+	21019
<i>n,tot</i>		CS	2UK ALD	2.0+06	7.0+06	Jour	NP,65,236	Mar 65	R.Batchelor+	21019
<i>d,el</i>	²³⁸ U	DA	2GERKFK	5.2+07		Jour	NP/A,111,265	68	F.Hinterberger+	D0225

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Californium

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Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n,f</i>	Many	FY	2FR ILL	2.5-02		Jour	PR/C,67,34610	Mar 03	I.Tsekhanovich+	22859
<i>n,f</i>	Many	KE	2FR ILL	2.5-02		Jour	PR/C,67,34610	Mar 03	I.Tsekhanovich+	22859