

Japan Charged-Particle Nuclear Reaction Data Group (JCPRG)

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Retrieval service is available at:

<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 Ref Vol Page	Date	Author	Data #
				Min	Max					
π^+,el	^1H	POD	2SWTPSI	6.8+07		Jour	PR/C,54,1930	96	R.Wieser+	O1128
p,el	^1H	DA	2SWTVIL	5.2+08	5.8+08	Jour	JP/G,8,643	82	P.Chatelain+	O1132
p,el	^1H	DA	2SWTVIL	5.3+08	5.8+08	Jour	JP/G,8,1363	82	A.Berdoz+	O1131
p,el	^1H	POD	2SWTVIL	5.8+08		Jour	JP/GL,9,261	83	A.Berdoz+	O1130
d,γ	^3He	POD	2SWTBAS	4.5+07		Jour	NP/A,636,189	98	H.Anklin+	O0797
$^3\text{He},el$	^1H	POD	2UK BIR	3.3+07		Jour	JP/G,3,571	77	O.Karban+	O1093
$^{238}\text{U},x$	Many	CS	2GERGSI	2.4+11		Jour	NP/A,725,213	03	M.Bernas+	O1069

1 Hydrogen 2

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,el	^2H	DA	2FR SAT	6.0+08	2.7+09	Jour	JP/G,8,111	82	P.Berthet+	O1134
p,el	^2H	POD	2NEDGRN	1.2+08	1.7+08	Jour	PRL,86,5862	01	K.Ermisch+	O1142
$p,^3\text{He}$	^{nat}Et	CS	2SWDUPP	9.3+08	1.1+09	Jour	PR/C,65,044608	02	R.Bilger+	O0896
$p,^3\text{He}$	^{nat}Et	DA	2SWDUPP	9.3+08	1.1+09	Jour	PR/C,65,044608	02	R.Bilger+	O0896
$p,n+p$	^1H	D3A	2SWTVIL	2.3+07		Jour	JP/G,11,59	85	F.Foroughi+	O1127
d,p	^3H	CS	2GERBOC	2.1+03	4.8+04	Jour	EPJ/A,13,377	02	F.Raiola+	O1073
d,p	^3H	TT	2JPNTOH	2.6+03	7.2+03	Jour	JP/G,23,1459	97	H.Yuki+	O1084
$^3\text{He},el$	^2H	POD	2UK BIR	3.3+07		Jour	JP/G,3,571	77	O.Karban+	O1093

1 Hydrogen 3

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$^3\text{He},el$	^3H	POD	2UK BIR	3.3+07		Jour	JP/G,3,571	77	O.Karban+	O1093

2 Helium 3

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
d,el	^3He	DA	3ARGCNE	2.4+07	2.7+07	Jour	NP,50,585	64	O.M.Bilaniuk+	D0145
d,p	^4He	DA	3ARGCNE	2.3+07	2.7+07	Jour	NP,50,585	64	O.M.Bilaniuk+	D0145
$^3\text{He},el$	^3He	POD	2UK BIR	3.2+07		Jour	JP/G,3,571	77	O.Karban+	O1093

2 Helium 4

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$^3\text{He},el$	^4He	POD	2UK BIR	3.2+07		Jour	JP/G,3,571	77	O.Karban+	O1093
α,el	^4He	DA	3SAFNAC	1.6+08	2.0+08	Jour	PR/C,54,2485	96	G.F.Steyn+	O1081

$\alpha, {}^3\text{He}$	${}^5\text{He}$	DA	3SAFNAC	1.6+08	2.0+08	Jour	PR/C,54,2485	96	G.F.Steyn+	O1081
$\alpha, {}^3\text{He}$	${}^5\text{He}$	DAE	3SAFNAC	1.6+08	2.0+08	Jour	PR/C,54,2485	96	G.F.Steyn+	O1081
${}^8\text{Li}, n$	${}^{11}\text{B}$	CS	2ITYLNS	2.7+06		Jour	EPJ/A,20,355	04	S.Cherubini+	O0792

3 Lithium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α, γ	incl	TTD	2SF HLS	2.4+06		Jour	NIM,212,441	83	R.Lappalainen+	O1067

3 Lithium 6

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p, π^+	${}^7\text{Li}$	DAP	2FR PAR	2.0+08		Jour	JP/G,19,417	93	N.Willis+	O1096
d, α	${}^4\text{He}$	DAP	2FR ENS	4.1+05	1.9+06	Jour	NIM,191,349	81	B.Maurel+	D0154
${}^3\text{He}, 0$		RP	2ITYPAD	0.0+00		Jour	JP/G,16,1511	90	N.Arena+	O1108
α, el	${}^6\text{Li}$	DA	2SWTVIL	5.9+07		Jour	JP/G,5,1731	79	F.Foroughi+	O1126
α, inel	${}^6\text{Li}$	DAP	2SWTVIL	5.9+07		Jour	JP/G,5,1731	79	F.Foroughi+	O1126

4 Beryllium 7

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p, γ	${}^8\text{B}$	CS	3ISLWZI	1.1+06	3.0+05	Jour	PR/C,67,065805	03	L.T.Baby+	O0548
p, γ	${}^8\text{B}$	CS	1USAWAU	1.2+05	1.8+06	Jour	PR/C,68,065803	Dec 03	A.R.Junghans+	C1004
p, γ	${}^8\text{B}$	CS	3ISLWZI	3.4+05	1.1+06	Jour	PR/C,67,065805	03	L.T.Baby+	O0548
p, γ	${}^8\text{B}$	CS	1USAWAU	8.8+05	2.5+06	Jour	PR/C,68,065803	Dec 03	A.R.Junghans+	C1004

4 Beryllium 9

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p, el	${}^9\text{Be}$	DA	3CPRLNZ	1.4+05	3.0+06	Jour	NIM/B,93,404	94	Z.Liu+	O1112
d, n	incl	DA	2FR SAT	1.0+08	2.3+09	Jour	EPJ/A,5,321	99	J.F.Lecolley+	O1075

5 Boron

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α, γ	incl	TTD	2SF HLS	2.4+06		Jour	NIM,212,441	83	R.Lappalainen+	O1067

5 Boron 10

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,α</i>	⁸ Be	DAP	2BLGNAM	5.0+05	3.0+06	Jour	JRC,38,193	77	G.Debras+	D0144

5 Boron 11

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,n</i>	¹¹ C	CS	2SWTZUR	2.5+06	6.7+06	Jour	HPA,24,465	52	J.P.Blaser+	D0095

6 Carbon 12

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,α</i>	incl	DAE	1USAORL	2.9+07	6.2+07	Jour	PR/C,8,1045	73	F.E.Bbertrand+	C0925
<i>p,d</i>	incl	DAE	1USAORL	3.9+07	6.2+07	Jour	PR/C,8,1045	73	F.E.Bbertrand+	C0925
<i>p,el</i>	¹² C	DA	2GERHAM	4.1+07		Jour	JP/G,8,987	82	L.Alvarez+	O1133
<i>p,inel</i>	¹² C	CSP	2UK GLS	1.3+07		Jour	JP/A,5,1252	72	A.M.Macleod+	D0141
<i>p,p</i>	incl	DAE	1USAORL	2.9+07	6.2+07	Jour	PR/C,8,1045	73	F.E.Bbertrand+	C0925
<i>p,p+2α</i>	⁴ He	CS	2UK GLS	1.3+07		Jour	JP/A,5,1252	72	A.M.Macleod+	D0141
<i>p,t</i>	incl	DAE	1USAORL	3.9+07	6.2+07	Jour	PR/C,8,1045	73	F.E.Bbertrand+	C0925
<i>p,x</i>	³ He	DAE	1USAORL	6.2+07		Jour	PR/C,8,1045	73	F.E.Bbertrand+	C0925
<i>d,²He</i>	¹² B	DAP	2NEDGRN	1.7+08		Jour	PR/C,65,044323	02	S.Rakers+	O1140
<i>d,el</i>	¹² C	DA	2NEDGRN	1.7+08		Jour	PR/C,63,037601	01	C.Baumer+	O1080
<i>d,inel</i>	¹² C	DAP	2NEDGRN	1.7+08		Jour	PR/C,63,037601	01	C.Baumer+	O1080
<i>d,p</i>	¹³ C	CSP	2FR LRM	7.0+05	4.0+06	Jour	NIM/B,132,468	97	F.Papillon+	O1066
<i>d,p</i>	¹³ C	DAP	2BLGNAM	5.3+05	3.0+06	Jour	JRC,38,193	77	G.Debras+	D0144

6 Carbon 13

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,n</i>	¹³ N	CS	2SWTZUR	2.7+06	6.7+06	Jour	HPA,24,465	52	J.P.Blaser+	D0095

7 Nitrogen

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>α,γ</i>	incl	TTD	2SF HLS	2.4+06		Jour	NIM,212,441	83	R.Lappalainen+	O1067

7 Nitrogen 14

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

p,α	^{11}C	CS	2SWTZUR	4.2+06	6.7+06	Jour	HPA,25,442	52	J.P.Blaser+	D0096
d,α	^{12}C	DAP	2FR ENS	6.0+05	1.4+06	Jour	RPA,4,383	69	G.Amsel+	D0127
d,α	^{12}C	DAP	2BLGNAM	6.0+05	3.0+06	Jour	JRC,38,193	77	G.Debras+	D0144
d,p	^{15}N	DAP	2FR ENS	6.0+05	1.4+06	Jour	RPA,4,383	69	G.Amsel+	D0127
$^3\text{He},d$	^{15}O	DAP	1USATNL	2.0+07		Jour	PR/C,66,055804	02	P.F.Bertone+	C1002

8 Oxygen

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α,γ	incl	TTD	2SF HLS	2.4+06		Jour	NIM,212,441	83	R.Lappalainen+	O1067

8 Oxygen 16

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
π^+,π^-	^{16}Ne	DAP	2SWTPSI	4.8+07	9.1+07	Jour	PRL,79,3849	97	K.Foehl+	O1129
p,α	^{13}N	CS	2UK GLS	1.3+07		Jour	NP/A,94,313	67	R.Chapman+	D0138
p,α	^{13}N	CSP	2UK GLS	1.3+07		Jour	NP/A,94,313	67	R.Chapman+	D0138
p,α	incl	DAE	1USAORL	6.2+07		Jour	PR/C,8,1045	73	F.E.Bbertrand+	C0925
p,d	incl	DAE	1USAORL	3.9+07	6.2+07	Jour	PR/C,8,1045	73	F.E.Bbertrand+	C0925
p,el	^{16}O	DA	2GERHAM	4.1+07		Jour	JP/G,8,987	82	L.Alvarez+	O1133
p,inel	^{16}O	CSP	2UK GLS	1.3+07		Jour	NP/A,94,313	67	R.Chapman+	D0138
p,p	incl	DAE	1USAORL	2.9+07	6.2+07	Jour	PR/C,8,1045	73	F.E.Bbertrand+	C0925
$p,p+\alpha$	^{12}C	CSP	2UK GLS	1.3+07		Jour	NP/A,94,313	67	R.Chapman+	D0138
p,t	incl	DAE	1USAORL	3.9+07	6.2+07	Jour	PR/C,8,1045	73	F.E.Bbertrand+	C0925
p,x	^3He	DAE	1USAORL	2.9+07	6.2+07	Jour	PR/C,8,1045	73	F.E.Bbertrand+	C0925
d,α	^{14}N	CS	2FR ENS	8.0+05	1.9+06	Jour	APH,9,297	64	G.Amsel	D0086
d,α	^{14}N	DA	2FR ENS	8.1+05	2.0+06	Jour	APH,9,297	64	G.Amsel	D0086
d,α	^{14}N	DAP	2BLGNAM	5.1+05	1.6+06	Jour	JRC,38,193	77	G.Debras+	D0144
d,el	^{16}O	DA	2FR ENS	8.6+05	2.0+06	Jour	APH,9,297	64	G.Amsel	D0086
d,p	^{17}O	DAP	2BLGNAM	5.1+05	3.0+06	Jour	JRC,38,193	77	G.Debras+	D0144
d,p	^{17}O	DAP	2FR ENS	8.1+05	2.0+06	Jour	APH,9,297	64	G.Amsel	D0086
d,p	^{17}O	?	2FR ENS	9.0+05	1.4+06	Jour	APH,9,297	64	G.Amsel	D0086
$^3\text{He},n$	^{18}Ne	CSP	2FR CSN	5.5+06	3.0+07	Jour	PR/C,68,025804	03	V.Tatischeff+	O0757
$^3\text{He},n$	^{18}Ne	DAP	2FR CSN	6.2+06	3.0+07	Jour	PR/C,68,025804	03	V.Tatischeff+	O0757
$^3\text{He},p$	^{18}F	CSP	2FR CSN	2.5+06	3.6+07	Jour	PR/C,68,025804	03	V.Tatischeff+	O0757
$^3\text{He},p$	^{18}F	DAP	2UK OXF	1.8+07		Jour	JP/G,2,935	76	H.M.Sengupta+	O1091
$^3\text{He},p$	^{18}F	DAP	2FR CSN	3.5+06	3.6+07	Jour	PR/C,68,025804	03	V.Tatischeff+	O0757
α,γ	^{20}Ne	RR	2GERKFK	0.0+00		Jour	PR/C,68,025801	03	S.Dababneh+	O0810

8 Oxygen 18

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,α	^{15}N	DA	2FR ENS	9.1+05	2.1+06	Jour	APH,9,297	64	G.Amsel	D0086
p,n	^{18}F	CS	2SWTZUR	2.1+06	6.8+06	Jour	HPA,24,465	52	J.P.Blaser+	D0095
$\alpha,0$		RP	2GERKFK	4.7+05	7.5+05	Jour	PR/C,68,025801	03	S.Dababneh+	O0810

9 Fluorine 19

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,0</i>		RP	3JORJOR	3.4+05	3.0+06	Jour	NIM/B,83,319	93	S.O.F.Dababneh+	O1068
<i>p,α</i>	¹⁶ O	DA	1USAOHO	2.0+06	3.0+06	Jour	NIM/A,450,353	00	A.Fessler+	C0972
<i>p,α</i>	¹⁶ O	DAP	1USAOHO	1.5+06	4.0+06	Jour	NIM/A,450,353	00	A.Fessler+	C0972
<i>p,α</i>	¹⁶ O	DAP	2FR ENS	7.1+05	2.0+06	Jour	NIM,168,93	80	D.Dieumegard+	D0134
<i>p,α</i>	¹⁶ O	PY	3JORJOR	1.9+06	3.1+06	Jour	NIM/B,83,319	93	S.O.F.Dababneh+	O1068
<i>p,α</i>	¹⁶ O	TTD	1USAOHO	1.5+06	4.0+06	Jour	NIM/A,450,353	00	A.Fessler+	C0972
<i>p,n</i>	¹⁹ Ne	CS	2SWTZUR	4.1+06	6.6+06	Jour	HPA,24,465	52	J.P.Blaser+	D0095
<i>d,α</i>	¹⁷ O	DAP	2FR ENS	7.1+05	1.9+06	Jour	NIM,191,349	81	B.Maurel+	D0154
<i>α,γ</i>	incl	TTD	2SF HLS	2.4+06		Jour	NIM,212,441	83	R.Lappalainen+	O1067

10 Neon 20

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,α</i>	¹⁷ F	CS	2UK GLS	1.3+07		Jour	NP/A,94,313	67	R.Chapman+	D0138
<i>p,inel</i>	²⁰ Ne	CSP	2UK GLS	1.3+07		Jour	NP/A,94,313	67	R.Chapman+	D0138
<i>p,p+α</i>	¹⁶ O	CSP	2UK GLS	1.3+07		Jour	NP/A,94,313	67	R.Chapman+	D0138
<i>d,α</i>	¹⁸ F	CS	2BLGLIE	7.0+06	1.2+07	Jour	NIM,136,185	76	M.Guillaume	D0112
<i>d,α</i>	¹⁸ F	TT	2BLGLIE	7.5+06	1.6+07	Jour	NIM,136,185	76	M.Guillaume	D0112

10 Neon 22

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>α,γ</i>	²⁶ Mg	CSP	2GERTHS	8.1+05	2.1+06	Jour	ZP/A,334,491	89	K.Wolke+	O1122
<i>α,n</i>	²⁵ Mg	CS	2GERIFS	6.2+05	1.0+06	Jour	PR/C,43,2849	91	V.Harms+	O1082
<i>α,n</i>	²⁵ Mg	CSP	2GERTHS	7.4+05	2.1+06	Jour	ZP/A,334,491	89	K.Wolke+	O1122
<i>α,n</i>	²⁵ Mg	CSP	2GERIFS	7.9+05	2.1+06	Jour	PR/C,43,2849	91	V.Harms+	O1082

11 Sodium 23

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,n</i>	²³ Mg	CS	2SWTZUR	5.0+06	6.6+06	Jour	HPA,24,465	52	J.P.Blaser+	D0095

12 Magnesium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>α,γ</i>	incl	TTD	2SF HLS	2.4+06		Jour	NIM,212,441	83	R.Lappalainen+	O1067

12 Magnesium 24

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	²⁴ Mg	DA	3POLIPJ	9.1+06		Jour	JP/G,2,831	76	M.Herman+	O1090
<i>p,incl</i>	²⁴ Mg	DAP	3POLIPJ	9.1+06		Jour	JP/G,2,831	76	M.Herman+	O1090
<i>d,²He</i>	²⁴ Na	DAP	2NEDGRN	1.7+08		Jour	PR/C,65,044323	02	S.Rakers+	O1140
<i>d,el</i>	²⁴ Mg	DA	2NEDGRN	1.7+08		Jour	PR/C,63,037601	01	C.Baumer+	O1080
<i>d,incl</i>	²⁴ Mg	DAP	2NEDGRN	1.7+08		Jour	PR/C,63,037601	01	C.Baumer+	O1080

12 Magnesium 25

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	²⁵ Mg	DA	3POLIPJ	9.1+06		Jour	JP/G,2,831	76	M.Herman+	O1090
<i>p,incl</i>	²⁵ Mg	DAP	3POLIPJ	9.1+06		Jour	JP/G,2,831	76	M.Herman+	O1090
<i>p,n</i>	²⁵ Al	CS	2SWTZUR	5.1+06	6.6+06	Jour	HPA,24,465	52	J.P.Blaser+	D0095

12 Magnesium 26

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	²⁶ Mg	DA	3POLIPJ	9.1+06		Jour	JP/G,2,831	76	M.Herman+	O1090
<i>p,incl</i>	²⁶ Mg	DAP	3POLIPJ	9.1+06		Jour	JP/G,2,831	76	M.Herman+	O1090

13 Aluminium 27

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,α</i>	incl	CS	1USAMHG	1.6+07		Conf	91JUELIC,,352	92	P.Jung	D4058
<i>p,α</i>	²⁴ Mg	TTD	2BLGNAM	1.7+06	2.5+06	Jour	JRC,12,189	72	G.Deconninck+	D0139
<i>p,el</i>	²⁷ Al	DA	3CPRLNZ	9.6+05	2.7+06	Jour	JRN,250,555	01	Ligong-Ping+	O1076
<i>p,γ</i>	²⁸ Si	TTD	2BLGNAM	5.0+05	2.5+06	Jour	JRC,12,189	72	G.Deconninck+	D0139
<i>p,incl</i>	²⁷ Al	TTD	2BLGNAM	1.5+06	3.0+06	Jour	JRC,12,189	72	G.Deconninck+	D0139
<i>p,n</i>	²⁷ Si	CS	2SWTZUR	5.8+06	6.6+06	Jour	HPA,24,465	52	J.P.Blaser+	D0095
<i>d,α</i>	incl	CS	1USAMHG	1.4+07		Conf	91JUELIC,,352	92	P.Jung	D4058
<i>d,³He</i>	²⁶ Mg	DAP	2FR PAR	2.9+07		Jour	PR/C,48,205	93	J.Vernotte+	O1148
<i>d,non</i>		CS	1USAMRY	1.4+08		Jour	PR,19,659	Mar 79	J.R. Wu+	C0884
<i>d,p</i>	incl	CS	1USAMRY	1.4+08		Jour	PR,19,659	Mar 79	J.R. Wu+	C0884

14 Silicon

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>α,γ</i>	incl	TTD	2SF HLS	2.4+06		Jour	NIM,212,441	83	R.Lappalainen+	O1067

14 Silicon 28

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$d, {}^3\text{He}$	${}^{27}\text{Al}$	DAP	2FR PAR	2.9+07		Jour	PR/C,49,1559	94	J.Vernotte+	O1147
α, el	${}^{28}\text{Si}$	DA	3INDVEC	4.5+07		Jour	JP/G,21,385	95	V.P.Darshan+	O1083
$\alpha, {}^3\text{He}$	${}^{29}\text{Si}$	DAP	3INDVEC	4.5+07	1.2+08	Jour	JP/G,21,385	95	V.P.Darshan+	O1083
α, t	${}^{29}\text{P}$	DAP	3INDVEC	4.5+07	6.5+07	Jour	JP/G,21,385	95	V.P.Darshan+	O1083

14 Silicon 29

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$d, {}^3\text{He}$	${}^{28}\text{Al}$	DAP	2FR PAR	2.9+07		Jour	PR/C,49,1559	94	J.Vernotte+	O1147
α, el	${}^{29}\text{Si}$	DA	3POLIFJ	2.7+07		Jour	JP/G,20,1789	94	M.Siemaszko+	O1110
α, inel	${}^{29}\text{Si}$	DAP	3POLIFJ	2.7+07		Jour	JP/G,20,1789	94	M.Siemaszko+	O1110

14 Silicon 30

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$d, {}^3\text{He}$	${}^{29}\text{Al}$	DAP	2FR PAR	2.9+07		Jour	PR/C,49,1559	94	J.Vernotte+	O1147
${}^3\text{He}, d$	${}^{31}\text{P}$	DAP	2FR PAR	2.5+07		Jour	PR/C,41,1956	90	J.Vernotte+	O1150
α, el	${}^{30}\text{Si}$	DA	3POLIFJ	2.7+07		Jour	JP/G,20,1789	94	M.Siemaszko+	O1110
α, inel	${}^{30}\text{Si}$	DAP	3POLIFJ	2.7+07		Jour	JP/G,20,1789	94	M.Siemaszko+	O1110
α, t	${}^{31}\text{P}$	DAP	3POLIFJ	2.7+07		Jour	JP/G,20,1789	94	M.Siemaszko+	O1110

18 Argon 40

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α, p	${}^{43}\text{K}$	TT	2BLGLIE	1.8+07	2.5+07	Jour	NIM,136,185	76	M.Guillaume	D0112

20 Calcium 40

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
π^+, π^-	${}^{40}\text{Ti}$	DAP	2SWTPSI	4.4+07	8.7+07	Jour	PRL,79,3849	97	K.Foehl+	O1129
${}^3\text{He}, \alpha$	${}^{39}\text{Ca}$	DAP	2UK HAR	5.0+07		Jour	JP/G,7,381	81	R.J.Griffiths+	O1124
${}^3\text{He}, \text{el}$	${}^{40}\text{Ca}$	DA	2UK HAR	5.0+07		Jour	JP/G,7,381	81	R.J.Griffiths+	O1124

20 Calcium 44

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
${}^3\text{He}, \alpha$	${}^{43}\text{Ca}$	DAP	2UK HAR	5.0+07		Jour	JP/G,7,381	81	R.J.Griffiths+	O1124

³He,el ⁴⁴Ca DA 2UK HAR 5.0+07 Jour JP/G,7,381 81 R.J.Griffiths+ O1124

20 Calcium 48

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,γ</i>	⁴⁹ Sc	CS	3AULAML	7.4+05	2.2+06	Jour	JP/G,5,399	79	S.R.Kennett+	O1125
<i>p,n</i>	⁴⁸ Sc	CS	3AULAML	1.1+06	2.3+06	Jour	JP/G,5,399	79	S.R.Kennett+	O1125
<i>p,n</i>	⁴⁸ Sc	CSP	3AULAML	1.1+06	2.2+06	Jour	JP/G,5,399	79	S.R.Kennett+	O1125
³ He,α	⁴⁷ Ca	DAP	2UK HAR	5.0+07		Jour	JP/G,7,381	81	R.J.Griffiths+	O1124
³ He,el	⁴⁸ Ca	DA	2UK HAR	5.0+07		Jour	JP/G,7,381	81	R.J.Griffiths+	O1124

22 Titanium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,α</i>	incl	CS	1USAMHG	1.6+07		Conf	91JUELIC,,352	92	P.Jung	D4058
<i>p,x</i>	⁴⁸ V	CS	1USAMHG	5.2+06	2.4+07	Conf	91JUELIC,,352	92	P.Jung	D4058
<i>d,α</i>	incl	CS	1USAMHG	1.4+07		Conf	91JUELIC,,352	92	P.Jung	D4058
<i>d,x</i>	⁴⁸ V	CS	1USAMHG	9.8+06	1.3+07	Conf	91JUELIC,,352	92	P.Jung	D4058
α,x	⁴⁸ Cr	CS	3CPRSIU	2.6+07	4.7+06	Jour	NIM/B,140,9	98	X.Peng+	O1074

22 Titanium 46

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	⁴⁶ Ti	DA	3INDVEC	3.5+07		Jour	JP/G,17,1861	91	V.R.Rao+	O1105
<i>p,el</i>	⁴⁶ Ti	DA	3INDVEC	4.5+07	5.0+07	Jour	NC/A,107,1441	94	V.R.Rao+	O1120
<i>p,inel</i>	⁴⁶ Ti	DAP	3INDVEC	3.5+07		Jour	JP/G,17,1861	91	V.R.Rao+	O1105
<i>p,inel</i>	⁴⁶ Ti	DAP	3INDVEC	4.5+07	5.0+07	Jour	NC/A,107,1441	94	V.R.Rao+	O1120

22 Titanium 48

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	⁴⁸ Ti	DA	3INDVEC	4.0+07	4.5+07	Jour	NC/A,107,1441	94	V.R.Rao+	O1120
<i>p,inel</i>	⁴⁸ Ti	DAP	3INDVEC	4.0+07	4.5+07	Jour	NC/A,107,1441	94	V.R.Rao+	O1120

23 Vanadium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,α</i>	incl	CS	1USAMHG	1.6+07		Conf	91JUELIC,,352	92	P.Jung	D4058
<i>p,x</i>	⁵¹ Cr	CS	1USAMHG	3.3+06	2.4+07	Conf	91JUELIC,,352	92	P.Jung	D4058
<i>d,α</i>	incl	CS	1USAMHG	1.4+07		Conf	91JUELIC,,352	92	P.Jung	D4058
<i>d,x</i>	⁵¹ Cr	CS	1USAMHG	7.8+06	1.3+07	Conf	91JUELIC,,352	92	P.Jung	D4058

23 Vanadium 51

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$\alpha,2\alpha$	^{47}Sc	CS	3INDVEC	4.0+07	1.1+08	Jour	JP/G,21,399	95	N.L.Singh+	O1116
$\alpha,3n$	^{52}Mn	CS	3INDVEC	2.9+07	1.1+08	Jour	JP/G,21,399	95	N.L.Singh+	O1116
$\alpha,3n$	^{52}Mn	CS	3INDVEC	2.9+07	1.1+08	Jour	JP/G,13,535	87	J.Ramarao+	O1118
α,el	^{51}V	DA	2UK BIR	2.5+07		Jour	NP/A,513,61	90	F.Ballester+	O1087
α,inel	^{51}V	DAP	2UK BIR	2.5+07		Jour	NP/A,513,61	90	F.Ballester+	O1087
α,n	^{54}Mn	CS	3INDVEC	1.1+07	1.1+08	Jour	JP/G,21,399	95	N.L.Singh+	O1116
α,n	^{54}Mn	CS	3INDVEC	1.1+07	1.1+08	Jour	JP/G,13,535	87	J.Ramarao+	O1118
α,x	^{44}Sc	CS	3INDVEC	6.5+07	1.1+08	Jour	JP/G,21,399	95	N.L.Singh+	O1116
α,x	^{46}Sc	CS	3INDVEC	4.0+07	1.1+08	Jour	JP/G,21,399	95	N.L.Singh+	O1116
α,x	^{48}Sc	CS	3INDVEC	5.8+07	1.1+08	Jour	JP/G,21,399	95	N.L.Singh+	O1116
α,x	^{48}V	CS	3INDVEC	4.6+07	1.1+08	Jour	JP/G,21,399	95	N.L.Singh+	O1116
α,x	^{48}Cr	CS	3INDVEC	7.8+07	1.1+08	Jour	JP/G,21,399	95	N.L.Singh+	O1116
α,x	^{51}Cr	CS	3INDVEC	3.5+07	1.1+08	Jour	JP/G,21,399	95	N.L.Singh+	O1116

24 Chromium 50

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α,el	^{50}Cr	DA	2UK BIR	2.5+07		Jour	NP/A,513,61	90	F.Ballester+	O1087
α,inel	^{50}Cr	DAP	2UK BIR	2.5+07		Jour	NP/A,513,61	90	F.Ballester+	O1087

24 Chromium 52

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α,el	^{52}Cr	DA	2UK BIR	2.5+07		Jour	NP/A,513,61	90	F.Ballester+	O1087
α,inel	^{52}Cr	DAP	2UK BIR	2.5+07		Jour	NP/A,513,61	90	F.Ballester+	O1087

24 Chromium 53

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α,el	^{53}Cr	DA	2UK BIR	2.5+07		Jour	NP/A,513,61	90	F.Ballester+	O1087
α,inel	^{53}Cr	DAP	2UK BIR	2.5+07		Jour	NP/A,513,61	90	F.Ballester+	O1087

26 Iron

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,α	incl	CS	1USAMHG	1.6+07		Conf	91JUELIC,,352	92	P.Jung	D4058
p,x	^{56}Co	CS	1USAMHG	5.6+06	2.4+07	Conf	91JUELIC,,352	92	P.Jung	D4058

d,α	incl	CS	1USAMHG	1.4+07		Conf	91JUELIC,,352	92	P.Jung	D4058
d,x	^{56}Co	CS	1USAMHG	7.9+06	1.3+07	Conf	91JUELIC,,352	92	P.Jung	D4058
$^3\text{He},x$	^{54}Mn	CS	3HUNDEB	1.2+07	2.5+07	Jour	NIM/B,211,312	03	F.Tarkanyi+	D4140
$^3\text{He},x$	^{55}Co	CS	3HUNDEB	1.2+07	2.5+07	Jour	NIM/B,211,312	03	F.Tarkanyi+	D4140
$^3\text{He},x$	^{56}Co	CS	3HUNDEB	1.2+07	2.5+07	Jour	NIM/B,211,312	03	F.Tarkanyi+	D4140
$^3\text{He},x$	^{57}Co	CS	3HUNDEB	1.2+07	2.5+07	Jour	NIM/B,211,312	03	F.Tarkanyi+	D4140
$^3\text{He},x$	^{58}Co	CS	3HUNDEB	1.2+07	2.5+07	Jour	NIM/B,211,312	03	F.Tarkanyi+	D4140
$^3\text{He},x$	^{56}Ni	CS	3HUNDEB	1.2+07	2.5+07	Jour	NIM/B,211,312	03	F.Tarkanyi+	D4140
$^3\text{He},x$	^{57}Ni	CS	3HUNDEB	1.2+07	2.5+07	Jour	NIM/B,211,312	03	F.Tarkanyi+	D4140

26 Iron 54

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$^3\text{He},2n$	^{55}Ni	TT	2BLGLVN	2.7+07		Jour	PR/C,59,2416	99	I.Reusen+	O1095
$^3\text{He},3n$	^{54}Ni	TT	2BLGLVN	4.5+07		Jour	PR/C,59,2416	99	I.Reusen+	O1095

26 Iron 56

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,el	^{56}Fe	DA	3INDIND	2.8+07		Jour	PR/C,65,014305	01	A.Kumar+	O1061
p,inel	^{56}Fe	DAP	3INDIND	2.8+07		Jour	PR/C,65,014305	01	A.Kumar+	O1061
p,p	incl	DA	2NEDGRN	1.9+08		Priv	MUKHERJEE	Apr 04	B.Mukherjee+	O1086
p,p	incl	?	2NEDGRN	1.9+08		Priv	MUKHERJEE	Apr 04	B.Mukherjee+	O1086
α,el	^{56}Fe	DA	2GERKFK	1.0+08		Jour	JP/G,1,344	75	H.J.Gils+	O1098
α,inel	^{56}Fe	DAP	2GERKFK	1.0+08		Jour	JP/G,1,344	75	H.J.Gils+	O1098

26 Iron 57

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,d	^{56}Fe	CSP	1USAORL	2.2+07		Jour	PR,130,2342	Jun 63	J.B.Ball+	C1034
p,d	^{56}Fe	DAP	1USAORL	2.2+07		Jour	PR,130,2342	Jun 63	J.B.Ball+	C1034

26 Iron 58

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,t	^{56}Fe	CSP	1USAORL	2.2+07		Jour	PR,130,2342	Jun 63	J.B.Ball+	C1034
p,t	^{56}Fe	DAP	1USAORL	2.2+07		Jour	PR,130,2342	Jun 63	J.B.Ball+	C1034

27 Cobalt 59

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

p,α	^{56}Fe	CSP	1USAORL	2.2+07		Jour	PR,130,2342	Jun 63	J.B.Ball+	C1034
p,α	^{56}Fe	DAP	1USAORL	2.2+07		Jour	PR,130,2342	Jun 63	J.B.Ball+	C1034
α,el	^{59}Co	DA	2UK BIR	2.5+07		Jour	NP/A,513,61	90	F.Ballester+	O1087
α,inel	^{59}Co	DAP	2UK BIR	2.5+07		Jour	NP/A,513,61	90	F.Ballester+	O1087

28 Nickel

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,α	incl	CS	1USAMHG	1.6+07		Conf	91JUELIC,,352	92	P.Jung	D4058
p,x	^{57}Co	CS	1USAMHG	1.5+07	2.5+07	Conf	91JUELIC,,352	92	P.Jung	D4058
d,α	incl	CS	1USAMHG	1.4+07		Conf	91JUELIC,,352	92	P.Jung	D4058
d,x	^{58}Co	CS	1USAMHG	8.0+06	1.3+07	Conf	91JUELIC,,352	92	P.Jung	D4058

28 Nickel 58

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
d,el	^{58}Ni	DA	2NEDGRN	1.7+08		Jour	PR/C,63,037601	01	C.Baumer+	O1080
d,inel	^{58}Ni	DAP	2NEDGRN	1.7+08		Jour	PR/C,63,037601	01	C.Baumer+	O1080
d,non	^1H	CS	1USAMRY	1.4+08		Jour	PR,19,659	Mar 79	J.R.Wu+	C0884
d,p	incl	CS	1USAMRY	1.4+08		Jour	PR,19,659	Mar 79	J.R.Wu+	C0884
α,el	^{58}Ni	DA	2UK BIR	2.5+07		Jour	JP/G,13,1541	87	F.Ballester+	O1089
α,inel	^{58}Ni	DAP	2UK BIR	2.5+07		Jour	JP/G,13,1541	87	F.Ballester+	O1089

28 Nickel 60

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
d,p	^{61}Ni	DAP	2SWTZUR	2.7+06	3.3+06	Jour	JP/G,17,955	91	E.Wesolowski+	O1138
$^3\text{He},\alpha$	^{59}Ni	DAP	2UK BIR	3.3+07		Jour	JP/G,16,1039	90	H.M.Sengupta+	O1102
α,el	^{60}Ni	DA	2UK BIR	2.5+07		Jour	JP/G,13,1541	87	F.Ballester+	O1089
α,inel	^{60}Ni	DAP	2UK BIR	2.5+07		Jour	JP/G,13,1541	87	F.Ballester+	O1089

28 Nickel 62

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
d,p	^{63}Ni	DAP	2SWTZUR	2.7+06	3.3+06	Jour	JP/G,17,955	91	E.Wesolowski+	O1138
α,el	^{62}Ni	DA	2UK BIR	2.5+07		Jour	JP/G,13,1541	87	F.Ballester+	O1089
α,inel	^{62}Ni	DAP	2UK BIR	2.5+07		Jour	JP/G,13,1541	87	F.Ballester+	O1089

28 Nickel 64

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,p</i>	⁶⁵ Ni	DAP	2SWTZUR	2.7+06	3.3+06	Jour	JP/G,17,955	91	E.Wesolowski+	O1138
<i>α,el</i>	⁶⁴ Ni	DA	2UK BIR	2.5+07		Jour	JP/G,13,1541	87	F.Ballester+	O1089
<i>α,inel</i>	⁶⁴ Ni	DAP	2UK BIR	2.5+07		Jour	JP/G,13,1541	87	F.Ballester+	O1089

29 Copper

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,α</i>	incl	CS	1USAMHG	1.6+07		Conf	91JUELIC,,352	92	P.Jung	D4058
<i>p,x</i>	⁶⁵ Zn	CS	1USAMHG	3.1+06	2.5+07	Conf	91JUELIC,,352	92	P.Jung	D4058
<i>d,α</i>	incl	CS	1USAMHG	1.4+07		Conf	91JUELIC,,352	92	P.Jung	D4058
<i>d,x</i>	⁶⁵ Zn	CS	1USAMHG	7.8+06	1.3+07	Conf	91JUELIC,,352	92	P.Jung	D4058

29 Copper 63

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>α,el</i>	⁶³ Cu	DA	2UK BIR	2.5+07		Jour	NP/A,513,61	90	F.Ballester+	O1087
<i>α,inel</i>	⁶³ Cu	DAP	2UK BIR	2.5+07		Jour	NP/A,513,61	90	F.Ballester+	O1087
<i>α,n</i>	⁶⁶ Ga	?	3INDVEC	2.7+07	7.1+07	Jour	PRM,36,115	91	A.V.Mohanrao+	D0136

29 Copper 65

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>α,2n</i>	⁶⁷ Ga	CS	3INDVEC	2.7+07	7.1+07	Jour	PRM,36,115	91	A.V.Mohanrao+	D0136

30 Zinc

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,x</i>	⁶⁵ Zn	TT	2ITYMIL	1.8+07	4.4+07	Jour	JRC,76,311	83	M.Bonardi+	O1062
<i>p,x</i>	⁶⁶ Ga	TT	2ITYMIL	5.9+06	4.4+07	Jour	JRC,76,311	83	M.Bonardi+	O1062
<i>p,x</i>	⁶⁷ Ga	TT	2ITYMIL	5.8+06	4.4+07	Jour	JRC,76,311	83	M.Bonardi+	O1062
<i>d,x</i>	Many	TT	2ZZZISP	1.9+07		Jour	NIM/B,213,373	04	F.Groppi+	O0778
<i>d,x</i>	⁶¹ Cu	TT	2ZZZISP	7.4+06	1.8+07	Jour	NIM/B,213,373	04	F.Groppi+	O0778
<i>d,x</i>	⁶⁴ Cu	TT	2ZZZISP	8.6+06	1.8+07	Jour	NIM/B,213,373	04	F.Groppi+	O0778

30 Zinc 64

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

<i>p</i> ,el	⁶⁴ Zn	DA	2NEDENT	2.0+07	Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>p</i> ,el	⁶⁴ Zn	POD	2NEDENT	2.0+07	Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>p</i> ,inel	⁶⁴ Zn	DAP	2NEDENT	2.0+07	Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>p</i> ,inel	⁶⁴ Zn	POD	2NEDENT	2.0+07	Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109

30 Zinc 66

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,el	⁶⁶ Zn	DA	2NEDENT	2.0+07		Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>p</i> ,el	⁶⁶ Zn	POD	2NEDENT	2.0+07		Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>p</i> ,inel	⁶⁶ Zn	DAP	2NEDENT	2.0+07		Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>p</i> ,inel	⁶⁶ Zn	POD	2NEDENT	2.0+07		Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>d</i> ,el	⁶⁶ Zn	DA	2UK ALD	1.2+07		Jour	JP/G,3,253	77	A.L.Abu-Ghazaleh+	O1092
<i>d</i> , <i>p</i>	⁶⁷ Zn	DAP	2UK ALD	1.2+07		Jour	JP/G,3,253	77	A.L.Abu-Ghazaleh+	O1092

30 Zinc 68

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,el	⁶⁸ Zn	DA	2NEDENT	2.0+07		Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>p</i> ,el	⁶⁸ Zn	POD	2NEDENT	2.0+07		Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>p</i> ,inel	⁶⁸ Zn	DAP	2NEDENT	2.0+07		Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>p</i> ,inel	⁶⁸ Zn	POD	2NEDENT	2.0+07		Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109

30 Zinc 70

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,el	⁷⁰ Zn	DA	2NEDENT	2.0+07		Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>p</i> ,el	⁷⁰ Zn	POD	2NEDENT	2.0+07		Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>p</i> ,inel	⁷⁰ Zn	DAP	2NEDENT	2.0+07		Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109
<i>p</i> ,inel	⁷⁰ Zn	POD	2NEDENT	2.0+07		Jour	JP/G,19,1191	93	W.H.L.Moonen+	O1109

31 Gallium 69

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d</i> , ³ He	⁶⁸ Zn	DAP	2FR PAR	2.6+07		Jour	PR/C,16,1825	77	G.Rotbard+	O1159
³ He, <i>d</i>	⁷⁰ Ge	DAP	2FR PAR	2.5+07		Jour	PR/C,12,1745	75	D.Ardouin+	O1156

31 Gallium 71

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d</i> , ³ He	⁷⁰ Zn	DAP	2FR PAR	2.6+07		Jour	PR/C,16,1825	77	G.Rotbard+	O1159

$^3\text{He},d$ ^{72}Ge DAP 2FR PAR 2.5+07 Jour PR/C,11,1649 75 D.Ardouin+ O1155

32 Germanium 70

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	^{70}Ge	DA	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,el</i>	^{70}Ge	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	^{70}Ge	DAP	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	^{70}Ge	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,t</i>	^{68}Ge	DAP	2FR PAR	2.6+07		Jour	PR/C,15,894	77	F.Guilbaut+	O1158

32 Germanium 72

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	^{72}Ge	DA	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,el</i>	^{72}Ge	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	^{72}Ge	DAP	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	^{72}Ge	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103

32 Germanium 73

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,^3He</i>	^{72}Ga	DAP	2FR PAR	2.5+07		Jour	PR/C,35,503	87	G.Rotbard+	O1151

32 Germanium 74

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	^{74}Ge	DA	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,el</i>	^{74}Ge	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	^{74}Ge	DAP	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	^{74}Ge	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,t</i>	^{72}Ge	DAP	2FR PAR	2.6+07		Jour	PR/C,14,58	76	M.Vergnes+	O1157

32 Germanium 76

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	^{76}Ge	DA	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,el</i>	^{76}Ge	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	^{76}Ge	DAP	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	^{76}Ge	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103

33 Arsenic 75

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,t</i>	⁷³ As	DAP	2FR PAR	2.6+07		Jour	PR/C,14,58	76	M.Vergnes+	O1157
<i>d,³He</i>	⁷⁴ Ge	DAP	2FR PAR	2.6+07		Jour	PR/C,16,1825	77	G.Rotbard+	O1159
³ He, <i>d</i>	⁷⁶ Se	DAP	2FR PAR	2.5+07		Jour	PR/C,12,1745	75	D.Ardouin+	O1156

34 Selenium 76

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	⁷⁶ Se	DA	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,el</i>	⁷⁶ Se	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	⁷⁶ Se	DAP	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	⁷⁶ Se	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>α,el</i>	⁷⁶ Se	DA	2UK BIR	2.5+07		Jour	JP/G,14,1103	88	F.Ballester+	O1088
<i>α,inel</i>	⁷⁶ Se	DAP	2UK BIR	2.5+07		Jour	JP/G,14,1103	88	F.Ballester+	O1088

34 Selenium 78

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	⁷⁸ Se	DA	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,el</i>	⁷⁸ Se	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	⁷⁸ Se	DAP	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	⁷⁸ Se	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>α,el</i>	⁷⁸ Se	DA	2UK BIR	2.5+07		Jour	JP/G,14,1103	88	F.Ballester+	O1088
<i>α,inel</i>	⁷⁸ Se	DAP	2UK BIR	2.5+07		Jour	JP/G,14,1103	88	F.Ballester+	O1088

34 Selenium 80

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	⁸⁰ Se	DA	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,el</i>	⁸⁰ Se	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	⁸⁰ Se	DAP	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>p,inel</i>	⁸⁰ Se	POD	2NEDENT	2.2+07		Jour	JP/G,19,635	93	W.H.L.Moonen+	O1103
<i>α,el</i>	⁸⁰ Se	DA	2UK BIR	2.5+07		Jour	JP/G,14,1103	88	F.Ballester+	O1088
<i>α,inel</i>	⁸⁰ Se	DAP	2UK BIR	2.5+07		Jour	JP/G,14,1103	88	F.Ballester+	O1088

38 Strontium 88

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,p</i>	⁸⁹ Sr	DAP	2SWTZUR	3.4+06	4.0+06	Jour	JP/G,10,549	84	A.Saganek+	O1136

39

Yttrium

89

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$d,2n$	^{89}Zr	CS	2GERZFK	5.3+06	1.3+07	Jour	JRN/L,127,7	88	D.Degering+	O1107
$\alpha,3n$	^{90}Nb	CS	3INDVEC	2.5+07	4.8+07	Jour	PR/C,55,2556	97	S.Mukherjee+	O1114
α,n	^{92}Nb	CS	3INDVEC	1.3+07	4.8+07	Jour	PR/C,55,2556	97	S.Mukherjee+	O1114

40

Zirconium

90

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
d,non	^1H	CS	1USAMRY	1.4+08		Jour	PR,19,659	Mar 79	J.R. Wu+	C0884
d,p	incl	CS	1USAMRY	1.4+08		Jour	PR,19,659	Mar 79	J.R. Wu+	C0884

41

Niobium

93

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$^3\text{He},2n+\alpha$	^{90}Nb	CS	4ZZZDUB	2.0+07	6.2+06	Jour	YF,61,1555	98	C.Necheva+	O1123
$^3\text{He},\gamma$	^{96}Tc	CS	4ZZZDUB	2.0+07	6.2+06	Jour	YF,61,1555	98	C.Necheva+	O1123
$^3\text{He},n$	^{95}Tc	CS	4ZZZDUB	2.0+07	9.5+06	Jour	YF,61,1555	98	C.Necheva+	O1123
$^3\text{He},x$	^{92}Nb	CS	4ZZZDUB	2.0+07	4.5+06	Jour	YF,61,1555	98	C.Necheva+	O1123
$^3\text{He},x$	^{93}Mo	CS	4ZZZDUB	2.0+07	7.9+06	Jour	YF,61,1555	98	C.Necheva+	O1123
$\alpha,2n$	^{95}Tc	CS	3INDVEC	1.6+07	1.0+08	Jour	JP/G,13,535	87	J.Ramarao+	O1118
$\alpha,2n$	^{95}Tc	CS	2GERJUL	1.6+07	1.1+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
$\alpha,2n$	^{95}Tc	CS	3INDVEC	1.7+07	4.7+07	Jour	JPJ,59,3916	90	N.L.Singh+	D0137
$\alpha,2n$	^{95}Tc	CS	2UK MAN	1.8+07	4.8+07	Jour	JIN,41,617	79	C.L.Branquinho+	D0140
$\alpha,2n$	^{95}Tc	CS	3INDVEC	3.4+07	7.6+07	Jour	JP/G,22,1455	96	S.Mukherjee+	O1111
$\alpha,2n$	^{95}Tc	CS	2GERJUL	5.9+07	7.8+07	Jour	ZP/A,308,301	82	J.Ernst+	D0143
$\alpha,2p$	^{95}Nb	CS	3INDVEC	3.4+07	7.6+07	Jour	JP/G,22,1455	96	S.Mukherjee+	O1111
$\alpha,2p$	^{95}Nb	CS	2GERJUL	5.9+07	1.5+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
$\alpha,3n$	^{94}Tc	CS	3INDVEC	2.8+07	4.7+07	Jour	JPJ,59,3916	90	N.L.Singh+	D0137
$\alpha,3n$	^{94}Tc	CS	2UK MAN	2.8+07	7.2+07	Jour	JIN,41,617	79	C.L.Branquinho+	D0140
$\alpha,3n$	^{94}Tc	CS	2GERJUL	2.9+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
$\alpha,3n+p$	^{93}Mo	CS	3INDVEC	4.0+07	4.7+07	Jour	JPJ,59,3916	90	N.L.Singh+	D0137
$\alpha,4n$	^{93}Tc	CS	2GERJUL	3.9+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
$\alpha,4n$	^{93}Tc	CS	2UK MAN	4.4+07	7.2+07	Jour	JIN,41,617	79	C.L.Branquinho+	D0140
$\alpha,5n$	^{92}Tc	CS	2GERJUL	1.7+08		Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,n	^{96}Tc	CS	3INDVEC	1.1+07	1.1+08	Jour	JP/G,13,535	87	J.Ramarao+	O1118
α,n	^{96}Tc	CS	3INDVEC	1.3+07	4.7+07	Jour	JPJ,59,3916	90	N.L.Singh+	D0137
α,n	^{96}Tc	CS	2UK MAN	1.5+07	2.3+07	Jour	JIN,41,617	79	C.L.Branquinho+	D0140
α,n	^{96}Tc	CS	2GERJUL	1.6+07	1.1+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,n	^{96}Tc	CS	3INDVEC	3.4+07	7.6+07	Jour	JP/G,22,1455	96	S.Mukherjee+	O1111
$\alpha,n+\alpha$	^{92}Nb	CS	3INDVEC	2.4+07	4.7+07	Jour	JPJ,59,3916	90	N.L.Singh+	D0137
α,x	^{81}Rb	CS	2GERJUL	1.1+08	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{82}Rb	CS	2GERJUL	1.4+08	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{83}Rb	CS	2GERJUL	1.2+08	1.6+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{84}Rb	CS	2GERJUL	1.1+08	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143

α,x	^{82}Sr	CS	2GERJUL	1.3+08	1.6+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{83}Sr	CS	2GERJUL	1.2+08	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{85}Sr	CS	2GERJUL	8.7+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{84}Y	CS	2GERJUL	9.7+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{85}Y	CS	2GERJUL	8.7+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{86}Y	CS	2GERJUL	6.8+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{87}Y	CS	3INDVEC	5.2+07	7.6+07	Jour	JP/G,22,1455	96	S.Mukherjee+	O1111
α,x	^{87}Y	CS	2GERJUL	5.9+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{88}Y	CS	2GERJUL	5.9+07	1.6+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{88}Y	CS	3INDVEC	6.3+07	7.6+07	Jour	JP/G,22,1455	96	S.Mukherjee+	O1111
α,x	^{90}Y	CS	2GERJUL	8.7+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{85}Zr	CS	2GERJUL	1.5+08	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{86}Zr	CS	2GERJUL	1.1+08	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{87}Zr	CS	2GERJUL	1.1+08	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{88}Zr	CS	3INDVEC	5.2+07	7.6+07	Jour	JP/G,22,1455	96	S.Mukherjee+	O1111
α,x	^{88}Zr	CS	2GERJUL	5.9+07	1.6+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{89}Zr	CS	3INDVEC	5.2+07	7.6+07	Jour	JP/G,22,1455	96	S.Mukherjee+	O1111
α,x	^{89}Zr	CS	2GERJUL	5.9+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{88}Nb	CS	2GERJUL	8.7+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{89}Nb	CS	2GERJUL	7.6+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{90}Nb	CS	3INDVEC	4.0+07	7.5+07	Jour	JP/G,22,1455	96	S.Mukherjee+	O1111
α,x	^{90}Nb	CS	2GERJUL	4.9+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{91}Nb	CS	2GERJUL	5.9+07	1.3+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{92}Nb	CS	3INDVEC	3.4+07	7.6+07	Jour	JP/G,22,1455	96	S.Mukherjee+	O1111
α,x	^{92}Nb	CS	2GERJUL	5.9+07	1.6+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{90}Mo	CS	2GERJUL	8.7+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
α,x	^{93}Mo	CS	2GERJUL	4.3+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143

42 Molybdenum 98

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,p</i>	^{99}Mo	DAP	2SWTZUR	4.5+06		Jour	JP/G,11,1221	85	A.Saganek+	O1137

44 Ruthenium 102

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,p</i>	^{103}Ru	DAP	3BZLUSP	1.5+07		Jour	PR/C,58,2689	98	M.D.L.Barbosa+	O1144

46 Palladium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,x</i>	^{104}Ag	CS	2BLGVUB	3.7+07	6.7+06	Jour	NIM/B,217,193	04	A.Hermanne+	D4138
<i>p,x</i>	^{104}Ag	TT	2BLGVUB	6.0+06	3.7+07	Jour	NIM/B,217,193	04	A.Hermanne+	D4138
<i>d,x</i>	^{104}Ag	CS	2BLGVUB	2.0+07	6.7+06	Jour	NIM/B,217,193	04	A.Hermanne+	D4138
<i>d,x</i>	^{104}Ag	TT	2BLGVUB	4.5+06	2.0+07	Jour	NIM/B,217,193	04	A.Hermanne+	D4138

46 Palladium 110

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,2n</i>	¹¹⁰ Ag	CS	2BLGVUB	2.0+07	5.8+06	Jour	NIM/B,217,193	04	A.Hermanne+	D4138
<i>d,2n</i>	¹¹⁰ Ag	TT	2BLGVUB	4.5+06	2.0+07	Jour	NIM/B,217,193	04	A.Hermanne+	D4138
<i>d,n</i>	¹¹¹ Ag	CS	2BLGVUB	2.0+07	5.8+06	Jour	NIM/B,217,193	04	A.Hermanne+	D4138
<i>d,n</i>	¹¹¹ Ag	TT	2BLGVUB	4.5+06	2.0+07	Jour	NIM/B,217,193	04	A.Hermanne+	D4138

47 Silver

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α ,f		CS	2FR SAC	6.4+08		Jour	NIM,173,157	80	M.Debeauvais+	O1101

47 Silver 107

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α , <i>2n</i>	¹⁰⁹ In	CS	3CPRSIU	2.6+07	1.8+07	Jour	ARI,47,309	96	X.Peng+	O1168
α , <i>n</i>	¹¹⁰ In	CS	3CPRSIU	2.6+07	1.3+07	Jour	ARI,47,309	96	X.Peng+	O1168
α , <i>x</i>	¹⁰⁹ Cd	CS	3CPRSIU	2.6+07	2.0+07	Jour	ARI,47,309	96	X.Peng+	O1168

47 Silver 109

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α , <i>2n</i>	¹¹¹ In	CS	3CPRSIU	2.6+07	1.5+07	Jour	ARI,47,309	96	X.Peng+	O1168

48 Cadmium 106

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	¹⁰⁶ Cd	DA	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p,el</i>	¹⁰⁶ Cd	POD	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p,inel</i>	¹⁰⁶ Cd	DAP	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p,inel</i>	¹⁰⁶ Cd	POD	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104

48 Cadmium 108

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,el</i>	¹⁰⁸ Cd	DA	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p,el</i>	¹⁰⁸ Cd	POD	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p,inel</i>	¹⁰⁸ Cd	DAP	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104

p,inel ¹⁰⁸Cd POD 2NEDENT 2.2+07 Jour JP/G,20,1955 94 R.M.A.L.Petit+ O1104

48 Cadmium 110

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,el	¹¹⁰ Cd	DA	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p</i> ,el	¹¹⁰ Cd	POD	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p</i> ,inel	¹¹⁰ Cd	DAP	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p</i> ,inel	¹¹⁰ Cd	POD	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104

48 Cadmium 112

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,el	¹¹² Cd	DA	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p</i> ,el	¹¹² Cd	POD	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p</i> ,inel	¹¹² Cd	DAP	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p</i> ,inel	¹¹² Cd	POD	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104

48 Cadmium 114

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,el	¹¹⁴ Cd	DA	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p</i> ,el	¹¹⁴ Cd	POD	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p</i> ,inel	¹¹⁴ Cd	DAP	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p</i> ,inel	¹¹⁴ Cd	POD	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104

48 Cadmium 116

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> ,el	¹¹⁶ Cd	DA	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p</i> ,el	¹¹⁶ Cd	POD	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p</i> ,inel	¹¹⁶ Cd	DAP	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104
<i>p</i> ,inel	¹¹⁶ Cd	POD	2NEDENT	2.2+07		Jour	JP/G,20,1955	94	R.M.A.L.Petit+	O1104

50 Tin 116

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p</i> , <i>t</i>	¹¹⁴ Sn	DAP	2GERMUN	2.6+07		Jour	JP/G,22,107	96	G.Cata-Danil+	O1078
³ He, α	¹¹⁵ Sn	DAP	2FR PAR	3.9+07		Jour	PR/C,21,124	80	E.Gerlic+	O1139

50 Tin 118

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,t</i>	¹¹⁶ Sn	DAP	2GERMUN	2.6+07		Jour	JP/G,22,107	96	G.Cata-Danil+	O1078

50 Tin 120

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,t</i>	¹¹⁸ Sn	DAP	2GERMUN	2.6+07		Jour	JP/G,22,107	96	G.Cata-Danil+	O1078

50 Tin 122

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,t</i>	¹²⁰ Sn	DAP	2GERMUN	2.6+07		Jour	JP/G,22,107	96	G.Cata-Danil+	O1078
<i>p,t</i>	¹²⁰ Sn	DAP	2GERMUN	2.6+07		Jour	PR/C,60,054603	99	P.Guazzoni+	O1079

50 Tin 124

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,t</i>	¹²² Sn	DAP	2GERMUN	2.6+07		Jour	JP/G,22,107	96	G.Cata-Danil+	O1078

51 Antimony

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α,x	¹²⁰ Sb	CS	3INDVEC	2.6+07	4.8+07	Jour	NC/A,110,693	97	N.L.Singh+	O1115
α,x	¹²³ I	CS	3INDVEC	1.6+07	4.8+07	Jour	NC/A,110,693	97	N.L.Singh+	O1115
α,x	¹²⁴ I	CS	3INDVEC	1.4+07	4.8+07	Jour	NC/A,110,693	97	N.L.Singh+	O1115

51 Antimony 121

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$\alpha,4n$	¹²¹ I	CS	3INDVEC	3.6+07	4.8+07	Jour	NC/A,110,693	97	N.L.Singh+	O1115
α,x	¹²¹ Te	CS	3INDVEC	4.0+07	4.8+07	Jour	NC/A,110,693	97	N.L.Singh+	O1115

51 Antimony 123

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,t</i>	¹²¹ Sb	DAP	2GERMUN	2.6+07		Jour	PR/C,62,054312	00	P.Guazzoni+	O1077

52 Tellurium 123

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,n</i>	¹²³ I	CS	3HUNDEB	4.6+06	1.8+07	Jour	JRN/L,213,135	96	I.Mahunka+	D4142

62 Samarium 144

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
³ He,el	¹⁴⁴ Sm	DA	2UK HAR	5.3+07		Jour	JP/G,1,358	75	R.Eagle+	O1097

62 Samarium 148

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
³ He,el	¹⁴⁸ Sm	DA	2UK HAR	5.3+07		Jour	JP/G,1,358	75	R.Eagle+	O1097

62 Samarium 150

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
³ He,el	¹⁵⁰ Sm	DA	2UK HAR	5.3+07		Jour	JP/G,1,358	75	R.Eagle+	O1097

62 Samarium 152

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
³ He,el	¹⁵² Sm	DA	2UK HAR	5.3+07		Jour	JP/G,1,358	75	R.Eagle+	O1097

62 Samarium 154

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,γ</i>	¹⁵⁶ Eu	CS	2GERGOE	7.6+06	1.7+07	Jour	ZP/A,306,367	82	K.L.Gippert+	O1113
³ He,el	¹⁵⁴ Sm	DA	2UK HAR	5.3+07		Jour	JP/G,1,358	75	R.Eagle+	O1097

65 Terbium

159

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$\alpha,2n$	^{161}Ho	CS	3INDVEC	2.2+07	4.8+07	Jour	PR/C,55,2556	97	S.Mukherjee+	O1114
$\alpha,3n$	^{160}Ho	?	3INDVEC	2.7+07	4.8+07	Jour	PR/C,55,2556	97	S.Mukherjee+	O1114
$\alpha,4n$	^{159}Ho	CS	3INDVEC	3.9+07	4.8+07	Jour	PR/C,55,2556	97	S.Mukherjee+	O1114
α,n	^{162}Ho	?	3INDVEC	2.3+07	4.8+07	Jour	PR/C,55,2556	97	S.Mukherjee+	O1114

67 Holmium

165

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
π^+,f		CS	3PAKNIL	8.0+07	1.0+08	Jour	PR/C,35,645	87	H.A.Khan+	O0992
π^+,f		DA	3PAKNIL	8.0+07		Jour	PR/C,35,645	87	H.A.Khan+	O0992
$\alpha,2n$	^{167}Tm	CS	3INDVEC	1.9+07	4.8+07	Jour	JP/G,18,927	92	N.L.Singh+	O1085
$\alpha,2n$	^{167}Tm	CS	3INDVEC	2.0+07	1.1+08	Jour	JP/G,13,535	87	J.Ramarao+	O1118
$\alpha,3n$	^{166}Tm	CS	3INDVEC	2.8+07	4.8+07	Jour	JP/G,18,927	92	N.L.Singh+	O1085
$\alpha,4n$	^{165}Tm	CS	3INDVEC	3.4+07	4.7+07	Jour	JP/G,18,927	92	N.L.Singh+	O1085
$\alpha,4n$	^{165}Tm	CS	3INDVEC	3.6+07	1.1+08	Jour	JP/G,13,535	87	J.Ramarao+	O1118
α,n	^{168}Tm	CS	3INDVEC	1.5+07	4.7+07	Jour	JP/G,18,927	92	N.L.Singh+	O1085

69 Thulium

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Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$\alpha,2n$	^{171}Lu	CS	3INDVEC	2.2+07	4.7+07	Jour	JPI,59,3916	90	N.L.Singh+	D0137
$\alpha,2n+\alpha$	^{167}Tm	CS	3INDVEC	3.7+07	4.7+07	Jour	JPI,59,3916	90	N.L.Singh+	D0137
$\alpha,3n$	^{170}Lu	CS	3INDVEC	3.0+07	4.7+07	Jour	JPI,59,3916	90	N.L.Singh+	D0137
$\alpha,4n$	^{169}Lu	CS	3INDVEC	3.7+07	4.7+07	Jour	JPI,59,3916	90	N.L.Singh+	D0137
α,n	^{172}Lu	CS	3INDVEC	1.6+07	4.7+07	Jour	JPI,59,3916	90	N.L.Singh+	D0137
$\alpha,n+\alpha$	^{168}Tm	CS	3INDVEC	3.0+07	4.7+07	Jour	JPI,59,3916	90	N.L.Singh+	D0137

73 Tantalum

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
α,x	^{181}Re	CS	2SF ABA	3.8+07	3.6+07	Jour	NIM/B,211,22	03	F.Tarkanyi+	D4139
α,x	^{182}Re	CS	2SF ABA	3.8+07	2.7+07	Jour	NIM/B,211,22	03	F.Tarkanyi+	D4139
α,x	^{183}Re	CS	2SF ABA	3.8+07	1.6+07	Jour	NIM/B,211,22	03	F.Tarkanyi+	D4139
α,x	^{184}Re	CS	2SF ABA	2.5+07	1.4+07	Jour	NIM/B,211,22	03	F.Tarkanyi+	D4139

73 Tantalum

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Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$p,4n$	^{178}W	CS	2FR SAT	7.1+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099

<i>p,x</i>	⁷ Be	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²² Na	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁴ Na	CS	2FR SAT	2.6+09		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁸ Mg	CS	2FR SAT	2.6+09		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁴⁶ Sc	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁴⁸ V	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁵² Mn	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁵⁴ Mn	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁵⁹ Fe	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁵⁶ Co	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁵⁷ Co	CS	2FR SAT	1.4+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁵⁸ Co	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁶⁰ Co	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁶⁵ Zn	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁷⁴ As	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁷⁵ Se	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸³ Rb	CS	2FR SAT	2.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁴ Rb	CS	2FR SAT	2.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸² Sr	CS	2FR SAT	1.2+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁵ Sr	CS	2FR SAT	2.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁷ Y	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁸ Y	CS	2FR SAT	1.3+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁸ Zr	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁹ Zr	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁹⁶ Tc	CS	2FR SAT	5.6+08	1.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰³ Ru	CS	2FR SAT	1.4+09		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰¹ Rh	CS	2FR SAT	2.6+09		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰² Rh	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰⁵ Ag	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰⁶ Ag	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹⁰ Ag	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹¹ In	CS	2FR SAT	1.2+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹³ Sn	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹⁹ Te	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²¹ Te	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²⁷ Xe	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²⁹ Cs	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²⁸ Ba	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³¹ Ba	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³³ Ba	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³⁴ Ce	CS	2FR SAT	1.2+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³⁵ Ce	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³⁹ Ce	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴³ Pm	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁴ Pm	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁵ Eu	CS	2FR SAT	3.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁶ Eu	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁷ Eu	CS	2FR SAT	3.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁸ Eu	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁹ Eu	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁶ Gd	CS	2FR SAT	3.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁷ Gd	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁹ Gd	CS	2FR SAT	3.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵¹ Gd	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵³ Gd	CS	2FR SAT	2.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵¹ Tb	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵² Tb	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099

<i>p,x</i>	¹⁵³ Tb	CS	2FR SAT	3.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵⁵ Tb	CS	2FR SAT	3.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵⁶ Tb	CS	2FR SAT	5.6+08		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵⁵ Dy	CS	2FR SAT	3.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵⁷ Dy	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁰ Er	CS	2FR SAT	2.6+08	1.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁵ Tm	CS	2FR SAT	1.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁷ Tm	CS	2FR SAT	9.7+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁸ Tm	CS	2FR SAT	1.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁶ Yb	CS	2FR SAT	1.2+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁹ Yb	CS	2FR SAT	8.2+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁹ Lu	CS	2FR SAT	9.7+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁰ Lu	CS	2FR SAT	8.2+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷¹ Lu	CS	2FR SAT	7.1+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷² Lu	CS	2FR SAT	8.2+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷³ Lu	CS	2FR SAT	7.1+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁴ Lu	CS	2FR SAT	8.6+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁷ Lu	CS	2FR SAT	3.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁰ Hf	CS	2FR SAT	8.6+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷¹ Hf	CS	2FR SAT	1.2+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷² Hf	CS	2FR SAT	7.1+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷³ Hf	CS	2FR SAT	7.1+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁵ Hf	CS	2FR SAT	7.1+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁹ Hf	CS	2FR SAT	7.1+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁵ Ta	CS	2FR SAT	7.1+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁶ Ta	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁷ Ta	CS	2FR SAT	7.1+07	1.2+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>α,2n</i>	¹⁸³ Re	CS	3INDVEC	1.8+07	6.5+07	Jour	PRM,36,115	91	A.V.Mohanrao+	D0136
<i>α,2n</i>	¹⁸³ Re	CS	3INDVEC	2.0+07	4.8+07	Jour	NC/A,107,1635	94	N.L.Singh+	O1119
<i>α,3n</i>	¹⁸² Re	CS	3INDVEC	2.6+07	4.8+07	Jour	NC/A,107,1635	94	N.L.Singh+	O1119
<i>α,4n</i>	¹⁸¹ Re	CS	3INDVEC	3.7+07	6.5+07	Jour	PRM,36,115	91	A.V.Mohanrao+	D0136
<i>α,4n</i>	¹⁸¹ Re	CS	3INDVEC	3.8+07	4.8+07	Jour	NC/A,107,1635	94	N.L.Singh+	O1119
<i>α,6n</i>	¹⁷⁹ Re	CS	2GERJUL	6.6+07	1.5+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
<i>α,7n</i>	¹⁷⁸ Re	CS	2GERJUL	7.6+07	1.5+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
<i>α,n</i>	¹⁸⁴ Re	CS	3INDVEC	1.4+07	4.8+07	Jour	NC/A,107,1635	94	N.L.Singh+	O1119
<i>α,x</i>	¹⁷¹ Lu	CS	2GERJUL	1.3+08	1.6+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
<i>α,x</i>	¹⁷⁰ Hf	CS	2GERJUL	1.5+08	1.6+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
<i>α,x</i>	¹⁷³ Hf	CS	2GERJUL	1.1+08	1.5+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
<i>α,x</i>	¹⁷² Ta	CS	2GERJUL	1.1+08	1.6+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
<i>α,x</i>	¹⁷⁴ Ta	CS	2GERJUL	9.2+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
<i>α,x</i>	¹⁷⁵ Ta	CS	2GERJUL	8.4+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
<i>α,x</i>	¹⁷⁶ Ta	CS	2GERJUL	7.6+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143
<i>α,x</i>	¹⁷⁷ W	CS	2GERJUL	8.4+07	1.7+08	Jour	ZP/A,308,301	82	J.Ernst+	D0143

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Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					
<i>p,x</i>	⁷ Be	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²² Na	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁴⁸ V	CS	2FR SAT	1.4+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁵² Mn	CS	2FR SAT	2.6+09		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁵⁴ Mn	CS	2FR SAT	1.2+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁵⁹ Fe	CS	2FR SAT	1.2+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁵⁶ Co	CS	2FR SAT	1.4+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099

<i>p,x</i>	⁶⁰ Co	CS	2FR SAT	3.3+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁶⁵ Zn	CS	2FR SAT	3.3+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁷⁴ As	CS	2FR SAT	2.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁷⁵ Se	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸³ Rb	CS	2FR SAT	9.6+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁴ Rb	CS	2FR SAT	1.2+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁵ Sr	CS	2FR SAT	8.0+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁷ Y	CS	2FR SAT	8.0+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁸ Y	CS	2SWTETH	5.2+07	6.9+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	⁸⁸ Y	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁸ Zr	CS	2FR SAT	2.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁸ Zr	CS	2SWTETH	5.2+07	6.9+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	⁸⁹ Zr	CS	2FR SAT	2.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁹⁶ Tc	CS	2FR SAT	3.3+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰⁶ Ag	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹⁰ Ag	CS	2FR SAT	9.9+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²¹ Te	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²⁷ Xe	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³¹ Ba	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³³ Ba	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³⁹ Ce	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴³ Pm	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁴ Pm	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁵ Eu	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁷ Eu	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁸ Eu	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁹ Eu	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁶ Gd	CS	2FR SAT	3.3+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁹ Gd	CS	2FR SAT	2.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵¹ Gd	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵³ Gd	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵³ Tb	CS	2FR SAT	3.3+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵⁵ Tb	CS	2FR SAT	5.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁰ Er	CS	2FR SAT	2.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁷ Tm	CS	2FR SAT	2.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁸ Tm	CS	2FR SAT	2.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁶ Yb	CS	2FR SAT	1.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁹ Yb	CS	2FR SAT	9.2+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁹ Lu	CS	2FR SAT	2.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷¹ Lu	CS	2FR SAT	8.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷³ Lu	CS	2FR SAT	6.9+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁷ Lu	CS	2SWTETH	5.2+07	6.9+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁷⁰ Hf	CS	2FR SAT	1.1+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷² Hf	CS	2FR SAT	6.9+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷³ Hf	CS	2FR SAT	6.9+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷³ Hf	CS	2SWTETH	6.9+07	8.4+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁷⁵ Hf	CS	2SWTETH	5.2+07	8.4+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁷⁵ Hf	CS	2FR SAT	6.9+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁹ Hf	CS	2SWTETH	5.2+07	6.9+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁸¹ Hf	CS	2SWTETH	5.2+07	8.4+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁸¹ Hf	CS	2FR SAT	6.9+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁶ Ta	CS	2SWTETH	6.6+07	6.9+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁷⁷ Ta	CS	2SWTETH	5.2+07	6.9+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁸² Ta	CS	2SWTETH	5.2+07	8.4+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁸² Ta	CS	2FR SAT	6.9+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸³ Ta	CS	2FR SAT	3.3+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸³ Ta	CS	2SWTETH	5.2+07	6.9+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100

<i>p,x</i>	¹⁷⁸ W	CS	2SWTETH	5.2+07	8.4+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁷⁸ W	CS	2FR SAT	6.9+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸¹ Re	CS	2SWTETH	5.2+07	8.4+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁸¹ Re	CS	2FR SAT	6.9+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸² Re	CS	2SWTETH	5.2+07	8.4+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁸² Re	CS	2FR SAT	6.9+07	7.6+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸³ Re	CS	2SWTETH	5.2+07	8.4+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁸³ Re	CS	2FR SAT	6.9+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸⁴ Re	CS	2SWTETH	5.2+07	8.4+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>p,x</i>	¹⁸⁴ Re	CS	2FR SAT	6.9+07	9.9+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸⁶ Re	CS	2SWTETH	5.2+07	6.9+07	Jour	NSTS,2,369	Aug 02	M.H.Miah+	O1100
<i>d,x</i>	¹⁸⁷ W	CS	2BLGLVN	5.1+06	4.9+07	Jour	NIM/B,211,319	03	F.Tarkanyi+	D4141
<i>d,x</i>	¹⁸¹ Re	CS	2BLGLVN	1.5+07	4.9+07	Jour	NIM/B,211,319	03	F.Tarkanyi+	D4141
<i>d,x</i>	¹⁸² Re	CS	2BLGLVN	7.0+06	4.9+07	Jour	NIM/B,211,319	03	F.Tarkanyi+	D4141
<i>d,x</i>	¹⁸³ Re	CS	2BLGLVN	7.0+06	4.9+07	Jour	NIM/B,211,319	03	F.Tarkanyi+	D4141
<i>d,x</i>	¹⁸⁴ Re	CS	2BLGLVN	7.0+06	4.9+07	Jour	NIM/B,211,319	03	F.Tarkanyi+	D4141
<i>d,x</i>	¹⁸⁶ Re	CS	2BLGLVN	7.0+06	4.9+07	Jour	NIM/B,211,319	03	F.Tarkanyi+	D4141

77 Iridium 191

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					
$\alpha,2n$	¹⁹³ Au	CS	3INDVEC	1.7+07	5.5+07	Jour	PR/C,45,2338	92	M.K.Bhardwaj+	D0142
$\alpha,3n$	¹⁹² Au	CS	3INDVEC	2.7+07	5.5+07	Jour	PR/C,45,2338	92	M.K.Bhardwaj+	D0142
$\alpha,4n$	¹⁹¹ Au	CS	3INDVEC	3.8+07	5.5+07	Jour	PR/C,45,2338	92	M.K.Bhardwaj+	D0142
$\alpha,5n$	¹⁹⁰ Au	CS	3INDVEC	4.9+07	5.5+07	Jour	PR/C,45,2338	92	M.K.Bhardwaj+	D0142
α,n	¹⁹⁴ Au	CS	3INDVEC	1.7+07	3.7+07	Jour	PR/C,45,2338	92	M.K.Bhardwaj+	D0142

77 Iridium 193

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					
$\alpha,3n$	¹⁹⁴ Au	CS	3INDVEC	2.5+07	5.5+07	Jour	PR/C,45,2338	92	M.K.Bhardwaj+	D0142
$\alpha,4n$	¹⁹³ Au	CS	3INDVEC	3.5+07	5.5+07	Jour	PR/C,45,2338	92	M.K.Bhardwaj+	D0142
$\alpha,5n$	¹⁹² Au	CS	3INDVEC	4.6+07	5.5+07	Jour	PR/C,45,2338	92	M.K.Bhardwaj+	D0142

78 Platinum 195

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					
<i>p,t</i>	¹⁹³ Pt	DAP	2FR PAR	2.5+07		Jour	PR/C,21,1232	80	G.Rotbard+	O1161
<i>d,p</i>	¹⁹⁶ Pt	DAP	2FR PAR	2.5+07		Jour	PR/C,30,517	84	M.Vergnes+	O1154

79 Gold 197

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					
π^+,f		CS	3PAKNIL	8.0+07	1.0+08	Jour	PR/C,35,645	87	H.A.Khan+	O0992

π^+,f		DA	3PAKNIL	8.0+07		Jour	PR/C,35,645	87	H.A.Khan+	O0992
p,d	^{196}Au	DAP	2FR PAR	2.5+07		Jour	PR/C,47,1921	93	G.Rotbard+	O1149
$\alpha,2n$	^{199}Tl	CS	3INDVEC	7.0+07	3.1+07	Jour	NC/A,108,269	95	S.Mukherjee+	O1121
$\alpha,3n$	^{198}Tl	CS	3INDVEC	7.0+07	3.1+07	Jour	NC/A,108,269	95	S.Mukherjee+	O1121
α,f		CS	2FR SAC	6.4+08		Jour	NIM,173,157	80	M.Debeauvais+	O1101
α,f		CS	2GERKFK	9.8+07	5.8+07	Jour	PR/C,8,2372	73	J.Ralarosy+	O1071
α,n	^{200}Tl	CS	3INDVEC	7.0+07	3.1+07	Jour	NC/A,108,269	95	S.Mukherjee+	O1121
α,t	incl	DAE	4KASKAZ	5.0+07		Jour	ASL,50,655	00	A.M.Blechman+	O1145
α,t	incl	DAP	4KASKAZ	5.0+07		Jour	ASL,50,655	00	A.M.Blechman+	O1145
α,x	^3He	DAE	4KASKAZ	5.0+07		Jour	ASL,50,655	00	A.M.Blechman+	O1145
α,x	^3He	DAP	4KASKAZ	5.0+07		Jour	ASL,50,655	00	A.M.Blechman+	O1145
α,x	^{194}Au	CS	3INDVEC	7.0+07	5.0+07	Jour	NC/A,108,269	95	S.Mukherjee+	O1121
α,x	^{196}Au	CS	3INDVEC	7.0+07	3.1+07	Jour	NC/A,108,269	95	S.Mukherjee+	O1121
α,x	^{198}Au	CS	3INDVEC	7.0+07	3.7+07	Jour	NC/A,108,269	95	S.Mukherjee+	O1121

80 Mercury 200

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,d	^{199}Hg	DAP	2FR PAR	2.5+07		Jour	PR/C,31,2071	85	M.Vergnes+	O1152

82 Lead

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
π^+,f		CS	3PAKNIL	8.0+07	1.0+08	Jour	PR/C,35,645	87	H.A.Khan+	O0992
π^+,f		DA	3PAKNIL	8.0+07		Jour	PR/C,35,645	87	H.A.Khan+	O0992
α,f		CS	2FR SAC	6.4+08		Jour	NIM,173,157	80	M.Debeauvais+	O1101

82 Lead 206

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,el	^{206}Pb	DA	1USALAS	6.5+08		Jour	PR/C,52,291	Jul 95	A.M.Mack+	C1033
p,el	^{206}Pb	POD	1USALAS	6.5+08		Jour	PR/C,52,291	Jul 95	A.M.Mack+	C1033
$p,inel$	^{206}Pb	DAP	1USALAS	6.5+08		Jour	PR/C,52,291	Jul 95	A.M.Mack+	C1033
$p,inel$	^{206}Pb	POD	1USALAS	6.5+08		Jour	PR/C,52,291	Jul 95	A.M.Mack+	C1033

82 Lead 207

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,el	^{207}Pb	DA	1USALAS	6.5+08		Jour	PR/C,52,291	Jul 95	A.M.Mack+	C1033
p,el	^{207}Pb	POD	1USALAS	6.5+08		Jour	PR/C,52,291	Jul 95	A.M.Mack+	C1033
$p,inel$	^{207}Pb	DAP	1USALAS	6.5+08		Jour	PR/C,52,291	Jul 95	A.M.Mack+	C1033
$p,inel$	^{207}Pb	POD	1USALAS	6.5+08		Jour	PR/C,52,291	Jul 95	A.M.Mack+	C1033
α,f		CS	2GERKFK	7.6+07	5.8+07	Jour	PR/C,8,2372	73	J.Ralarosy+	O1071

				82		Lead		208			
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #	
				Min	Max						
<i>p,α</i>	incl	DA	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,α</i>	incl	DAE	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,α</i>	incl	DE	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,d</i>	incl	DA	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,d</i>	incl	DAE	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,d</i>	incl	DE	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,el</i>	²⁰⁸ Pb	DA	1USALAS	6.5+08		Jour	PR/C,52,291	Jul 95	A.M.Mack+	C1033	
<i>p,el</i>	²⁰⁸ Pb	POD	1USALAS	6.5+08		Jour	PR/C,52,291	Jul 95	A.M.Mack+	C1033	
<i>p,inel</i>	²⁰⁸ Pb	DAP	1USALAS	6.5+08		Jour	PR/C,52,291	Jul 95	A.M.Mack+	C1033	
<i>p,inel</i>	²⁰⁸ Pb	POD	1USALAS	6.5+08		Jour	PR/C,52,291	Jul 95	A.M.Mack+	C1033	
<i>p,n</i>	incl	DA	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,n</i>	incl	DAE	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,n</i>	incl	DE	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p̄,n</i>	incl	PY	2ZZZCER	1.2+09	4.2+09	Jour	PR/C,56,1909	97	L.Pienkowski+	O0848	
<i>p,p</i>	incl	DA	2NEDGRN	1.9+08		Priv	MUKHERJEE	Apr 04	B.Mukherjee+	O1086	
<i>p,p</i>	incl	DA	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,p</i>	incl	DAE	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,p</i>	incl	DE	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,p</i>	incl	?	2NEDGRN	1.9+08		Priv	MUKHERJEE	Apr 04	B.Mukherjee+	O1086	
<i>p,t</i>	incl	DA	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,t</i>	incl	DAE	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,t</i>	incl	DE	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,x</i>	³ He	DA	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,x</i>	³ He	DAE	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>p,x</i>	³ He	DE	2BLGLVN	6.3+07		Priv	KELLETT	Mar 04	A.Guertin+	O1146	
<i>d,³He</i>	²⁰⁷ Tl	DAP	2FR PAR	1.1+08		Jour	JP/G,10,1435	84	H.Langevin-Joliot+	O1135	

				83		Bismuth		209			
Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #	
				Min	Max						
<i>p,3n</i>	²⁰⁷ Po	CS	2FR SAT	8.6+07	5.5+08	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,4n</i>	²⁰⁶ Po	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁷ Be	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	²² Na	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	²⁴ Na	CS	2FR SAT	2.6+09		Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	²⁸ Mg	CS	2FR SAT	1.4+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁴⁶ Sc	CS	2FR SAT	5.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁴⁸ V	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁵² Mn	CS	2FR SAT	1.2+09	1.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁵⁴ Mn	CS	2FR SAT	5.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁵⁹ Fe	CS	2FR SAT	1.2+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁵⁶ Co	CS	2FR SAT	1.4+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁵⁷ Co	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁵⁸ Co	CS	2FR SAT	2.8+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁶⁰ Co	CS	2FR SAT	1.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁶⁵ Zn	CS	2FR SAT	2.8+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁷⁴ As	CS	2FR SAT	2.8+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	
<i>p,x</i>	⁷⁵ Se	CS	2FR SAT	1.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099	

<i>p,x</i>	⁸² Br	CS	2FR SAT	7.7+07	7.6+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸³ Rb	CS	2FR SAT	1.1+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁴ Rb	CS	2FR SAT	1.1+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁶ Rb	CS	2FR SAT	8.6+07	1.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸² Sr	CS	2FR SAT	1.6+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁵ Sr	CS	2FR SAT	1.3+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁷ Y	CS	2FR SAT	2.8+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁸ Y	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁹¹ Y	CS	2FR SAT	1.3+08	2.8+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁸ Zr	CS	2FR SAT	1.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁸⁹ Zr	CS	2FR SAT	2.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁹⁵ Zr	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁹⁷ Zr	CS	2FR SAT	2.4+08	2.8+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁹⁵ Nb	CS	2FR SAT	7.4+07	1.0+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁹⁶ Nb	CS	2FR SAT	9.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁹⁹ Mo	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	⁹⁶ Tc	CS	2FR SAT	2.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰³ Ru	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰⁶ Ru	CS	2FR SAT	7.4+07	3.2+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰¹ Rh	CS	2FR SAT	2.8+08	1.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰² Rh	CS	2FR SAT	1.3+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰⁵ Rh	CS	2FR SAT	8.9+07	5.5+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹² Pd	CS	2FR SAT	1.4+09		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰⁵ Ag	CS	2FR SAT	2.8+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁰⁶ Ag	CS	2FR SAT	3.2+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹⁰ Ag	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹⁵ Cd	CS	2FR SAT	1.0+08	1.7+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹¹ In	CS	2FR SAT	1.0+09	1.4+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹⁴ In	CS	2FR SAT	1.0+08	1.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹³ Sn	CS	2FR SAT	1.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹⁷ Sn	CS	2FR SAT	1.3+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²⁰ Sb	CS	2FR SAT	1.0+08	1.4+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²⁴ Sb	CS	2FR SAT	7.4+07	1.4+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²⁵ Sb	CS	2FR SAT	7.4+07	2.8+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹¹⁹ Te	CS	2FR SAT	5.5+08	1.4+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²¹ Te	CS	2FR SAT	8.6+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²³ Te	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²⁶ I	CS	2FR SAT	1.1+08	7.6+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹²⁷ Xe	CS	2FR SAT	8.6+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³² Cs	CS	2FR SAT	1.0+09	1.4+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³⁴ Cs	CS	2FR SAT	7.4+07	2.8+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³¹ Ba	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³³ Ba	CS	2FR SAT	1.1+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹³⁹ Ce	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴³ Pm	CS	2FR SAT	5.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁴ Pm	CS	2FR SAT	2.8+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁵ Eu	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁷ Eu	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁸ Eu	CS	2FR SAT	1.4+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁹ Eu	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁶ Gd	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁷ Gd	CS	2FR SAT	1.4+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁴⁹ Gd	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵¹ Gd	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵³ Gd	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵³ Tb	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁵⁵ Tb	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099

<i>p,x</i>	¹⁶⁰ Er	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁵ Tm	CS	2FR SAT	2.6+09		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁷ Tm	CS	2FR SAT	5.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁶ Yb	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁹ Yb	CS	2FR SAT	5.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁶⁹ Lu	CS	2FR SAT	7.6+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷¹ Lu	CS	2FR SAT	5.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷³ Lu	CS	2FR SAT	3.2+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁰ Hf	CS	2FR SAT	1.0+09	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷² Hf	CS	2FR SAT	5.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷³ Hf	CS	2FR SAT	5.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁵ Hf	CS	2FR SAT	2.8+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁶ Ta	CS	2FR SAT	1.0+09		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁷ Ta	CS	2FR SAT	1.2+09		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁷⁸ W	CS	2FR SAT	5.5+08	1.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸¹ Re	CS	2FR SAT	5.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸³ Re	CS	2FR SAT	2.8+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸⁴ Re	CS	2FR SAT	1.6+09		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸² Os	CS	2FR SAT	7.6+08		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸⁵ Os	CS	2FR SAT	2.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸⁵ Ir	CS	2FR SAT	5.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸⁶ Ir	CS	2FR SAT	2.8+08	1.4+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸⁷ Ir	CS	2FR SAT	5.5+08		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸⁹ Ir	CS	2FR SAT	2.4+08	1.4+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸⁸ Pt	CS	2FR SAT	2.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁸⁹ Pt	CS	2FR SAT	5.5+08	1.0+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁹¹ Pt	CS	2FR SAT	2.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁹³ Au	CS	2FR SAT	1.5+08	7.6+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁹⁴ Au	CS	2FR SAT	2.4+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁹⁵ Au	CS	2FR SAT	8.9+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁹⁶ Au	CS	2FR SAT	5.5+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁹³ Hg	CS	2FR SAT	1.0+09		Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁹⁴ Hg	CS	2FR SAT	1.3+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁹⁵ Hg	CS	2FR SAT	5.5+08	1.2+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁹⁷ Hg	CS	2FR SAT	1.6+08	5.5+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰³ Hg	CS	2FR SAT	1.1+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	¹⁹⁹ Tl	CS	2FR SAT	1.3+08	5.5+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰⁰ Tl	CS	2FR SAT	1.0+08	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰¹ Tl	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰² Tl	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰⁰ Pb	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰¹ Pb	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰² Pb	CS	2FR SAT	1.0+08	1.6+08	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰³ Pb	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰³ Bi	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰⁴ Bi	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰⁵ Bi	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰⁶ Bi	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>p,x</i>	²⁰⁷ Bi	CS	2FR SAT	7.4+07	2.6+09	Jour	NSTS,2,242	02	R.Michel+	O1099
<i>d,non</i>	¹ H	CS	1USAMRY	1.4+08		Jour	PR,19,659	Mar 79	J.R. Wu+	C0884
<i>d,p</i>	incl	CS	1USAMRY	1.4+08		Jour	PR,19,659	Mar 79	J.R. Wu+	C0884
<i>α,3n</i>	²¹⁰ At	CS	3INDVEC	2.9+07	4.9+07	Jour	NC/A,107,1635	94	N.L.Singh+	O1119
<i>α,4n</i>	²⁰⁹ At	CS	3INDVEC	3.9+07	4.9+07	Jour	NC/A,107,1635	94	N.L.Singh+	O1119
<i>α,f</i>		CS	2FR SAC	6.4+08		Jour	NIM,173,157	80	M.Debeauvais+	O1101
<i>α,f</i>		CS	2GERKFK	9.8+07	4.6+07	Jour	PR/C,8,2372	73	J.Ralarosy+	O1071

90 Thorium 232

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
d,non	1H	CS	1USAMRY	1.4+08		Jour	PR,19,659	Mar 79	J.R.Wu+	C0884
d,p	incl	CS	1USAMRY	1.4+08		Jour	PR,19,659	Mar 79	J.R.Wu+	C0884
α,f		CS	2FR SAC	6.4+08		Jour	NIM,173,157	80	M.Debeauvais+	O1101
α,f		CS	2GERKFK	9.8+07	3.1+07	Jour	PR/C,8,2372	73	J.Ralarosy+	O1071

92 Uranium

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
π^+,f		CS	3PAKNIL	8.0+07		Jour	PR/C,35,645	87	H.A.Khan+	O0992
π^-,f		CS	3PAKNIL	8.0+07	1.0+08	Jour	PR/C,35,645	87	H.A.Khan+	O0992
π^+,f		DA	3PAKNIL	8.0+07		Jour	PR/C,35,645	87	H.A.Khan+	O0992
π^+,f	Many	PY	3PAKNIL	8.0+07		Jour	PR/C,35,645	87	H.A.Khan+	O0992
π^-,f	Many	PY	3PAKNIL	8.0+07		Jour	PR/C,35,645	87	H.A.Khan+	O0992
α,f		CS	2FR SAC	6.4+08		Jour	NIM,173,157	80	M.Debeauvais+	O1101

92 Uranium 235

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$d,2n$	^{235}Np	CS	2UK HAR	1.5+07	3.2+07	Jour	RCA,62,123	93	L.F.Bellido+	O1064
d,n	^{236}Np	CS	2UK HAR	1.5+07	2.8+07	Jour	RCA,62,123	93	L.F.Bellido+	O1064

92 Uranium 238

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,f	Many	CS	2SF JYV	2.5+07		Jour	PL/B,454,1	99	J.C.Wang+	O1141
p,f	^{132}I	?	3INDCAU	4.0+07		Jour	PR/C,46,1445	92	T.Datta+	O0995
p,p	incl	DA	2NEDGRN	1.9+08		Priv	MUKHERJEE	Apr 04	B.Mukherjee+	O1086
p,p	incl	?	2NEDGRN	1.9+08		Priv	MUKHERJEE	Apr 04	B.Mukherjee+	O1086
$d,4n$	^{236}Np	CS	2UK HAR	2.2+07	2.8+07	Jour	RCA,62,123	93	L.F.Bellido+	O1064
$d,5n$	^{235}Np	CS	2UK HAR	2.2+07	2.8+07	Jour	RCA,62,123	93	L.F.Bellido+	O1064
$d,\alpha+f$?	2GERBON	2.5+07		Jour	JP/GL,18,105	92	A.K.Sinha+	O1106
d,γ	^{240}Np	CS	2GERGOE	2.0+07		Jour	ZP/A,306,367	82	K.L.Gippert+	O1113
$d,t+f$?	2GERBON	2.5+07		Jour	JP/GL,18,105	92	A.K.Sinha+	O1106
3He,p	^{240}Np	CS	2UK BIR	1.5+07	2.9+07	Jour	NP,84,411	66	S.M.Qaim	O0801
3He,x	^{238}Np	?	2UK BIR	2.0+07	2.9+07	Jour	NP,84,411	66	S.M.Qaim	O0801
3He,x	^{239}Np	?	2UK BIR	1.5+07	2.9+07	Jour	NP,84,411	66	S.M.Qaim	O0801
α,f		CS	2GERKFK	9.8+07	2.6+07	Jour	PR/C,8,2372	73	J.Ralarosy+	O1071
α,f	^{126}Sb	CS	3INDVEC	3.0+07	3.5+07	Jour	PR/C,38,1787	88	B.S.Tomar+	O1070
α,f	^{128}Sb	CS	3INDVEC	2.3+07	3.5+07	Jour	PR/C,38,1787	88	B.S.Tomar+	O1070
α,f	^{130}Sb	CS	3INDVEC	2.3+07	3.5+07	Jour	PR/C,38,1787	88	B.S.Tomar+	O1070

93

Neptunium

237

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,f</i>	¹³² I	?	3INDVEC	3.0+07		Jour	PR/C,51,3104	95	T.Datta+	O1143