EXFOR News (March 2021)

New experimental data available from Nuclear Reaction Data Centres

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

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

[1] N. Otuka, E. Dupont, V. Semkova, B. Pritychenko et al., Nucl.Data.Sheets **120**(2014)272.

Quantity codes

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

Special codes in outgoing particle field

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

Special codes in incident energy field

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

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

1 Hydrogen 1

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{16}C,el	^{1}H	?	3CPRIMP	3.8+08	3.8+08	Jour	PR/C,101,024601	20	Y.Jiang+	S0228
*	^{16}C,inel	^{1}H	?	3CPRIMP	3.8+08	3.8+08	Jour	PR/C,101,024601	20	Y.Jiang+	S0228
*	^{58}Ni,el	^{1}H	?	3CPRIMP	5.5+09	5.5+09	Jour	PR/C,100,054609	19	K.Yue+	S0223

1 Hydrogen 2

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{3}He	CS	1USAROC	1.6+04	1.6+04	Jour	PR/C,101,042802	20	A.B.Zylstra+	C2569
*	^{16}C,el	^{2}H	?	3CPRIMP	3.8+08	3.8+08	Jour	PR/C,101,024601	20	Y.Jiang+	S0228
*	^{16}C,inel	^{2}H	?	3CPRIMP	3.8+08	3.8+08	Jour	PR/C,101,024601	20	Y.Jiang+	S0228

1 Hydrogen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{56}Fe,tcc		CS	2JPNIRS	2.6+10	2.8+10	Jour	NP/A,1001,121923	20	Rongli+	S0232

2 Helium 3

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	$p,2p$	^{2}H	DA	2UK KCL	3.0+07	5.0+07	Jour	NP/A,130,513	69	S.A.Harbison+	O0474

2 Helium 4

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,el	^{4}He	DA	1USATNL	8.1+07	8.1+07	Jour	PR/C,101,034618	20	X.Li+	L0259
	$p,2p$	^{3}H	CS	2UK HAR	1.4+08	1.4+08	Jour	NP/A,181,329	72	J.E.Nicholls+	O0531
	$p,2p$	^{3}H	DA	2FR CSN	1.6+08	1.6+08	Jour	NP/A,156,289	70	M.Bernas+	O0483
	$p,2p$	^{3}H	DA	2UK KCL	5.0+07	5.0+07	Jour	NP/A,130,513	69	S.A.Harbison+	O0474
	$p,2p$	^{3}H	?	2FR CSN	1.6+08	1.6+08	Jour	NP/A,156,289	70	M.Bernas+	O0483
	p,d	^{3}He	CS	2UK HAR	1.4+08	1.4+08	Jour	NP/A,181,329	72	J.E.Nicholls+	O0531
	p,d	^{3}He	CS	2UK HAR	5.3+07	5.3+07	Jour	NP,60,369	64	D.J.Cairns+	O0451
	p,d	^{3}He	DA	2FR CSN	1.6+08	1.6+08	Jour	NP/A,156,289	70	M.Bernas+	O0483
	p,d	^{3}He	DA	2UK KCL	5.0+07	5.0+07	Jour	NP/A,152,503	70	S.A.Harbison+	O0528
	p,d	^{3}He	DA	2UK HAR	5.3+07	5.3+07	Jour	NP,60,369	64	D.J.Cairns+	O0451
	p,d	^{3}He	DA	2FR SAT	7.7+08	7.7+08	Jour	PL/B,67,265	77	T.Bauer+	O0537
	p,d	^{3}He	?	2FR CSN	1.6+08	1.6+08	Jour	NP/A,156,289	70	M.Bernas+	O0483
	p,el	^{4}He	CS	2UK HAR	1.4+08	1.4+08	Jour	NP/A,181,329	72	J.E.Nicholls+	O0531

	p,el	^{4}He	CS	2UK HAR	5.3+07	5.3+07	Jour	NP,60,369	64	D.J.Cairns+	O0451
	p,el	^{4}He	DA	2UK HAR	1.4+08	1.4+08	Jour	NP/A,181,329	72	J.E.Nicholls+	O0531
	p,el	^{4}He	DA	2UK HAR	5.3+07	5.3+07	Jour	NP,60,369	64	D.J.Cairns+	O0451
	p,n+p	^{3}He	CS	2UK HAR	1.4+08	1.4+08	Jour	NP/A,181,329	72	J.E.Nicholls+	O0531
	p,n+p	^{3}He	DA	2UK HAR	1.4+08	1.4+08	Jour	NP/A,181,329	72	J.E.Nicholls+	O0531
	p,n+p	^{3}He	?	2UK HAR	1.4+08	1.4+08	Jour	NP/A,181,329	72	J.E.Nicholls+	O0531
	p,non		CS	2UK HAR	5.3+07	5.3+07	Jour	NP,60,369	64	D.J.Cairns+	O0451
	p,x+^{3}He	inclusive	DA	2UK KCL	5.0+07	5.0+07	Jour	NP/A,130,513	69	S.A.Harbison+	O0474
*	^{13}C,n	^{16}O	?	4KASKAZ	1.7+06	2.7+06	Jour	BAS,84,420	20	E.M.Gazeeva+	D8027
*	^{17}O,el	^{4}He	?	2ITYLNS	1.5+06	9.0+06	Jour	PAN,83,520	20	D.K.Nauruzbayev+	D8026

3 Lithium 6

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	n,t	^{4}He	CS	3CPRIHP	1.0+00	3.0+06	Jour	CPH/C,44,014003	20	Huaiyong Bai+	32800
*	n,t	^{4}He	DA	3CPRIHP	1.0+00	3.0+06	Jour	CPH/C,44,014003	20	Huaiyong Bai+	32800
	p,d	^{5}Li	DAP	2FR PAR	1.6+08	1.6+08	Jour	NP/A,126,60	69	D.Bachelier+	O0556
*	^{22}Ne,d	^{26}Mg	DAP	1USATAM	2.2+07	2.2+07	Jour	PL/B,802,135267	20	H.Jayatissa+	C2517

3 Lithium 7

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	γ,t	^{4}He	CS	1USATNL	4.4+06	9.9+06	Jour	PR/C,101,055801	20	M.Munch+	L0260
*	γ,t	^{4}He	DA	1USATNL	1.0+07	1.0+07	Jour	PR/C,101,055801	20	M.Munch+	L0260
	p,d	^{6}Li	DAP	2FR PAR	1.6+08	1.6+08	Jour	NP/A,126,60	69	D.Bachelier+	O0556

4 Berylium 9

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
	n,γ		RP	2JPNTIT	6.2+05	6.2+05	Jour	NP/A,575,72	94	H.Kitazawa+	20873
*	n,γ	^{10}Be	CS	3MEXINI	2.5-02	2.5-02	Jour	PR/C,102,044601	20	D.J.Marin-Lambarri+	31830
	p,d	^{8}Be	DAP	2FR PAR	1.5+08	1.5+08	Jour	NP/A,126,60	69	D.Bachelier+	O0556
*	p,x+n	inclusive	TTD	3CZRUJF	3.0+07	3.0+07	Jour	EPJ/CS,146,03013	17	J.Novak+	D0987
*	^{24}Mg,x	^{22}Mg	CSP	1USAMSU	2.3+09	2.3+09	Jour	PR/C,101,031303	20	B.Longfellow+	C2519
*	^{25}Al,x	^{23}Al	CSP	1USAMSU	2.6+09	2.6+09	Jour	PR/C,101,031303	20	B.Longfellow+	C2519
*	^{26}Si,x	^{24}Si	CSP	1USAMSU	2.8+09	2.8+09	Jour	PR/C,101,031303	20	B.Longfellow+	C2519

5 Boron 10

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	n,α	^{7}Li	CS	3CPRIHP	1.0+00	2.4+06	Jour	CPH/C,43,124002	19	Haoyu Jiang+	32804
*	n,α	^{7}Li	CSP	3CPRIHP	1.0+00	9.0+05	Jour	CPH/C,43,124002	19	Haoyu Jiang+	32804
*	n,α	^{7}Li	DA	3CPRIHP	1.0+00	2.4+06	Jour	CPH/C,43,124002	19	Haoyu Jiang+	32804
*	n,α	^{7}Li	DAP	3CPRIHP	1.0+00	9.0+05	Jour	CPH/C,43,124002	19	Haoyu Jiang+	32804

	p,d	^{9}B	DAP	2FR PAR	1.5+08	1.5+08	Jour	NP/A,126,60	69	D.Bachelier+	O0556

5 Boron 11

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,d	^{10}B	DAP	2FR PAR	1.5+08	1.5+08	Jour	NP/A,126,60	69	D.Bachelier+	O0556

6 Carbon

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{56}Fe,tcc		CS	2JPNIRS	2.6+10	2.8+10	Jour	NP/A,1001,121923	20	Rongli+	S0232

6 Carbon 12

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,2α		?	1USATNL	1.0+07	1.0+07	Jour	PR/C,101,021302	20	R.Smith+	L0258
*	n,tot		CS	4UZ UZB	1.4+07	1.4+07	Jour	BAS,84,894	20	S.V.Artemov+	31807
	p,d	^{11}C	DAE	2FR PAR	1.6+08	1.6+08	Jour	NP/A,126,60	69	D.Bachelier+	O0556
	p,d	^{11}C	DAP	2FR PAR	1.6+08	1.6+08	Jour	NP/A,126,60	69	D.Bachelier+	O0556
	p,inel	^{12}C	DAP	2FR CSN	5.0+06	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,inel	^{12}C	DAP	2FR CSN	7.2+06	3.7+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{14}N	DAP	2FR CSN	1.8+07	3.7+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{15}N	DAP	2FR CSN	1.5+07	3.7+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
*	^{16}C,x	^{15}B	CS	3CPRIMP	3.8+09	3.8+09	Jour	PR/C,100,044609	19	Y.X.Zhao+	S0221
*	^{24}Mg,fus		CS	2ITYPAD	8.5+06	1.7+07	Jour	PR/C,101,044608	20	G.Montagnoli+	D8028

7 Nitrogen 14

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{15}N	CS	3MEXINI	2.5-02	2.5-02	Jour	PR/C,102,044601	20	D.J.Marin-Lambarri+	31830

8 Oxygen

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,tot		CS	3CZRUJF	1.9+07	2.7+07	Jour	EPJ/CS,239,20008	20	M.Ansorge+	31831

8 Oxygen 16

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,d	^{15}O	DAP	2FR PAR	1.6+08	1.6+08	Jour	NP/A,126,60	69	D.Bachelier+	O0556
	p,inel	^{16}O	DAP	2FR CSN	2.0+07	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,x	^{12}C	DAP	2FR CSN	2.0+07	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,x	^{15}N	DAP	2FR CSN	2.2+07	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,inel	^{16}O	DAP	2FR CSN	2.0+07	3.7+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{12}C	DAP	2FR CSN	2.2+07	3.7+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{15}N	DAP	2FR CSN	3.2+07	3.7+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631

9 Fluorine 19

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,tot		CS	4UZ UZB	1.4+07	1.4+07	Jour	BAS,84,894	20	S.V.Artemov+	31807

11 Sodium 23

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,γ	^{24}Na	CS	3INDTRM	1.5+07	1.5+07	Jour	PR/C,102,014603	20	A.Gandhi+	33150

12 Magnesium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,x+γ	inclusive	CSP	3SAFITH	3.0+07	6.6+07	Jour	PR/C,102,025802	20	W.Yahia-Cherif+	D0984

12 Magnesium 24

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,inel	^{24}Mg	CSP	2FR CSN	1.0+07	2.0+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,inel	^{24}Mg	DAP	2FR CSN	5.0+06	2.0+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,x	^{20}Ne	DAP	2FR CSN	2.0+07	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,x	^{21}Na	CS	2FR CSN	1.5+07	2.0+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,x	^{21}Na	DAP	2FR CSN	1.5+07	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,x	^{23}Na	DAP	2FR CSN	1.5+07	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,x	^{23}Mg	DAP	2FR CSN	2.0+07	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
*	p,x+γ	inclusive	CSP	3SAFITH	3.0+07	6.6+07	Jour	PR/C,102,025802	20	W.Yahia-Cherif+	D0984
	α,inel	^{24}Mg	DAP	2FR CSN	8.5+06	3.0+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{20}Ne	DAP	2FR CSN	2.0+07	4.0+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{23}Na	DAP	2FR CSN	2.0+07	4.0+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{23}Mg	DAP	2FR CSN	3.0+07	4.0+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{25}Mg	DAP	2FR CSN	3.5+07	4.0+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{26}Mg	DAP	2FR CSN	2.0+07	4.0+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631

	α,x	^{26}Al	DAP	2FR CSN	2.0+07	3.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{27}Al	DAP	2FR CSN	8.5+06	8.5+06	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{27}Si	DAP	2FR CSN	1.5+07	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631

13 Aluminium 27

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,tot		CS	3SAFWIT	8.0+06	3.0+07	Jour	EPJ/A,54,234	18	M.Jingo+	G0078
*	n,α	^{24}Na	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834
*	^{56}Fe,tcc		CS	2JPNIRS	2.7+10	2.8+10	Jour	NP/A,1001,121923	20	Rongli+	S0232

14 Silicon

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,x+γ	inclusive	CSP	3SAFITH	3.0+07	6.6+07	Jour	PR/C,102,025802	20	W.Yahia-Cherif+	D0984

14 Silicon 28

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,d	^{27}Si	DAP	2FR PAR	1.6+08	1.6+08	Jour	NP/A,126,60	69	D.Bachelier+	O0556
	α,^{16}O	^{16}O	DAP	1USAWAU	4.2+07	4.2+07	Jour	PR,158,887	67	R.Vandenbosch+	C2560

16 Sulphur

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,tot		CS	4UZ UZB	1.4+07	1.4+07	Jour	BAS,84,894	20	S.V.Artemov+	31807

16 Sulphur 32

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	α,el	^{32}S	DA	1USATNL	2.1+07	2.1+07	Jour	PR/C,99,055812	19	K.Setoodehnia+	C2461
*	α,p		RP	1USATNL	5.7+04	9.8+05	Jour	PR/C,99,055812	19	K.Setoodehnia+	C2461
*	α,p	^{35}Cl	DAP	1USATNL	2.1+07	2.1+07	Jour	PR/C,99,055812	19	K.Setoodehnia+	C2461

16 Sulphur 34

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{35}Cl	RR	1USATNL			Jour	PR/C,99,055812	19	K.Setoodehnia+	C2461

18 Argon 39

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,α	^{36}S	CS	2FR ILL	Maxwl		Jour	NIM/A,489,577	02	G.Goeminne+	22673

19 Potassium 41

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,p	^{41}Ar	CS	3INDTRM	1.5+07	1.5+07	Jour	PR/C,102,014603	20	A.Gandhi+	33150

20 Calcium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,tot		CS	3SAFWIT	8.0+06	3.0+07	Jour	EPJ/A,54,234	18	M.Jingo+	G0078

20 Calcium 40

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,d	^{39}Ca	DAP	2FR PAR	1.6+08	1.6+08	Jour	NP/A,126,60	69	D.Bachelier+	O0556

22 Titanium 48

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,^{2}He	^{48}Sc	DAP	2NEDKVI	1.8+08	1.8+08	Jour	PR/C,70,054302	04	S.Rakers+	O0417

23 Vanadium 51

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,α	^{48}Sc	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834

25 Manganese 55

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	$n,2n$	^{54}Mn	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834

26 Iron

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x	^{52}Cr	DAP	2FR CSN	2.0+07	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,x	^{55}Mn	DAP	2FR CSN	2.0+07	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,x	^{54}Fe	DAP	2FR CSN	4.8+06	1.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,x	^{55}Fe	DAP	2FR CSN	1.5+07	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,x	^{56}Fe	DAP	2FR CSN	4.8+06	2.0+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	p,x	^{56}Co	DAP	2FR CSN	4.8+06	2.5+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{55}Fe	DAP	2FR CSN	2.4+07	3.9+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{58}Co	DAP	2FR CSN	1.9+07	3.9+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{59}Co	DAP	2FR CSN	6.3+06	3.9+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{58}Ni	DAP	2FR CSN	1.9+07	3.9+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631
	α,x	^{59}Ni	DAP	2FR CSN	6.3+06	3.9+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631

26 Iron 54

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,el		RP	2GERZFK	1.4+06	1.3+07	Jour	PR/C,101,064303	20	R.Schwengner+	L0262
*	γ,sct	^{54}Fe	CS	2GERZFK	4.3+03	1.3+04	Jour	PR/C,101,064303	20	R.Schwengner+	L0262
*	n,p	^{54}Mn	CS	3CZRUJV	Fiss		Jour	EPJ/CS,239,19004	20	M.Schulc+	31835

26 Iron 56

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,tot		CS	3SAFWIT	8.0+06	3.0+07	Jour	EPJ/A,54,234	18	M.Jingo+	G0078
*	n,p	^{56}Mn	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834
*	p,x+γ	inclusive	CSP	3SAFITH	3.0+07	6.6+07	Jour	PR/C,102,025802	20	W.Yahia-Cherif+	D0984
	α,inel	^{56}Fe	DAP	2FR CSN	6.3+06	3.9+07	Jour	PR/C,76,034607	07	A.Belhout+	O1631

27 Cobalt 59

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,2n	^{58}Co	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834
*	n,3n	^{57}Co	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834
*	n,α	^{56}Mn	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834
*	n,p	^{59}Fe	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834

28 Nickel 58

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,tot		CS	3SAFWIT	8.0+06	3.0+07	Jour	EPJ/A,54,234	18	M.Jingo+	G0078

28 Nickel 61

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,α	^{58}Co	CS	2GERJUL	5.3+06	1.8+07	Jour	PR/C,48,3115	93	S.Sudar+	D4037

29 Copper 63

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,3n	^{61}Cu	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834
*	^{18}O,^{14}C	^{67}Ga	DA	3BZLUSP	2.7+07	3.3+07	Jour	PR/C,98,044614	18	E.Crema+	D0986
*	^{18}O,^{16}O	^{65}Cu	DAP	3BZLUSP	2.6+07	3.4+07	Jour	PR/C,98,044614	18	E.Crema+	D0986
*	^{18}O,^{19}F	^{62}Ni	DA	3BZLUSP	2.5+07	3.5+07	Jour	PR/C,98,044614	18	E.Crema+	D0986

29 Copper 65

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,p	^{65}Ni	CS	3INDTRM	1.5+07	1.5+07	Jour	PR/C,102,014603	20	A.Gandhi+	33150
*	n,p	^{65}Ni	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834

30 Zinc 68

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,n	^{68}Ga	CS	3INDTRM	8.6+06	1.8+07	Jour	JRN,324,285	20	H.Naik+	D6382

32 Germanium 74

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,γ	^{75}As	CS	3CPRAEP	1.4+06	2.8+06	Jour	PL/B,805,135431	20	D.Wu+	S0231

32 Germanium 76

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

*	^{6}Li,inel	^{76}Ge	DAP	3BZLUSP	2.8+07	2.8+07	Jour	JP/CS,630,012025	15	X.X.Zhang+	D0989

39 Yttrium 89

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	n,2n	^{88}Y	CS	3KORKRM	1.5+07	3.7+07	Jour	EPJ/A,53,182	17	M.Zaman+	30846
*	n,2n	^{88}Y	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834
*	n,3n	^{87}Y	CS	3KORKRM	2.1+07	3.7+07	Jour	EPJ/A,53,182	17	M.Zaman+	30846
*	n,3n	^{87}Y	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834
*	n,4n	^{86}Y	CS	3KORKRM	3.7+07	3.7+07	Jour	EPJ/A,53,182	17	M.Zaman+	30846
*	n,α	^{86}Rb	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834
*	^{7}Li,3n	^{93}Mo	CS	3INDTRM	1.9+07	3.9+07	Jour	PR/C,101,024608	20	R.Prajapat+	D6380
*	^{7}Li,3n	^{93}Mo	TT	3INDTRM	1.9+07	3.9+07	Jour	PR/C,101,024608	20	R.Prajapat+	D6380
*	^{7}Li,3n+α	^{89}Zr	CS	3INDTRM	3.1+07	3.9+07	Jour	PR/C,101,024608	20	R.Prajapat+	D6380
*	^{7}Li,3n+α	^{89}Zr	TT	3INDTRM	3.1+07	3.9+07	Jour	PR/C,101,024608	20	R.Prajapat+	D6380
*	^{7}Li,x	^{90}Y	CS	3INDTRM	1.9+07	3.9+07	Jour	PR/C,101,024608	20	R.Prajapat+	D6380
*	^{7}Li,x	^{90}Y	TT	3INDTRM	1.9+07	3.9+07	Jour	PR/C,101,024608	20	R.Prajapat+	D6380
*	^{7}Li,x	^{91}Y	CS	3INDTRM	1.9+07	3.9+07	Jour	PR/C,101,024608	20	R.Prajapat+	D6380
*	^{7}Li,x	^{91}Y	TT	3INDTRM	1.9+07	3.9+07	Jour	PR/C,101,024608	20	R.Prajapat+	D6380
*	^{7}Li,x	^{92}Nb	CS	3INDTRM	2.4+07	3.9+07	Jour	PR/C,101,024608	20	R.Prajapat+	D6380
*	^{7}Li,x	^{92}Nb	TT	3INDTRM	2.4+07	3.9+07	Jour	PR/C,101,024608	20	R.Prajapat+	D6380
*	^{9}Be,3n	^{95}Tc	CS	3CPRIMP	4.6+07	5.0+07	Jour	PR/C,101,014606	20	G.S.Li+	S0224
*	^{9}Be,4n	^{94}Tc	CS	3CPRIMP	4.6+07	5.0+07	Jour	PR/C,101,014606	20	G.S.Li+	S0224
*	^{9}Be,5n	^{93}Tc	CS	3CPRIMP	4.6+07	5.0+07	Jour	PR/C,101,014606	20	G.S.Li+	S0224
*	^{9}Be,x	^{90}Nb	CS	3CPRIMP	4.7+07	5.0+07	Jour	PR/C,101,014606	20	G.S.Li+	S0224
*	^{9}Be,x	^{92}Nb	CS	3CPRIMP	4.6+07	5.0+07	Jour	PR/C,101,014606	20	G.S.Li+	S0224

40 Zirconium 90

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	^{12}C,^{13}C	^{89}Zr	DAP	3CPRAEP	6.6+07	6.6+07	Jour	PR/C,97,064614	18	L.Gan+	S0187
*	^{12}C,el	^{90}Zr	DA	3CPRAEP	6.6+07	6.6+07	Jour	PR/C,97,064614	18	L.Gan+	S0187
*	^{13}C,^{12}C	^{91}Zr	DAP	3CPRAEP	6.4+07	6.4+07	Jour	PR/C,97,064614	18	L.Gan+	S0187
*	^{13}C,el	^{90}Zr	DA	3CPRAEP	6.6+07	6.6+07	Jour	PR/C,97,064614	18	L.Gan+	S0187

40 Zirconium 92

	Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
					Min	Max		Ref Vol Page			
*	^{12}C,^{13}C	^{91}Zr	DAP	3CPRAEP	6.6+07	6.6+07	Jour	PR/C,97,064614	18	L.Gan+	S0187
*	^{12}C,el	^{92}Zr	DA	3CPRAEP	6.6+07	6.6+07	Jour	PR/C,97,064614	18	L.Gan+	S0187
*	^{13}C,^{12}C	^{93}Zr	DAP	3CPRAEP	6.4+07	6.4+07	Jour	PR/C,97,064614	18	L.Gan+	S0187
*	^{13}C,el	^{92}Zr	DA	3CPRAEP	6.6+07	6.6+07	Jour	PR/C,97,064614	18	L.Gan+	S0187

40 Zirconium 94

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{12}C,^{13}C	^{93}Zr	DAP	3CPRAEP	6.6+07	6.6+07	Jour	PR/C,97,064614	18	L.Gan+	S0187
*	^{12}C,el	^{94}Zr	DA	3CPRAEP	6.6+07	6.6+07	Jour	PR/C,97,064614	18	L.Gan+	S0187
*	^{13}C,^{12}C	^{95}Zr	DAP	3CPRAEP	6.4+07	6.4+07	Jour	PR/C,97,064614	18	L.Gan+	S0187
*	^{13}C,el	^{94}Zr	DA	3CPRAEP	6.6+07	6.6+07	Jour	PR/C,97,064614	18	L.Gan+	S0187

40 Zirconium 96

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{12}C,^{13}C	^{95}Zr	DAP	3CPRAEP	6.6+07	6.6+07	Jour	PR/C,97,064614	18	L.Gan+	S0187
*	^{12}C,el	^{96}Zr	DA	3CPRAEP	6.6+07	6.6+07	Jour	PR/C,97,064614	18	L.Gan+	S0187
*	^{13}C,^{12}C	^{97}Zr	DAP	3CPRAEP	6.4+07	6.4+07	Jour	PR/C,97,064614	18	L.Gan+	S0187
*	^{13}C,el	^{96}Zr	DA	3CPRAEP	6.6+07	6.6+07	Jour	PR/C,97,064614	18	L.Gan+	S0187

41 Niobium 93

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,$2n$	^{92}Nb	CS	3INDTRM	1.5+07	1.5+07	Jour	JRN,325,863	20	I.Pasha+	33148
*	n,α	^{90}Y	CS	3INDTRM	1.5+07	1.5+07	Jour	JRN,325,863	20	I.Pasha+	33148

42 Molybdenum 92

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,p	^{92}Nb	CS	3INDTRM	1.5+07	1.5+07	Jour	JRN,325,863	20	I.Pasha+	33148

46 Palladium 102

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,$2n$	^{101}Pd	CS	3INDTRM	1.5+07	1.5+07	Jour	JRN,325,175	20	I.Pasha+	33146

46 Palladium 105

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,p	^{105}Rh	CS	3INDTRM	1.5+07	1.5+07	Jour	JRN,325,175	20	I.Pasha+	33146

46 Palladium 106

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,p	^{106}Rh	CS	3INDTRM	1.5+07	1.5+07	Jour	JRN,325,175	20	I.Pasha+	33146

46 Palladium 110

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,$2n$	^{109}Pd	CS	3INDTRM	1.5+07	1.5+07	Jour	JRN,325,175	20	I.Pasha+	33146

48 Cadmium 116

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{20}Ne,^{22}Ne	^{114}Cd	CSP	2ITYLNS	3.1+08	3.1+08	Jour	PR/C,102,044606	20	D.Carbone+	D8029
*	^{20}Ne,^{22}Ne	^{114}Cd	DAE	2ITYLNS	3.1+08	3.1+08	Jour	PR/C,102,044606	20	D.Carbone+	D8029
*	^{20}Ne,^{18}O	^{118}Sn	CSP	2ITYLNS	3.1+08	3.1+08	Jour	PR/C,102,044606	20	D.Carbone+	D8029
*	^{20}Ne,^{18}O	^{118}Sn	DAE	2ITYLNS	3.1+08	3.1+08	Jour	PR/C,102,044606	20	D.Carbone+	D8029

49 Indium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,tot		CS	4UZ UZB	1.4+07	1.4+07	Jour	BAS,84,894	20	S.V.Artemov+	31807

49 Indium 115

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,$2n$	^{114}In	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834
*	n,α	^{112}Ag	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834
*	n,inel	^{115}In	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834

50 Tin 112

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{6}Li,el	^{112}Sn	DA	3INDTRM	3.0+07	3.0+07	Jour	PR/C,102,021601	20	D.Chattopadhyay+	D6387
*	^{6}Li,^{3}He+X	^{4}He	CS	3INDTRM	3.0+07	3.0+07	Jour	PR/C,102,021601	20	D.Chattopadhyay+	D6387
*	^{6}Li,^{3}He+X	^{4}He	CSP	3INDTRM	3.0+07	3.0+07	Jour	PR/C,102,021601	20	D.Chattopadhyay+	D6387
*	^{6}Li,^{3}He+X	^{4}He	?	3INDTRM	3.0+07	3.0+07	Jour	PR/C,102,021601	20	D.Chattopadhyay+	D6387

50 Tin 116

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,d	^{115}Sn	DAP	3CPRAEP	1.8+07	1.8+07	Jour	PR/C,101,014612	20	L.Gan+	S0225
*	d,p	^{117}Sn	DAP	3CPRAEP	1.2+07	1.2+07	Jour	PR/C,101,014612	20	L.Gan+	S0225

50 Tin 118

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,d	^{117}Sn	DAP	3CPRAEP	1.8+07	1.8+07	Jour	PR/C,101,014612	20	L.Gan+	S0225
*	d,p	^{119}Sn	DAP	3CPRAEP	1.2+07	1.2+07	Jour	PR/C,101,014612	20	L.Gan+	S0225

50 Tin 120

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,0		RP	2GERZFK			Jour	PR/C,102,014317	20	M.Muescher+	G0081
*	γ,sct	^{120}Sn	CS	2GERZFK	4.9+06	9.1+06	Jour	PR/C,102,014317	20	M.Muescher+	G0081
*	p,d	^{119}Sn	DAP	3CPRAEP	1.8+07	1.8+07	Jour	PR/C,101,014612	20	L.Gan+	S0225
*	d,p	^{121}Sn	DAP	3CPRAEP	1.2+07	1.2+07	Jour	PR/C,101,014612	20	L.Gan+	S0225

50 Tin 122

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,d	^{121}Sn	DAP	3CPRAEP	1.4+07	1.4+07	Jour	PR/C,101,014612	20	L.Gan+	S0225
*	d,p	^{123}Sn	DAP	3CPRAEP	1.2+07	1.2+07	Jour	PR/C,101,014612	20	L.Gan+	S0225

50 Tin 124

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,d	^{123}Sn	DAP	3CPRAEP	1.4+07	1.4+07	Jour	PR/C,101,014612	20	L.Gan+	S0225
*	d,p	^{125}Sn	DAP	3CPRAEP	1.2+07	1.2+07	Jour	PR/C,101,014612	20	L.Gan+	S0225

52 Tellurium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,tot		CS	4UZ UZB	1.4+07	1.4+07	Jour	BAS,84,894	20	S.V.Artemov+	31807

53 Iodine 127

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,2n	^{126}I	CS	3INDTRM	1.5+07	1.5+07	Jour	PR/C,102,014603	20	A.Gandhi+	33150

57 Lanthanum 139

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,3n	^{137}Ce	CS	1USALAS	4.7+07	8.9+07	Jour	NIM/B,468,81	20	K.V.Becker+	C2516
*	p,5n	^{135}Ce	CS	1USALAS	4.7+07	8.9+07	Jour	NIM/B,468,81	20	K.V.Becker+	C2516
*	p,6n	^{134}Ce	CS	1USALAS	5.5+07	8.9+07	Jour	NIM/B,468,81	20	K.V.Becker+	C2516
*	p,7n	^{133}Ce	CS	1USALAS	6.3+07	8.9+07	Jour	NIM/B,468,81	20	K.V.Becker+	C2516
*	p,8n	^{132}Ce	CS	1USALAS	7.8+07	8.9+07	Jour	NIM/B,468,81	20	K.V.Becker+	C2516
*	p,n	^{139}Ce	CS	1USALAS	4.7+07	8.9+07	Jour	NIM/B,468,81	20	K.V.Becker+	C2516
*	p,x	^{132}Cs	CS	1USALAS	5.9+07	8.9+07	Jour	NIM/B,468,81	20	K.V.Becker+	C2516
*	p,x	^{131}Ba	CS	1USALAS	5.9+07	8.9+07	Jour	NIM/B,468,81	20	K.V.Becker+	C2516
*	p,x	^{133}Ba	CS	1USALAS	4.7+07	8.9+07	Jour	NIM/B,468,81	20	K.V.Becker+	C2516
*	p,x	^{133}La	CS	1USALAS	6.8+07	8.9+07	Jour	NIM/B,468,81	20	K.V.Becker+	C2516
*	p,x	^{135}La	CS	1USALAS	4.7+07	8.9+07	Jour	NIM/B,468,81	20	K.V.Becker+	C2516

60 Neodymium 142

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	p,x+p	inclusive	DAE	3SAFITH	2.0+08	2.0+08	Jour	PR/C,102,064327	20	L.M.Donaldson+	D0860

62 Samarium 147

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{64}Ni,2n	^{209}Th	CS	2GERGSI	2.9+08	2.9+08	Jour	EPJ/A,46,337	10	J.A.Heredia+	D8025
	^{64}Ni,3n	^{208}Th	CS	2GERGSI	2.9+08	2.9+08	Jour	EPJ/A,46,337	10	J.A.Heredia+	D8025

62 Samarium 150

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{64}Ni,4n	^{210}Th	CS	2GERGSI	2.9+08	2.9+08	Jour	EPJ/A,46,337	10	J.A.Heredia+	D8025

62 Samarium 152

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{64}Ni,4n	^{212}Th	CS	2GERGSI	2.9+08	2.9+08	Jour	EPJ/A,46,337	10	J.A.Heredia+	D8025

63 Europium 153

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,α	^{150}Pm	CS	3CPRNPC	1.4+07	1.5+07	Jour	JP/G,47,075104	20	Junhua Luo+	32808
*	n,p	^{153}Sm	CS	3CPRNPC	1.4+07	1.5+07	Jour	JP/G,47,075104	20	Junhua Luo+	32808

66 Dysprosium

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,x	^{155}Dy	CS	2GERZFK		7.5+07	Jour	EPJ/A,56,264	20	H.Naik+	G0079
*	γ,x	^{157}Dy	CS	2GERZFK		7.5+07	Jour	EPJ/A,56,264	20	H.Naik+	G0079
*	γ,x	^{159}Dy	CS	2GERZFK		7.5+07	Jour	EPJ/A,56,264	20	H.Naik+	G0079

67 Holmium 165

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	^{32}S,x	Many	CS	1USABRK	3.8+08	3.8+08	Jour	PR/C,40,1244	89	C.Casey+	C2562
	^{32}S,x	^{48}Sc	DA	1USABRK	5.1+08	5.1+08	Jour	PR/C,40,1244	89	C.Casey+	C2562
	^{32}S,x	^{74}As	DA	1USABRK	5.1+08	5.1+08	Jour	PR/C,40,1244	89	C.Casey+	C2562
	^{32}S,x	^{89}Zr	DA	1USABRK	5.1+08	5.1+08	Jour	PR/C,40,1244	89	C.Casey+	C2562
	^{32}S,x	^{111}In	DA	1USABRK	5.1+08	5.1+08	Jour	PR/C,40,1244	89	C.Casey+	C2562
	^{32}S,x	^{131}Ba	DA	1USABRK	5.1+08	5.1+08	Jour	PR/C,40,1244	89	C.Casey+	C2562
	^{32}S,x	^{146}Gd	DA	1USABRK	5.1+08	5.1+08	Jour	PR/C,40,1244	89	C.Casey+	C2562
	^{32}S,x	^{149}Gd	DA	1USABRK	5.1+08	5.1+08	Jour	PR/C,40,1244	89	C.Casey+	C2562
	^{32}S,x	^{160}Er	DA	1USABRK	5.1+08	5.1+08	Jour	PR/C,40,1244	89	C.Casey+	C2562
	^{32}S,x	^{169}Yb	DA	1USABRK	5.1+08	5.1+08	Jour	PR/C,40,1244	89	C.Casey+	C2562

72 Hafnium 180

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{19}F,fus		CS	3INDNSD	7.2+07	1.1+08	Jour	PR/C,99,061601	19	J.Gehlot+	D6365

73 Tantalum 181

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x+α	inclusive	CS	2ITYMIL	2.0+07	3.0+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DAE	2ITYMIL	2.0+07	3.0+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
*	^{9}Be,x	^{184}Re	CS	3CPRIMP	3.6+07	5.0+07	Jour	PR/C,99,054617	19	G.S.Li+	S0219
*	^{16}O,fus		CS	3INDNSD	6.2+07	1.0+08	Jour	PR/C,101,024611	20	P.Jisha+	D6379
*	^{18}O,fus		CS	3INDNSD	6.0+07	1.0+08	Jour	PR/C,101,024611	20	P.Jisha+	D6379

*	^{19}F,fus		CS	3INDNSD	7.2+07	1.1+08	Jour	PR/C,99,061601	19	J.Gehlot+	D6365

74 Tungsten 182

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{19}F,fus		CS	3INDNSD	7.2+07	1.1+08	Jour	PR/C,99,061601	19	J.Gehlot+	D6365

75 Rhenium 185

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	^{40}Ar,5n	^{220}Np	CS	3CPRIMP	2.0+08	2.0+08	Jour	PRL,122,192503	19	Z.Y.Zhang+	S0209

76 Osmium 193

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,γ	^{194}Os	CS	2FR ILL	Maxwl		Jour	PL/B,76,280	78	R.F.Casten+	20820

79 Gold 197

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x+α	inclusive	CS	2ITYMIL	2.0+07	4.1+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DA	2ITYMIL	2.0+07	4.1+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DAE	2ITYMIL	2.0+07	4.1+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
*	^{9}Be,3n	^{203}Bi	CS	3INDTRM	3.2+07	4.5+07	Jour	PR/C,101,034611	20	M.Kaushik+	D6383
*	^{9}Be,3n	^{203}Bi	CS	3CPRIMP	4.6+07	4.9+07	Jour	PR/C,100,054601	19	G.S.Li+	S0222
*	^{9}Be,4n	^{202}Bi	CS	3INDTRM	3.4+07	4.5+07	Jour	PR/C,101,034611	20	M.Kaushik+	D6383
*	^{9}Be,4n	^{202}Bi	CS	3CPRIMP	4.6+07	4.9+07	Jour	PR/C,100,054601	19	G.S.Li+	S0222
*	^{9}Be,5n	^{201}Bi	CS	3CPRIMP	4.7+07	4.9+07	Jour	PR/C,100,054601	19	G.S.Li+	S0222
*	^{9}Be,x	^{199}Tl	CS	3CPRIMP	4.6+07	4.9+07	Jour	PR/C,100,054601	19	G.S.Li+	S0222
*	^{9}Be,x	^{200}Tl	CS	3CPRIMP	4.6+07	4.9+07	Jour	PR/C,100,054601	19	G.S.Li+	S0222
	^{129}Xe,x	Many	CS	1USAMSU	2.9+09	2.9+09	Jour	PR/C,46,647	92	A.Yokoyama+	C2564

82 Lead

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,tot		CS	4UZ UZB	1.4+07	1.4+07	Jour	BAS,84,894	20	S.V.Artemov+	31807

82 Lead 206

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x+α	inclusive	CS	2ITYMIL	2.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DAE	2ITYMIL	2.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
*	^{16}O,fus		CS	3INDNSD	8.6+07	1.2+08	Jour	PR/C,101,014616	20	M.M.Hosamani+	D6377

82 Lead 207

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	p,x+α	inclusive	CS	2ITYMIL	3.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DAE	2ITYMIL	3.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263

82 Lead 208

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	γ,tot		CS	3SAFWIT	8.0+06	2.2+07	Jour	EPJ/A,54,234	18	M.Jingo+	G0078
	p,x+α	inclusive	CS	2ITYMIL	3.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DAE	2ITYMIL	3.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
*	^{9}Be,el	^{208}Pb	DA	3CPRIMP	8.8+07	8.8+07	Jour	CPH/C,44,024001	20	Fang-Fang Duan+	S0229
*	^{10}Be,el	^{208}Pb	DA	3CPRIMP	1.3+08	1.3+08	Jour	CPH/C,44,024001	20	Fang-Fang Duan+	S0229
*	^{16}O,fus		CS	3INDNSD	8.7+07	1.2+08	Jour	PR/C,101,014616	20	M.M.Hosamani+	D6377
*	^{204}Hg,x	Many	CS	1USAANL	9.8+08	1.1+09	Jour	PR/C,101,034612	20	V.V.Desai+	C2515

83 Bismuth 209

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,4n	^{206}Bi	CS	3CZRUJF	2.9+07	2.9+07	Jour	EPJ/CS,239,20004	20	D.Kral+	31834
	p,fis	Many	CS	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
	p,fis	^{83}Se	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
	p,fis	^{112}Ag	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
	p,fis	^{118}Sb	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
	p,fis	^{122}Sb	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
	p,x+α	inclusive	CS	2ITYMIL	2.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DA	2ITYMIL	3.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	p,x+α	inclusive	DAE	2ITYMIL	2.0+07	4.4+07	Rept	INFN/BE-73/5	73	E.Gadioli+	O2263
	^{59}Co,x	^{267}Ds	CS	1USABRK	3.0+08	3.0+08	Jour	PR/C,51,R2293	95	A.Ghiorso+	C2565

90 Thorium 229

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		NUD	4RUSMIF	2.5-02	2.5-02	Jour	YF,49,1551	89	A.N.Gudkov+	41730

90 Thorium 232

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	γ,fis		NUD	4UKRIEP		1.8+07	Jour	AE,66,210	89	P.P.Ganich+	G4070
	γ,x+n	inclusive	CS	4UKRIEP	6.3+06	1.7+07	Jour	AE,66,210	89	P.P.Ganich+	G4070
	p,fis		CS	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
	p,fis	Many	CS	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
	p,fis	^{83}Se	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
	p,fis	^{112}Ag	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
	p,fis	^{122}Sb	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
	p,fis	^{137}Ce	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
	p,fis	^{139}Ce	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
	d,x+p	inclusive	DAE	1USAWAU	2.2+07	2.2+07	Jour	PR/C,1,2096	70	K.L.Wolf+	C2563

92 Uranium 233

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		CS	4RUSRI	Fiss	1.5+07	Rept	INDC(CCP)-114,8	77	V.M.Adamov+	40547
	n,fis	Many	FY	4RUSMIF	2.5-02	2.5-02	Jour	YK,,(3),49,1981)=(R,INIS-SU-122,59	81	A.N.Gudkov+	41728
	n,fis		NUD	4RUSMIF	2.5-02	2.5-02	Rept	INDC(CCP)-260,56	86	A.N.Gudkov+	41731
	n,fis	Many	?	4RUSMIF	2.5-02	2.5-02	Jour	YK,,(3),49,1981)=(R,INIS-SU-122,59	81	A.N.Gudkov+	41728
	α,fis	^{134}Cs	CS	1USAANL	4.2+07	4.2+07	Jour	JIN,26,669	64	H.Warhanek+	C2559

92 Uranium 234

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		CS	4RUSRI	Fiss	1.5+07	Rept	INDC(CCP)-114,8	77	V.M.Adamov+	40547
*	n,fis		FY	2ZZZGEL	2.0+05	5.0+06	Jour	PR/C,93,034603	16	A.Al-Adili+	23164

92 Uranium 235

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		CS	4RUSRI	1.4+07	1.5+07	Rept	INDC(CCP)-114,8	77	V.M.Adamov+	40547
	n,fis		CS	3DDRTUD	1.5+07	1.5+07	Jour	SJA,47,1040	79	I.D.Alkhazov+	31832
	n,fis		CS	4RUSRI	1.5+07	1.5+07	Rept	INDC(CCP)-114,8	77	V.M.Adamov+	40547
	n,fis		CS	4RUSRI	2.5+06	2.5+06	Rept	INDC(CCP)-48,34	75	I.M.Kuks+	40258
	n,fis		CS	1USAANL	3.5+04	3.5+06	Jour	NSE,53,370	74	W.P.Poenitz	10333
	n,fis		CS	3DDRROS	8.2+06	8.2+06	Rept	INDC(GDR)-13,122	80	R.Arlt+	31833
	n,fis		CS	4RUSRI	Fiss		Rept	INDC(CCP)-114,8	77	V.M.Adamov+	40547
	n,fis	Many	FY	4RUSRI	1.4+07	1.4+07	Jour	RAK,2,746	60	I.T.Krisyuk+	41726
	n,fis	Many	FY	4ZZZDUB	7.0-01	3.6+01	Rept	JINR-P3-87-862	87	A.A.Bogdzel'+	41723
	n,fis	γ	MLT	4ZZZDUB	3.1+00	2.1+01	Jour	CZJ/B,30,1101	80	Z.Dlouhy+	41733
	n,fis		NUD	4RUSMIF	2.5-02	2.5-02	Jour	YF,49,1551	89	A.N.Gudkov+	41730
	n,fis		NUD	4RUSMIF	2.5-02	2.5-02	Rept	INDC(CCP)-260,56	86	A.N.Gudkov+	41731

*	n,fis	Many	?	2ZZZGEL	2.5-02	2.5-02	Jour	PR/C,93,034603	16	A.Al-Adili+	23164
	n,fis		?	1USAANL	3.4+04	2.5+05	Jour	NSE,53,370	74	W.P.Poenitz	10333
	α,fis	^{134}Cs	CS	1USAANL	2.7+07	4.2+07	Jour	JIN,26,669	64	H.Warhanek+	C2559

92 Uranium 236

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,fis		CS	4RUSRI	Fiss	1.5+07	Rept	INDC(CCP)-114,8	77	V.M.Adamov+	40547
n,fis	Many	FY	4RUSFEI	Fast		Jour	AE,48,401	80	A.N.Gudkov+	41727
d,x	^{236}U	CS	1USAWAU	1.3+07	2.1+07	Jour	PR/C,1,2096	70	K.L.Wolf+	C2563
e,fis		CS	3BZLUSP	5.5+06	2.6+07	Jour	NCL,26,487	79	J.D.T.Arrudaneto+	G0080

92 Uranium 238

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
γ,fis		DA	3ISLNEG	7.8+06	7.8+06	Jour	PR/C,32,1944	85	S.Kahane+	G0066
γ,fis	Many	FY	3ISLNEG	7.8+06	9.0+06	Jour	PR/C,32,1944	85	S.Kahane+	G0066
γ,fis		MAS	3ISLNEG	7.8+06	7.8+06	Jour	PR/C,32,1944	85	S.Kahane+	G0066
γ,fis		?	4UKRIEP		1.8+07	Jour	AE,66,210	89	P.P.Ganich+	G4070
0,fis	^{103}Ru	FY	1USAARK	Spont		Prog	ORO-3235-12,21	67	D.D.Sabu+	14640
γ,fis	^{134}I	FY	3ISLNEG	7.8+06	9.0+06	Jour	PR/C,32,1944	85	S.Kahane+	G0066
γ,fis	^{135}Xe	FY	3ISLNEG	7.8+06	7.8+06	Jour	PR/C,32,1944	85	S.Kahane+	G0066
n,fis		CS	3DDRTUD	1.5+07	1.5+07	Jour	SJA,47,1040	79	I.D.Alkhazov+	31832
n,fis		CS	4RUSRI	Fiss	1.5+07	Rept	INDC(CCP)-114,8	77	V.M.Adamov+	40547
n,fis	Many	FY	2JPNKYU	1.4+07	1.4+07	Jour	NST,16,779	79	H.Yamamoto+	21909
n,fis	Many	FY	4RUSRI	1.4+07	1.4+07	Jour	RAK,2,743	60	I.T.Krisyuk+	41725
n,fis	Many	KE	2JPNKYU	1.4+07	1.4+07	Jour	NST,16,779	79	H.Yamamoto+	21909
n,fis	Many	NU	2JPNKYU	1.4+07	1.4+07	Jour	NST,16,779	79	H.Yamamoto+	21909
n,fis	Many	?	2JPNKYU	1.4+07	1.4+07	Jour	NST,16,779	79	H.Yamamoto+	21909
p,fis		CS	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
p,fis	Many	CS	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
p,fis	Many	KE	3ISLWZI	1.2+07	1.2+07	Jour	PRL,21,36	68	E.Cheifetz+	D0988
p,fis	Many	NU	3ISLWZI	1.2+07	1.2+07	Jour	PRL,21,36	68	E.Cheifetz+	D0988
p,fis		NU	3ISLWZI	1.2+07	1.2+07	Jour	PRL,21,36	68	E.Cheifetz+	D0988
p,fis	Many	?	3ISLWZI	1.2+07	1.2+07	Jour	PRL,21,36	68	E.Cheifetz+	D0988
p,fis	^{83}Se	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
p,fis	^{112}Ag	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
p,fis	^{131}Ba	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
p,fis	^{176}Ta	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
p,fis	^{198}Au	?	4ZZZDUB	4.8+08	4.8+08	Conf	55MOSCOW,,97	55	A.P.Vinogradov+	O0624
d,x	^{238}U	CS	1USAWAU	1.3+07	2.1+07	Jour	PR/C,1,2096	70	K.L.Wolf+	C2563
α,fis	^{134}Cs	CS	1USAANL	3.0+07	4.2+07	Jour	JIN,26,669	64	H.Warhanek+	C2559
*	^{6}Li,fis	^{1}H	CS	3INDNSD	3.0+07	4.0+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{6}Li,fis	^{1}H	DA	3INDNSD	3.0+07	4.0+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{6}Li,fis	^{2}H	CS	3INDNSD	3.4+07	4.0+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{6}Li,fis	^{2}H	DA	3INDNSD	3.0+07	4.0+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{6}Li,fis	^{3}H	CS	3INDNSD	3.0+07	4.0+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{6}Li,fis	^{3}H	DA	3INDNSD	3.4+07	4.0+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{6}Li,fis	^{4}He	CS	3INDNSD	3.0+07	4.0+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{6}Li,fis	^{4}He	DA	3INDNSD	3.0+07	4.0+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{7}Li,fis	^{1}H	CS	3INDNSD	3.1+07	4.1+07	Jour	PR/C,99,024620	19	A.Pal+	D6354

*	^{7}Li,fis	^{1}H	DA	3INDNSD	3.1+07	4.1+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{7}Li,fis	^{2}H	CS	3INDNSD	3.1+07	4.1+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{7}Li,fis	^{2}H	DA	3INDNSD	3.1+07	4.1+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{7}Li,fis	^{3}H	CS	3INDNSD	3.1+07	4.1+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{7}Li,fis	^{3}H	DA	3INDNSD	3.1+07	4.1+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{7}Li,fis	^{4}He	CS	3INDNSD	3.1+07	4.1+07	Jour	PR/C,99,024620	19	A.Pal+	D6354
*	^{7}Li,fis	^{4}He	DA	3INDNSD	3.1+07	4.1+07	Jour	PR/C,99,024620	19	A.Pal+	D6354

93 Neptunium 237

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	d,fis	^{134}Cs	CS	1USAANL	2.1+07	2.1+07	Jour	JIN,26,669	64	H.Warhanek+	C2559

94 Plutonium 239

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		CS	4RUSRI	Fiss	1.5+07	Rept	INDC(CCP)-114,8	77	V.M.Adamov+	40547

94 Plutonium 241

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,fis	Many	FY	3INDTRM	2.5-02	2.5-02	Jour	EPJ/A,56,186	20	H.Naik+	33144
*	n,fis		MAS	3INDTRM	2.5-02	2.5-02	Jour	EPJ/A,56,186	20	H.Naik+	33144

94 Plutonium 242

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,fis		CS	4RUSRI	Fiss	1.5+07	Rept	INDC(CCP)-114,8	77	V.M.Adamov+	40547

96 Curium 244

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	0,fis		FY	4ZZZDUB	Spont		Rept	JINR-E7-95-148	95	M.Andrassy+	41724

96 Curium 245

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,fis	Many	FY	3INDTRM	2.5-02	2.5-02	Jour	EPJ/A,56,227	20	H.Naik+	33145

*	n,fis	MAS	3INDTRM	2.5-02	2.5-02	Jour	EPJ/A,56,227	20	H.Naik+	33145

98 Californium 249

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,fis	Many	FY	4RUSMIF	2.5-02	2.5-02	Jour	AE,50,355	81	A.N.Gudkov+	41729
^{136}Xe,x	Many	CS	1USABRK	7.5+08	8.8+08	Jour	PR/C,35,2117	87	K.E.Gregorich+	C2558

98 Californium 252

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
0,fis	Many	FY	4RUSKUR	Spont		Jour	JP/G,5,723	79	A.A.Borovoy+	41732