EXFOR News (September 2019)

New experimental data available from Nuclear Reaction Data Centres

EXFOR [1] is a world-wide data library for experimental neutron, charged-particle and photon induced reaction data compiled by the International Network of the Nuclear Reaction Data Centres (NRDC)[a] co-ordinated by the IAEA Nuclear Data Section. Regularly updated web retrieval databases are available at IAEA-NDS as well as NNDC, NEADB, 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 (Naohiko Otsuka n.otsuka@iaea.org) for inclusion in the EXFOR News distribution list as well as any question on EXFOR.

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

Quantity codes

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

Special codes in outgoing particle field

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

Special codes in incident energy field

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

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

4 Beryllium 9

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,α	^{6}He	CS	2UK CAV	6.0+05	4.0+06	Jour	PRS/A,192,114	47	K.W.Allen+	23521
n,tot		CS	2UK CAV	4.3+05	4.0+06	Jour	PRS/A,192,114	47	K.W.Allen+	23521

5 Boron 10

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,α	^{7}Li	?	2NEDRCN	8.8-02	8.8-02	Jour	ZP/A,324,271	86	P.J.J.Kok+	23486
n,γ	^{11}B	CS	2NEDRCN	2.5-02	2.5-02	Jour	ZP/A,324,271	86	P.J.J.Kok+	23486
n,γ	^{11}B	SPC	2NEDRCN	2.5-02	2.5-02	Jour	ZP/A,324,271	86	P.J.J.Kok+	23486

6 Carbon

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,sct	^{nat}C	CS	2JPNIPC	2.6-02	2.7+01	Jour	JMJ,24,569	42	B.Kimura	23489
n,tot		CS	2JPNIPC	2.6-02	2.7+01	Jour	JMJ,24,569	42	B.Kimura	23489

7 Nitrogen 14

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{15}N	SPC	2GERKIL	2.5-02	2.5-02	Jour	AKE,17,145	71	D.Bellmann	23482

10 Neon

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ		CS	2SWDCTH	2.5-02	2.5-02	Jour	PS,2,169	70	E.Selin	23510
n,γ		SPC	2SWDCTH	2.5-02	2.5-02	Jour	PS,2,169	70	E.Selin	23510

10 Neon 20

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{21}Ne	CS	2GERKIL	2.5-02	2.5-02	Jour	AKE,17,145	71	D.Bellmann	23482
n,γ	^{21}Ne	CSP	2SWDCTH	2.5-02	2.5-02	Jour	PS,2,169	70	E.Selin	23510
n,γ	^{21}Ne	SPC	2GERKIL	2.5-02	2.5-02	Jour	AKE,17,145	71	D.Bellmann	23482

10 Neon 21

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{22}Ne	CS	2GERKIL	2.5-02	2.5-02	Jour	AKE,17,145	71	D.Bellmann	23482
n,γ	^{22}Ne	SPC	2GERKIL	2.5-02	2.5-02	Jour	AKE,17,145	71	D.Bellmann	23482

10 Neon 22

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{23}Ne	CS	2GERKIL	2.5-02	2.5-02	Jour	AKE,17,145	71	D.Bellmann	23482
n,γ	^{23}Ne	CS	2SWDCTH	2.5-02	2.5-02	Jour	PS,2,169	70	E.Selin	23510
n,γ	^{23}Ne	CSP	2SWDCTH	2.5-02	2.5-02	Jour	PS,2,169	70	E.Selin	23510
n,γ	^{23}Ne	SPC	2GERKIL	2.5-02	2.5-02	Jour	AKE,17,145	71	D.Bellmann	23482
n,γ	^{23}Ne	?	2SWDCTH	2.5-02	2.5-02	Jour	PS,2,169	70	E.Selin	23510

11 Sodium 23

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,0		RP	2UK HAR			Conf	66PARIS,1,129	66	M.C.Moxon+	23480
n,γ	^{24}Na	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{24}Na	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491
n,γ	^{24}Na	SPC	2NEDRCN	2.5-02	2.5-02	Rept	RCN-175	72	J.Kopecky+	23508
n,tot		CS	2UK HAR	2.9+03	2.9+03	Conf	66PARIS,1,129	66	M.C.Moxon+	23480

12 Magnesium 26

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{27}Mg	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

13 Aluminium 27

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{28}Al	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,sct	^{27}Al	CS	2JPNIPC	2.6-02	2.7+01	Jour	JMJ,24,569	42	B.Kimura	23489
n,tot		CS	2UK CAV	3.5+05	3.8+06	Jour	PRS/A,192,114	47	K.W.Allen+	23521
n,tot		CS	2GERMUN	5.3-07	5.3-07	Jour	PL/B,29,33	69	A.Steyerl	23506

14 Silicon

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,abs		CS	2UK HAR	Maxwl		Rept	AEEW-M-887	69	R.J.Maddison+	23528

16 Sulphur 36

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{37}S	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

17 Chlorine

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,sct	^{nat}Cl	CS	2JPNIPC	2.6-02	2.7+01	Jour	JMJ,24,569	42	B.Kimura	23489
n,x	^{38}Cl	CS	2GERSFN	2.5-02	2.5-02	Jour	RCA,21,214	74	B.Grundel+	23484

17 Chlorine 35

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{36}Cl	DAP	2NEDRCN	2.5-02	2.5-02	Jour	NP,77,267	66	G.Vanmiddelkoop+	23493

17 Chlorine 37

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{38}Cl	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{38}Cl	RI	2SWDAE		5.0-01	Jour	RCA,12,119(2)	69	D.Brune	23483

18 Argon 37

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,0		RP	2ZZZGEL			Jour	NP/A,678,11	00	G.Goeminne+	23505
n,α	^{34}S	CS	2ZZZGEL	1.2-02	8.0+01	Jour	NP/A,678,11	00	G.Goeminne+	23505

19 Potassium 40

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,p	^{40}Ar	CS	2FR SAC	5.4-02	5.4-02	Jour	HPA,31,727	58	J.Rossel+	23512

19 Potassium 41

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{42}K	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

20 Calcium 46

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{47}Ca	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

20 Calcium 48

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{49}Ca	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

21 Scandium 45

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{46}Sc	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

22 Titanium 47

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{48}Ti	CS	2NEDRCN	2.5-02	2.5-02	Jour	NP/A,419,439	84	J.F.A.G.Ruyl+	23502
n,γ	^{48}Ti	SPC	2NEDRCN	2.5-02	2.5-02	Jour	NP/A,419,439	84	J.F.A.G.Ruyl+	23502

22 Titanium 49

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{50}Ti	CS	2NEDRCN	2.5-02	2.5-02	Jour	NP/A,419,439	84	J.F.A.G.Ruyl+	23502
n,γ	^{50}Ti	SPC	2NEDRCN	2.5-02	2.5-02	Jour	NP/A,419,439	84	J.F.A.G.Ruyl+	23502

22 Titanium 50

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{51}Ti	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{51}Ti	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491

23 Vanadium 51

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{52}V	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{52}V	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491

24 Chromium 50

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{51}Cr	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

25 Manganese 55

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{56}Mn	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{56}Mn	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491
n,sct	^{55}Mn	CS	2JPNIPC	2.6-02	2.7+01	Jour	JMJ,24,569	42	B.Kimura	23489

26 Iron

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,sct	^{nat}Fe	CS	2JPNIPC	2.6-02	2.7+01	Jour	JMJ,24,569	42	B.Kimura	23489

26 Iron 58

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{59}Fe	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

27 Cobalt 59

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

	n,γ		RP	2FR SAC	1.3+05	1.3+05	Jour	NP/A,130,353	69	C.Samour+	23496
	n,γ	^{60}Co	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
	n,γ	^{60}Co	CSP	2FR SAC	1.0+00	1.0+00	Jour	NP/A,130,353	69	C.Samour+	23496
	n,γ	^{60}Co	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491
	n,γ	^{60}Co	SPC	2FR SAC	2.5-02	1.3+02	Jour	NP/A,130,353	69	C.Samour+	23496
	n,sct	^{59}Co	CS	2JPNIPC	2.6-02	2.7+01	Jour	JMJ,24,569	42	B.Kimura	23489
	n,tot		RP	2FR SAC	-4.2+05	1.3+05	Jour	NP/A,130,353	69	C.Samour+	23496
	n,x	^{60}Co	CS	2UK HAR	Maxwl	2.5-02	Rept	AERE-R-4111	64	N.K.Taylor+	23524

28 Nickel

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
*	n,inel	^{nat}Ni	DE	1USALAS	6.0+06	8.0+06	Jour	PR/C,83,034604	11	S.Noda+	14290
	n,sct	^{nat}Ni	CS	2JPNIPC	2.6-02	2.7+01	Jour	JMJ,24,569	42	B.Kimura	23489

28 Nickel 64

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{65}Ni	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{65}Ni	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491

29 Copper 63

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{64}Cu	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

29 Copper 65

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{66}Cu	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

30 Zinc

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,sct	^{nat}Zn	CS	2JPNIPC	2.6-02	2.7+01	Jour	JMJ,24,569	42	B.Kimura	23489

30 Zinc 64

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{65}Zn	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

30 Zinc 68

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{69}Zn	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

31 Gallium 71

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{72}Ga	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{72}Ga	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491

33 Arsenic 75

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{76}As	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

34 Selenium 74

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{75}Se	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

35 Bromine 79

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{80}Br	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

35 Bromine 81

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{82}Br	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

36 Krypton 78

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,abs		?	2UK HAR	2.5-02	2.5-02	Jour	AF,5,191	52	I.Bergstroem	23509

37 Rubidium 85

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{86}Rb	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

37 Rubidium 87

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{88}Rb	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

38 Strontium 84

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{85}Sr	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{85}Sr	CS	2UK HAR	2.5-02	2.5-02	Jour	PPS/A,65,958	52	G.E.Harrison+	23519

38 Strontium 86

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{87}Sr	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

38 Strontium 87

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{88}Sr	CS	2UK HAR	2.5-02	2.5-02	Jour	PPS/A,65,958	52	G.E.Harrison+	23519

39 Yttrium 89

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{90}Y	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

40 Zirconium 94

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{95}Zr	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

40 Zirconium 96

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{97}Zr	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

41 Niobium 93

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{94}Nb	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{94}Nb	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491

42 Molybdenum 98

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{99}Mo	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

42 Molybdenum 100

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{101}Mo	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

44 Ruthenium 96

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{97}Ru	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

44 Ruthenium 99

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,0		RP	2ZZZGEL			Jour	NP/A,385,301	82	C.Coceva+	23501

44 Ruthenium 101

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,0		RP	2ZZZGEL			Jour	NP/A,385,301	82	C.Coceva+	23501

44 Ruthenium 102

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{103}Ru	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

44 Ruthenium 104

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{105}Ru	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

45 Rhodium 103

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{104}Rh	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

46 Palladium 108

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{109}Pd	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

46 Palladium 110

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{111}Pd	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

47 Silver 107

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{108}Ag	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

n,γ	^{108}Ag	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491

47 Silver 109

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,γ	^{110}Ag	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{110}Ag	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491

48 Cadmium 110

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,γ		RP	2GERKFK			Rept	FZKA-6860	03	K.Wisshak+	23487
n,γ	^{111}Cd	CS	2GERKFK	Maxwl	1.0+04	Rept	FZKA-6860	03	K.Wisshak+	23487

48 Cadmium 112

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,γ		RP	2GERKFK			Rept	FZKA-6860	03	K.Wisshak+	23487
n,γ	^{113}Cd	CS	2GERKFK	Maxwl	1.0+04	Rept	FZKA-6860	03	K.Wisshak+	23487

48 Cadmium 114

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,γ		RP	2GERKFK			Rept	FZKA-6860	03	K.Wisshak+	23487
n,γ	^{115}Cd	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{115}Cd	CS	2GERKFK	Maxwl	1.1+04	Rept	FZKA-6860	03	K.Wisshak+	23487

48 Cadmium 116

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,γ		RP	2GERKFK			Rept	FZKA-6860	03	K.Wisshak+	23487
n,γ	^{117}Cd	CS	2GERKFK	Maxwl	1.0+04	Rept	FZKA-6860	03	K.Wisshak+	23487

49 Indium 113

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,γ	^{114}In	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

49 Indium 115

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{116}In	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{116}In	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491

50 Tin 112

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{113}Sn	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

50 Tin 116

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{117}Sn	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

50 Tin 122

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{123}Sn	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

50 Tin 124

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{125}Sn	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

51 Antimony

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,el		RP	2JPNJAE		3.5+02	Jour	JPJ,33,1185	72	M.Ohkubo+	23490

51 Antimony 121

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,0		RP	2JPNJAE			Jour	JPJ,33,1185	72	M.Ohkubo+	23490

n,el		RP	2JPNJAE		3.5+02	Jour	JPJ,33,1185	72	M.Ohkubo+	23490
n,γ		RP	2JPNJAE	6.2+00	1.5+02	Jour	JPJ,33,1185	72	M.Ohkubo+	23490
n,γ	^{122}Sb	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

51 Antimony 123

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,0		RP	2JPNJAE			Jour	JPJ,33,1185	72	M.Ohkubo+	23490
n,el		RP	2JPNJAE		3.5+02	Jour	JPJ,33,1185	72	M.Ohkubo+	23490
n,γ		RP	2JPNJAE	5.1+01	1.9+02	Jour	JPJ,33,1185	72	M.Ohkubo+	23490
n,γ	^{124}Sb	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

53 Iodine 127

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,γ	^{128}I	CS	2GERMUN	2.5-02	2.5-02	Jour	RCA,33,183	83	L.Friedmann+	23485
n,γ	^{128}I	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{128}I	RI	2SWDAE		5.0-01	Jour	RCA,12,119(2)	69	D.Brune	23483
n,γ	^{128}I	RI	2GERMUN		5.0-01	Jour	RCA,33,183	83	L.Friedmann+	23485

53 Iodine 128

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,γ	^{129}I	CS	2GERMUN	2.5-02	2.5-02	Jour	RCA,33,183	83	L.Friedmann+	23485
n,γ	^{129}I	RI	2GERMUN		5.0-01	Jour	RCA,33,183	83	L.Friedmann+	23485

53 Iodine 129

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,γ	^{130}I	CS	2GERMUN	2.5-02	2.5-02	Jour	RCA,33,183	83	L.Friedmann+	23485
n,γ	^{130}I	RI	2GERMUN	5.0-01		Jour	RCA,33,183	83	L.Friedmann+	23485

55 Caesium 133

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,γ	^{134}Cs	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

56 Barium 132

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{133}Ba	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

56 Barium 138

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{139}Ba	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

57 Lanthanum 138

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{139}La	POL	2JPNKEK	3.0+00	3.0+00	Jour	NP/A,504,269	89	Y.Masuda+	23503

57 Lanthanum 139

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{140}La	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{140}La	POL	2JPNKEK	7.3-01	7.3-01	Jour	NP/A,504,269	89	Y.Masuda+	23503
n,tot		POL	2JPNKEK	7.3-01	7.3-01	Jour	NP/A,504,269	89	Y.Masuda+	23503

58 Cerium 140

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{141}Ce	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

58 Cerium 142

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{143}Ce	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

59 Praseodymium 141

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{142}Pr	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

60 Neodymium 143

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,α	^{140}Ce	CSP	2FR ILL	Maxwl		Conf	74PETTEN,,395	74	A.Emsallem+	23492
$n,\gamma+\alpha$	^{140}Ce	CS	2FR ILL	Maxwl		Conf	74PETTEN,,395	74	A.Emsallem+	23492

60 Neodymium 146

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{147}Nd	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

60 Neodymium 148

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{149}Nd	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

60 Neodymium 150

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{151}Nd	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

62 Samarium 147

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,α	^{144}Nd	CSP	2FR ILL	Maxwl		Conf	74PETTEN,,395	74	A.Emsallem+	23492
$n,\gamma+\alpha$	^{144}Nd	CS	2FR ILL	Maxwl		Conf	74PETTEN,,395	74	A.Emsallem+	23492

62 Samarium 149

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,α	^{146}Nd	CSP	2FR ILL	Maxwl		Conf	74PETTEN,,395	74	A.Emsallem+	23492
$n,\gamma+\alpha$	^{146}Nd	CS	2FR ILL	Maxwl		Conf	74PETTEN,,395	74	A.Emsallem+	23492

62 Samarium 152

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{153}Sm	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

62 Samarium 154

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{155}Sm	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

63 Europium 153

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{154}Eu	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

64 Gadolinium 153

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{154}Gd	CS	2FR ILL	2.5-02	2.5-02	Conf	81GRENOB,,218	81	A.M.J.Spits+	23481

64 Gadolinium 158

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{159}Gd	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

64 Gadolinium 160

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{161}Gd	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

65 Terbium 159

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{160}Tb	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

66 Dysprosium 164

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{165}Dy	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

67 Holmium 165

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{166}Ho	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

68 Erbium 170

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{171}Er	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

69 Thulium 169

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{170}Tm	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,x	^{170}Tm	CS	2GERZFK	Maxwl		Jour	NP/A,102,241	67	A.Andreeff+	23494

70 Ytterbium 174

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{175}Yb	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

70 Ytterbium 176

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{177}Yb	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

71 Lutetium 175

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{176}Lu	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

72 Hafnium 174

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{175}Hf	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

72 Hafnium 177

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{178}Hf	SPC	2ZZZGEL	1.1+00	1.6+02	Jour	NP/A,281,240	77	M.Stefanon+	23499

72 Hafnium 178

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{179}Hf	CS	2FR SAC	Maxwl		Conf	93FRIBOU,,192	93	Ch.Briancon+	23511

72 Hafnium 179

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{180}Hf	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

72 Hafnium 180

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{181}Hf	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

73 Tantalum 181

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{182}Ta	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{182}Ta	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491

74 Tungsten 186

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{187}W	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{187}W	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491

75 Rhenium 185

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{186}Re	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

75 Rhenium 187

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{188}Re	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

76 Osmium 184

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{185}Os	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

76 Osmium 190

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{191}Os	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

76 Osmium 191

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{192}Os	CS	2FR ILL	2.5-02	2.5-02	Jour	NP/A,309,206	78	R.F.Casten+	23500
n,γ	^{192}Os	?	2FR ILL	2.5-02	2.5-02	Jour	NP/A,309,206	78	R.F.Casten+	23500

76 Osmium 192

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{193}Os	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{193}Os	CS	2DENRIS	2.5-02	2.5-02	Jour	NP/A,125,305	69	K.Maackbisgard+	23495

77 Iridium 193

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{194}Ir	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

78 Platinum 198

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{199}Pt	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

79 Gold 197

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ		RP	2FR SAC	4.9+03	1.1+05	Jour	NP/A,130,353	69	C.Samour+	23496
n,γ	^{198}Au	CSP	2FR SAC	1.0+00	1.0+00	Jour	NP/A,130,353	69	C.Samour+	23496
n,γ	^{198}Au	SPC	2FR SAC	2.5-02	4.9+00	Jour	NP/A,130,353	69	C.Samour+	23496
n,t		RP	2FR SAC	4.9+03	7.8+04	Jour	NP/A,130,353	69	C.Samour+	23496
n,tot		CS	2GERMUN	5.3-07	5.3-07	Jour	PL/B,29,33	69	A.Steyerl	23506

80 Mercury

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,sct	^{nat}Hg	CS	2JPNIPC	2.6-02	2.7+01	Jour	JMJ,24,569	42	B.Kimura	23489

80 Mercury 196

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{197}Hg	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

80 Mercury 201

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,γ	^{202}Hg	SPC	2UK HAR	4.3+01	5.6+02	Rept	AERE-PR/NP-17,22	70	B.W.Thomas+	23522

80 Mercury 202

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

n,γ	^{203}Hg	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488

82 Lead

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,sct	^{nat}Pb	CS	2JPNIPC	2.6-02	2.7+01	Jour	JMJ,24,569	42	B.Kimura	23489

83 Bismuth

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,γ		CS	2UK HAR	2.5-02	2.5-02	Jour	JNE,6,41	57	G.W.Horsley	23513

83 Bismuth 209

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,γ	^{210}Bi	CS	2UK HAR	2.5-02	2.5-02	Jour	PPS/A,66,700	53	D.J.Littler+	23520

90 Thorium 232

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
γ,fis		CS	1USAVIR	5.0+06	9.0+06	Jour	ARI,38,561	87	W.J.Varhue+	L0251
γ,fis	Many	FY	1USAWSA		2.7+07	Jour	PR/C,44,1118	91	J.R.Smith+	L0253
γ,fis	Many	FY	1CANTOR		4.0+07	Jour	JIN,35,2621	73	A.Chattopadhyay+	L0249
0,fis		?	2UK HAR	Spont		Jour	PPS/A,65,73	52	F.R.Barclay+	23518
γ,x+n	inclusive	CS	1USAVIR	5.0+06	1.1+07	Jour	ARI,38,561	87	W.J.Varhue+	L0251
n,γ	^{233}Th	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{233}Th	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491

92 Uranium 233

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max		Ref Vol Page			
n,fis	Many	?	1CANMCM		5.0-01	Jour	CJP,53,775	75	J.R.Delaeter+	14535
n,fis	Many	?	1USAMIS	2.5-02	2.5-02	Jour	JIN,43,885	81	D.K.Pal+	10995
n,fis	Many	?	1CANMCM	Maxwl		Jour	CJP,53,775	75	J.R.Delaeter+	14535
n,fis	^{3}H	FY	1USAANL	Maxwl		Jour	NP/A,151,65	70	D.L.Horrocks+	14531
n,fis	^{115}Pd	?	1USAORL	Maxwl		Jour	RCA,16,66	71	M.F.Roche+	13288

92 Uranium 235

	Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
	n,0		RP	2ZZZGEL			Jour	JNE,27,435	73	J.P.Theobald+	23517
	n,0		RP	2UK HAR			Rept	NRDC-117	59	E.R.Collins+	23527
	n,fis		FY	1USAANL	2.5-02	2.5-02	Jour	NIM,115,47	74	S.B.Kaufman+	14534
*	n,fis	Many	FY	1USAWSU	Maxwl	7.0+05	Jour	JRN,296,763	13	L.A.Metz+	14538
	n,fis		KE	1USAANL	2.5-02	2.5-02	Jour	NIM,115,47	74	S.B.Kaufman+	14534
	n,fis		NUD	1USATAM	Fast		Conf	97TRIEST,1,491	97	W.Charlton+	14536
	n,fis	Many	?	1CANMCM		5.0-01	Jour	CJP,53,775	75	J.R.Delaeter+	14535
	n,fis	^{3}H	FY	1CANMCM	Maxwl		Jour	PR/C,5,551	72	G.Kugler+	14533
	n,fis	^{3}H	KE	1CANMCM	Maxwl		Jour	PR/C,5,551	72	G.Kugler+	14533
	n,fis	^{3}H	?	1CANMCM	Maxwl		Jour	PR/C,5,551	72	G.Kugler+	14533
	n,fis	^{3}He	?	1CANMCM	Maxwl		Jour	PR/C,5,551	72	G.Kugler+	14533
	n,fis	^{4}He	FY	1CANMCM	Maxwl		Jour	PR/C,5,551	72	G.Kugler+	14533
	n,fis	^{4}He	KE	1CANMCM	Maxwl		Jour	PR/C,5,551	72	G.Kugler+	14533
	n,fis	^{90}Kr	?	1USAWSU	Maxwl		Jour	PR/C,32,1327	85	P.L.Reeder+	12945
	n,fis	^{115}Pd	?	1USAORL	Maxwl		Jour	RCA,16,66	71	M.F.Roche+	13288

92 Uranium 238

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
γ,fis		CS	1USAVIR	5.0+06	1.1+07	Jour	ARI,38,561	87	W.J.Varhue+	L0251
γ,fis		CS	1USAUI	7.6+06	1.6+07	Jour	PR/C,42,2148	90	W.Wilke+	L0252
γ,fis		DA	1USAUI	1.1+07	1.1+07	Jour	PR/C,42,2148	90	W.Wilke+	L0252
γ,fis	Many	FY	1USALRL		1.0+08	Jour	PRL,84,903	00	T.E.Cowan+	L0254
γ,fis	Many	FY	1USAUI		2.1+07	Jour	PR/C,42,2148	90	W.Wilke+	L0252
γ,fis	Many	FY	1CANTOR		4.0+07	Jour	JIN,35,2621	73	A.Chattopadhyay+	L0249
γ,fis	Many	FY	1USAWSA		9.0+06	Jour	JIN,38,1109	76	W.D.James+	L0250
γ,fis	Many	?	1CANTOR		3.0+07	Jour	JIN,35,2621	73	A.Chattopadhyay+	L0249
γ,x+n	inclusive	CS	1USAVIR	5.0+06	1.1+07	Jour	ARI,38,561	87	W.J.Varhue+	L0251
n,0		RP	2ZZZGEL			Rept	INDC(NDS)-0129,112	81	F.Poortmans+	20726
n,abs		CS	2UK HAR	2.5-02	2.5-02	Rept	NRDC-84,9	55	P.A.Egelstaff+	23526
n,fis	Many	?	1CANMCM		5.0-01	Jour	CJP,53,775	75	J.R.Delaeter+	14535
n,γ		RP	2ZZZGEL		9.0+02	Rept	INDC(NDS)-0129,112	81	F.Poortmans+	20726
n,γ	^{239}U	CS	2BLGGHT	2.5-02	2.5-02	Conf	88MITO,,583	88	F.Decorte+	23488
n,γ	^{239}U	CS	2UK NPL	2.5-02	2.5-02	Jour	JNE,23,705	69	J.B.Hunt+	23515
n,γ	^{239}U	RI	2JPNKNK	5.0-01		Rept	INDC(JPN)-120,210	93	I.Kimura+	23491

93 Neptunium 237

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,0		RP	2UK HAR			Jour	NP/A,196,389	72	R.Kuiken+	23497
n,fis		NUD	1USATAM	Fast		Conf	97TRIEST,1,491	97	W.Charlton+	14536

94 Plutonium 239

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,abs		ETA	2UK WIN	2.5-02	2.5-02	Jour	JNE/AB,18,105	64	D.H.Carter+	23514
n,abs		?	2UK WIN	2.5-02	2.5-02	Jour	JNE/AB,18,105	64	D.H.Carter+	23514
n,fis	^{3}H	FY	1USAANL	Maxwl		Jour	NP/A,151,65	70	D.L.Horrocks+	14531

94 Plutonium 240

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,0		RP	2UK HAR			Rept	NRDC-84,9	55	P.A.Egelstaff+	23526
n,abs		CS	2UK HAR	Maxwl	2.5-02	Rept	AEEW-R-115	62	R.B.Tattersall	23529
n,abs		RI	2UK HAR	1.3-01		Rept	AEEW-R-115	62	R.B.Tattersall	23529
n,el		RP	2UK HAR	2.0+01	2.0+01	Rept	AERE-PR/NP-19,12	72	M.C.Moxon+	23523

94 Plutonium 241

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,fis		?	2UK HAR		2.5-02	Rept	NRDC-84,9	55	P.A.Egelstaff+	23526

94 Plutonium 242

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,0		RP	2UK HAR			Rept	NRDC-84,9	55	P.A.Egelstaff+	23526

95 Americium 243

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
n,fis		NUD	1USATAM	Fast		Conf	97TRIEST,1,491	97	W.Charlton+	14536

96 Curium 246

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,fis		FY	1USAORL	Spont		Jour	NSE,50,169	73	R.W.Stoughton+	10605

98 Californium 249

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,fis	Many	?	1USAMIS	Spont		Jour	PR/C,1,1044	70	D.E.Troutner+	13278
n,fis	Many	?	1USAMIS	2.5-02	2.5-02	Jour	JIN,43,885	81	D.K.Pal+	10995

98 Californium 252

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,fis	Many	CHG	1USAMIS	Spont		Jour	PR/C,1,1044	70	D.E.Troutner+	13278
0,fis	Many	FY	1USALAS	Spont		Jour	PR/C,23,2100	81	J.Weber+	12709
0,fis		FY	1USALAS	Spont		Jour	PR/C,23,2100	81	J.Weber+	12709
0,fis		FY	1USAANL	Spont		Jour	NIM,115,47	74	S.B.Kaufman+	14534
0,fis	Many	KE	1USALAS	Spont		Jour	PR/C,23,2100	81	J.Weber+	12709
0,fis		KE	1USALAS	Spont		Jour	PR/C,23,2100	81	J.Weber+	12709
0,fis		KE	1USAANL	Spont		Jour	NIM,115,47	74	S.B.Kaufman+	14534
0,fis	Many	?	1USAMIS	Spont		Jour	PR/C,1,1044	70	D.E.Troutner+	13278

100 Fermium 257

Reaction	Product	Quant.	Lab.	Energy (eV) Min	Energy (eV) Max	Type	Documentation Ref Vol Page	Date	Author	Data #
0,fis	Many	FY	1USALRL	Spont		Jour	PRL,27,45	71	W.John+	14532
n,fis	Many	FY	1USALRL	Maxwl		Jour	PRL,27,45	71	W.John+	14532