

EXFOR News (November 2014)

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 coordinated by the [IAEA Nuclear Data Section](#). Regularly updated web retrieval databases are available at [IAEA-NDS](#) as well as [NNDC](#), [NEADB](#), [JAEA](#), [JCPRG](#) and [CDFE](#).

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

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

Quantity codes

ALF	α -value ($\sigma_{\text{capt}}/\sigma_{\text{fis}}$)	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 $d\Omega_1/d\Omega_2/dE'$	NUD	Delayed fission neutron multiplicity $\bar{\nu}_d$
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	η -value $\bar{\nu}\sigma_{\text{fis}}/(\sigma_{\text{capt}} + \sigma_{\text{fis}})$	TTD	Differential thick target yield, $d/d\Omega$
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	tex	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), [CAJaD](#) (Russia), [CDFE](#) (Russia), [CNPD](#) (Russia), [UkrNDC](#) (Ukraine)

2 Helium 3

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
n,p	^3H	?	4ZZZDUB	2.6+02	1.4+05	Jour	YF,35,(3),532	82	S.B.Borzakov+	40657

4 Beryllium 9

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
$n,2n+\alpha$	^4He	?	4RUSFEI	Fiss		Jour	AE,2,(3),279	Mar 57	B.G.Dubovsky+	41260

6 Carbon 12

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
γ,el	^{12}C	DA	1CANSAS	8.4+07	1.0+08	Jour	PR/C,64,014603	01	B.J.Warkentin+	L0191
γ,inel	^{12}C	DAP	1CANSAS	8.4+07	1.0+08	Jour	PR/C,64,014603	01	B.J.Warkentin+	L0191

8 Oxygen 16

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
γ,el	^{16}O	DA	1USAUI	3.0+07	1.1+08	Jour	PR/C,54,2124	96	G.Feldman+	L0190

14 Silicon 29

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
γ,n	^{28}Si	CS	1USALRL	9.5+06	1.9+07	Jour	PR/C,36,1621	87	K.G.Mcneill+	M0878

26 Iron 58

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
n,inel	$^{\text{nat}}\text{Fe}$	CSP	4RUSFEI	2.9+06	2.9+06	Jour	AE,3,(12),498	57	V.I.Popov	40367

28 Nickel 60

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

*	$\gamma,0$		RP	2GERTHD			Jour	PR/C,88,044304	13	M.Scheck+	L0192
*	$\gamma,inel$	^{60}Ni	?	1USATNL	7.6+06	9.7+06	Jour	PR/C,87,051304	13	M.Scheck+	L0189

29 Copper

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					
n,el	^{nat}Cu	CS	4RUSFEI	2.9+06	2.9+06	Jour	AE,3,(12),498	57	V.I.Popov	40367

34 Selenium

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #	
				Min	Max						
*	$\gamma,0$	RP	1USATNL			Jour	PR/C,88,064308	13	P.M.Goddard+	L0187	
*	γ,el	^{76}Se	CSP	1USATNL	4.6+06	8.8+06	Jour	PR/C,88,064308	13	P.M.Goddard+	L0187
*	$\gamma,inel$?	1USATNL	1USATNL	5.3+06	8.8+06	Jour	PR/C,88,064308	13	P.M.Goddard+	L0187
*	$\gamma,inel$	^{76}Se	CSP	1USATNL	6.1+06	9.1+06	Jour	PR/C,88,064308	13	P.M.Goddard+	L0187
*	γ,sct	^{76}Se	CSP	1USATNL	4.6+06	8.8+06	Jour	PR/C,88,064308	13	P.M.Goddard+	L0187

46 Palladium

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #
				Min	Max					
$n,0$		RP	4ZZZDUB	1.3+01	1.3+01	Conf	75KIEV,4,60	Jun 75	N.P.Balabanov+	40494

48 Cadmium

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #	
				Min	Max						
*	γ,x	Many	?	4RUSMOS		5.5+07	Jour	YF,77,(7),856	14	S.S.Belyshev+	M0880

48 Cadmium

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #	
				Min	Max						
*	γ,n	^{107}Cd	?	4RUSMOS		5.5+07	Jour	YF,77,(7),856	14	S.S.Belyshev+	M0880

48 Cadmium

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation	Date	Author	Data #	
				Min	Max						
*	γ,p	^{110}Ag	?	4RUSMOS		5.5+07	Jour	YF,77,(7),856	14	S.S.Belyshev+	M0880

48 Cadmium 112

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
*	γ,x	Many	?	4RUSMOS		5.5+07	Jour	YF,77,(7),856	14	S.S.Belyshev+	M0880

48 Cadmium 113

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
*	γ,p	^{112}Ag	?	4RUSMOS		5.5+07	Jour	YF,77,(7),856	14	S.S.Belyshev+	M0880

48 Cadmium 114

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
*	γ,p	^{113}Ag	?	4RUSMOS		5.5+07	Jour	YF,77,(7),856	14	S.S.Belyshev+	M0880

48 Cadmium 116

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
*	γ,x	Many	?	4RUSMOS		5.5+07	Jour	YF,77,(7),856	14	S.S.Belyshev+	M0880

49 Indium 115

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
	n,el	RP		4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947	77	V.N.Kononov+	40513

58 Cerium 142

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
*	γ,n	^{141}Ce	CS	1USATNL	7.6+06	9.7+06	Jour	PR/C,89,035803	14	A.Sauerwein+	L0188

60 Neodymium 142

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
	n,el	RP		4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947	77	V.N.Kononov+	40513

60 Neodymium 144

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,el</i>		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

60 Neodymium 146

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,el</i>		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

60 Neodymium 148

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,el</i>		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

60 Neodymium 150

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,el</i>		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

62 Samarium 144

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,el</i>		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

62 Samarium 147

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,el</i>		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

62 Samarium 148

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,el</i>		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

62 Samarium 149

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,0		RP	4ZZZDUB		7.1+01	Conf	75KIEV,4,60	Jun 75	N.P.Balabanov+	40494
<i>n</i> ,el		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947	77	V.N.Kononov+	40513

62 Samarium 150

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,el		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947	77	V.N.Kononov+	40513

62 Samarium 152

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,el		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947	77	V.N.Kononov+	40513

62 Samarium 154

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,el		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947	77	V.N.Kononov+	40513

63 Europium 151

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,el		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947	77	V.N.Kononov+	40513

63 Europium 153

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,el		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947	77	V.N.Kononov+	40513

64 Gadolinium 156

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,el		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947	77	V.N.Kononov+	40513

64 Gadolinium 157

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,0</i>		RP	4ZZZDUB	1.6+01		Conf	75KIEV,4,60		Jun 75	N.P.Balabanov+	40494

64 Gadolinium 158

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,el</i>		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

64 Gadolinium 160

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,el</i>		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

68 Erbium 166

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,el</i>		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

68 Erbium 168

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,el</i>		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

68 Erbium 170

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,el</i>		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

70 Ytterbium 171

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n,0</i>		RP	4ZZZDUB	1.6+01		Conf	75KIEV,4,60		Jun 75	N.P.Balabanov+	40494

73 Tantalum 181

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
n,el		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

77 Iridium 191

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
* n,γ	^{192}Ir	CS	4ZZZDUB	2.5-02	2.5-02	Jour	IZV,78,(5),549		14	S.A.Karamian+	41599
* n,γ	^{192}Ir	RI	4ZZZDUB	5.0-01		Jour	IZV,78,(5),549		14	S.A.Karamian+	41599

77 Iridium 193

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
* n,γ	^{194}Ir	CS	4ZZZDUB	2.5-02	2.5-02	Jour	IZV,78,(5),549		14	S.A.Karamian+	41599
* n,γ	^{194}Ir	RI	4ZZZDUB	5.0-01		Jour	IZV,78,(5),549		14	S.A.Karamian+	41599

79 Gold 197

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
n,el		RP	4RUSFEI	5.0+03	3.5+05	Jour	YF,26,(5),947		77	V.N.Kononov+	40513

82 Lead

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
n,el	$^{\text{nat}}\text{Pb}$	CS	4RUSFEI	2.9+06	2.9+06	Jour	AE,3,(12),498		57	V.I.Popov	40367

83 Bismuth 209

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
n,el	^{209}Bi	CS	4RUSFEI	2.9+06	2.9+06	Jour	AE,3,(12),498		57	V.I.Popov	40367
$n,inel$	^{209}Bi	DAP	4RUSFEI	2.9+06	2.9+06	Jour	AE,3,(12),498		57	V.I.Popov	40367

90 Thorium 229

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,fis		DE	4RUSNIR	2.5-02	2.5-02	Jour	AE,29,(2),95	70	N.I.Kroshkin+	40064

92 Uranium 233

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,fis		NUF	4RUSNIR	2.5-02	2.5-02	Rept	INDC(CCP)-235,(2),294	83	A.A.Boytssov+	40873
<i>n</i> ,fis		NUF	4RUSNIR	2.5-02	2.5-02	Jour	YK,1985,(3),16	Sep 85	B.I.Starostov+	40930

92 Uranium 235

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,fis		NUF	4RUSNIR	2.5-02	2.5-02	Rept	INDC(CCP)-235,(2),294	83	A.A.Boytssov+	40873
<i>n</i> ,fis		NUF	4RUSNIR	2.5-02	2.5-02	Jour	YK,1985,(3),16	Sep 85	B.I.Starostov+	40930
<i>n</i> ,fis		NUF	4RUSNIR	Maxwl		Rept	INDC(CCP)-235,(2),285	83	V.N.Nefedov+	40871
<i>n</i> ,fis		?	4RUSKUR	1.4-01	3.3+04	Rept	JINR-E3-97-213,348	May 97	V.F.Gerasimov+	41369

92 Uranium 238

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
* γ ,fis	Many	FY	4RUSMOS		6.8+07	Jour	YF,77,(7),871	14	B.S.Ishkhanov+	M0881
<i>n</i> , γ	²³⁹ U	?	4RUSLEB	4.5+00	3.0+04	Rept	ICD-6,32	69	A.A.Bergman+	40059

93 Neptunium 236

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,fis		?	4RUSKUR	6.8-02	1.6+04	Rept	JINR-E3-97-213,348	May 97	V.F.Gerasimov+	41369

93 Neptunium 237

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,2 <i>n</i>	²³⁶ Np	CS	4RUSFEI	7.1+06	9.9+06	Jour	AE,58,(2),117	85	N.V.Kornilov+	40701
<i>n</i> ,fis		?	4RUSKUR	3.0-01	2.8+04	Rept	JINR-E3-97-213,348	May 97	V.F.Gerasimov+	41369

94 Plutonium 236

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,fis		?	4RUSKUR	3.3-01	4.4+04	Rept	JINR-E3-97-213,348	May 97	V.F.Gerasimov+	41369

94 Plutonium 238

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,fis		CS	4RUSKUR	2.4-02	4.2+02	Rept	YFI-2,16	66	V.F.Gerasimov	40270
<i>n</i> ,fis		DE	4RUSNIR	2.5-02	2.5-02	Jour	AE,29,(2),95	70	N.I.Kroshkin+	40064
<i>n</i> ,fis		RP	4RUSKUR	2.9+00	8.3+01	Rept	YFI-2,16	66	V.F.Gerasimov	40270
<i>n</i> ,fis		?	4RUSKUR	1.2-01	4.1+04	Rept	JINR-E3-97-213,348	May 97	V.F.Gerasimov+	41369

94 Plutonium 239

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,fis		NUF	4RUSNIR	2.5-02	2.5-02	Rept	INDC(CCP)-235,(2),294	83	A.A.Boytssov+	40873
<i>n</i> ,fis		NUF	4RUSNIR	2.5-02	2.5-02	Jour	YK,1985,(3),16	Sep 85	B.I.Starostov+	40930
<i>n</i> ,fis		NUF	4RUSNIR	Maxwl		Rept	INDC(CCP)-235,(2),285	83	V.N.Nefedov+	40871
<i>n</i> ,fis		?	4RUSKUR	4.6-02	2.7+04	Rept	JINR-E3-97-213,348	May 97	V.F.Gerasimov+	41369

94 Plutonium 241

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,fis		?	4RUSKUR	4.6-02	4.7+04	Rept	JINR-E3-97-213,348	May 97	V.F.Gerasimov+	41369

95 Americium 241

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,fis		CS	4RUSKUR	2.3-02	5.0+01	Rept	YFI-2,16	66	V.F.Gerasimov	40270
<i>n</i> ,fis		?	4RUSKUR	3.1-01	1.5+01	Rept	YFI-2,16	66	V.F.Gerasimov	40270
<i>n</i> ,fis		?	4RUSKUR	4.3-02	4.7+04	Rept	JINR-E3-97-213,348	May 97	V.F.Gerasimov+	41369
<i>n</i> , γ	²⁴² Am	CS	4RUSFEI	3.0+05	3.0+05	Rept	INDC(CCP)-105,58	76	V.I.Ivanov+	40308
<i>n</i> , γ	²⁴² Am	?	4RUSFEI	3.0+05	3.0+05	Rept	INDC(CCP)-105,58	76	V.I.Ivanov+	40308

95 Americium 242

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>n</i> ,fis		DE	4RUSNIR	2.5-02	2.5-02	Jour	AE,29,(2),95	70	N.I.Kroshkin+	40064
<i>n</i> ,fis		?	4RUSKUR	5.5-02	4.6+04	Rept	JINR-E3-97-213,348	May 97	V.F.Gerasimov+	41369

96 Curium 244

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
0, fis		DE	4RUSNIR	Spont		Jour	AE,29,(2),95		70	N.I.Kroshkin+	40064

96 Curium 245

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n</i> , fis		DE	4RUSNIR	2.5-02	2.5-02	Jour	AE,29,(2),95		70	N.I.Kroshkin+	40064
<i>n</i> , fis		?	4RUSKUR	4.3-02	4.3+04	Rept	JINR-E3-97-213,348		May 97	V.F.Gerasimov+	41369

98 Californium 249

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
<i>n</i> , fis		DE	4RUSNIR	2.5-02	2.5-02	Jour	AE,29,(2),95		70	N.I.Kroshkin+	40064
<i>n</i> , fis		NU	4RUSNIR	2.4-02	2.4-02	Jour	AE,29,(2),95		70	N.I.Kroshkin+	40064
<i>n</i> , fis		?	4RUSKUR	6.1-02	4.5+04	Rept	JINR-E3-97-213,348		May 97	V.F.Gerasimov+	41369
<i>n</i> , fis	<i>n</i>	KE	4RUSNIR	2.4-02	2.4-02	Jour	AE,29,(2),95		70	N.I.Kroshkin+	40064

98 Californium 252

Reaction	Product	Quant.	Lab.	Energy (eV)		Type	Documentation		Date	Author	Data #
				Min	Max		Ref	Vol Page			
0, fis		DE	4RUSNIR	Spont		Jour	AE,29,(2),95		70	N.I.Kroshkin+	40064
0, fis		NUF	4RUSRI	Spont		Conf	73KIEV,4,138		May 73	M.V.Blinov+	40418
0, fis		NUF	4RUSRI	Spont		Conf	80KIEV,3,109		Sep 80	M.V.Blinov+	40535
0, fis		NUF	4RUSNIR	Spont		Rept	NIIAR-1(360)		Jan 79	B.I.Starostov+	40644