

Japan Charged-Particle Nuclear Reaction Data Group (JCPRG)

EXFOR : Recent Compilation List (Added in Aug 2004)

EXFOR is a world-wide database for experimental neutron induced, charged-particle induced and photonuclear reaction compiled by Nuclear Reaction Data Centres Network coordinated by IAEA Nuclear Data Section. This list gives newly compiled data to EXFOR. *List consists of tables titled by target nuclide.*

Retrieval service is available at:

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

Quantity code

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

Special codes in outgoing particle field

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

Special codes in incident energy field

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

2 Helium 6

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,n</i>	⁶ Li	DAP	1USANOT	9.6+05	3.4+06	Jour	PRL,92,232502	04	G.V.Rogachev+	C1039

5 Boron 10

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,γ</i>	¹¹ C	CS	1USATNL	8.4+04	1.3+05	Jour	PR/C,68,045803	03	A.P.Tonchev+	C1036
<i>p,γ</i>	¹¹ C	POD	1USATNL	1.0+05	1.6+05	Jour	PR/C,68,045803	03	A.P.Tonchev+	C1036

5 Boron 11

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,n</i>	¹¹ C	MLT	1USAORL	4.0+06	1.2+07	Jour	ARI,32,389	81	J.K.Bair+	C1043

6 Carbon

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,n</i>	incl	PY	1USAORL	4.0+06	1.2+07	Jour	ARI,32,389	81	J.K.Bair+	C1043
<i>p,x</i>	Many	CS	1USAMIN	9.9+06		Jour	PRL,5,207	60	V.Meyer+	C1042

6 Carbon 12

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>d,el</i>	¹² C	DA	1USAWis	2.2+06	3.5+06	Jour	PR,104,1008	Nov 56	M.T.Mcellistrem+	C0993
<i>d,p</i>	¹³ C	DAP	1USAWis	1.9+06	3.4+06	Jour	PR,104,1008	Nov 56	M.T.Mcellistrem+	C0993
³ He,α	¹¹ C	DAP	1USARIC	1.8+06	5.4+06	Jour	NP,51,481	64	H.-M.Kuan+	C1040
³ He,el	¹² C	DA	1USARIC	2.8+06	5.4+06	Jour	NP,51,481	64	H.-M.Kuan+	C1040
³ He,p	¹⁴ N	DAP	1USARIC	1.8+06	5.4+06	Jour	NP,51,481	64	H.-M.Kuan+	C1040

6 Carbon 13

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
<i>p,n</i>	¹³ N	CS	1USAORL	0.0+00	1.2+07	Jour	ARI,32,389	81	J.K.Bair+	C1043
<i>p,n</i>	incl	PY	1USAORL	4.0+06	1.2+07	Jour	ARI,32,389	81	J.K.Bair+	C1043

7 Nitrogen 14

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,x	${}^7\text{Be}$	CS	1USAMSU	2.2+07		Jour	PR/C,8,483	Aug 73	H.Laumer+	C0985
p,x	${}^{11}\text{C}$	CS	1USAMSU	2.2+07		Jour	PR/C,8,483	Aug 73	H.Laumer+	C0985
p,x	Many	CS	1USAMSU	2.2+07	4.2+07	Jour	PR/C,8,483	Aug 73	H.Laumer+	C0985

8 Oxygen 16

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
d,α	${}^{14}\text{N}$	DA	1USASC	8.4+05	1.0+06	Jour	NIM,149,289	78	S.T.Picraux	C1041

9 Fluorine 19

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
${}^3\text{He},0$		RP	1USAYAL	0.0+00	1.6+06	Jour	PR/C,69,048801	04	D.W.Visser+	C1037
${}^3\text{He},p+t$	${}^{18}\text{F}$	DAP	1USAYAL	2.5+07		Jour	PR/C,69,048801	04	D.W.Visser+	C1037
${}^3\text{He},t+\alpha$	${}^{15}\text{O}$	DAP	1USAYAL	2.5+07		Jour	PR/C,69,048801	04	D.W.Visser+	C1037

30 Zinc 66

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,x	Many	CS	1USAMIN	9.9+06		Jour	PRL,5,207	60	V.Meyer+	C1042
p,x	Many	DAE	1USAMIN	9.9+06		Jour	PRL,5,207	60	V.Meyer+	C1042

50 Tin

Reaction	Product	Quantity	Lab.	Energy (eV)		Type	Documentation Ref Vol Page	Date	Author	Data #
				Min	Max					
p,x	Many	CS	1USAMIN	9.9+06		Jour	PRL,5,207	60	V.Meyer+	C1042