

Element (* monoisotopic element, No blank in A-field):

Actinium	Ac	89	Californium	Cf	98	Fluorine *	F	9	Lanthanum *	La	57	Nitrogen *	N	7	Rhodium *	Rh	45	Terbium *	Tb	65
Aluminium *	Al	13	Carbon *	C	6	Francium	Fr	87	Lawrencium	Lr	103	Nobelium	No	102	Rubidium	Rb	37	Thallium	Tl	81
Americium	Am	95	Cerium	Ce	58	Gadolinium	Gd	64	Lead	Pb	82	Osmium	Os	76	Ruthenium	Ru	44	Thorium *	Th	90
Antimony	Sb	51	Cesium *	Cs	55	Gallium	Ga	31	Lithium	Li	3	Oxygen *	O	8	Rutherfordium	Rf	104	Thulium *	Tm	69
Argon	Ar	18	Chlorine	Cl	17	Germanium	Ge	32	Lutetium	Lu	71	Palladium	Pd	46	Samarium	Sm	62	Tin	Sn	50
Arsenic *	As	33	Chromium	Cr	24	Gold *	Au	79	Magnesium	Mg	12	Phosphorus *	P	15	Scandium *	Sc	21	Titanium	Ti	22
Astatine	At	85	Cobalt *	Co	27	Hafnium	Hf	72	Manganese *	Mn	25	Platinum	Pt	78	Seaborgium	Sg	106	Tungsten	W	74
Barium	Ba	56	Copper	Cu	29	Hassium	Hs	108	Meitnerium	Mt	109	Plutonium	Pu	94	Selenium	Se	34	Uranium	U	92
Berkelium	Bk	97	Curium	Cm	96	Helium *	He	2	Mendelevium	Md	101	Polonium	Po	84	Silicon	Si	14	Vanadium *	V	23
Beryllium *	Be	4	Darmstadtium	Ds	110	Holmium *	Ho	67	Mercury	Hg	80	Potassium	K	19	Silver	Ag	47	Xenon	Xe	54
Bismuth *	Bi	83	Dubnium	Db	105	Hydrogen *	H	1	Molybdenum	Mo	42	Praesodymium*	Pr	59	Sodium *	Na	11	Ytterbium	Yb	70
Bohrium	Bh	107	Dysprosium	Dy	66	Indium	In	49	Neptunium	Np	93	Promethium	Pm	61	Strontium	Sr	38	Yttrium *	Y	39
Boron	B	5	Einsteinium	Es	99	Iodine *	I	53	Neodymium	Nd	60	Protactinium	Pa	91	Sulphur	S	16	Zinc	Zn	30
Bromine	Br	35	Erbium	Er	68	Iridium	Ir	77	Neon	Ne	10	Radium	Ra	88	Tantalum *	Ta	73	Zirconium	Zr	40
Cadmium	Cd	48	Europium	Eu	63	Iron	Fe	26	Nickel	Ni	28	Radon	Rn	86	Technetium	Tc	43			
Calcium	Ca	20	Fermium	Fm	100	Krypton	Kr	36	Niobium *	Nb	41	Rhenium	Re	75	Tellurium	Te	52			

Reaction codes:

ABS	Absorption	PAI	Pair production	0	-	FF	Fission fragments	K	Kaons,unspecified	PI	Pions,unspecified
EL	Elastic scattering	SCT	Total scat. (ela + inel)	A	Alphas	G	Gammas	KN	Kaons,negative	PI0	Pions,neutral
F	Fission	TCC	Total charge changing	AP	Antiprotons	HE2	² He	KP	Kaons,positive	PIN	Pions,negative
FUS	Total fusion	THS	Thermal neutron scat.	D	Deuterons	HE3	³ He	LF	Light fragment	PIP	Pions,positive
INL	Inelastic scattering	TOT	Total	EC	Electron capture	HE6	⁶ He	N	Neutrons	T	Tritons
NON	Nonelastic (= tot-ela)	X	Process unspecified	ETA	η -mesons	HF	Heavy fragment	P	Protons		

Physical quantity codes:

ALF	α , capture-to-fission cross section ratio	D3E	$d\sigma/d\Omega dE_1 dE_2$	KE	Kinetic energy	RI	Resonance integral
AMP	Scattering length or amplitude	D4A	$d\sigma/d\Omega_1 d\Omega_2 dE_1 dE_2$	KER	Kerma factor	RP	Resonance parameter
CHG	Fragment charge distribution	DAP	$d\sigma/d\Omega$ (partial)	MLT	Multiplicity	RR	Reaction rate
CS	Cross section	DAT	Temperature dependent Legendre coefficient	NQ	Nuclear quantity (level density parameter etc.)	SIF	Self indication
CSP	Partial cross section	DEP	Energy spectrum for specific group	NU	ν , number of fission neutron (tot or prompt)	SPC	Gamma spectrum
CST	Temperature dependent cross section	DP	$d\sigma/dp$	NUD	ν_d , number of fission neutron (delayed)	TSL	Thermal scattering
DA	$d\sigma/d\Omega$	DT	$d\sigma/dt$	NUF	Fission fragment neutron yield	TT	Thick target yield
DE	$d\sigma/dE$	ETA	η , number of fission neutron per absorption	POL	Polarization (polarization, analyzing power etc.)	TTD	Differential thick target yield
DAA	$d\sigma/d\Omega_1 d\Omega_2$	EVL	Evaluation	POD	Angular or energy dependent polarization	TTP	Partial thick target yield
DAE	$d\sigma/d\Omega dE$	FY	Fission product yield	POT	Potential scattering radius or cross section		
D3A	$d\sigma/d\Omega_1 d\Omega_2 dE$	INT	Cross section integral over incident energy	PY	Product yield (other than fission)		

Laboratory codes:

2JPN AIS	AIST	2JPNHYO	Hyogo Agr.U.	2JPNJTD	Juntendo U.	2JPNLEP	KEK	2JPNNSHR	Ship Res..	2JPN TSU	U.of Tsukuba
2JPN AIT	Ashikaga I. Tech.	2JPNICU	Internat. Christ. U.	2JPNKEK	KEK	2JPNNAG	Nagoya U.	2JPN SHZ	Shizuoka U.	2JPN WDA	Waseda U.
2JPN AYO	Aoyama Gakuin U.	2JPNIPC	RIKEN	2JPNKIT	U.Occup.Env.Health	2JPNNCT	Oita Nat.Col. Tech.	2JPN STA	Sci.Tech.Agency	2JPN WER	Wakasawan E.Res.C.
2JPN CIT	Chiba I.Tech.	2JPNIRS	Nat.I.of Radiol.Sci.	2JPNKNK	Kinki U.	2JPN NIA	Nagasaki I. Applied Sci.	2JPN SUT	Tokyo U. of Sci.	2JPN YAM	Yamanashi U.
2JPN ETL	Electrotech. Lab.	2JPNISS	ISSP, U.Tokyo.	2JPNKNZ	Kanazawa U.	2JPN NIF	Nat.Inst.Fusion Sci.	2JPN SUU	Saitam U.	2JPN YMG	Yamagata U.
2JPN FE	Fuji Electric	2JPNJAE	JAEA	2JPNKON	Konan U.	2JPN NIG	NAIG Corp.	2JPN TIT	Tokyo I.Tech.	2JPN YOK	Rikkyo U.
2JPN FUK	Fukuoka U.	2JPNJCL	Cycl. Lab., RIKEN	2JPNKTJ	Kobe Tokiwa J. Col.	2JPN NII	Niigata U.	2JPN TKS	Tokushima U.		
2JPN GMT	Gifu Col.Med.Tech.	2JPNJEL	Elect.Pow.Dev.Corp.	2JPNKTO	Kyoto U.	2JPNOSA	Osaka U.	2JPN TMU	Tokyo Metro.U.		
2JPN HIR	Hiroshima U.	2JPNJNC	Nucl.Cycl.Develop.I.	2JPNKUE	Kyoto U. of Education	2JPNOSP	Rad.Centre Osaka Pref.	2JPN TOH	Tohoku U.		
2JPN HIT	Himeji I. Tech.	2JPNJPN	Japan	2JPNKYO	Kyoritsu Col. Pharm.	2JPNPNC	PNC	2JPN TOI	Tohoku I.Tech.		
2JPN HOS	Hosei U.	2JPNJSR	Synchrotrn Rad.Res.I.	2JPNKYU	Kyushu U.	2JPN SAE	Sumitomo Ato. E. Ind.	2JPN TOK	U.of Tokyo		

CINDA ENTRY FORM (Example)
Japan Charged-Particle Nuclear Reaction Data Group

Date 2004.06.26 Page 1/1
 Compiler Otsuka Naohiko Checked _____
 Punched _____ Verified _____

Target			Reaction		Quant.	Lab.	Work	Inc. Energy (eV)				Reference					Comments		
Z	A	M	Proj.	Proc.				Min	±	Max	±	Title	Vol.	Iss.	Page	Date	Author [†]	Comments (incl. other lab., products)	
												PTP	111	1-5			Scanned but no article		
												PTP/S	153				Proc.of "Finite Density QCD"		
												JPJ	73	1-5					
												NST	41	1-5					
												JAERI-C	2004	5					
6	12		D	ETA+3HE	DAE	2JPNJPN	Theo	3.5	+9			PTP/S	153		340	200405	Nagahiro+	GRPH,OPTMDL,N(1535) dominance	
3	6		D	A	TT	2JPNTOH	Expt	2.0	+3	1.0	+5	JPJ	73	3	609	200403	Kasagi+	GRPH,Pd-Li Tgt,E-DE	
↓	7		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
3	0		D	N	TTD	2JPNTOH	Expt	2.5	+7			NST	41	4	399	200404	Aoki+	GRPH,TOF,2JPNJAE	
↓	↓		↓	↓	TT	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	GRPH,TOF,2JPNJAE,7Be
4	9		↓	↓	TTD	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	GRPH,TOF,2JPNJAE
↓	↓		↓	↓	TT	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	GRPH,TOF,2JPNJAE,7Be
90	232		P	F	CS	3KORKAE	Theo	1.0	+6	2.5	+8	JAERI-C	2004	5	81	200404	Lee+	GRPH, LDM, CFD Exp, 2JPNJAE	
92	233		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	234		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	236		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
96	243		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	GRPH, LDM, 2JPNJAE
	244		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
	245		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
↓	246		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

Recommended abbreviations

- **The status of the work:** TBD:To be done, TBC:To be completed, TBP:To be published, ABST:Abstract
- **The form of data given:** NDG:No data given, GRPH(S):Graph(s), TBL:Table, CURV:Curve, PRELIM:Preliminary data, SUPSDD:Superseded
- **Experimental method:** VDG:Van der graaff, SCIN:Scintillator, SPEC(T):Spectrometer, MASS-SPEC:Mass spectrometer, GELI:Germanium (lithium drifted) detector, TOF:Time-of-flight, SCAT:Scattering, ACT:Activation
- **Theoretical treatment:** ANAL(YS):Analysis, CALC:Calculation, C-C:Coupled channel, OPTMDL:Optical model, STATMDL:Statistical model, COMPNUC:Compound nucleus, TH(EO):Theory, theoretical
- **Further specification of reaction quantity:**
General: EN:Neutron energy, EG:Gamma ray energy, ELAS:Elastic, INEL:Inelastic, SIG:Cross section (do not use 'CS'), ABSOL:Absolute, REL TO:Relative to, CFD:Compared with
Particle emission: ANG:Angle, ANGDIST:Angular distribution, LEG COEF:Legendre coefficients, E':Secondary energy, A, ALF:Alpha (particle), D:Deuteron, N:Neutron, P:Proton, G(AM):Gamma (ray)
Final state: EXCIT:Excitation, LVL:Level, META:Metastable, GND:Ground state, ISOM:Isomeric state, T1/2, HL:Half-life
Resonance parameters: RESPARS:Resonance parameters J:Spin, L:Orbital angular momentum, WT(OT):Total width, WN:Neutron width, WG:Gamma width, WF:Fission width, WA(LF):Alpha width