^{64}Zn(d,α) 1973Da28,1972Ba19

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Alan L. Nichols, Balraj Singh, Jagdish K. Tuli	NDS 113, 973 (2012)	15-Apr-2012

1973Da28: E=12.08 MeV, spectrograph, FWHM=12 keV, $\sigma(\theta)$ 1973Da28 also include data on ^{63}Cu(d,t), ^{63}Cu(^{3}He,α) and ^{62}Ni(^{3}He,t). E(level): 1973Da28 quote single set of excitation energies for their (d,α), (^{3}He,α) and (d,t) studies. DWBA analysis.
1972Ba19: E=15 MeV, Si detectors, FWHM=30-35 keV, $\sigma(\theta)$. DWBA analysis.
Data for levels below 3 MeV are from 1973Da28; other data from 1972Ba19.

^{62}Cu Levels

E(level)	L[@]	dσ/dΩ (μb/sr)[b]	E(level)	L[@]	dσ/dΩ (μb/sr)[b]	E(level)	L[@]	dσ/dΩ (μb/sr)[b]
0	0+2	70	1491 *5*	4	11	2360 *7*	4(+2)	18
41.0 *15*	(2)	4	1510 *5*	2(+4)	16	2374[#] *7*		
243.0 *15*	2	15	1530 *8*	2	27	2422 *7*	4(+3)	20
286.0 *15*	2	13	1572 *5*	3	6	2446[#] *7*		≈6
390.0 *15*	4	12	1680 *5*	4	110	2486 *8*	1,2	7
426.0 *15*	4(+2)	100	1746 *5*	[a]	3.5	2506 *8*	2,1	20
548.0 *16*	0(+2)	35	1753 *5*	[a]	3.5	2520 *8*	4(+3)	≈8
638.0 *19*	0	18	1775 *5*	2	18	2547 *8*	(2)[&]	≈7
674.0 *20*	4	19	1823 *6*	(4,2)	8	2565[#] *8*		
699.0 *21*	(2)[&]	1.5	1846[#] *6*			2610[†] *8*	2,1	10
728.0 *22*	2	25	1918 *6*	(5)	8	2640 *8*	2,1	30
916 *3*	2	15	1985 *6*		6	2704 *8*	2(+1)	74
984 *3*	4	28	2022 *6*	(2)[&]	6	2835[‡] *9*	2	95
1023 *3*	2	10	2067 *6*		≈2	2860 *9*	4(+2)	32
1077 *3*	2(+4)	6.5	2107[†] *6*		≈3	2944[†] *9*		
1145 *3*	2	12	2139 *6*	4(+3)	95	3010 *9*	(2)	
1247 *4*	(4)[&]	4	2159 *7*	4	17	3150 *10*	(4)	
1285 *4*	(2)	5	2176 *7*	2	23	3310 *10*	2+4	
1344 *4*	(4)	5	2224 *7*	(2)	22	3420 *10*		
1367 *4*	(2,1)	12	2243 *7*	4(+3)	45	3550 *10*		
1409 *8*	(4)	5	2296 *7*	4(+3)	12			
1433 *4*	(2)	6	2315 *7*	(2)	7			

[†] Unresolved doublet.
[‡] Possible doublet.
[#] Weak state.
[@] From DWBA analysis.
[&] Tentative assignment.
[a] L=(2) and σ values combined for 1746 and 1753 levels.
[b] Values are from 1973Da28 and correspond to angle where maximum.