^{198}Hg(d,p) 1972Mo12

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 108, 79 (2007)	15-Oct-2006

1972Mo12 (also 1972MoZA, thesis): E=17 MeV, magnetic spec, FWHM=10-14 keV FWHM. Measured $\sigma(\theta)$ at three angles.

^{199}Hg Levels

E(level) (keV)	dσ/dΩ (max) (μb/sr)	E(level) (keV)	dσ/dΩ (max) (μb/sr)
0	588	3245	394
158	368	3273	183
208	675	3338	278
406	841	3413	306
671	51	3431	76
700	136	3511	154
759	171	3582	174
1222	154	3604	392
1329	96	3626	115
1459	39	3648	269
1651	14	3930 ?	150
2393	560	3988	299
2424	413	4052	200
2462	269	4098	250
3133 ?	100	4491 ?	300
3199	284	4808 ?	240

E(level)[&]	Jπ[†]	L	S[@]	E(level)[&]
0	1/2$^-$[‡]	(1)	0.46	3245 *13*
158 *1*	5/2$^-$[‡]	(3)	0.32	3273 *13*
208 *1*	3/2$^-$[#]	(1)	0.20	3338 *13*
406 *2*	3/2$^-$[#]	(1)	0.26	3413 *14*
671 *3*	5/2$^-$[‡]*c*	(3)	0.04	3431 *14*
700 *3*	5/2$^-$[‡]*c*	(3)	0.08	3511 *14*
759 *3*				3582 *14*
1222 *5*	(7/2$^-$,3/2$^-$)[#]*d*	(3,1)	0.10,0.05	3604 *14*
1329 *5*	3/2$^-$[#]*c*	(1)	0.03	3626 *15*
1459 *6*	(7/2$^-$)[#]*c*	(3)	0.04	3648 *15*
1651 *7*	(3/2$^-$)[#]*c*	(1)	0.004	3930? *16*
2393[a] *10*				3988 *16*
2424[a] *10*				4052[b] *16*
2462[a] *10*				4098[b] *16*
3133? *13*				4491? *18*
3199 *13*				4808? *19*

[†] Based upon assignments by 1972Mo12 in (d,t) dataset, L values (from data at three angles), shell model and sum rules.
[‡] L-1 assumed, $p_{1/2}$ for L=^{1}·$F_{5/2}$ for L=3.
[#] L+1 assumed, $p_{3/2}$ for L=^{1}·$F_{7/2}$ for L=3.
[@] S=[dσ/dΩ(exp)]/[N(2J_f+1)(dσ/dΩ(DWBA))], where N=1.5. Values are accurate to 50%, exclusive of DWBA calculations and

Continued on next page (footnotes at end of table)

^{198}Hg(d,p) 1972Mo12 (continued)

^{199}Hg Levels (continued)

spin assignment.

[&] Uncertainties assigned (evaluator) based on general statement by that these are 0.4% for resolved levels.

[a] probable fragments of $g_{9/2}$ state (1972Mo12).

[b] Observed at only two angles.

[c] Both possible spins (L+1/2 and L-1/2) are given In 'Adopted Levels'.

[d] $1/2^{(-)},3/2^{(-)}$ In 'Adopted Levels'.