^{202}Hg(d,t) 1972Mo12

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 187,355 (2023)	20-Sep-2022

Beam: E(d)=17 MeV; Target: enriched ^{202}Hg, but isotopic purity is unknown; Detectors: photographic emulsions, split-pole spectrograph, FWHM=8-12 keV.

^{201}Hg Levels

E(level)[†]	Jπ[‡]	L[†]	S[#]	Comments
0[@]	3/2⁻	1	2.1	S: Probably includes strength to the 1.57 keV (J^π=1/2⁻) level, that is unresolved in 1972Mo12.
27[&]	5/2⁻	1+3	1.7	Jπ: From Adopted Levels. S for L=3.
32	3/2⁻	1+3	0.85	Jπ: From Adopted Levels. S for L=1; S=0.87 in 1972Mo12.
168	1/2⁻	1	1.6	
464	5/2⁻	3	1.2	
645	5/2⁻	3	1.4	
732	3/2⁻	1	0.92	
766[a]	13/2⁺	>4		Jπ: From Adopted Levels. S=10.0 is expected for L=6 (1972Mo12).
953				
1035	3/2⁻	1	0.25	
1075				
1287	7/2⁻	3	1.2	
1360				
1583				
1591				
1693	7/2⁻	3	2.1	
1710	(7/2⁻)	(3)	0.96	
1737	3/2⁻	1	0.23	
1971	(3/2⁻)	(1)	0.11	
2037	(7/2⁻,11/2⁻)	(3,5)	0.28	S: Value quoted for L=3. S=2.8 for L=5 (1972Mo12).
2096	(7/2⁻,11/2⁻)	(3,5)	0.35	S: Value quoted for L=3. S=4.1 for L=5 (1972Mo12).
2478				
2663?				

[†] From 1972Mo12. ΔE=0.4% for well-resolved peaks.
[‡] From the deduced L values and spectroscopic factors (1972Mo12), unless otherwise specified.
[#] ΔS≈±50%. S=N*(dσ/dΩ)$_{expt}$/(dσ/dΩ)$_{DWBA}$. N=1/3.33.
[@] Dominant configuration=$\nu\ p^{-1}_{3/2}$.
[&] Dominant configuration=$\nu\ f^{-1}_{5/2}$.
[a] Configuration=$\nu i^{-1}_{13/2}$.