

$^{204}\text{Hg}(p,3n\gamma)$ 1974Ha06

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 196,342 (2024)	1-Sep-2023

1974Ha06: E(p)=28 MeV, pulsed beam with 1.2 ms interval and 40 μs width; Target: natural Hg; Detector: Ge(Li), measured $\gamma(\theta, H, t)$, deduced g factor.

 ^{202}Tl Levels

E(level) [†]	J ^π [‡]	T _{1/2} [‡]	Comments
0.0	2 ⁻	12.4706 d 55	
490	4 ⁻		
950	7 ⁺	591 μs 3	$\mu=0.90$ 4 μ : From $g=0.128$ 6 based on $\gamma(\theta, H, t)$ measurement (1974Ha06). configuration: Dominant $\pi(s_{1/2}^{-1})\otimes\nu(i_{13/2}^{-1})$.

[†] From E γ .

[‡] From Adopted Levels.

 $\gamma(^{202}\text{Tl})$

E γ [†]	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [‡]	$\alpha^{\#}$	Comments
460	950	7 ⁺	490	4 ⁻	E3	0.1210	$\alpha(K)=0.0613$ 9; $\alpha(L)=0.0446$ 7; $\alpha(M)=0.01162$ 17; $\alpha(N+..)=0.00349$ 5 $\alpha(N)=0.00293$ 5; $\alpha(O)=0.000526$ 8; $\alpha(P)=2.99\times 10^{-5}$ 5
490	490	4 ⁻	0.0	2 ⁻	E2	0.0295	$\alpha(K)=0.0210$ 3; $\alpha(L)=0.00645$ 9; $\alpha(M)=0.001596$ 23; $\alpha(N+..)=0.000479$ 7 $\alpha(N)=0.000401$ 6; $\alpha(O)=7.35\times 10^{-5}$ 11; $\alpha(P)=4.92\times 10^{-6}$ 7

[†] From 1974Ha06, but no uncertainties were reported by the authors.

[‡] From adopted gammas.

[#] Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ -ray energies, assigned multiplicities, and mixing ratios, unless otherwise specified.

$^{204}\text{Hg}(p,3n\gamma)$ 1974Ha06Level Scheme