

$^{203}\text{Tl}(\mu, X\gamma)$ 1972Ba53

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

Target: natural Tl; Detectors: Ge(Li); Measured: delayed γ 's in muonic Tl; E_γ , I_γ .

 ^{201}Hg Levels

<u>E(level)[†]</u>	<u>J^π[‡]</u>
0	3/2 ⁻
1.5648 [‡] 10	1/2 ⁻
26.2738 [‡] 3	5/2 ⁻
32.155 [‡] 13	3/2 ⁻
414.9 4	7/2 ⁻
542.8 3	1/2 ⁻ , 3/2, 5/2

[†] From a least-squares fit to E_γ , unless otherwise stated.

[‡] From Adopted Levels.

 $\gamma(^{201}\text{Hg})$

<u>E_γ[†]</u>	<u>I_γ[†]</u>	<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>
388.17 23	0.76 19	414.9	7/2 ⁻	26.2738	5/2 ⁻
414.86 36	0.68 22	414.9	7/2 ⁻	0	3/2 ⁻
542.76 31	0.78 22	542.8	1/2 ⁻ , 3/2, 5/2	0	3/2 ⁻

[†] From 1972Ba53. I_γ is per 100 μ^- stopped in natural Tl. Assignment to ^{201}Hg was made by the evaluator based on Adopted Levels levels and gammas properties and on syst of structures populated via $(\mu, xn\gamma)$ reactions in neighboring nuclei.

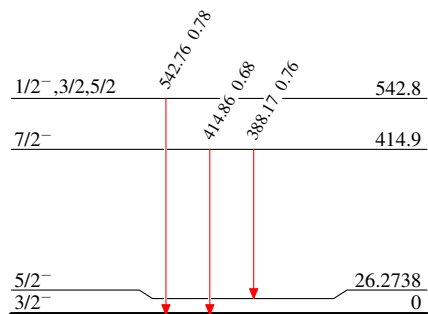
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Level Scheme

Intensities: Type not specified

Legend

- \longrightarrow $I_\gamma < 2\% \times I_\gamma^{max}$
- \longrightarrow $I_\gamma < 10\% \times I_\gamma^{max}$
- \longrightarrow $I_\gamma > 10\% \times I_\gamma^{max}$

 $^{201}_{80}\text{Hg}_{121}$