

$^{208}\text{Pb}(7\text{Li},t\gamma)$ 1980Sj01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	K. Auranen and E. A. Mccutchan		NDS 168, 117 (2020)	1-Aug-2020

1980Sj01: E(^7Li)=30-34 MeV. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$, $\gamma(^{212}\text{Po g.s.})\alpha$, $\gamma(\theta)$, $\gamma(t)$.

$\gamma(t)$ shows that all γ rays have a delayed component suggesting an isomeric state at or above the 1354.0 level. The 727.4 γ also has a prompt component.

 ^{212}Po Levels

E(level) [†]	$J\pi^{\ddagger}$
0.0	0 ⁺
727.4 3	2 ⁺
1132.5 4	4 ⁺
1354.0 5	6 ⁺

[†] From $E\gamma$.

[‡] From the Adopted Levels.

 $\gamma(^{212}\text{Po})$

$E\gamma$	$I\gamma^{\dagger}$	$E_i(\text{level})$	J_i^{π}	E_f	J_f^{π}	Comments
221.5 3	20 2	1354.0	6 ⁺	1132.5	4 ⁺	$\gamma(\theta)$ of 221.5 γ nearly isotropic.
405.1 3	31 8	1132.5	4 ⁺	727.4	2 ⁺	$I\gamma$: γ ray observed as a doublet with a 405 keV γ in ^{213}At . Relative intensity deduced from coincidence experiments.
727.4 3	100	727.4	2 ⁺	0.0	0 ⁺	$\gamma(\theta)$ of 727.4 γ nearly isotropic.

[†] Relative intensity.

$^{208}\text{Pb}(7\text{Li},\gamma)$ 1980Sj01Level SchemeIntensities: Relative I_γ

Legend

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

