

$^{210}\text{Pb}(t,\alpha)$ 1976EI07

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. Chen # and F. G. Kondev		NDS 126, 373 (2015)	30-Sep-2013

1976EI07: E=20 MeV triton beam was produced from the Los Alamos three-stage tandem accelerator. A target of 240 $\mu\text{g}/\text{cm}^2$ ^{210}Pb metal on a 50 $\mu\text{g}/\text{cm}^2$ carbon backing was used. Reaction products were momentum analyzed with a broad-range magnetic spectrometer and recorded on photographic plates, $\theta=42^\circ$, FWHM \approx 40 keV (estimated by the evaluators from the authors' spectrum). Measured $\sigma(E_\alpha, \theta)$. Deduced levels.

Target $J^\pi(^{210}\text{Pb g.s.})=0^+$.

 ^{209}Tl Levels

E(level)	J^π	L^\dagger	Comments
0.0	$1/2^+$	(0)	configuration: $\pi(s_{1/2})^{-1}$.
325 10	$3/2^+$	(2)	configuration: $\pi(d_{3/2})^{-1}$.
739 10			
947 10			
1230 10			
1369 10	$(11/2^-)$	(5)	configuration: $\pi(h_{11/2})^{-1}$.
1748 10	$(5/2^+)$	(2)	configuration: $\pi(d_{5/2})^{-1}$.

† Not measured directly in **1976EI07**, but inferred from $L(t,\alpha)$ for analogous levels (g.s., 350 keV δ , 1341 keV δ and 1674 keV δ) in ^{207}Tl (**1970Ba07**).