

$^{210}\text{Pb}(\text{p},\text{p}') E=20.5 \text{ MeV}$ 1971EI03

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 121, 561 (2014)	31-Mar-2014

Enriched ^{210}Pb target (thickness $240 \mu\text{g}/\text{cm}^2$ deposited on a $50 \mu\text{g}/\text{cm}^2$) was bombarded by protons, $E=20.5 \text{ MeV}$, and scattered protons were analysed by magnetic spectrometer and recorded on photographic plates. Deduced excited level energies of ^{210}Pb and L values.

 ^{210}Pb Levels

ΔE : Uncertainty=10 keV.

E(level) [†]	L [@]	Comments
0	0	
795 [#]	2	
1095	(4)	
1192	(6)	
1869 [#]	3	(p,p') strength relative to L=3, 2828 state is 1.3:1 for split 3^- collective excitation.
2215		
2518		
2828 [#]	3	
3069	(2)	
3194	(4)	
4080 [#]	2	
4128 [#]	2	
4185		
4285	(4)	
4390		
5396		
5445		
5492		

[†] Calibrated to 795 keV for first-excited state.

[‡] Uncertainty=10 keV.

[#] Collective 2^+ and 3^- excitations; see 1971EI03 for comparison (energy, intensity) with lighter lead isotopes.

[@] Deduced from angular distributions at 7 angles ($\theta=28-70$) by comparison with results from DWBA calculations.