

$^{205}\text{Pb}(\text{p,t})$ 1978Di10,1978E110

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 177, 509, 2021	4-Jul-2021

1978Di10: E(p)=34.7 MeV; Target: 78.9% enriched ^{205}Pb ; magnetic spectrograph FWHM=12 keV; Measured: $d\sigma/d\Omega(\theta)$ from 7.5-60° with a 5° step; Deduced: L, J^π , DWBA calc.

1978E110: E(p)=17.5 MeV; Target: 75.8% enriched ^{205}Pb ; magnetic spectrograph; Measured: $d\sigma/d\Omega(\theta)$ from 7.5-92.5° with a 5° step; Deduced: L, J^π , DWBA calc.

 ^{203}Pb Levels

E(level) [‡]	J^π [‡]	L [‡]	$\sigma(203)/\sigma(202)$ [†]	Comments
0 [@]	5/2 ⁻	0	0.60	
126 ^{&} 12	1/2 ⁻	2		
185 12				
595 ^a 12	3/2 ⁻	2	0.13	
775 ^a 12	1/2 ⁻	2	0.04	
819 ^a 12	7/2 ⁻	2	0.25	
834 [#] 10				
864 ^a 12	5/2 ⁻	2	0.27	
895 ^a 12	9/2 ⁻	2	0.37	
909 [#] 10				
930 12		(4)		
969 [#] 10				
1032 12		(4)		E(level): 1040 keV 10 in 1978E110.
1084 12		(2)		E(level): 1093 keV 10 in 1978E110.
1160 12	9/2 ⁻	2		J^π, L : From 1978E110.
1177 [#] 10				
1195 12		(4)		
1216 [#] 10				
1262? 12				E(level): From figure 1 in 1978Di10.

[†] Ratio of $^{204}\text{Pb}(\text{p,t})^{202}\text{Pb}$ and $^{205}\text{Pb}(\text{p,t})^{203}\text{Pb}$ cross sections.

[‡] From 1978Di10, unless otherwise stated.

[#] From 1978E110, but not reported by 1978Di10.

[@] Dominant configuration= $\nu(f_{5/2}^{-1})$.

[&] Dominant configuration= $\nu(p_{1/2}^{-1})$.

^a Dominant configuration= $\nu(f_{5/2}^{-1})\otimes 2^+$.