

$^{206}\text{Pb}(\text{pol } t, \alpha)$ 1966Hi05,1977F104

| Type | Author | History Citation | Literature Cutoff Date |
|-----------------|--------------|-------------------|------------------------|
| Full Evaluation | F. G. Kondev | NDS 166, 1 (2020) | 20-Apr-2020 |

E(t)=13.5 MeV (1966Hi05); E(t)=17 MeV, 75% polarized (1977F104).
Other: 1976SuZW.

 ^{205}Tl Levels

| E(level) [†] | J π [‡] | L [†] | S ^{†#} | Comments |
|-----------------------|--------------------------------------|----------------|-----------------|---|
| 0 | 1/2 ⁺ | 0 | 1.4 | configuration: $\pi(s_{1/2}^{-1})$. |
| 205 5 | 3/2 ⁺ | 2 | 1.6 | configuration: $\pi(d_{3/2}^{-1})$. |
| 614 5 | 5/2 ⁺ | 2 | 0.3 | configuration: Probably a mixture of configuration= $\pi(d_{5/2}^{-1})$ and configuration= $\pi(s_{1/2}^{-1})\otimes 2^+$. |
| 1138 5 | 3/2 ⁺ | 2 | 0.8 | |
| 1222 5 | 1/2 ⁺ | 0 | 0.3 | |
| 1341 5 | 3/2 ⁺ | 2 | 0.4 | |
| 1436 5 | (1/2 ⁺) | (0) | 0.3 | |
| 1491 5 | 11/2 ⁻ | 5 | 5.3 | configuration: $\pi(h_{11/2}^{-1})$. |
| 1580? | | | | E(level): From 1966Hi05. |
| 1859 10 | 5/2 ⁺ , 11/2 ⁻ | 2,5 | (0.5) | S: Assuming J=5/2. |
| 1953 10 | 5/2 ⁺ , 11/2 ⁻ | 2,5 | (0.6) | S: Assuming J=5/2. |
| 2044 10 | 11/2 ⁻ , 5/2 ⁺ | 5,2 | (2.4) | S: Assuming J=11/2. |
| 2112 10 | 11/2 ⁻ , 5/2 ⁺ | 5,2 | (1.0) | S: Assuming J=11/2. |
| 2304 10 | (1/2 ⁺) | (0) | (0.1) | |
| 2420 10 | | | | |
| 2482 10 | | | | |
| 2588 10 | 5/2 ⁺ , 11/2 ⁻ | 2,5 | (0.4) | S: Assuming J=5/2. |
| 2714 10 | | | | |

[†] From 1977F104, unless otherwise stated.

[‡] From L transfer values and vector analyzing power in 1977F104.

[#] Defined as $\Delta\sigma/\Delta\Omega(\text{exp}) = 23 \times S \times \sigma(\text{DWBA})$. $\Delta S = \pm 20\%$.