

$^{204}\text{Pb}(\text{t},\alpha)$ **1977Fl04**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 105,1 (2005)	1-Mar-2005

$E(t)=17$ MeV, 75% polarized ^3H ; Target: enriched ^{204}Pb , 0.19 mg/cm² thick; Measured: $\sigma(E(\alpha),\theta)$, $\Delta E(\alpha)=15$ keV, $A(\theta)$; Deduced: E, L, J^π , S. DWBA analysis. Other: [1966Hi05](#).

 ^{203}Tl Levels

E(level) [†]	J^π ^a	S ^b	E(level) [†]	J^π ^a	S ^b	E(level) [†]	J^π ^a	S ^b
0 [±]	1/2 ⁺	1.80	1580 ^{&} 5	5/2 ⁺	0.30	2100 10	3/2 ⁺	0.21
279 [#] 5	3/2 ⁺	2.46	1618 5	3/2 ⁺	0.11	2140 10	5/2 ⁺	0.17
680 5	5/2 ⁺	0.42	1657 5	5/2 ⁺	0.13	2170 10	11/2 ⁻	0.43
1045 5	3/2 ⁺	0.05	1695 5	(5/2 ⁺)	0.67	2290 10		
1075 5	3/2 ⁺	0.11	1760 5	(11/2 ⁻)	0.52	2310 10	(5/2 ⁺)	0.93
1232 5	3/2 ⁺	0.90	1830 10	5/2 ⁺	0.13	2330 10		
1318 5	3/2 ⁺	0.21	1850 10			2370 10	11/2 ⁻	0.75
1414 5	1/2 ⁺	0.047	1920 10	1/2 ⁺	0.07	2430 10	11/2 ⁻	1.40
1458 [@] 5	11/2 ⁻	5.92	2010 10	3/2 ⁺	0.05	2470 10	(5/2 ⁻)	

[†] From [1977Fl04](#).[‡] Configuration= $\pi(s_{1/2}^{-1})$.[#] Configuration= $\pi(d_{3/2}^{-1})$.[@] Configuration= $\pi(h_{11/2}^{-1})$.[&] Dominant configuration= $\pi(d_{5/2}^{-1})$.^a From vector analyzing power in [1977Fl04](#).^b S=N*(dσ/dΩ)(exp)/(dσ/dΩ)(DWBA) with N=1/23 ([1977Fl04](#)).