

$^{205}\text{Tl}(\text{d,p})$ 1965Er02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 201,346 (2025)	21-Jan-2025

1965Er02: E=12 MeV. Measured p in magnetic spectrograph with FWHM $\approx$ 15 keV.

Others: 1965Mu04, 1964Mu07: E=15 MeV. p(θ) measured in magnetic spectrograph with FWHM=60 keV; 1969Wh02: measured excitation functions for groups of levels as a function of E(d) with Si detectors; 1970Le09: E=17 MeV. Measured p(θ) in magnetic spectrograph.

^{205}Tl target has $J^\pi=1/2^+$.

 ^{206}Tl Levels

E(level) [†]	J π [#]	L [‡]	E(level) [†]	E(level) [†]	J π [#]	E(level) [†]
0.0	(0 ⁻)	1	2868 7	3900 7		4739 7
263 2	(2 ⁻)	3	2896 7	3938 7		4775 7
305 2	(1 ⁻)	1	3014 7	3976 7		4879 7
635 2	(2 ⁻)	(1) [@]	3363 7	4126 7		4904 7
650 5		(3) [@]	3424 7	4200 7		4941 7
802 5		3	3452 7	4238 7	(3 ⁺)	5015 7
998 5		3	3538 7	4273 7	(2 ⁺)	5055 7
1117 5		(3)	3564 7	4426 7	(1 ⁺)	5091 7
1335 5			3638 7	4491 7	(0 ⁺)	5140 7
2581 7	(5 ⁺)		3717 7	4555 7		
2594 7	(4 ⁺)		3784 7	4622 7		
2828 7			3874 7	4680 7		

[†] From 1965Er02. Uncertainties are assigned by evaluators as indicated in 1965Er02.

[‡] From 1965Er02 and 1970Le09.

[#] From 1965Er02, based on deduced L values and shell-model arguments.

[@] The 635 and 650 peaks are not resolved, but the observed distribution has been interpreted, as indicated by 1965Er02.