

$^{206}\text{Pb}(\text{t,p}),(\text{pol t,p})$ 1971Ig03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. J. Martin	NDS 108,1583 (2007)	1-Jun-2007

1971Ig03 E=20 MeV, FWHM=17 keV, $\theta=10^\circ$ to 80° .

1983A105 E(pol t)=17 MeV, FWHM=25 keV, $\theta=10^\circ$ to 60° .

Data of 1971Ig03 supersede those of 1970Ig01.

Other: 1966Bj03.

1983A105 studied the two-step contributions for excitation of several known levels and deduced partial configurations for these levels.

 ^{208}Pb Levels

E(level)	L [†]	Comments
0.0	0 [‡]	
2614 5	3 [‡]	
3200 5	5 [‡]	
3709 10	5,6	
3961 10	6	
4037 10		
4086 10		
4179 12		
4250 12		
4293 12	5	L: from authors' Fig.4. Table I gives L=5,6.
4319 12	2,5,6	
4424 12	5,6	
4605 15	8	
4693 15	3	
4859 15	0	
4933 15	2	
4968 15	2,6	
5037 15	(3)	
5202 15	3,5,6	
5236 15	0+3	L: from authors' Fig.6. Table I gives L=0.
5280 15	1,2	
5338 15	2,5,6	
5477 15	5,6	
5505 15	1	
5550 15	2,6	
5595 15		
5629 15	2,6	
5685 15	8	
5698 20	4,5,6	
5801 20	2	
5862 20		
5905 20	4,5	
5937 20	2,5,6	
5973 20	2	
6019 20	3,5	
6058 20		
6089 20	3,5	
6171 20	2	
6677 20	2,5,6	
6746 20		
6820 20	2	
6867 20	2	
6912 20	2,5,6	

Continued on next page (footnotes at end of table)

$^{206}\text{Pb}(t,p),(\text{pol } t,p)$ [1971Ig03](#) (continued) ^{208}Pb Levels (continued)

<u>E(level)</u>	<u>L</u> [†]	<u>Comments</u>
6932 20	2	
6954 20		
6980 20		
7014 20		
7055 20	1	
7080 20		
7142 20		
7176 20	1,2	
7230 20	2	
7294 20		
7319 20	1	
7387 20	1	
7427 20		
7480 20	1	
7523 20	1	E(level): value of 7423 given In Table I is a misprint. See FIG.11.
7575 20	2,4	
7612 20		
7641 20		
7683 20		
7712 20		
7752 20		
7875 20		
8260 20		
8282 20		
8493 20		
8520 20		

[†] From a comparison of angular distributions with those to known low-lying 0^+ , 3^- , 5^- levels In ^{208}Pb , and with those obtained In $^{208}\text{Pb}(t,p)$ and $^{207}\text{Pb}(t,p)$ reactions to levels with known spin. Empirical shapes are not available for $L>8$. Also, for large L, a fit to a given L is not sufficiently unique to rule out adjacent L's. The authors suggest that an assignment of L=6 should include the additional possibility of L=7, while an assignment of L=8 should include the additional possibility of L=7,9. The L-values of [1971Ig03](#) are given only where the choice for a given level is restricted to fewer than 4 alternatives.

[‡] Based on known level J.