

$^{210}\text{Pb}(\text{p,t})$  **1971Ig03**

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

$E=20$ , FWHM=17 keV,  $\theta=10^\circ-80^\circ$ .

Data of [1971Ig03](#) supersede those of [1970Ig01](#). [1972Os05](#) obtain spectroscopic factors for the g.s. and first two excited levels based on an analysis of data of [1971Ig03](#).

 $^{208}\text{Pb}$  Levels

E(level)	L <sup>‡</sup>	S	E(level)	L <sup>‡</sup>	E(level)	L <sup>‡</sup>	E(level)	L <sup>‡</sup>
0.0	0 <sup>†</sup>	0.89	4693 15		5685 15	8	6404 20	
2614 5	3 <sup>†</sup>	0.91	4843		5698 20		6450 20	1,2
3200 5	5 <sup>†</sup>	0.86	4859 15	0	5801 20	2	6467 20	
3961 10	5,6		4935 15	2	5937 20	2	6497 20	
4037 10	8		5072 15	2,5	5973 20	2	6547 20	
4086 10	2		5202 15	5,6	6174 20	2	6577 20	2
4178 12	5		5237 15	0	6233 20	2,5	6600 20	
4252 12	3,5		5280 15	1,2	6257 20		6677 20	2
4293 12	5,6 <sup>#</sup>		5505 15	1,2	6333 20		6726 20	8
4317 12	2,5		5551 15	2	6340 20	2		
4424 12	2,5		5628 15	2	6380 20	3		

<sup>†</sup> Based on known level J.

<sup>‡</sup> From a comparison of angular distributions with those to known low-lying  $0^+$ ,  $3^-$ ,  $5^-$  levels in  $^{208}\text{Pb}$ , and with those obtained in  $^{208}\text{Pb}(\text{t,p})$  and  $^{207}\text{Pb}(\text{t,p})$  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 here only where the choice for a given level is restricted to fewer than 4 alternatives.

<sup>#</sup> From authors' FIG.4. Table I gives  $L=5$ .