
 $^{210}\text{Bi}(\text{p,t}): \text{target}=\text{9}^- \text{ isomer}$ [1979Er11](#)

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

E=18.4 MeV, FWHM=10-15 keV.

The authors suggest, on the bases of excitation energies and $\sigma(\theta)$, that the L=0 levels At 2473 and 2413 have configuration= $^{206}\text{Pb}(0^+)\pi 1\text{h}_{9/2}\nu 2\text{g}_{9/2}$ and the L=2 levels have configuration= $^{206}\text{Pb}(2^+)\pi 1\text{h}_{9/2}\nu 2\text{g}_{9/2}$. Nearly all the ^{206}Pb core strength resides In the 2473 level (82%) with an additional 8% In the 2413 level.

 ^{208}Bi Levels

E(level) [†]	L	S [#]	Comments
0.0			
63			
511			
603			
632			E(level): doublet consisting of the 628.6 and 633.1 levels.
652			
889			
927			
961			
1097			
1576			
1664			
1721 [‡]			
1792	0		
2137 7			
2165 7			
2346			
2413 5	0	0.08	
2434			
2473 5	0	0.82	
2560 5			
2668			
2850 7			
3099 5	2	0.09	
3162 5	2	0.26	
3261 [‡] 10			
3310 [‡] 10	2	0.19	
3340 7			
3420 10			
3462 5	2	0.08	
3530 7	0	0.03	
3572 5	2	0.12	
3640 [‡] 7			
3761 7			
3777 10			
3861 5			
3916 10			
4023 10			
4097 10			
4147 5			
4249 5			

[†] Energies given without uncertainties are taken by the authors from the (p,d) work of [1973Cr05](#) and rounded off by them to the nearest keV. The authors do not state how their spectrum was calibrated, but they appear to have used the (p,d) data As

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 ^{208}Bi Levels (continued)

calibration points. Their energies are thus subject to the same correction As required for the (p,d) values. See (p,d) for a discussion of this correction. Where used In adopted values, and for correlation with levels from other reactions, the evaluator has lowered the authors' values, given above, using the relation $E(\text{corrected})=0.99747E(\text{authors})$.

‡ Doublet (from peak Γ).

Value given is the fraction of ^{206}Pb core strength ($^{206}\text{Pb}(0^+)$ for $L=0$, ^{206}Pb for $L=2$) concentrated In the ^{208}Bi level.