^{209}Bi(t,α) 1968Bj01

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

E=13 MeV, FWHM=50 keV. $J^{\pi}(^{209}Bi)=9/2^{-}$.

^{208}Pb Levels

E(level)	L	C^2S[†]	Comments
0.0	5	(1.0)	C^2S: value assumed by authors for normalization of spectroscopic factors.
2619 *20*	2	≤0.10[#]	E(level): value used for energy calibration. L: admixture of L=4 cannot Be ruled out. C^2S: ≤0.28 for hole state $1g_{7/2}$.
3200 *20*	0	0.06[‡]	C^2S: <0.09 ($2d_{3/2}$), <0.06 ($2d_{5/2}$), <0.28 ($1g_{7/2}$).
3710 *20*	0	0.31[‡]	C^2S: <0.52 ($2d_{3/2}$), <0.36 ($2d_{5/2}$), <1.7 ($1g_{7/2}$).
3960 *20*	0	1.01[‡]	C^2S: <1.86 ($2d_{3/2}$), <1.17 ($2d_{5/2}$), <5.7 ($1g_{7/2}$).
4130 *20*			
4260 *20*			
4300 *20*			
4380 *20*			
4480 *20*			
4630 *20*			
4710 *20*			
4870 *20*			
4910 *20*			
4970 *20*			
5090 *20*			
5170 *20*			
5200 *20*			
5500 *20*			
5560 *20*			
5670 *20*			

[†] Values of C^2S are based on a DWBA analysis with overall normalization chosen so that $C^2S(^{209}Pb$ g.s.)=1. The (d,^{3}He) reaction on ^{209}Bi (J=9/2) is expected to populate states in ^{208}Pb with configuration=$\pi 1h_{9/2}\pi(nlj)^{-1}J$ where the proton hole states are In the shell Z < 82.

[‡] If hole state is $3S_{1/2}$.

[#] If hole state is $2d_{3/2}$.