^{209}Bi(d,d′) 1971Un01,1966Hi02

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. Chen # and F. G. Kondev	NDS 126, 373 (2015)	30-Sep-2013

1971Un01: E=13.1 MeV deuteron beam, FWHM=3-10 keV. Measured $\sigma(\theta)$ at θ=120°,125°,150°. Deduced levels.
1966Hi02: E=13 MeV deuterons were produced from the Aldermaston tandem generator. Target was 300 μg/cm^2 ^{209}Bi. Scattered deuterons were momentum analyzed with a multi-range magnetic magnetic spectrograph. Measured $\sigma(E_d,\theta)$. Deduced levels.
Other:
1968Hi09: E=52 MeV. Measured $\sigma(\theta)$. Deduced deformation parameters.

^{209}Bi Levels

E(level)†	Comments
0.0	
900	
1605‡ *10*	
2487‡ *10*	
2558‡ *10*	
2585	
2593‡ *10*	β_3=0.15 (1968Hi09) E(level): ΔE<1.6 keV for separation of members of known 2600 doublet in 1971Un01.
2618	
2733‡ *10*	
2768	
2828	
2977‡ *10*	E(level): 2958 from 1971Un01.
2988	
3041	
3091	
3136	E(level): possible doublet because of large σ; however, levels are not resolved. Energy separation <3 keV.
3154	E(level): doublet with separation ≈4 keV. 3130 *20* and 3150 *20* from 1966Hi02.
3170	
3210‡ *20*	E(level): 3213 from 1971Un01.
3308	
3379	
3407	
3466	

† From 1971Un01, unless otherwise noted.
‡ From 1966Hi02.