^{209}Bi(d,α),(p,^{3}He) 1971Ya05,1971Ko04

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev, S. Lalkovski	NDS 112, 707 (2011)	1-Aug-2010

1971Ya05: E(d)=11 MEV; Measured: α-particles at 135 deg. FWHM=100 keV; DWBA analysis; From the same authors: 1968Ya09.

1971Ko04: Facility: Naval Research Lab, Washington; Beam: E(d)=20 MeV and E(p)=40 MeV; Target: 900 μg/cm^2 chemically purified ^{209}Bi; Detectors: magnet and ΔE-E telescope comprising of silicon surface-barrier detectors. FWHM=150 keV; Measured: E, $\sigma(\theta)$.

Other: 1962Mi06 and 2000Sp09 (theoretical analysis).

^{207}Pb Levels

E(level)[†]	J$^\pi$[‡]	Comments
0	1/2$^-$	configuration: $\nu(3p_{1/2})^{-1}$ (1971Ya05,1971Ko04).
570	5/2$^-$	configuration: $\nu(2f_{5/2})^{-1}$ (1971Ya05,1971Ko04).
900	3/2$^-$	configuration: $\nu(3p_{3/2})^{-1}$ (1971Ya05,1971Ko04).
1630	13/2$^+$	configuration: $\nu(1i_{13/2})^{-1}$ (1971Ya05,1971Ko04).
2340	7/2$^-$	configuration: $\nu(2f_{7/2})^{-1}$ (1971Ya05,1971Ko04).
2640		E(level): From 1971Ko04. 1971Ya05 report 2740 keV, however, the authors′ spectrum is consistent with 2640 keV, so the label may be a misprint.
3210		
3430		E(level): From 1971Ko04. 1971Ya05 report 3470 keV, but label the peak as the h9/2 hole state, whose adopted energy is 3414 keV. configuration: $\nu(1h_{9/2})^{-1}$ (1971Ya05).
3700		configuration: $[[\pi(3s_{1/2})^{-1}\nu(3p^{-1}_{1/2}]_{0-}\pi(1h_{9/2})]_{9/2+}$ (1971Ya05).
3890		
4160		
4330		
4400		
4640		
4860		
5140		
5190		
5530		
5810		

[†] From 1971Ya05, unless otherwise noted.
[‡] Based on $\sigma(\theta)$ and DWBA analysis in 1971Ko04.