

<sup>209</sup>Bi(p,t) 1973Er05

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

**1973Er05:** Facility: Van de Graaf, University of Pittsburgh; Beam: E(p)=17.8 MeV; Target: 90 μg/cm<sup>2</sup>, 100% pure <sup>209</sup>Bi evaporated onto 20μg/cm<sup>2</sup> thick C backing; Detectors: Enge split-spectrograph, position sensitive surface-barrier detector, photo-emulsion Kodak NTB 50-μm (FWHM=9-12 keV), two NaI(Tl) detectors; Measured: E(t), dσ/dΩ.

Others: **1969RiZX:** Facility: Emperor tandem at Heidelberg; E=20.5 MeV; FWHM = 29 keV.

<sup>207</sup>Bi Levels

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	L <sup>#</sup>	Comments
0	9/2 <sup>-</sup>	0+2	configuration: π(1h <sub>9/2</sub> ) <sup>+1</sup> .
669 <sup>&amp;</sup> 5	11/2 <sup>-</sup>	2	
742 <sup>&amp;</sup> 5	7/2 <sup>-</sup>	2	
892 <sup>&amp;</sup> 5	9/2 <sup>-</sup>	2+0	
931 <sup>&amp;</sup> 5	13/2 <sup>-</sup>	2	
992 5	7/2 <sup>-</sup>	2	configuration: π(2f <sub>7/2</sub> ) <sup>+1</sup> .
1149 <sup>&amp;</sup> 5	5/2 <sup>-</sup>	2	
1211 5	9/2 <sup>-</sup>	0	L: possible higher-L admixtures. configuration: π(1h <sub>9/2</sub> ) <sup>+1</sup> ⊗0 <sub>2</sub> <sup>+</sup> .
1241 5			
1335 5			
1373 5			
1459 5	( <sup>-</sup> )	(2)	
1512? <sup>@</sup> 5	( <sup>-</sup> )	(2)	
1556 5	( <sup>-</sup> )	(2)	
1588 5			
1644 <sup>a</sup> 5	15/2 <sup>-</sup>	(4)	J <sup>π</sup> : From the Adopted Levels.
1667 <sup>a</sup> 5	( <sup>-</sup> )	(4)	
1693 5			
1715? <sup>@</sup> 5			
1748 5			
1770 <sup>a</sup> 5	( <sup>-</sup> )	(4)	
1813 <sup>a</sup> 5	( <sup>-</sup> )	(4)	
1869 5			
1906? <sup>@</sup> 5			
1942 <sup>a</sup> 5	( <sup>-</sup> )	(4)	
1976 5			
1996 <sup>a</sup> 5	( <sup>-</sup> )	(4)	
2044 5			
2081 <sup>a</sup> 5	( <sup>-</sup> )	(4)	
2111 <sup>a</sup> 5	( <sup>-</sup> )	(4)	
2174 5			
2231 5			
2265 5			

<sup>†</sup> From 1973Er05.

<sup>‡</sup> Based on the deduced L values in 1973Er05, unless otherwise stated.

<sup>#</sup> From 1973Er05, based on DWBA calculations made using the DWUCK code.

<sup>@</sup> Reported by 1969RiZX, not seen in 1973Er05.

<sup>&</sup> Probable member of the (π(1h<sub>9/2</sub>)<sup>+1</sup>)⊗2<sub>1</sub><sup>+</sup>(206PB) multiplet.

<sup>a</sup> Probable member of the (π(1h<sub>9/2</sub>)<sup>+1</sup>)⊗4<sub>1</sub><sup>+</sup>(206PB) multiplet.