^{208}Pb(^{7}Li,^{6}He),(pol ^{7}Li,^{6}He) 1979Ze03,1993Yo01,1998Mo02

History

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

1979Ze03: E=52 MeV ^{7}Li beam was produced from the Australian National University 14 UD Pelletron accelerator. Target was enriched ^{208}Pb (>99%) metal with a thickness of about 100 μg/cm^2 on a thin carbon backing. Reaction products were momentum analyzed with an Enge spectrograph and detected by a resistive-wire gas proportional detector, FWHM=70 keV. Measured $\sigma(\theta)$. Deduced levels, spectroscopic factors from DWBA analysis.

1993Yo01: E=30 MeV/nucleon ^{7}Li beam was produced from the K500 superconducting cyclotron at Michigan State University. Target was an enriched (99.14%) self-supporting 5.84 mg/cm^2 thick ^{208}Pb metal. Reaction products were momentum analyzed with the S320 broad range magnetic spectrograph and detected by the focal plane detector system, FWHM= 1MeV. Measured $\sigma(\theta)$. Deduced levels, widths.

1998Mo02: E=33 MeV polarized beam was produced from the Daresbury Tandem. Target was 150 μg/cm^2 self-supporting ^{208}Pb. Reaction products were detected with an array of six silicon telescopes. Measured $\sigma(\theta)$, analyzing powers. Deduced spectroscopic factors.

For a preliminary report on a search for high-J orbitals, see 1988BeZY.

^{209}Bi Levels

E(level)†	J$^{\pi}$#	S‡	Comments
0	9/2$^-$	1.40	Additional information 1. S: if configuration=$\pi(1h_{9/2})^{+1}$.
896	7/2$^-$	1.19	Additional information 2. S: if configuration=$\pi(2f_{7/2})^{+1}$, 1.01 *10* from 1998Mo02.
1609	13/2$^+$		E=1.4 MeV, Γ=0.7 MeV (1993Yo01).
2826	5/2$^-$	1.07	Additional information 3. S: if configuration=$\pi(2f_{5/2})^{+1}$, 0.75 *4* from 1998Mo02 for unresolved 2826+3120.
3120	3/2$^-$	0.89	S: if configuration=$\pi(3p_{3/2})^{+1}$, 0.75 *4* from 1998Mo02 for unresolved 2826+3120.
3633	1/2$^-$	0.64	S: if configuration=$\pi(3p_{1/2})^{+1}$, 0.54 *4* from 1998Mo02.
4400			E(level): doublet from 1998Mo02. S: 0.49 *10* for the component with configuration=$\pi(3p_{1/2})^{+1}$, 0.10 *9* for the component with configuration=$\pi(2f_{7/2})^{+1}$ (1998Mo02).
8400			E(level): from 1993Yo01. Additional information 4.

† Rounded-off values from Adopted Levels.
‡ From DWBA analysis in 1979Ze03.
# From Adopted Levels.