^{208}Pb(^{16}O,^{15}N) 1978Pi09

History

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

1978Pi09,1978Ol02: E=104, 138.5, 216.6 and 312.6 MeV ^{16}O beams were produced from the Lawrence Berkeley Laboratory 88-inch cyclotron. Targets were 95% enriched ^{208}Pb of 100-200 μg/cm^2 thicknesses on carbon backings. Reaction products were momentum analyzed in a magnetic spectrometer and detected in a focal-plane detector system, FWHM=180-240 keV. Measured $\sigma(\theta)$. Deduced levels, spectroscopic factors from DWBA analysis. See also 1972l01.

1973Ko09: E=104,140 MeV ^{16}O beams were produced from the Berkeley 88-inch cyclotron. Measured $\sigma(\theta)$. Deduced levels, spectroscopic factors from DWBA analysis.

1987Me05,1986Be41: E=793 MeV ^{16}O beam was produced from GANIL facility. Target was 300 μg/cm^2 ^{208}Pb on a carbon backing. Reaction products were momentum analyzed with the energy-loss magnetic spectrometer, FWHM=215 keV. Measured $\sigma(\theta)$. Deduced levels, spectroscopic factors from DWBA analysis. See also 1989Bi01.

1989Bi01: E=95 MeV/nucleon at GANIL. Energy loss spectrometer(SPEG). Measured σ(E,θ). Deduced levels.

Others: 1977Ol01, 1977Vi02, 1972Ko32, 1971Ba84.

^{209}Bi Levels

E(level)†	S‡	Comments
0	0.95	S: if configuration=$\pi(1h_{9/2})^{+1}$.
896	0.74	S: if configuration=$\pi(2f_{7/2})^{+1}$.
1609	0.61	S: if configuration=$\pi(1i_{13/2})^{+1}$.
2826	0.61	S: if configuration=$\pi(2f_{5/2})^{+1}$.
3119	0.55	S: if configuration=$\pi(3p_{3/2})^{+1}$.
3634	0.52	S: if configuration=$\pi(3p_{1/2})^{+1}$.

† Rounded-off values from Adopted Levels.

‡ From 1978Pi09 normalized to the theoretical value of 0.95 for the ground state (1973Ri13. See also 1978Ol02). Others: 1973Ko09, 1987Me05.