

$^{208}\text{Pb}(^{12}\text{C}, ^{11}\text{C})$ 1988Me04

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

1988Me04: E=480 MeV ^{12}C beam was produced from the GANIL cyclotron. A 99% enriched ^{208}Pb target was used. Reaction products were momentum analyzed with the magnetic spectrometer SPEG and detected in gas counters, FWHM=200 keV. Measured $\sigma(\theta)$. Deduced levels, spectroscopic factors from DWBA analysis.

 ^{209}Pb Levels

E(level) [†]	S [‡]	Comments
0	0.80	S: for configuration= $\nu(2g_{9/2})^{+1}$.
779	0.50	S: for configuration= $\nu(1i_{11/2})^{+1}$.
1423	0.62	S: for configuration= $\nu(1j_{15/2})^{+1}$, contribution from the unresolved 1567 keV $\nu(3d_{5/2})^{+1}$ state is negligible.
2491	0.92	S: for configuration= $\nu(2g_{7/2})^{+1}$, contribution from the unresolved 2537 keV $\nu(3d_{3/2})^{+1}$ state is negligible.
3020	0.085	S: for configuration= $\nu(1j_{15/2})^{+1}$.
3600	0.065	S: for configuration= $\nu(1j_{15/2})^{+1}$ as suggested by 1986Ma49 in ($\alpha, ^3\text{He}$). Peak is probable doublet consisting of 3550-keV and 3715-keV levels reported in ($\alpha, ^3\text{He}$).
4060	0.13	S: for configuration= $\nu(1k_{17/2})^{+1}$, as suggested by 1986Ma49 in ($\alpha, ^3\text{He}$). Peak is probable doublet consisting of 3934-keV and 4211-keV levels reported in ($\alpha, ^3\text{He}$).
4990		
5620		
6470		

[†] Values below 2000 are rounded-off values from Adopted Levels. In addition to the resolved peaks listed here, broad structures are observed around an excitation energy of 10 MeV (1988Me04).

[‡] Spectroscopic factors are normalized to the theoretical value of 0.62 for the 1426 level (1973Ri13). Excitation of the 1567 $\nu(3d_{5/2})^{+1}$ level, which would be unresolved from the 1426 level, is expected to be negligible. The configurations of the g.s. and first three excited states are taken by the authors of 1988Me04 as known (see Adopted Levels).