^{62}Ni(^{12}C,^{11}B) 1977Pe05,1974Be58

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 196,17 (2024)	30-Sep-2023

1977Pe05: E=48 MeV ^{12}C beam was produced from the Saclay FN tandem Van de Graaff accelerator. Reaction products were detected with a ΔE-E solid-state counter telescope (FWHM=250 keV). Measured $\sigma(\theta)$. Deduced levels, J, π, L-transfers, spectroscopic factors from DWBA analysis.

1974Be58: E=78 MeV ^{12}C beam was produced from the 88-inch cyclotron of Lawrence Berkeley Laboratory. Target was 80-200 μg/cm^2 foil enriched ^{62}Ni on a thin carbon backing. Reaction products were momentum-analyzed with an energy-loss magnetic spectrometer (FWHM=100-200 keV). Measured $\sigma(\theta)$. Deduced levels, J, π, L-transfers, spectroscopic factors from DWBA analysis.

^{63}Cu Levels

E(level)[†]	Jπ[‡]	L[#]	C^{2}S[#]	Comments
0	3/2$^-$	1	2.0	
671	1/2$^-$	1	0.80	E(level): other: 670 *50* (1974Be58).
962	5/2$^-$	3	2.5	E(level): other: 970 *50* (1974Be58).
1412	5/2$^-$	3	3.3	E(level): other: 1400 *50* (1974Be58).
2509	9/2$^+$	4	5.3	E(level): other: 2520 *50* (1974Be58).
3280[@] *50*	5/2$^-$	3[@]	0.42[@]	
3500[@] *50*	5/2$^+$	2[@]	0.24[@]	
3970[@] *50*	9/2$^+$	4[@]	1.3[@]	

[†] From 1977Pe05, except where noted otherwise.
[‡] Values assumed for the extraction of C^{2}S.
[#] From DWBA and CCBA analysis of measured $\sigma(\theta)$ in 1977Pe05 assuming C^{2}S(^{12}C)=2.44, except as noted.
[@] From 1974Be58 assuming C^{2}S(^{12}C)=2.98.