^{62}Ni(α,d)   **1994Fi01,1969Lu07**

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen	NDS 178, 41 (2021).	12-Nov-2021

1994Fi01: E≈55 MeV, FWHM=120 keV. Measured $\sigma(\theta)$ and comparison to DWBA calculations. Uncertainty for absolute differential cross sections=20%. Theoretical structure calculations are reported by the same group (1994Vo01).

1969Lu07 (also 1968Lu05,1968LuZY): E=50 MeV, FWHM=170 keV. Groups reported at 1610, 2250, 2370, 3810, 4570 and 5320 are confirmed by 1994Fi01 with the exception of the 2250 group.

^{64}Cu Levels

E(level)[†]	J$^{\pi}$[‡]	L	Comments
1590 _30_	6$^-$	5	Configuration=$\pi p_{3/2} \otimes \nu g_{9/2}$ (1994Fi01).
2250			E(level): reported by 1969Lu07 only.
2370 _30_	(7$^-$)		Possible configuration=$\pi f_{5/2} \otimes \nu g_{9/2}$ (1994Fi01).
3340 _30_			Weak peak in spectrum reported by 1994Fi01 only.
3790 _30_	9$^+$	8	Configuration=$\pi g_{9/2} \otimes \nu g_{9/2}$ (1994Fi01).
4560 _30_	(7$^+$)		J$^{\pi}$: 1969Lu07 assigned 9$^+$ to this group based on large cross section, but $\sigma(\theta)$ data and DWBA calculations by 1994Fi01 support 7$^+$ with configuration=$\pi g_{9/2} \otimes \nu d_{5/2}$ or configuration=$\pi d_{5/2} \otimes \nu g_{9/2}$.
5350 _30_			

[†] From figure 6 of 1994Fi01.

[‡] From 1994Fi01, based on agreement of $\sigma(\theta)$ data with DWBA calculations with stretched proton-neutron configurations.