^{63}Cu(d,n),(pol d,n) 1966Ok02,1968Ok08,1976Wo02

History

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

J^π(^{63}Cu g.s.)=3/2$^-$.

1966Ok02, 1968Ok08: (d,n),E=11.7 MeV, time of flight, FWHM≤3%, $\sigma(\theta)$. Data in 1966Ok02 (also 1965Ok01) and DWBA analysis in 1968Ok08.

1976Wo02: (pol d,n),E=8 MeV. Measured $\sigma(\theta)$ and analyzing powers for g.s. and first 2$^+$ state. DWBA calculations.

2013Ra32: (d,n),E=6, 7.5 MeV. Measured E(n), I(n), n(θ), σ(E,θ) using TOF technique at Edwards accelerator facility, Ohio University. Deduced level density. Hauser-Feshbach model calculations using EMPIRE and TALYS computer codes.

Additional information 1.

^{64}Zn Levels

E(level)†	L†	(C^{2}S)(2J$_f$+1)/(2J$_i$+1)†
0	1	0.55
1030 50	1	1.16
1850 50	1	0.39
2230 50		
3120 50	1	2.44
3400 50	1	0.65
3850 50	1	1.13
4420 50	1	0.94
5050 50	1	0.46
5480 50	(1)	0.48

† From 1968Ok08.