

$^{58}\text{Ni}({}^7\text{Li}, {}^8\text{He}), ({}^{14}\text{N}, {}^{15}\text{C})$ [1987St04](#), [1985Sh03](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. R. Bhat	NDS 85, 415 (1998)	24-Sep-1998

[1987St04](#): $E({}^{14}\text{n})= 150$ MeV, FWHM= 180 keV; measured $\sigma(\theta)$ with a Q3D spectrometer and focal-plane detector.

[1985Sh03](#): $E({}^7\text{Li})= 173.6$ MeV, measured $\sigma(\theta)$, magnetic spectrometer, focal-plane detector.

 ^{57}Cu Levels

E(level) [‡]	J^π [†]	Comments
0.0	$3/2^-$	Additional information 1.
1040 25	$(1/2^- \text{ \& } 5/2^-)$	Probably an unresolved doublet.
2520 25	$(5/2^-, 7/2^-)$	
3510 25	$(9/2^+)$	
5710 25	$(5/2^+)$	

[†] From comparison to the mirror nucleus, ^{57}Ni , and cross section systematics ([1987St04](#)).

[‡] From [1987St04](#). All levels are seen in $({}^{14}\text{n}, {}^{15}\text{C})$. The $({}^7\text{Li}, {}^8\text{He})$ reaction populates the g.s., 1040 and 3510 levels, and the $({}^{12}\text{C}, {}^9\text{Li})$ reaction populates the 1040 and 3510 levels.