

⁹⁰Zr(pol p,pn) [1984Wa21](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 114, 1 (2013)	20-Oct-2012

[1984Wa21](#) (also [1984PeZU](#)): E=148.8 MeV. Measured neutron and proton spectra, resolution≈1 MeV, deduced deep neutron hole states, DWIA analysis.
Other: [1971Co02](#): (p,np) E=14-17 MeV. Measured σ(E(n),E(p)).

⁸⁹Zr Levels

E(level)	Jπ [†]	L	S
0 [‡]	9/2 ⁺	4	8
5.7×10 ² [‡]	1/2 ⁻	1	2
3.9×10 ³	(7/2 ⁻ ,9/2 ⁻)	3	4.0
9.5×10 ³	(3/2 ⁺)&(1/2 ⁺)	2+0	6.6,4.4
41.5×10 ³	(3/2 ⁻)	1	10

[†] From Adopted Levels.
[‡] Unresolved g.s.+570.