

$^{90}\text{Zr}(\text{d,t}),(\text{pol d,t})$ [1973Ta05,1994Va28](#)

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

[1973Ta05](#): (d,t) E=21.4 MeV. Measured $\sigma(\theta)$, DWBA.

[1994Va28](#): (pol d,t) E=200 MeV. Measured $\sigma(\theta)$, vector and tensor-analyzing powers for g.s., 590, 1090 and 1450 levels.

Others:

[1976Go10](#): (d,t) E=16 MeV.

[1977WuZR](#): (d,t) E=70 MeV.

[1981Ka04](#), [1983Na13](#): theoretical and analysis.

[Additional information 1](#).

 ^{89}Zr Levels

E(level) [†]	J ^{π‡}	L [†]	S [†]
0	9/2 ⁺ [#]	4	7.7
590 15	1/2 ⁻ [#]	1	1.9
1100 15	3/2 ⁻ [#]	1	1.6
1450 15	5/2 ⁻ [#]	3	2.1
1520 15	(9/2) ⁺	4	0.3
1630 15	5/2 ⁺	2	0.1
1750 15	1/2 ⁻	1	0.04
1870 15	3/2 ⁻	1	0.39
2100 15	5/2 ⁻	3	0.5
2900 15	7/2 ⁺ ,9/2 ⁺	4	0.33

[†] From [1973Ta05](#).

[‡] From Adopted Levels for levels above 1450.

[#] From L-transfer and tensor-analyzing powers ([1994Va28](#)).