

${}^{89}\text{Y}(\text{d},\text{n})$ 1976Ad06

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, E. A. Mccutchan		NDS 165,1 (2020)	1-Mar-2020

$J^\pi({}^{89}\text{Y})=1/2^-$.

1976Ad06: E=11.5 MeV. Measured $\sigma(\theta)$, $\theta=10^\circ-75^\circ$ in steps of 5° . Liquid scintillator, time-of-flight, FWHM=80 keV. (1976Ad06).
For vector-analyzing power in ${}^{89}\text{Y}(\text{pol d},\text{n})$, see 1972Qu02.

 ${}^{90}\text{Zr}$ Levels

E(level)	L [†]	C ² S' [†]	Comments
0	1	1.09	
1763 20	1	0.43	
2321 10	4	6.37	
2735 10	4	4.37	
4228 15	1	0.09	L,C ² S': L=1+4, C ² S'=0.08+0.10 for 2p3/2+1g9/2.
4430			
4540			
5090			
5640 10	2	0.71	C ² S': 0.64 for 2d5/2.
5764 15	2	0.26	C ² S': 0.24 for 2d5/2.
5868 15	2	0.13	C ² S': 0.12 for 2d5/2.
6020 20	2	0.05	C ² S': 0.04 for 2d5/2.
6198 20	2	0.14	C ² S': 0.12 for 2d5/2.
6247 15	2	0.20	C ² S': 0.17 for 2d5/2.
6670			
6820			
6870			
7005 20	0	0.04	
7116 30	0	0.04	
7258 15	0	0.04	
7480			
7600			
7776 25	2	0.10	C ² S': 0.09 for 2d5/2.
7840			
8000			
13140	2		E(level): Suggested analog of ${}^{90}\text{Y}$ g.s.
13340	2		E(level): Suggested analog of ${}^{90}\text{Y}(203)$.

[†] From comparison of $\sigma(\theta)$ with DWBA calculations.