
$^{89}\text{Y}(\text{p},\text{p}),(\text{pol p},\text{p}) \quad 1964\text{Fo03,1969Mi18,1973Gr08}$

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

1964Fo03: $^{89}\text{Y}(\text{p},\text{n})(\text{p},\text{p})$, measured $\sigma(E)$.

1969Mi18: $E=7.04\text{-}7.61$ MeV. Measured $\sigma(E,\theta)$, Si(Li), polarization(θ), carbon foil polarimeter and $\Delta E/E$ telescope.

1973Gr08: $^{89}\text{Y}(\text{polarized p},\text{p})$, $E=4.7\text{-}5.1$ MeV. Measured $\sigma(\theta)$, $A(\theta)$.

Others: 1969Li17, 1992Ch38.

Data are from 1964Fo03, except as noted.

^{90}Zr Levels

E(level)	J^π	T _{1/2}	L	Comments
13120 30	1 ⁻ ,2 ⁻ ,3 ⁻ @	25.5 [†] keV	20	E(level): Probable analog of $^{90}\text{Y}(\text{g.s.})$.
13320 30	1 ⁻ ,2 ⁻ ,3 ⁻ @	27.7 [†] keV	20	E(level): Probable analog of $^{90}\text{Y}(203)$.
14270 30				E(level): Probable analog of $^{90}\text{Y}(1212)$.
14400 30				E(level): Probable analog of $^{90}\text{Y}(1371)$.
15550 30	2 ⁻ ,(1 ⁻) [#]	60 [‡] keV		E(level): Proton configuration d3/2. Probable analog of $^{90}\text{Y}(2474)$.
15700 30	1 ⁻ ,(2 ⁻) [#]	60 [‡] keV		E(level): Proton configuration d3/2. Probable analog of $^{90}\text{Y}(2624)$.

[†] From 1973Gr08.

[‡] From 1969Mi18.

[#] From 1969Mi18.

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