

$^{96}\text{Zr}(\text{d},^3\text{He}),(\text{pol t},\alpha)$ 1983Fl06,1968Pr02

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, G. Mukherjee, A. A. Sonzogni		NDS 111, 2555 (2010)	30-Jun-2009

1968Pr02: E(d)=34.4 MeV. Measured $\sigma(\theta(\text{c.m.})=10^\circ \text{ to } 72^\circ)$; Si telescope. FWHM=75-125 keV. DWBA.

1983Fl06: E(t)=17 MeV; average polarization=78%. Measured $\sigma(\theta)$ and analyzing power, $\theta=10^\circ \text{ to } 45^\circ$, 5° steps; Q3D spectrometer, helical focal-plane detector. FWHM=24 keV. DWBA.

All data are from [1983Fl06](#), except as noted.

 ^{95}Y Levels

E(level)	J $^\pi$ [†]	L ‡	C ² S [#]	E(level)	J $^\pi$ [†]	L ‡	C ² S [#]	E(level)
0.0	1/2 $^-$	1	2.7,2.08	1887 8	5/2 $^-$	3	2.5,1.47	2655 ^{&} 20
686 5	3/2 $^-$	1	2.4,1.90	1983 20				2855 ^{&} 20
827 5	5/2 $^-$	3	9.9,6.24	2041 10	3/2 $^-$	1	2.2,1.41	2906 20
1090 8	7/2 $^-$,9/2 $^+$			2308 ^{&} 10	3/2 $^-$		0.19	3405 20
(1631 [@])				2603 ^{&} 10				4150 ^a 30

[†] From DWBA analysis of $\sigma(\theta)$ and $\alpha(\theta)$ in (pol t, α).

[‡] From DWBA analysis of $\sigma(\theta)$ in (d,t).

[#] First value is from [1983Fl06](#); second value, from [1968Pr02](#).

[@] From [1968Pr02](#); looked for but not observed by [1983Fl06](#).

[&] This group is too broad to be a single state.

^a Only two fairly sharp groups which appeared at all angles are reported above 2.9 MeV. The density of states above 2.9 MeV is too high to permit identification of additional states.