^{92}Zr(d,^{3}He),(t,α) **1968Pr02,1968Ha34**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 114, 1293 (2013)	1-Sep-2013

Other: 1984Se13.

(d,^{3}He): from 1968Pr02. E(d)=34.4 *1* MeV. E-ΔE semi telescope, FWHM=125 keV. θ(c.m.)=10° to≈70°.

(t,α): from 1968Ha34. E(t)=12.1 MeV. >95% enriched target. Multigap magnetic spectrograph. θ≈15° to 60° or 80°.

Gross properties of (pol d,^{3}He) are investigated by 1984Se13.

^{91}Y Levels

E(level)[†]	L[‡]	C^{2}S[#]	Comments
0	1	1.33	C^{2}S: p$_{1/2}$ orbital assumed. C^{2}S(t,α) normalized to (d,^{3}He) value (1.33).
550[@] *10*	4	1.09[&]	C^{2}S(t,α)=2.17.
653[@] *10*	1	0.84[&]	C^{2}S(t,α)=0.92.
922 *10*	3	1.50	C^{2}S(t,α)=1.17.
1481[@] *10*	1	1.90[&]	C^{2}S(t,α)=2.21.
1552[@] *10*	3	5.28[&]	C^{2}S(t,α)=4.16.
1974 *10*	(3)	0.21	L: L(d,^{3}He)=(1); L(t,α)=(3), based on fewer data points, but consistent with Adopted Levels, Gammas. C^{2}S(t,α)=0.65 if L=3.
2058 *25*			E(level): not reported in (d,^{3}He).
2159 *25*			E(level): not reported in (d,^{3}He).
2205 *25*	3	1.21	C^{2}S(t,α)=0.70.
2475 *25*	1	0.38	C^{2}S(t,α)=0.40.
2569 *15*	1		L: from (t,α); level not reported in (d,^{3}He). C^{2}S(t,α)=0.37.

[†] From (t,α) (1968Ha34).

[‡] From DWBA analysis of $\sigma(\theta)$ by 1968Pr02 and 1968Ha34, except as noted.

[#] Values are C^{2}S(d,^{3}He) from 1968Pr02. The authors estimate 15% experimental uncertainty and 30% normalization uncertainty from the model. C^{2}S(t,α) values are given in the comments, and have been normalized to C^{2}S(d,^{3}He) for g.s.; g$_{9/2}$, f$_{5/2}$, p$_{3/2}$ orbits have been assumed for L=4,3,1, respectively, except as noted.

[@] Not resolved in (d,^{3}He).

[&] Strengths of the unresolved states deduced from fit to $\sigma(\theta)$ assuming two L values.