^{93}Nb(d,^{3}He), (pol d,^{3}He)   1995Ay03,1974Ch52

	Type	Author	History Citation	Literature Cutoff Date
	Full Evaluation	Coral M. Baglin	NDS 113, 2187 (2012)	15-Sep-2012

J^{π}(^{93}Nb)=9/2$^+$.

1995Ay03: E(pol d)=12 MeV; 3 pairs of ΔE-E Si surface-barrier detector telescopes; measured A_{zz}, A_{yy}, θ(c.m.)≈85°−165°; DWBA analysis; g.s. only. See 1999Ei02 for further analysis of these data.

1974Ch52: E(d)=17.2 MeV; cooled Si surface-barrier detector telescopes; θ(c.m.)≈18°−78°; DWBA analysis of $\sigma(\theta)$. Levels ≈150 keV apart are well resolved.

^{92}Zr Levels

E(level)[†]	J^{π}[‡]	L[#]	S[@]
0.0	0$^+$	4	10.8
930			
1370			
1850			
2330			
2450	5$^-$	1	[&]
2740 *10*	4$^-$	1	[&]
3310			
3940			
4280			

[†] 1974Ch52 analyzed $\sigma(\theta)$ for the g.s. and the levels at 2.45 and 2.74 MeV. The other levels are indicated in the spectrum only. Uncertainties in level energies are given for the 2740 level only.

[‡] Adopted values for 0 and 2450 levels; deduced by authors from L and S for 2740 level. See comment on S.

[#] From DWBA analysis (1974Ch52).

[@] From DWBA analysis, assuming 1g$_{9/2}$, 2p$_{1/2}$ orbitals for L=4, 1 pickup, respectively (1974Ch52).

[&] S=2.1 *4* for 2450, 5$^-$ and 2740 levels combined. This exhausts the 2p$_{1/2}$ pickup strength, implying J^{π}=4$^-$ for the 2740 level (1974Ch52).