^{92}Zr(^{3}He,d) 1969Ca20,1973Fi14

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 112, 1163 (2011)	15-Dec-2010

Other: 1970Mc19.

1969Ca20: ^{92}Zr(^{3}He,d), E=30.9 *1* MeV, magnetic spectrograph + photographic plates, θ(lab)=6°−30°, 94.5% ^{92}Zr target, FWHM=30 keV; DWBA analysis of $\sigma(\theta)$.

1973Fi14: ^{92}Zr(^{3}He,d), E=30.2 MeV, ΔE-E Si telescopes, FWHM=70 keV, θ(lab)=8°−45°; DWBA analysis of $\sigma(\theta)$ for IAS.

^{93}Nb Levels

E(level)[†]	L[‡]	S′[#]	Comments
0	4	7.90 *4*	
29 *5*	1	1.06 *6*	
685 *5*	1	0.28 *2*	
807 *5*	2	0.360 *18*	
970?[@] *10*	1	0.024	
1080 *10*	4	0.4	
1290 *10*	1	0.20 *4*	
1330 *10*	(2)	0.24	
1570 *10*	1	0.08	
1660 *10*	2	0.048	
1710 *10*	2	0.036	
2180 *10*	2	0.18	
2320 *10*	2	0.36	
2520 *10*	(0)		
2590 *10*	2	0.12	
11020[&] *40*	2[&]	3.9[&]	Analog of ^{93}Zr(g.s.).
12470[&] *40*	2[&]	2.12[&]	Analog of ^{93}Zr 1450 or 1425 level.
12570[&] *40*	4[&]	3.0[&]	Analog of ^{93}Zr(1470 level).
13090[&] *40*	5[&]	2.4[&]	Analog of ^{93}Zr(2028 level).

[†] From 1969Ca20, except as indicated.

[‡] From 1969Ca20: DWBA analysis of $\sigma(\theta)$, if not indicated otherwise.

[#] From 1969Ca20: DWBA analysis of $\sigma(\theta)$, normalized by authors to 10 holes in the $1g_{9/2}$, $2p_{1/2}$, $2p_{3/2}$, $1f_{5/2}$ orbitals; normalization factor =0.81.

[@] This deuteron group may include a contribution from ^{90}Zr(^{3}He,d). No other evidence exists for an L=1 level at this energy. Level omitted from Adopted Levels.

[&] From 1973Fi14 only; ΔE=30-40 keV. L and S′ deduced from comparison of $\sigma(\theta)$ and DWBA (single particle resonance method).