
 $^{96}\text{Zr}(^3\text{He},\text{d})$ IAS [1980Ga01](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 111, 525 (2010)	19-Nov-2009

$E(^3\text{He})=39$ MeV. Enriched target. Measured $\sigma(E(\text{d}),\theta)$; DWBA analysis.

Other reaction: $^{96}\text{Zr}(^3\text{He},\text{dp}')$ with $E(^3\text{He})=37.5$ MeV; measured $E(\text{p}')$, $I(\text{p}')$, $\text{dp}'(\theta)$; deduced proton decay Γ to various levels in ^{96}Zr . (p' =proton emitted from IAS).

[1973Fi14](#): $^{97}\text{Zr}(^3\text{He},\text{d})$ $E(^3\text{He})=30.2$ MeV, measured $\sigma(E(\text{d}),\theta)$. L values agree with those quoted.

[1970Za09](#): $^{97}\text{Zr}(\text{d},\text{n})$ $E(\text{d})=12$ MeV, measured $\sigma(E(\text{n}))$ (n tof). Did not observe ^{97}Zr g.s. analog state and concluded that s1/2 analog states are weakly populated.

 ^{97}Nb Levels

E(level)	$J\pi^\dagger$	L	$(2J+1)C^2S$	Comments
14430 30	$(3/2)^+$	2	0.73	Analog of ^{97}Zr 1103 keV $3/2^+$ state. Other: 14570 40 (1973Fi14).
14650 30	$(7/2)^+$	4	0.98	Analog of ^{97}Zr 1264 keV $7/2^+$ state. Other: 14730 40 (1973Fi14).
15640 30	$(11/2)^-$	5	0.48	Analog of ^{97}Zr 2265 keV $11/2^-$ state. Other: 15750 40 (1973Fi14).

† From analysis of $\text{dp}'(\theta)$.