

$^{92}\text{Zr}({}^3\text{He}, {}^3\text{He}')$ 1967Bi08, 1968Ru01

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

Other: 1981Ya02.

1967Bi08: $E({}^3\text{He})=51.3$ MeV; surface barrier and Li-drifted Si telescope, $\text{FWHM}\approx 200$ keV; $\theta(\text{lab})=10^\circ-76^\circ$; 93.2% enriched ^{92}Zr target.

1968Ru01: $E({}^3\text{He})=25$ MeV; surface barrier detectors, resolution not stated.

1981Ya02: $E({}^3\text{He})=110-140$ MeV; two sets of Si detector telescopes, $\text{FWHM}=150-300$ keV; $\theta=20^\circ$. Observed low energy and high energy octupole resonances and GQR.

 ^{92}Zr Levels

E(level) [†]	L [@]	β_L [#]	Comments
0.0			
930	2	0.10	
1500 [‡]	(4) [‡]	0.041	
1850	2	0.07	
2340	3	0.16	
7.0×10^3 4			E: from 1981Ya02. Low energy octupole giant resonance.
$\approx 15\times 10^3$			E: from 1981Ya02; GQR.
26.0×10^3 15			E: From 1981Ya02. High energy octupole giant resonance; $\Gamma\approx 7$ MeV.

[†] Mean value from 1967Bi08 and 1968Ru01, unless indicated otherwise. Additional, probably complex, peaks appear in the spectrum of 1967Bi08.

[‡] From 1967Bi08 only. Had the 1380 level been excited, it could not have been resolved from this state.

[#] β_L values; from 1967Bi08 for 1500 level, from 1968Ru01 otherwise.

[@] From 1968Ru01, except As noted.