

$^{94}\text{Zr}(^3\text{He,d}),(\alpha,t),(^{16}\text{O},^{15}\text{N})$ **1973Zi04,1973Me02,1972Zi01**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, G. Mukherjee, A. A. Sonzogni		NDS 111, 2555 (2010)	30-Jun-2009

1971Ni03: $E(^{16}\text{O})=60$ MeV. Measured $\sigma(\theta=60^\circ)$; Si $\Delta E/E$ telescope. FWHM=200-400 keV.

1972Zi01: $E\alpha=50$ MeV. Measured $\sigma(\theta(\text{c.m.})=12^\circ$ to $50^\circ)$; Si-Si(Li) telescope. FWHM=50 keV.

1973Me02: $E(^3\text{He})=E=35.6$ MeV. Measured $\sigma(\theta=8^\circ$ to $37^\circ)$; magnetic spectrometer, emulsions. FWHM=35 keV. DWBA.

1973Zi04: $E(^{16}\text{O})=104$ MeV. Measured $\sigma(\theta=25^\circ)$; magnetic spectrometer, position-sensitive detector, ToF. FWHM=300 keV.

See also $^{94}\text{Zr}(^3\text{He,d})$ IAR. Others: **1976CoYU** for $(^3\text{He,d})$ and **1973Ch10** for $(^{16}\text{O},^{15}\text{N})$. See **1983Lu03** for additional references for $(^3\text{He,d})$.

 ^{95}Nb Levels

E(level) [†]	L [‡]	C ² S' [‡]	E(level) [†]	L [‡]	C ² S' [‡]	E(level) [†]
0.0 [#]	4	7.8	1913 [@] 8	2	0.24	3510 20
236 [#] 8	1	0.60	2070 [@] 8	2	0.36	3900 ^c 20
728 [#] 8	2	0.84	2121 ^{@a} 8	2	0.42	4050 20
799 [@] 8	1	0.24	2165 ^a 8	2	0.72	4160 20
1000 ^{@&} 20			2373 ^a 8	(0)	(0.06)	4360 20
1223 [@] 8	1	0.08	2406 ^b 8	(0,2)	(0.06,0.12)	4520 20
1274 8	1	0.10	2431 ^b 8	(2)	(0.18)	4610 20
1430 ^{@&} 20			2540 ^{&} 20			4830 ^c 20
1590 ^{@a} 8	2	0.18	2660 ^{&} 20			5200 20
1645 [@] 8	(1)	(0.14)	2790 ^{&} 20			5360 20
1720 ^{@&} 20			2967 8	2	0.30	5770 20
1810 [@] 8	2	0.36	3110 20			

[†] Excitation energies are from **1973Me02** below 3 MeV and from **1972Zi01** above 3 MeV and states observed by **1973Me02** were also reported by **1972Zi01**, except as noted.

[‡] From DWBA analysis of $\sigma(\theta)$ by **1973Me02**.

[#] Also observed in $(^{16}\text{O},^{15}\text{N})$ by **1971Ni03** or **1973Zi04**.

[@] Unresolved in $(^{16}\text{O},^{15}\text{N})$ by **1971Ni03** or **1973Zi04**.

[&] From **1972Zi01**. Not reported by **1973Me02**.

^a Not observed by **1972Zi01**.

^b Unresolved by **1972Zi01**.

^c Broad unresolved groups observed at 3.8 MeV and 4.8 MeV, respectively, by **1973Zi04** in $(^{16}\text{O},^{15}\text{N})$.