

$^{94}\text{Zr}(\alpha, \alpha')$  1986Si17

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni		NDS 107, 2423 (2006)	1-Jan-2006

E=35.4 MeV,  $\theta=10^\circ-45^\circ$ , FWHM=25-30 keV. DWBA. Isoscalar transition rates in single-particle units are derived from  $\alpha$  angular distribution fits.

Deformation lengths adjusted from DWBA.  $\delta_L = \beta_L R$  where  $\beta_L$  is the deformation parameter and R the nuclear radius .

E;  $\Delta E \approx 10$  for E $\approx 2$  MeV,  $\Delta E \approx 20$  for E $\approx 5$  MeV.

Other: 1969Bi03 (E=65 MeV), 1989Ku19 (E=50.1 MeV).

 $^{94}\text{Zr}$  Levels

E(level)	$L^\dagger$	$\delta_L$ (fm)	E(level)	$L^\dagger$	$\delta_L$ (fm)	E(level)	$L^\dagger$	$\delta_L$ (fm)
0.0			2940	5	0.26	3627	5	0.19
919	2	0.68	3077			3682		
1469	4	0.31	3163	4	0.30	3755	(4)	0.17
1671	2	0.42	3244	3	0.32	3917	4	0.25
2057	3	1.03	3345	5	0.23	4105	(3)	
2336	4	0.19	3379	3	0.19	4168	7	0.18
2372	2	0.22	3435	(3,4)		4370	4	0.14
2617	5	0.27	3493					
2881	4	0.33	3588	4	0.22			

$^\dagger$  From DWBA.