

$^{96}\text{Zr}(\text{d},\text{d}')$, (pol d,d') 1993Ho01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni		NDS 109, 2501 (2008)	1-Apr-2008

1993Ho01: E=22 MeV (polarized), FWHM=6-8 keV; E=52 MeV, FWHM=14 keV 2; measured elastic and inelastic scattering, analyzing power; DWBA and coupled-channels analysis. Other: 1990MoZY, 1962Jo05.
All data are from 1993Ho01, unless indicated otherwise.

 ^{96}Zr Levels

E(level) [†]	L	B(EL)(W.u.) [‡]	Comments
0.0			
1582	(0)	3.2×10^{-4}	B(EL)(W.u.): $=\beta_0^2$ (E(d)=22 MeV); 2.5×10^{-5} (E(d)=52 MeV).
1751	2	7.9,7.3	
1897	3	50.0,51.0	
2226	(2)	0.16,0.05	
2439	(2,4)	0.14	B(EL)(W.u.): B(E2) at E(d)=52 MeV; B(E4)=4.9 (E(d)=22 MeV).
2669	(2)	0.16,0.12	
2695 2	(0)	3.6×10^{-5}	B(EL)(W.u.): $=\beta_0^2$ (E(d)=22 MeV); 6.4×10^{-5} (E(d)=52 MeV).
2857	4	1.4,1.0	
2926 2	(0)	2.5×10^{-5}	B(EL)(W.u.): $=\beta_0^2$ (E(d)=22 MeV).
3082	4	4.7,3.6	
3120	5	13.0,16.0	
3150	(2)	0.33,0.27	
3176	4	14.0,13.0	
3212	2	0.60,0.51	
3249	2	0.36,0.47	
3309	4	0.37	E(level): ^{90}Zr contaminant 2^+ level at 3308 keV.
3363	(3,4)	0.25	B(EL)(W.u.): for L=(3).
3399 [#] 11	(4)	0.22 [#]	
3432	4	0.64,0.58	
3445 [#] 12	(2)	0.16 [#]	
3457 2	(6)	1.1 [@]	
3472	2	0.40,0.47	
3483	6	10.9,10.9	
3509	2	0.33,0.21	
3557	2	0.33,0.30	
3576	(3,5,6)	0.55 [@]	B(EL)(W.u.): for L=(3) at 22 MeV; 1.6 for L=(5) and 3.6 for L=(6) both at E(d)=52 MeV.
3586 2			
3602	(2)	0.07	
3621	(0),2	1.6×10^{-5}	B(EL)(W.u.): $=\beta_0^2$ (52 MeV); B(E2)=1.4 for L=2 (22 MeV).
3679	(3,4,5)	0.28,0.25	B(EL)(W.u.): for L=(3); B(E4)=0.58 for L=(4) (52 MeV).
3701	(0,2)	0.9×10^{-5}	B(EL)(W.u.): $=\beta_0^2$ (22 MeV); 1.6×10^{-5} (52 MeV); B(E2)=0.89 for L=(2) (22 MeV).
3732			
3749	(4),5	4.2,3.1	B(EL)(W.u.): for L=5.
3772 2	(6)	0.60,2.6	
3833	4	0.56 [@]	
3857	2	0.12,0.16	
3921			
3947	(2)	0.29 [@]	
3997	(2)	0.39 [@]	
4014	5	5.6,8.0	
4029	3	0.67,1.0	
4038	2	1.7 [@]	
4068 2	(1)	0.032 [@]	

Continued on next page (footnotes at end of table)

$^{96}\text{Zr}(\text{d,d}')$, (pol d,d') 1993Ho01 (continued) ^{96}Zr Levels (continued)

<u>E(level)[†]</u>	<u>L</u>	<u>B(EL)(W.u.)[‡]</u>	<u>Comments</u>
4121? 4			
4132	(0)	2.5×10^{-5}	B(EL)(W.u.): $=\beta_0^2$ at 22 MeV; 3.6×10^{-5} (52MeV).
4207 [#] 9	(4)	0.45 [#]	
4233 [#] 6	7	22.0 [#]	
4249 [#] 9	3	0.37 [#]	
4323 [#] 8	(3),(2)	0.62 [#]	B(EL)(W.u.): for L=(3) at 52 MeV; 0.24 for L=(2) at 22 MeV.
4341 7	(4)	0.38	
4418 [#] 9	6	2.9 [#]	
4515 [#] 6	(2)	0.16 [#]	
4531 [#] 6	(2)	0.16 [#]	
4640 [#] 8	(5,6)	1.3,2.9 [#]	B(EL)(W.u.): for L=(5) and L=(6) respectively.

[†] From E=22 MeV (polarized) data, unless indicated otherwise.

[‡] B(EL)(W.u.) at 22 and 52 MeV respectively, unless indicated otherwise.

[#] Observed at E=52 MeV.

@ Observed at 22 MeV.