

${}^{91}\text{Zr}(\text{d},\text{d}') \quad 1986\text{Ho09}$

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 114, 1293 (2013)	1-Sep-2013

$J^\pi(\text{target})=5/2^+$.

Other: 1962Jo05 (E=15 MeV, FWHM \approx 40 keV).

1986Ho09: E=17 MeV; 89% ${}^{91}\text{Zr}$ target, magnetic spectrometer with nuclear emulsions, FWHM \approx 15 keV, $\theta=25^\circ-80^\circ$.

 ${}^{91}\text{Zr}$ Levels

E(level) [†]	L [‡]	β_L [‡]	E(level) [†]	L [‡]	β_L [‡]	E(level) [†]	L [‡]	β_L [‡]	E(level) [†]	L [‡]
0			2766 4	(5)		3687 6	2		4273 6	
1205 [#]	2	0.18	2777 4	(3)	0.069	3709 6	2		4287? 6	
1466 2	2	0.081	2813 4	3		3753 6	(2)	0.036 ^{&}	4300? 6	
1884 3	2	0.101	2831 4	3	0.155 ^a	3777 6	(2)		4340 7	
2043 3	2	0.099	2857 4	(4)	0.046	3822 6	(2)		4403 7	(3)
2134 3	2	0.083	2870 4	(2)		3852 6	(2)		4413? 7	
2172 3	3	0.162	2912 4			3899 6	(2)		4440 7	
2203? 3			2931 4	2		3911 6			4464? 7	
2261 3			3011 5	3	0.036 ^b	3952 6			4501 7	
2290 3	5	0.045	3035 5	3		3965 6			4535 7	
2322 [@] 3	5	0.063 [@]	3086 [@] 5	(3)		3986 6			4549 7	
2358 4	(3)		3111 5	2		4010 6			4593 7	
2368 4	(4)		3238 5	(2)		4043 6			4651? 7	
2397 4	(3)	0.068	3291 5	(2)		4075 6			4690 7	
2537 4	(2)		3313 [@] 5	(2)		4116 6			4715? 7	
2559 4			3322 5			4151 6			4790 7	(3)
2581 4	3		3476 ^c 5	(2)		4162? 6				
2643 4	3	0.105	3489 5			4174? 6				
2696 4	3		3653 5	(5)		4194 6				

[†] 1986Ho09 estimate $\Delta E=0.15\%$.

[‡] From DWBA. 25% uncertainty in absolute cross sections.

[#] E=1204.8 4 used as energy calibration point.

[@] ${}^{90}\text{Zr}$ contaminant subtracted.

[&] If $J^\pi=3/2^+$.

^a If $J^\pi=3/2^-$.

^b If $J^\pi=7/2^-$.

^c Possible doublet.