

$^{66}\text{Zn}(\text{p},\text{p}')$ 1987Ja04,1967Ka11

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 111, 1093 (2010)		3-Mar-2009

1993Mo15: E(p)(polarized)=20.4 MeV, FWHM $\approx$ 100 keV, and 35 keV; $\sigma(\theta)$, analyzing power; DWBA and coupled-channels analysis of scattering and analyzing power data.

1987Ja04: E(p)=22 MeV, FWHM $\approx$ 14 keV; $\sigma(\theta)$, $\theta=10^\circ-110^\circ$; DWBA and coupled-channels analysis.

1980Fa07: E(p)=35.2 MeV; $\sigma(\theta)$; coupled-channels analysis.

1967Ka11: E(p)=11.0 MeV, FWHM=6-8 keV; σ at $\theta=100^\circ$ and 130° .

1969Ya04: E(p)=55 MeV, FWHM $\approx$ 150 keV; $\sigma(\theta)$, $\theta\approx 5^\circ-65^\circ$; DWBA analysis.

1967Br10: E(p)=10.9 MeV, FWHM=10 keV; level energies.

1968Le23: E(p)=50 MeV; $\sigma(\theta)$ and asymmetries; DWBA analysis.

1970Pe09: E(p)=11 MeV; $\sigma(\theta)$; DWBA analysis.

1973An28: E(p)=6.02 MeV; $\sigma(\theta)$; Hauser-Feshbach and DWBA analysis.

1973Ta03: E(p)=30.5 MeV; $\sigma(\theta)$ and analyzing powers; DWBA analysis.

Others: 1967Ca15, 1967Ca19, 1967Di03, 1971Pa14, 1963Ro14, 1984PrZR and 1985MaZO.

For deformation parameters see 1993Mo15, 1987Ja04, 1980Fa07, 1973Ta03, 1973An28, 1969Ya04, 1968Le23.

 ^{66}Zn Levels

E(level) [†]	L [@]	E(level) [†]	L [@]	E(level) [†]	L [@]	E(level) [†]	L [@]
0		3809 ^b 2		4511 5	(0)	5059 10	
1041 2	2 ^c	3822 [‡] 4		4527 5		5073 10	
1871 2		3874 5		4538 [‡] 7	4	5086 10	
2371 2		3881 5		4565 2	3 ^{&}	5097 10	
2450 2	4 ^c	3899 [‡] 4	5	4610 5	4	5106 10	
2704 2	(1)	3926 ^b 2	6	4620 10		5124 10	
2766 2	4	3946 2	(1)	4636 5		5143 10	
2778 2	2	3969 2	4	4645 10		5159 10	
2828 2	3 ^c	4005 10	4	4655 ^{‡b} 7	3+4	5169 10	
2941 2	2	4021 2		4683 10		5180 10	
3080 2	4	4081 2		4694 [‡] 7	4	5198 10	
3107 ^b 2	(0)	4089 2	(1)	4730 [‡] 7	2	5222 10	
3212 [‡] 4	2	4110 [@] 10	3	4745 10		5234 10	
3225 5		4116 2		4758 10		5245 10	
3231 [‡] 4		4181 2		4780 [‡] 7	5	5263 10	
3332 ^b 2		4189 [‡] 7	4	4796 [‡] 7	(1)	5274 10	
3382 2	(1)	4223 2	(1)	4808 [#] 7		5285 10	
3433 2	(1)	4258 2		4832 10		5305 10	
3509 2	2	4267 [‡] 7	4	4848 10		5322 10	
3522 2		4295 2	(1)	4862 10		5331 10	
3534 [‡] 4	(0)	4322 2		4875 10		5352 10	
3578 2	4	4332 [‡] 7	2	4885 10		5364 10	
3673 2	2	4392 2	3	4907 10		5375 10	
3691 2		4425 5		4918 10		5389 10	
3712 2		4435 10		4945 10		5403 10	
3726 2		4439 [‡] 7	2	4957 10		5420 10	
3739 2		4454 5		4984 10		5431 10	
3747 5		4463 10		5006 10		5446 10	
3754 [@] 5	4	4472 [‡] 7	3	5025 10		5650 ^a 30	3 ^{&}
3794 2		4496 3		5038 10			

Continued on next page (footnotes at end of table)

 $^{66}\text{Zn}(\text{p},\text{p}')$ [1987Ja04](#),[1967Ka11](#) (continued)

 ^{66}Zn Levels (continued)

[†] From [1967Ka11](#) for $E \leq 4808$ and from [1967Br10](#) for $E > 4808$, except as noted. Energies from [1967Ka11](#) are average values from two $^{66}\text{Zn}(\text{p},\text{p}')$ measurements up to 4800 and one $^{69}\text{Ga}(\text{p},\alpha)$ experiment for E up to 4400.

[‡] Weighted average of data from [1967Ka11](#) and [1987Ja04](#).

[#] Weighted average of data from [1967Ka11](#) and [1967Br10](#).

[@] From [1987Ja04](#), unless indicated otherwise.

[&] From [1969Ya04](#).

^a from [1969Ya04](#).

^b Possible doublet ([1967Ka11](#)).

^c J^π in Adopted Levels consistent with analyzing power data of [1993Mo15](#).