

$^{68}\text{Zn}(e,e')$ 1973Li24,1976Ne06,1977Ne05

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 113, 1735 (2012)	1-Mar-2012

Data are mainly from 1976Ne06 and 1977Ne05.

1977Ne05: $E(e)=100-275$ MeV. Measured $\sigma(E,\theta)$ for $\theta=40^\circ-100^\circ$, FWHM=150 keV; deduced B(E2).

1976Ne06: $E(e)=40-112$ MeV. Measured $\sigma(E,\theta)$ for $\theta=58^\circ, 111^\circ$, and 128° ; deduced B(E2) and B(E3).

1973Li24: $E(e)=225$ MeV. Measured $\sigma(\theta)$; deduced B(E2) and B(E3).

B(E2) values for the 2^+ states were obtained from Fourier-Bessel analysis and are model-independent (1977Ne05). The B(E3) has been derived from the modified Tassie model with a two-parameter Fermi charge distribution for the g.s. (1976Ne06). Other B(E2) and B(E3) measurements: 1973Li24.

Others: 1981Ko06,1980Wo02,1972Ne01.

 ^{68}Zn Levels

<u>E(level)[†]</u>	<u>J^π</u>	<u>T_{1/2}</u>	<u>Comments</u>
0	0 ⁺		
1077	2 ⁺	1.48 ps 8	Q=-0.106 16 (1981Ko06); B(E2)↑=0.132 7 (1977Ne05) B(E2): value of 1977Ne05 supersedes authors' earlier work (1976Ne06). Other: 0.108 14 (1973Li24). Q: data of 1977Ne05 analyzed by 1981Ko06 to extract quadrupole moment of 1077 level using a model independent method based on energy-weighted sum rule. T _{1/2} : deduced from B(E2) and adopted γ -ray properties.
1883	2 ⁺	1.53 ps +28-20	B(E2)↑=0.0046 7 (1977Ne05) T _{1/2} : deduced from B(E2) and adopted γ -ray properties.
2751	3 ⁻		B(E3)↑=0.0235 17 (1973Li24) B(E3): other: 0.038 8 (1976Ne06).

[†] From the Adopted Levels.