

${}^{66}\text{Zn}(\alpha, \alpha')$ 1970A116

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

1990Bu25: $E\alpha=50.5$ MeV; measured $\sigma(\theta)$, DWBA and coupled-channels analysis.

1970A116: $E\alpha=31$ MeV, FWHM=80-120 keV; $\sigma(\theta)$, $\theta\approx 15^\circ-65^\circ$; DWBA analysis.

1971A111: $E\alpha=27.2$ MeV, FWHM=250 keV; $\sigma(\theta)$, $\theta\approx 20^\circ-160^\circ$; DWBA analysis.

Others: 1963Br13, 1965Wi04, 1967Se12, 1968Al20, 1970Iv02, 1973Bu32, 1975Ba77, 1975Bo02, and 1979PaZO. For giant resonance data see 1976Yo02, 1978Mo10, 1980Lu06, 1981Co16, and 1981Yo04.

Additional information 1.

 ${}^{66}\text{Zn}$ Levels

| E(level) [†] | L [‡] | Comments |
|-----------------------|----------------|---|
| 0 | | |
| 1040 30 | 2 | β_2 : 0.19 (1970A116), 0.22 (1971A111), 0.220 (1990Bu25), 0.217 (1990Bu25); the two values from 1990Bu25 are from DWBA and coupled-channels analysis, respectively. |
| 1870 30 | (2) | |
| 2450 30 | (4) | |
| 2830 30 | 3 | β_3 : 0.19 (1970A116), 0.21 (1971A111). |
| 3090 30 | 4 | $\beta_4=0.075$ (1970A116) |
| 3770 30 | | |
| 3920 30 | | |
| 4150 30 | | |
| 4430 30 | 3 | $\beta_3=0.072$ (1970A116) |
| 4540 30 | | |
| 4770 30 | | |
| 4910 30 | | |
| 5100 45 | | |
| 5370 45 | | |
| 5500 45 | | |
| 5690 45 | | |
| 5790 45 | | |

[†] From 1970A116.

[‡] From DWBA analysis of $\sigma(\theta)$ (1970A116).