

$^{70}\text{Zn}(\alpha, \alpha')$ [1971A118,1970Co31](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal, E. A. Mccutchan		NDS 136, 1 (2016)	1-Jul-2016

[1988Ba71](#): $E(\alpha)=25$ MeV. Measured $\sigma(\theta)$ for $\theta=15^\circ$ to 172.5° in 2.5° steps using Si surface-barrier detectors (FWHM=100-200 keV); coupled-channel analysis.

[1971A118](#): $E(\alpha)=31$ MeV. Measured $\sigma(\theta)$ using semiconductor detectors (FWHM=70-100 keV); DWBA analysis.

[1970Co31](#): $E(\alpha)=42$ MeV. Measured $\sigma(\theta)$ for $\theta=20^\circ$ to 54° in 2° steps using Si(Li) detectors (FWHM=150 keV).

Others: [1990Bu25](#), [1979PaZO](#), [1978Lu06](#), [1975Ba77](#), [1971A111](#).

 ^{70}Zn Levels

E(level) [†]	L [‡]	β_{LR} [‡]	Comments
0.0			
882 10	2	1.09 6	$\beta_2=0.220$ (1990Bu25) β_2R : other: 0.868 (harmonic vibrational model) and 0.815 (asymmetric-rotor model) (1988Ba71). E(level): other: 880 30 (1971A118).
1550 [#] 30			
1760 15			J^π : 1970Co31 assign (4^+) according to $2J+1$ intensity rule. E(level): other: 1780 30 (1971A118). E(level): other: 1950 30 (1971A118).
1945 15			
2370 20			
2845 10	3	0.92 5	β_3R : 0.764 (harmonic-vibrational model) (1988Ba71). E(level): other: 2870 30 (1971A118).
3040? 20			
3335 15	3	0.43 3	E(level): other: 3370 30 (1971A118).
3460 20			
3520 [#] 30			
3660 [#] 30			
3860 [#] 30			
3980 [#] 30			
4200 [#] 30	5	0.32 3	

[†] From [1970Co31](#), except noted.

[‡] From DWBA analysis in [1971A118](#).

[#] From [1971A118](#).