

$^{68}\text{Zn}(\text{d},\text{n})$  1970Co17

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja	NDS 115, 1 (2014)	31-Jul-2013

1970Co17: ED=10 MeV, resolution (FWHM) $\approx$ 80 keV; neutron time-of-flight, measured  $\sigma(\theta)$ ,  $\theta=18^\circ-70^\circ$ ; DWBA analysis.

Others: 1966Ok02, 1968Ok07, 1968Le20, and 1992HoZS.

Data are from 1970Co17, except where otherwise noted.

 $^{69}\text{Ga}$  Levels

E(level)	$J^\pi^\dagger$	$L^\ddagger$	$C^2S'$	Comments
0	$3/2^-$	1	1.62	
315 15	$1/2^-$	1	1.20	
575 15	$5/2^-$	3	4.62	
863 15	$3/2^-$	1	0.30	
1021 15	$1/2^-$	1	0.17	
1134 15				
1324 15	$7/2^-$	3	0.42	
1488 15		(0),(3)	0.03,0.41	E(level): Authors suggest a possible doublet; however E=1488.14 with $J^\pi=7/2^-$ and E=1525.76 with $J^\pi=3/2^-$ from Adopted Levels suggests population in (d,n) of just the $7/2^-$ level. $C^2S'$ : calculated for J=1/2 and J=5/2.
1725 15	$5/2^-$	3	0.90	
1979 15		4+(1)	4.94+0.20	E(level): Probable doublet of E=1972.39 with $J^\pi=9/2^{(+)}$ , and E=1973.10 with $J^\pi(1/2)^-$ from Adopted Levels. $C^2S'$ : calculated for J=9/2 and J=1/2.
2563 15				
2660 15				E(level): level at 2700 50 with L=1, $C^2S'=0.83$ reported by 1968Ok07. Normalization factor not given.
2932 15	$5/2^+$	2	0.11	
3092? 15		(1),(3)		
3460? 50				E(level): reported by 1968Ok07 but not observed by 1970Co17. L=(1), $C^2S'=0.68$ (1968Ok07). Normalization factor not given.

$^\dagger$  Used to extract spectroscopic factors.

$^\ddagger$  From DWBA analysis of  $\sigma(\theta)$ .