^{67}Zn(d,p) 1985Do06,1978Ba13,1963Li06

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

Target $J^\pi=5/2^-$.

1985Do06: E(d)=6 MeV. Measured $\sigma(\theta)$ for θ=25°−160° using cooled Si detector (FWHM=15 keV); DWBA analysis.

1978Ba13: E(d)=12.3 MeV, polarized incident beam. Measured $\sigma(\theta)$, vector and tensor analyzing powers using six Si ΔE-E telescopes (FWHM=100 keV); DWBA analysis.

1963Li06: E(d)=15 MeV. Measured $\sigma(\theta)$, θ=9°- 50° using magnetic spectrograph and photographic plates (FWHM=90 keV); DWBA analysis.

Others: 1975ShYO, 1973ToZX, 1968Gr23, 1965Bo36, 1958Sh72.

^{68}Zn Levels

E(level)†	L†	S′‡	E(level)†	L†	S′‡	E(level)†	L†	S′‡
0	3[c]	0.72	3815 *4*	4	0.41	4846 *10*	0	0.028
1077 *4*	1[b]	0.17	3851 *4*	1	0.056	4949 *10*	2	0.090
1884 *4*	1[b]	0.14	3905 *4*	4	0.58	5019 *10*	2	0.086
2339 *4*	1	0.044	3940 *4*	4	3.0	5120 *10*	2	0.061
2418 *4*	(3)	0.16	4027[&] *10*	(4)+(1)	0.88+0.16	5162 *10*		
2754 *4*	4	0.35	4061 *10*	1	0.087	5200 *10*	0	0.038
2823 *4*	1	0.098	4140[#a]	2[#]	0.595[@]	5279 *10*		
2958 *4*	(1)+(3)	0.026+0.31	4212 *10*	1	0.052	5317 *10*	2	0.10
3006 *4*	1	0.022	4281 *10*			5414 *10*		
3184 *4*	2[#]	0.105[@]	4303 *10*			5420[#a]	0[#]	0.149[@]
3282 *4*	(1)[b]	0.040	4355 *10*	2	0.13	5610[#a]	0[#]	0.070[@]
3424 *4*	1	0.58	4396 *10*	1	0.072	5635 *10*	(2)	0.064
3457 *4*	4	1.5	4425 *10*	2	0.035	5860[#]	2[#]	0.183[@]
3588 *4*	1	0.13	4452 *10*	2	0.075	6760[#]	2[#]	0.50[@]
3611 *4*	4	1.7	4608 *10*	2	0.061	7110[#]	0[#]	0.48[@]
3663 *4*	1	0.24	4656 *10*	0	0.031			
3769 *4*			4746 *10*	0	0.077			

† From 1985Do06, unless indicated otherwise.

‡ From 1985Do06, unless indicated otherwise, uncertainty ≈25%.

From 1963Li06.

@ From 1963Li06. Note that values of these authors differ from those of 1985Do06 for several levels by almost a factor of 2.

& Doublet.

a Not observed by 1985Do06; level energy is in a region of labeled contamination in spectra of 1985Do06 and could correspond to an impurity.

b Analyzing power data indicate J of transferred neutron is 1/2 (1978Ba13).

c Analyzing power data indicate J of transferred neutron is 5/2 (1978Ba13).