^{70}Zn(p,t) 1988Ca22

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

1988Ca22: E(p)=35 MeV. Measured $\sigma(\theta)$, θ(lab)=10°−50° (5° steps) using QDDD spectrometer with position-sensitive gas counter and plastic scintillator (FWHM=35 keV); DWBA and coupled-channels Born approximation (CCBA) calculations.
1966Mc15: E(p)=17.5 MeV. Measured $\sigma(\theta)$, θ(lab)=10°−130°, using ΔE-E Si telescope (FWHM=70 keV); DWBA calculations.

^{68}Zn Levels

E(level)[†]	L[‡]	σ_{max}(μb/sr)	Comments
0	0	1274	
1078[#]	2	298	
1657	0	231	
1879	2	74	
2339	2	190	
2418[#]	4	45	L: 4 or 1 from DWBA; $J^{\pi}=4^{+}$ from CCBA fit.
2510?			E(level): Extremely weak, very tentative assignment.
2749[#]	3	57	L: from CCBA fit.
2819	2	23	
2957[#@]	4,4+(2)	127	
3275[#]	4+(2)	87	
3345	(0)	66	
3462[@]	2+5	99	
3577[#@]	4+(2)	103	
3701	2	183	
3890[@]		192	L: 4+(2) or 1.
4017[@]		102	L: 2 or 1.
4110[#]	4	107	
4252[@]	2+4	215	

[†] From 1988Ca22, level uncertainties are not given. 1988Ca22 confirm all levels observed by 1966Mc15.
[‡] From DWBA fits by 1988Ca22 to $\sigma(\theta)$, unless indicated otherwise.
[#] CCBA calculations give a better fit to $\sigma(\theta)$. For L=4, fit is improved for forward angle data points.
[@] Doublet.