^{44}Ca(n,γ) E=10-60 keV res   1971Ch56

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. W. Burrows	NDS 109, 171 (2008)	30-Oct-2007

Measured γ's; NaI. Others: see 1973Bi11.

^{45}Ca Levels

E(level)[†]	J$^{\pi}$[†]	E(level)[†]	J$^{\pi}$[†]	E(level)[†]	J$^{\pi}$[†]	E(level)[†]	J$^{\pi}$[†]
0	7/2$^-$	1900	3/2$^-$	3241	3/2$^-$	3838	(1/2)$^-$
174	5/2$^-$	2249	1/2$^-$	3418	1/2$^-$	S(n)+x	(3/2$^-$)[‡]
1435	3/2$^-$	2842	3/2$^-$	3783	1/2$^-$,3/2$^-$		

[†] From the Adopted Levels, except for the resonance. Energies are nominal.

[‡] Average Iγ showed No correlation with thermal capture or (d,pγ) results. The existence of a transition to the 7/2$^-$, g.s. would rule out 1/2$^+$ for this resonance. 2006MuZX list several L=1 resonances In the region of E(n)=10 to 60 keV. This would imply J$^{\pi}$=3/2$^-$ since J$^{\pi}$(g.s.)=7/2$^-$.

γ(^{45}Ca)

E$_{\gamma}$[†]	I$_{\gamma}$[‡]	E$_i$(level)	J$^{\pi}_i$	Comments
3570	4	S(n)+x	(3/2$^-$)	
3629	1	S(n)+x	(3/2$^-$)	
3993	9	S(n)+x	(3/2$^-$)	
4168	11	S(n)+x	(3/2$^-$)	
4568	9	S(n)+x	(3/2$^-$)	
5159	8	S(n)+x	(3/2$^-$)	
5512	25	S(n)+x	(3/2$^-$)	
5980	8	S(n)+x	(3/2$^-$)	
7240[#&]	4	S(n)+x	(3/2$^-$)	Additional information 1.
7415[@]	1	S(n)+x	(3/2$^-$)	

[†] From 1968Gr11, except As noted.

[‡] Iγ are averaged over resonances and normalized so that the Σ Iγ=Σ Iγ (1968Gr11). Since the choice of γ-rays for use In fitting the spectra was not unique due to the level spacing, 1971Ch56 did not assign any uncertainties, although the statistical uncertainties are small.

[#] From 1969Bo31. See footnote In (n,γ) E=thermal.

[@] Not observed In (n,γ) E=thermal.

[&] Placement of transition in the level scheme is uncertain.