^{48}Ca(n,X),(n,γ) E=0.01-2 MeV   1987Ca11

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. W. Burrows[a]	NDS 109, 1879 (2008)	14-Jul-2008

Measured transmission and total capture (scin). R-matrix analysis. See 1987Ca11 for discussion of astrophysical effects. Other: see 1995Bu23.

^{49}Ca Levels

All data are from the R-matrix analysis of 1987Ca11, except As noted.

E(level)[†]	J^π	$g\Gamma_n\Gamma_\gamma/\Gamma$	Γ_n (keV)	Comments
S(n)+19.3		9.5×10^{-3} eV 14		
S(n)+106.9		0.124 eV 24		
S(n)+161.4	$1/2[^-]$	0.15 eV 6	0.059 5	Γ_γ=0.15 eV 6
S(n)+303.6	$1/2^{-\ddagger}$	0.3 eV 3	2.5 3	Γ_γ=0.3 eV 3
S(n)+401.2	$3/2^-$	1.6 eV 6	3.3 2	Γ_γ=0.8 eV 3
S(n)+415.5	$\geq5/2$	1.5 eV 4	0.38 8	Γ_γ=0.5 eV 1
S(n)+450.4	$1/2^{(+)}$	2.5 eV 10	4.3 4	Γ_γ=2.5 eV 10
S(n)+960[#@]	$5/2^+$		61 2	
S(n)+1133[#]	$1/2$		6 3	
S(n)+1259[#]	$\geq5/2$		1.2 4	
S(n)+1373[#]	$3/2^-$		5 1	
S(n)+1395[#]	$5/2^+$		4 2	
S(n)+1593[#]	$5/2^+$		160 20	
S(n)+1814[#@]	$5/2^+$		240 30	
S(n)+1963[#@]	$5/2^+$		18 2	
S(n)+1963[#]	$\geq7/2$		2.9 6	

[†] From experimentally observed neutron peaks (1987Ca11), except As noted. E(n) In laboratory system; S(N)=5146.45 18 (2003Au03).
[‡] From the evaluation of 2006MuZX.
[#] Converted from E(n)(C.M.) based on R-matrix analysis to E(n)(lab) by the evaluator.
[@] Corresponds to experimental peaks At 960, 1785, and 1922 keV, respectively.