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

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}	Comments
S(n)+19.3		$g\Gamma_n\Gamma_\gamma/\Gamma$=9.5×10^{-3} eV *14*.
S(n)+106.9		$g\Gamma_n\Gamma_\gamma/\Gamma$=0.124 eV *24*.
S(n)+161.4	1/2[$^-$]	Γ_n=0.059 keV *5*
		Γ_γ=0.15 eV *6*
		$g\Gamma_n\Gamma_\gamma/\Gamma$=0.15 eV *6*.
S(n)+303.6	1/2$^{-\ddagger}$	Γ_n=2.5 keV *3*
		Γ_γ=0.3 eV *3*
		$g\Gamma_n\Gamma_\gamma/\Gamma$=0.3 eV *3*.
S(n)+401.2	3/2$^-$	Γ_n=3.3 keV *2*
		Γ_γ=0.8 eV *3*
		$g\Gamma_n\Gamma_\gamma/\Gamma$=1.6 eV *6*.
S(n)+415.5	≥5/2	Γ_n=0.38 keV *8*
		Γ_γ=0.5 eV *1*
		$g\Gamma_n\Gamma_\gamma/\Gamma$=1.5 eV *4*.
S(n)+450.4	1/2$^{(+)}$	Γ_n=4.3 keV *4*
		Γ_γ=2.5 eV *10*
		$g\Gamma_n\Gamma_\gamma/\Gamma$=2.5 eV *10*.
S(n)+960[#@]	5/2$^+$	Γ_n=61 keV *2*
S(n)+1133[#]	1/2	Γ_n=6 keV *3*
S(n)+1259[#]	≥5/2	Γ_n=1.2 keV *4*
S(n)+1373[#]	3/2$^-$	Γ_n=5 keV *1*
S(n)+1395[#]	5/2$^+$	Γ_n=4 keV *2*
S(n)+1593[#]	5/2$^+$	Γ_n=160 keV *20*
S(n)+1814[#@]	5/2$^+$	Γ_n=240 keV *30*
S(n)+1963[#@]	5/2$^+$	Γ_n=18 keV *2*
S(n)+1963[#]	≥7/2	Γ_n=2.9 keV *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.