^{36}Cl(n,p):resonance 1985Gl07

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	John Cameron, Jun Chen and Balraj Singh, Ninel Nica	NDS 113, 365 (2012)	15-Jan-2012

1985Gl07: E<10 MeV neutron beams produced the IBR-30 pulsed reactor of the JINR. Proton detected in a ionization chamber and measured using the time-of-flight method. Measured $\sigma(E_n)$. Deduced neutron resonances at 1.3, 3.5 and 8.3 keV.

^{37}Cl Levels

E(level)†	E_n(lab) (keV)	Comments
10312.1 *1*	1.3 *1*	Γ_n=0.7 eV, assuming Γ_γ=1 eV. $g\Gamma_n\Gamma_p/\Gamma$=0.07 eV *1*, $(2J+1)\Gamma_\gamma\Gamma_p/\Gamma$=1.01 eV *19*.
10314.3 *3*	3.5 *3*	Γ_n=0.14 eV, assuming Γ_γ=1 eV. $g\Gamma_n\Gamma_p/\Gamma$=0.08 eV *3*, $(2J+1)\Gamma_\gamma\Gamma_p/\Gamma$=5.9 eV *9*.
10318.8 *9*	8.2 *9*	Γ_n=4.6 eV, assuming Γ_γ=1 eV. $g\Gamma_n\Gamma_p/\Gamma$=1.7 eV *3*, $(2J+1)\Gamma_\gamma\Gamma_p/\Gamma$=3.7 eV *6*.

† From $E_x=E_{cm}+S(n)$, where E_{cm} is deduced from E_n in 1985Gl07 and S(n)=10310.87 *6* for ^{37}Cl (2011AuZZ).