

$^{74}\text{Se}(n,\gamma),(n,n)$:resonances **2006MuZX**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Alexandru Negret, Balraj Singh		NDS 114, 841 (2013)	30-Jun-2013

2006MuZX: Evaluation of neutron resonances.

2011Og03: E(n)=15-100, 500 keV; measured gamma spectra, deduced capture cross sections.

 ^{75}Se Levels

E(level) [†]	J ^π	L	Comments
8027.38? 7	1/2 ⁺	0	Fictitious level. E _n (lab)=-0.22 keV. gΓ _n =(0.25) eV.
8027.63 7	1/2 ⁺	0	E _n (lab)=0.02713 keV 2. gΓ _n =0.170 eV 8, Γ _γ =0.21 eV 2.
8027.87 7	1/2 ⁺	0	E _n (lab)=0.2715 keV 10. gΓ _n =4.5 eV 2, Γ _γ =0.30 eV 5, gΓ _n Γ _γ /Γ=0.28 eV 5.
8028.61 7	1/2 ⁺	0	E _n (lab)=1.0210 keV 1. gΓ _n =2.4 eV 4, Γ _γ =0.30 eV 5, gΓ _n Γ _γ /Γ=0.27 eV 5.
8028.96 7	1/2 ⁺	0	E _n (lab)=1.3750 keV 7. gΓ _n =1.22 eV 9, Γ _γ =0.32 eV 5, gΓ _n Γ _γ /Γ=0.25 eV 5.
8029.21 7	1/2 ⁺	0	E _n (lab)=1.630 keV 7. gΓ _n =0.14 eV 4.
8029.31 7	1/2 ⁺	0	E _n (lab)=1.732 keV 4. gΓ _n =9.9 eV 6, Γ _γ =0.27 eV 6, gΓ _n Γ _γ /Γ=0.26 eV 6.
8029.87 8	1/2 ⁺	0	E _n (lab)=2.303 keV 24. gΓ _n =1.6 eV 4, Γ _γ =0.28 eV 5, gΓ _n Γ _γ /Γ=0.23 eV 5.
8034.72 8	1/2 ⁺	0	E _n (lab)=7.22 keV 3. gΓ _n =21 eV 4.

[†] E(level energy)=S(n)+ E_n(lab)[nuclear mass of ^{74}Se] / [mass of neutron+nuclear mass of ^{74}Se], where S(n)=8027.60 7 (2012Wa38).