

⁷²Ge(n,γ),(n,n):resonances **2006MuZX**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 158, 1 (2019)	16-May-2019

$J^\pi(^{72}\text{Ge g.s.})=0^+$.

2006MuZX: evaluated data for neutron resonances.

⁷³Ge Levels

S(n)(⁷³Ge)=6782.94 5 (**2017Wa10**).

E(level) [†]	J ^π [†]	Comments
S(n)-0.862?	1/2 ⁻	Fictitious level. $\Gamma_\gamma=(0.15)$ eV, $g\Gamma_n^0=1.008$ eV.
S(n)+0.2520 4	(1/2 ⁻ ,3/2 ⁻)	$g\Gamma_n=0.00034$ eV 10.
S(n)+0.7378 20	(1/2 ⁻ ,3/2 ⁻)	$g\Gamma_n=0.0025$ eV 8.
S(n)+2.191 7	(1/2 ⁻ ,3/2 ⁻)	$g\Gamma_n=0.046$ eV 9.
S(n)+2.621 3	1/2 ⁺	$g\Gamma_n=1.18$ eV 39, $g\Gamma_n^0=0.0239$ eV 80, $\Gamma_\gamma=0.135$ eV 30, $g\Gamma_n\Gamma_\gamma/\Gamma=0.102$ eV 30.
S(n)+2.7566 40	1/2 ⁺	$g\Gamma_n=0.40$ eV 18, $g\Gamma_n^0=0.0076$ eV 34, $\Gamma_\gamma=0.23$ eV 4, $g\Gamma_n\Gamma_\gamma/\Gamma=0.15$ eV 4.
S(n)+3.660 6	1/2 ⁺	$g\Gamma_n=1.26$ eV 43, $g\Gamma_n^0=0.0179$ eV 70, $\Gamma_\gamma=0.12$ eV 3, $g\Gamma_n\Gamma_\gamma/\Gamma=0.11$ eV 3.
S(n)+4.578 80	1/2 ⁺	$g\Gamma_n=17$ eV 2, $g\Gamma_n^0=0.0239$ eV 80.
S(n)+4.967 19	1/2 ⁺	$g\Gamma_n=27$ eV 3, $g\Gamma_n^0=0.220$ eV 30.
S(n)+9.022 50	1/2 ⁺	$g\Gamma_n=41$ eV 6, $g\Gamma_n^0=0.380$ eV 40.
S(n)+9.707 27	1/2 ⁺	$g\Gamma_n=4$ eV 1, $g\Gamma_n^0=0.430$ eV 60.
S(n)+11.228 30	1/2 ⁺	$g\Gamma_n=22$ eV 4, $g\Gamma_n^0=0.041$ eV 10.
S(n)+12.100 35	1/2 ⁺	$g\Gamma_n=23$ eV 7, $g\Gamma_n^0=0.210$ eV 40.
S(n)+19.180 65	1/2 ⁺	$g\Gamma_n=125$ eV 30, $g\Gamma_n^0=0.91$ eV 22.
S(n)+29.54 15	1/2 ⁺	$g\Gamma_n=35$ eV 4, $g\Gamma_n^0=0.204$ eV 24.
S(n)+33.92 20	1/2 ⁺	$g\Gamma_n=150$ eV, $g\Gamma_n^0=0.814$ eV.
S(n)+39.63 25	1/2 ⁺	$g\Gamma_n=250$ eV, $g\Gamma_n^0=1.260$ eV.

[†] Energies, J^π and widths of resonances are from **2006MuZX** evaluation.