^{62}Ni(n,γ):resonances 2018MuZY

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All resonance parameters taken from 2018MuZY evaluation, unless otherwise stated.
2018MuZY: evaluation of neutron resonance energies, J^π values, width parameters, and resonance strengths for nuclei of Z=1-60.

^{63}Ni Levels

All resonance parameters including resonance neutron energies, J^π, L, $g\Gamma_n$, Γ_γ and resonance strengths are from the compilation and evaluation in 2018MuZY, unless otherwise indicated.
$g\Gamma_n=(2J+1)\Gamma_n/2$.

E(level)[†]	J^π	$g\Gamma_n\Gamma_\gamma/\Gamma$	L	E_n(lab) (keV)	Comments
6839.87 *6*		0.0017 *2*	>1	2.1286 *22*	$g\Gamma_n$=0.0017 eV.
6842.24 *8*	1/2		0	4.54 *5*	$g\Gamma_n=1.88\times10^3$ eV *20*, Γ_γ=2.60 eV *14*.
6846.07 *6*	(1/2)	0.035 *3*	>1	8.4384 *22*	$g\Gamma_n$=0.038 eV, Γ_γ 0.46 eV.
6847.16 *6*	[1/2]	0.40 *4*	>1	9.5403 *14*	$g\Gamma_n$=0.71 eV, Γ_γ 0.46 eV.
6849.80 *6*	(1/2)	0.047 *8*	>1	12.2254 *34*	$g\Gamma_n$=0.052 eV, Γ_γ 0.46 eV.
6855.28 *6*	(1/2)	0.158 *7*	>1	17.792 *3*	$g\Gamma_n$=0.245 eV, Γ_γ 0.46 eV.
6858.04 *6*	(1/2)	0.113 *6*	>1	20.602 *3*	$g\Gamma_n$=0.15 eV, Γ_γ 0.46 eV.
6862.00 *6*	(1/2)	0.231 *10*	>1	24.622 *6*	$g\Gamma_n$=0.46 eV, Γ_γ 0.46 eV.
6865.74 *6*	[3/2]	0.343 *30*	>1	28.428 *6*	$g\Gamma_n$=0.53 eV, Γ_γ 0.46 eV.
6866.8 *6*	(3/2)	0.60 *3*	>1	29.5 *6*	$g\Gamma_n$=1.7 eV, Γ_γ 0.46 eV.
6867.25 *6*	(1/2)	0.042 *6*	>1	29.960 *6*	$g\Gamma_n$=0.046 eV, Γ_γ 0.46 eV.
6871.69 *6*	(3/2)	0.34 *4*	>1	34.474 *13*	$g\Gamma_n$=0.54 eV, Γ_γ 0.46 eV.
6875.44 *6*	[3/2]	0.94 *5*	1	38.280 *8*	$g\Gamma_n$=3.4 eV, Γ_γ 0.65 eV.
6877.67 *6*		0.16 *2*	>1	40.548 *3*	$g\Gamma_n$=0.25 eV, Γ_γ 0.46 eV.
6878.35 *6*		0.18 *4*	>1	41.242 *8*	$g\Gamma_n$=1 eV.
6880.10 *6*	1/2		0	43.023 *20*	$g\Gamma_n$=340 eV *10*, Γ_γ=0.50 eV *5*.
6882.18 *6*	[3/2]	0.45 *3*	>1	45.137 *9*	$g\Gamma_n$=0.88 eV, Γ_γ 0.46 eV.
6890.32 *6*	(1/2)	0.20 *4*	>1	53.402 *12*	$g\Gamma_n$=0.4 eV, Γ_γ 0.46 eV.
6893.88 *7*		0.33 *5*	>1	57.024 *30*	$g\Gamma_n$=56 eV *4*.
6894.48 *7*	(1/2)	0.212 *29*	>1	57.634 *30*	$g\Gamma_n$=0.4 eV, Γ_γ 0.46 eV.
6900.2 *4*	(1/2)	0.27 *7*	>1	63.4 *4*	$g\Gamma_n$=0.65 eV, Γ_γ 0.46 eV.
6904.59 *7*	(1/2)	0.23 *9*	>1	67.912 *30*	$g\Gamma_n$=0.44 eV, Γ_γ 0.46 eV.
6907.53 *7*		0.183 *34*	>1	70.893 *30*	E_n(lab) (keV): 57.024 in 2018MuZY is a misprint and it should be 70.893 adopted from 2014Le04. $g\Gamma_n$=0.3 eV, Γ_γ 0.46 eV.
6911.00 *6*		0.54 *5*	>1	74.420 *14*	$g\Gamma_n$=4.4 eV.
6913.99 *7*	1/2		0	77.463 *30*	$g\Gamma_n$=70 eV *30*.
6915.03 *6*		0.35 *4*	>1	78.519 *15*	$g\Gamma_n$=0.52 eV.
6917.93 *6*		0.24 *4*	>1	81.469 *16*	$g\Gamma_n$=0.44 eV, Γ_γ 0.46 eV.
6930.21 *6*		0.43 *9*	>1	93.944 *18*	$g\Gamma_n$=13 eV.
6930.95 *6*	1/2		0	94.70 *2*	$g\Gamma_n=2.50\times10^3$ eV *10*, Γ_γ=0.56 eV *13*.
6940.27 *6*		1.20 *16*	>1	104.17 *2*	$g\Gamma_n$=36 eV.
6942.61 *7*	1/2		0	106.55 *3*	$g\Gamma_n=4.60\times10^3$ eV *20*, Γ_γ=1.40 eV *31*.
6949.16 *6*		0.66 *13*	>1	113.20 *2*	$g\Gamma_n$=8.6 eV.
6955.91 *8*		1.13 *16*	>1	120.05 *5*	$g\Gamma_n$=1.3 eV.
6967.58 *7*		0.52 *11*	>1	131.92 *3*	
6974.55 *8*		1.51 *25*	>1	139.01 *5*	$g\Gamma_n$=127 eV.
6979.65 *8*		1.5 *4*		144.19 *5*	$g\Gamma_n$=27 eV.
6983.11 *8*		1.70 *18*		147.71 *5*	
6985.24 *9*				149.87 *7*	$g\Gamma_n$=140 eV *20*, Γ_γ=0.58 eV *12*.
6996.93 *8*		1.67 *28*	>1	161.75 *5*	$g\Gamma_n$=58 eV.

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^{62}Ni(n,γ):resonances 2018MuZY (continued)

^{63}Ni Levels (continued)

E(level)[†]	J^π	$g\Gamma_n\Gamma_\gamma/\Gamma$	L	E_n(lab) (keV)	Comments
7015.77 *8*		1.34 *27*	>1	180.90 *5*	$g\Gamma_n$=58 eV.
7021.95 *8*			>1	187.18 *5*	$g\Gamma_n$=90 eV *20*, Γ_γ=1.61 eV *30*.
7049.03 *21*	1/2		1	214.7 *2*	$g\Gamma_n$=190 eV *20*.
7063.59 *7*	1/2		0	229.50 *4*	$g\Gamma_n=6.25\times10^3$ eV *8*.
7076.09 *10*	1/2		0	242.20 *8*	$g\Gamma_n=7.8\times10^2$ eV *4*.
7093.1			>1	259.5	$g\Gamma_n$=113 eV.
7105.9			>1	272.5	$g\Gamma_n$=333 eV.
7113.8	1/2		0	280.5	$g\Gamma_n=4.80\times10^3$ eV *20*.
7119	1/2		0	286	$g\Gamma_n=1.5\times10^3$ eV *5*.
7130			>1	297	$g\Gamma_n$=200 eV.
7132.5			>1	299.5	$g\Gamma_n$=600 eV.
7137	1/2		0	304	$g\Gamma_n$=800 eV.
7148.2			>1	315.5	$g\Gamma_n$=238 eV.
7152			>1	319	$g\Gamma_n$=375 eV.
7156			>1	323	$g\Gamma_n$=580 eV.
7160	1/2		0	327	$g\Gamma_n$=5500 eV.
7176.5	1/2		0	344.2	$g\Gamma_n$=7600 eV.
7184			>1	352	$g\Gamma_n$=279 eV.
7188.3	1/2		0	356.2	$g\Gamma_n$=2000 eV.
7196			>1	364	$g\Gamma_n$=194 eV.
7206.3	1/2		0	374.5	$g\Gamma_n$=250 eV.
7214.1	1/2		0	382.5	$g\Gamma_n$=1250 eV.
7220.0	1/2		0	388.5	$g\Gamma_n$=4500 eV.
7232.8	1/2		0	401.5	$g\Gamma_n$=1500 eV.
7234.6			>1	403.3	$g\Gamma_n$=392 eV.
7251.3			>1	420.3	$g\Gamma_n$=813 eV.
7254	1/2		0	423	$g\Gamma_n$=1500 eV.
7264	1/2		0	433	$g\Gamma_n$=6500 eV.
7275	1/2		0	444	$g\Gamma_n$=350 eV.
7280.4			>1	449.8	$g\Gamma_n$=250 eV.
7281			>1	450	$g\Gamma_n$=236 eV.
7288	1/2		0	458	$g\Gamma_n$=500 eV.
7292.2			>1	461.8	$g\Gamma_n$=550 eV.
7305	1/2		0	475	$g\Gamma_n$=1500 eV.
7310			>1	480	$g\Gamma_n$=324 eV.
7318.5	1/2		0	488.6	$g\Gamma_n$=4000 eV.
7323.4	1/2		1	493.5	$g\Gamma_n$=934 eV.
7328	1/2		0	498	$g\Gamma_n$=1500 eV.
7345.0			>1	515.5	$g\Gamma_n$=145 eV.
7351			>1	522	$g\Gamma_n$=390 eV.
7358	3/2		1	529	$g\Gamma_n$=1690 eV.
7364.7	1/2		1	535.5	$g\Gamma_n$=1390 eV.
7368	1/2		0	539	$g\Gamma_n$=2000 eV.
7383			>1	554	$g\Gamma_n$=675 eV.
7397.2			>1	568.5	$g\Gamma_n$=843 eV.
7400.4	1/2		0	571.8	$g\Gamma_n$=4000 eV.
7409	1/2		0	581	$g\Gamma_n$=500 eV.
7411.9	1/2		0	583.5	$g\Gamma_n$=10000 eV.
7418.8	1/2		0	590.5	$g\Gamma_n$=2000 eV.
7427.7	1/2		1	599.5	$g\Gamma_n$=905 eV.

[†] From $E_{c.m.}$+S(n) where S(n)=6837.77 *6* (2021Wa16) and $E_{c.m.}=E_n(lab)\times m(^{62}Ni)/[m_n+m(^{62}Ni)]$ with mass values from 2021Wa16.