^{60}Ni(n,γ),(n,n):resonances 2018MuZY

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	20-Jan-2020

Neutron resonance energies and parameters are from evaluation of 2018MuZY.
2010Gu19: E(n)=0.100-600 keV; measured E(n), I(n), σ, R-matrix analysis.

^{61}Ni Levels

E(n)(lab) values are in keV.

E(level)[†]	J$^{\pi}$[‡]	L	g$\Gamma_n\Gamma_\gamma/\Gamma$ (eV)[#]	Comments
7817.74? *5*	1/2$^+$	0		E(level): fictitious level from negative value of resonance energy. E(n)(Lab)=−2.438 keV, Γ_γ=[1.16] eV.
7821.41 *5*	(1/2$^-$,3/2$^-$)	(1)	0.00025 *3*	E(n)(Lab)=1.3263 keV *10*, gΓ_n=0.00025 eV *3*.
7822.32 *5*	3/2$^-$	1		E(n)(Lab)=2.2487 keV *10*, gΓ_n=0.0593 eV *6*, Γ_γ=0.553 eV *50*.
7825.55 *5*	3/2$^-$	1	0.038 *3*	E(n)(Lab)=5.5341 keV *10*, gΓ_n=0.041 eV *3*, Γ_γ=[0.5] eV.
7832.11 *5*	1/2$^-$	1	0.16 *1*	E(n)(Lab)=12.206 keV *1*, gΓ_n=0.24 eV *3*, Γ_γ=[0.5] eV.
7832.33 *5*	1/2$^+$	0	2.29 *17*	E(n)(Lab)=12.423 keV *1*, gΓ_n=2.349 keV *60*, Γ_γ=2.29 eV *17*.
7833.49 *5*	1/2$^-$	1	0.280 *2*	E(n)(Lab)=13.606 keV *1*, gΓ_n=1.1 eV *3*.
7841.04 *5*	1/2$^-$	1	0.019 *2*	E(n)(Lab)=21.286 keV *2*, gΓ_n=0.020 eV *2*, Γ_γ=[0.5] eV.
7843.52 *5*	(1/2)$^-$	1	0.23 *2*	E(n)(Lab)=23.802 keV *1*, gΓ_n=4.7 eV *2*, Γ_γ=0.24 eV *2*.
7843.63 *5*	(3/2$^+$)	(2)	0.50 *1*	E(n)(Lab)=23.912 *1*, gΓ_n=0.117 eV *40*, Γ_γ=0.44 eV *2*.
7848.10 *5*	1/2$^-$	1	0.036 *30*	E(n)(Lab)=28.465 *2*, gΓ_n=0.039 eV *3*, Γ_γ=[0.5] eV.
7848.15 *5*	1/2$^-$	1	0.097 *6*	E(n)(Lab)=28.515 *2*, gΓ_n=0.12 eV *1*, Γ_γ=[0.5] eV.
7848.31 *5*	1/2$^+$	0	0.41 *3*	E(n)(Lab)=28.675 *1*, gΓ_n=685 eV *15*, Γ_γ=0.41 eV *3*.
7849.12 *5*	1/2$^-$	1	0.041 *3*	E(n)(Lab)=29.498 *2*, gΓ_n=0.045 eV *3*, Γ_γ=[0.5] eV.
7849.89 *5*	(3/2)$^-$	1	0.38 *1*	E(n)(Lab)=30.279 *1*, gΓ_n=0.8 eV *2*, Γ_γ=0.36 eV *2*.
7852.60 *5*	(1/2)$^-$	1	0.49 *2*	E(n)(Lab)=33.039 *2*, gΓ_n=8.0 eV *3*, Γ_γ=0.52 eV *2*.
7852.97 *5*	(1/2)$^-$	1	0.29 *2*	E(n)(Lab)=33.414 *2*, gΓ_n=9.8 eV *3*, Γ_γ=0.30 eV *2*.
7859.02 *5*	(3/2)$^-$	1	0.52 *2*	E(n)(Lab)=39.560 *1*, gΓ_n=2.3 eV *1*, Γ_γ=0.34 eV *2*.
7862.14 *5*	(1/2)$^-$	1	0.31 *1*	E(n)(Lab)=42.735 *1*, gΓ_n=1.4 eV *2*, Γ_γ=0.40 eV *2*.
7862.41 *5*	1/2$^-$	1	0.39 *2*	E(n)(Lab)=43.007 *2*, gΓ_n=2 eV.
7862.53 *5*	1/2$^+$	0	0.18 *2*	E(n)(Lab)=43.133 *1*, gΓ_n=101.4 eV *30*, Γ_γ=0.18 eV *2*.
7866.89 *5*	1/2$^-$	1	0.08 *1*	E(n)(Lab)=47.567 *5*, gΓ_n=0.1 eV.
7866.95 *5*	(3/2)$^-$	1	0.92 *2*	E(n)(Lab)=47.630 *3*, gΓ_n=1.7 eV *2*, Γ_γ=1.00 eV *3*.
7866.98 *5*	1/2$^-$	1	0.92 *2*	E(n)(Lab)=47.658 *5*, gΓ_n=0.6 eV *1*, Γ_γ=0.6 eV.
7869.12 *5*	1/2$^-$	1	0.32 *2*	E(n)(Lab)=49.835 *1*, gΓ_n=0.64 eV, Γ_γ=0.64 eV *8*.
7870.23 *5*	1/2$^-$	1	0.14 *1*	E(n)(Lab)=50.963 *2*, gΓ_n=0.20 eV *2*, Γ_γ=[0.5] eV.
7870.88 *5*	(3/2$^+$)	(2)	0.48 *1*	E(n)(Lab)=51.628 *1*, gΓ_n=0.85 eV *5*, Γ_γ=0.55 eV *2*.
7871.93 *5*	1/2$^-$	1	0.10 *1*	E(n)(Lab)=52.696 *3*, gΓ_n=0.13 eV *2*, Γ_γ=[0.5] eV.
7875.51 *5*	(3/2$^+$,5/2$^+$)	(2)	0.29 *1*	J$^{\pi}$: 2018MuZY list (1/2) which seems inconsistent with L=(2). E(n)(Lab)=56.331 *1*, gΓ_n=0.60 eV *5*, Γ_γ=0.56 eV *3*.
7876.09 *5*	1/2$^-$	1	0.45 *1*	E(n)(Lab)=56.919 *1*, gΓ_n<0.62 eV, Γ_γ=1.64 eV *10*.
7883.96 *5*	1/2$^-$	1	0.05 *2*	E(n)(Lab)=64.92 *1*.
7884.12 *5*	1/2$^-$	1	0.18 *1*	E(n)(Lab)=65.091 *6*, gΓ_n=0.29 eV *3*, Γ_γ=[0.5] eV.
7884.27 *5*	1/2$^+$	0	1.10 *6*	E(n)(Lab)=65.238 *1*, gΓ_n=434 eV *8*, Γ_γ=1.10 eV *6*.
7884.65 *5*	(3/2)$^-$	1	0.99 *3*	E(n)(Lab)=65.623 *2*, gΓ_n<2.4 eV, Γ_γ=0.84 eV *4*.
7890.35 *5*	(3/2$^+$)	(2)	0.39 *1*	E(n)(Lab)=71.424 *2*, gΓ_n<0.75 eV.
7892.16 *5*	(3/2)$^-$	1	0.57 *2*	E(n)(Lab)=73.262 *1*, gΓ_n=2.0 eV *1*, Γ_γ=0.4 eV *2*.
7897.10 *5*	1/2$^-$	1	0.21 *3*	E(n)(Lab)=78.286 *2*, gΓ_n<0.8 eV.
7898.90 *5*	(3/2)$^-$	1	0.44 *1*	E(n)(Lab)=80.117 *2*, gΓ_n<0.9 eV, Γ_γ=0.43 eV *3*.
7900.79 *5*	(1/2)$^-$	1	0.23 *1*	E(n)(Lab)=82.042 *3*, gΓ_n=0.45 eV, Γ_γ=0.47 eV *4*.
7903.76 *5*	(3/2)$^-$	1	0.42 *1*	E(n)(Lab)=85.055 *1*, gΓ_n<1 eV.
7904.92 *5*	(3/2)$^-$	1	1.22 *30*	E(n)(Lab)=86.242 *2*, gΓ_n=3.0 eV *2*, Γ_γ=1.00 eV *4*.
7905.57 *5*	1/2$^+$	0	0.31 *4*	E(n)(Lab)=86.903 *1*, gΓ_n=387 eV *11*, Γ_γ=0.31 eV *4*.

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^{60}Ni(n,γ),(n,n):resonances 2018MuZY (continued)

^{61}Ni Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	L	g$\Gamma_n\Gamma_\gamma/\Gamma$ (eV)[#]	Comments
7906.61 *5*	(3/2)$^-$	1	0.73 *50*	E(n)(Lab)=87.959 *2*, gΓ_n=11.6 eV *3*, Γ_γ=0.39 eV *3*.
7908.44 *5*	1/2$^-$	1	0.22 *1*	E(n)(Lab)=89.817 *5*, gΓ_n=0.5 eV, Γ_γ=0.40 eV *4*.
7910.31 *5*	(1/2)$^-$	1	0.35 *2*	E(n)(Lab)=91.722 *5*, gΓ_n=6.7 eV *3*, Γ_γ=0.37 eV *2*.
7912.40 *5*	(3/2)$^-$	1	0.57 *2*	E(n)(Lab)=93.845 *5*, gΓ_n=3.2 eV *5*, Γ_γ=0.35 eV *3*.
7914.10 *5*	1/2$^-$	1	0.16 *1*	E(n)(Lab)=95.573 *5*, gΓ_n=0.23 eV *2*, Γ_γ=[0.5] eV.
7915.63 *5*	(3/2)$^-$	1	0.53 *3*	E(n)(Lab)=97.130 *5*, gΓ_n=3.2 eV *2*, Γ_γ=0.32 eV *2*.
7916.57 *5*	1/2$^+$	0	0.34 *7*	E(n)(Lab)=98.083 *1*, gΓ_n=983 eV *19*, Γ_γ=0.34 eV *7*.
7917.95 *5*	(3/2)$^-$	1	0.87 *40*	E(n)(Lab)=99.482 *5*, gΓ_n=8.0 eV *6*, Γ_γ=0.49 eV *3*.
7920.58 *5*	1/2$^-$	1	0.19 *1*	E(n)(Lab)=102.16 *1*, gΓ_n=0.31 eV *3*.
7926.25 *5*	1/2$^+$	0	0.72 *6*	E(n)(Lab)=107.93 *1*, gΓ_n=634 eV *15*, Γ_γ=0.72 eV *6*.
7926.85 *5*	3/2$^-$	1	0.8 *3*	E(n)(Lab)=108.540 *5*, gΓ_n=3 eV *2*, Γ_γ=0.55 eV.
7929.84 *5*	(3/2$^+$)	(2)	1.42 *3*	E(n)(Lab)=111.58 *1*, gΓ_n=5 eV *1*, Γ_γ=0.99 eV *11*.
7930.33 *5*	(1/2)$^-$	1	0.38 *3*	E(n)(Lab)=112.08 *1*, gΓ_n=2.5 eV *5*, Γ_γ=0.45 eV *4*.
7930.60 *5*	(1/2)$^-$	1	0.47 *4*	E(n)(Lab)=112.35 *1*, gΓ_n=3.5 eV *5*, Γ_γ=0.54 eV *5*.
7931.64 *5*	(3/2)$^-$	1	0.75 *5*	E(n)(Lab)=113.410 *5*, gΓ_n=3.0 eV *5*, Γ_γ=0.50 eV *4*.
7932.19 *5*	1/2$^-$	1	0.028 *4*	E(n)(Lab)=113.97 *2*, gΓ_n=0.030 eV *4*, Γ_γ=[0.5] eV.
7938.62 *5*	1/2$^-$	1	0.12 *3*	E(n)(Lab)=120.50 *1*, gΓ_n=0.16 eV *5*, Γ_γ=[0.5] eV.
7938.75 *5*	(3/2$^+$)	(2)	0.76 *10*	E(n)(Lab)=120.64 *1*, gΓ_n=7.5 eV *3*, Γ_γ=0.42 eV *6*.
7939.07 *5*	(3/2)$^-$	1	1.05 *40*	E(n)(Lab)=120.96 *1*, gΓ_n=2.6 eV *2*, Γ_γ=0.88 eV *6*.
7941.80 *5*	(3/2)$^-$	1	0.68 *5*	E(n)(Lab)=123.740 *1*, gΓ_n=32.5 eV *10*, Γ_γ=0.35 eV *3*.
7942.19 *5*			0.061 *15*	E(n)(Lab)=124.13 *1*, gΓ_n=0.70 eV *2*, Γ_γ=[0.5] eV.
7945.44 *5*			0.022 *5*	E(n)(Lab)=127.44 *1*, gΓ_n=0.023 eV *6*, Γ_γ=[0.5] eV.
7945.77 *5*	(1/2)$^-$	1	0.48 *4*	E(n)(Lab)=127.78 *1*, gΓ_n=68.4 eV *10*, Γ_γ=0.48 eV *4*.
7947.85 *5*	(3/2)$^-$	1	0.78 *2*	E(n)(Lab)=129.89 *1*, gΓ_n<2.5 eV, Γ_γ=0.57 eV *10*.
7951.54 *5*	(3/2)$^-$	1	0.49 *4*	E(n)(Lab)=133.64 *1*, gΓ_n=22.9 eV *10*, Γ_γ=0.50 eV *4*.
7953.50 *5*	1/2$^-$	1	0.13 *2*	E(n)(Lab)=135.63 *2*, gΓ_n=0.18 eV *3*, Γ_γ=[0.5] eV.
7953.99 *5*	(3/2)$^-$	1	1.02 *5*	E(n)(Lab)=136.13 *1*, gΓ_n=17.5 eV *10*, Γ_γ=0.54 eV *3*.
7954.26 *5*	(3/2)$^-$	1	1.59 *3*	E(n)(Lab)=136.41 *1*, gΓ_n=7.5 eV *6*, Γ_γ=1.00 eV *2*.
7955.18 *5*	1/2$^-$,3/2$^-$	1	0.076 *14*	E(n)(Lab)=137.34 *2*, gΓ_n=0.09 eV *2*, Γ_γ=[0.5] eV.
7955.41 *5*	(1/2)$^-$	1	0.45 *3*	E(n)(Lab)=137.58 *1*, gΓ_n=5.6 eV *3*, Γ_γ=0.49 eV *3*.
7956.99 *5*	1/2$^+$	0	0.70 *6*	E(n)(Lab)=139.18 *1*, gΓ_n=31.6 eV *17*, Γ_γ=0.72 eV *6*.
7957.47 *5*	(3/2)$^-$	1	1.05 *5*	E(n)(Lab)=139.67 *2*, gΓ_n=24.2 eV *10*, Γ_γ=0.55 eV *3*.
7957.82 *5*	1/2$^{(-)}$	(1)	0.70 *6*	E(n)(Lab)=140.03 *1*, gΓ_n=33.6 eV *10*, Γ_γ=0.72 eV *6*.
7957.94 *5*			1.06 *5*	E(n)(Lab)=140.15 *1*, gΓ_n=5 eV, Γ_γ=1.35 eV *15*.
7962.96 *5*	1/2$^-$	1	0.045 *8*	E(n)(Lab)=145.25 *1*, gΓ_n=0.048 eV *10*, Γ_γ=[0.5] eV.
7963.57 *5*			0.97 *4*	E(n)(Lab)=145.87 *1*, gΓ_n=1 eV, Γ_γ=0.59 eV *5*.
7965.31 *5*	1/2$^-$,3/2$^-$	1	0.045 *9*	E(n)(Lab)=147.64 *2*, gΓ_n=0.054 eV *10*, Γ_γ=[0.5] eV.
7966.57 *5*	(3/2$^+$)	(2)	0.97 *4*	E(n)(Lab)=148.92 *1*, gΓ_n=9.1 eV *6*, Γ_γ=0.54 eV *2*.
7969.14 *5*	(1/2)$^-$	1	0.39 *3*	E(n)(Lab)=151.54 *1*, gΓ_n=15.6 eV *10*, Γ_γ=0.40 eV *3*.
7972.03 *5*	(1/2)$^-$	1	0.50 *4*	E(n)(Lab)=154.48 *1*, gΓ_n=163 eV *4*, Γ_γ=0.50 eV *4*.
7974.03 *5*	1/2$^+$	0	0.38 *3*	E(n)(Lab)=156.51 *1*, gΓ_n=472 eV *10*, Γ_γ=0.38 eV *3*.
7974.31 *5*	1/2$^-$,3/2$^-$	1	0.02 *1*	E(n)(Lab)=156.80 *2*, gΓ_n=0.021 eV *6*, Γ_γ=[0.5] eV.
7977.80 *5*	(1/2)$^-$	1	0.57 *3*	E(n)(Lab)=160.34 *1*, gΓ_n=21.9 eV *10*, Γ_γ=0.59 eV *3*.
7978.80 *5*			0.034 *8*	E(n)(Lab)=161.36 *1*, gΓ_n=0.036 eV *9*, Γ_γ=[0.5] eV.
7979.27 *5*	1/2$^+$	0	0.57 *30*	E(n)(Lab)=161.84 *1*, gΓ_n=1.330 keV *27*, Γ_γ=0.57 eV *3*.
7979.72 *5*	1/2$^-$	1	1.04 *4*	E(n)(Lab)=162.30 *2*, gΓ_n=[10] eV, Γ_γ=1.16 eV *5*.
7983.71 *5*	(3/2$^+$)	(2)	0.98 *5*	E(n)(Lab)=166.35 *1*, gΓ_n<3 eV, Γ_γ=0.73 eV *5*.
7984.67 *5*	(3/2$^+$)	(2)	1.75 *6*	E(n)(Lab)=167.33 *1*, gΓ_n=7.4 eV *8*, Γ_γ=1.15 eV *6*.
7985.09 *5*	1/2$^-$	1	0.36 *2*	E(n)(Lab)=167.76 *2*, gΓ_n=1.26 eV *25*, Γ_γ=[0.5] eV.
7988.02 *5*	(3/2$^+$)	(2)	1.32 *5*	E(n)(Lab)=170.74 *1*, gΓ_n=4 eV *1*, Γ_γ=0.99 eV *19*.
7989.52 *5*	1/2$^-$	1	0.15 *3*	E(n)(Lab)=172.26 *2*, gΓ_n=0.22 eV *6*, Γ_γ=[0.5] eV.
7990.02 *5*	1/2$^-$	1	0.44 *2*	E(n)(Lab)=172.77 *2*, gΓ_n=11.1] eV, Γ_γ=0.74 eV *6*.
7991.91 *5*	(1/2)$^-$	1	0.25 *3*	E(n)(Lab)=174.69 *2*, gΓ_n=12.1 eV *5*, Γ_γ=0.26 eV *3*.
7992.31 *5*	(3/2)$^-$	1	0.83 *7*	E(n)(Lab)=175.10 *2*, gΓ_n=4 eV *1*, Γ_γ=0.52 eV *4*.
7997.21 *5*	1/2$^-$	1	0.52 *3*	E(n)(Lab)=180.08 *2*, gΓ_n=[1.6] eV, Γ_γ=0.77 eV *6*.
8000.08 *5*	3/2$^-$	1	0.92 *6*	E(n)(Lab)=183.00 *2*, gΓ_n=77.3 eV *16*, Γ_γ=0.47 eV *3*.

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^{60}Ni(n,γ),(n,n):resonances 2018MuZY (continued)

^{61}Ni Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	L	g$\Gamma_n\Gamma_\gamma/\Gamma$ (eV)[#]	Comments
8000.75 *5*	(1/2)$^-$	1	0.72 *4*	E(n)(Lab)=183.68 *2*, gΓ_n=12.9 eV *5*, Γ_γ=0.76 eV *4*.
8003.04 *5*	1/2$^+$	0	0.50 *18*	E(n)(Lab)=186.01 *1*, gΓ_n=5.38 keV *14*, Γ_γ=0.50 eV *18*.
8003.83 *5*	1/2$^-$,3/2$^-$	1	0.86 *5*	E(n)(Lab)=186.81 *1*, gΓ_n<2 eV.
8008.54 *11*	1/2$^-$,3/2$^-$	1	0.032 *9*	E(n)(Lab)=191.6 *1*, gΓ_n=0.034 eV *10*, Γ_γ=[0.5] eV.
8009.70 *5*	3/2$^-$	1	0.66 *4*	E(n)(Lab)=192.78 *2*, gΓ_n=63.3 eV *16*, Γ_γ=0.33 eV *2*.
8011.23 *5*	(3/2)$^-$	1	0.97 *6*	E(n)(Lab)=194.34 *1*, gΓ_n=18.7 eV *12*, Γ_γ=0.51 eV *3*.
8011.49 *6*			0.49 *4*	E(n)(Lab)=194.60 *3*, gΓ_n=0.96 eV *14*, Γ_γ=[0.5] eV.
8012.88 *5*			0.13 *2*	E(n)(Lab)=196.01 *1*, gΓ_n=0.17 eV *3*, Γ_γ=[0.5] eV.
8013.63 *5*			1.16 *5*	E(n)(Lab)=196.78 *1*, gΓ_n<5 eV.
8015.79 *5*	1/2$^+$	0	0.69 *14*	E(n)(Lab)=198.97 *1*, gΓ_n=3.025 keV *75*, Γ_γ=0.83 eV *14*.
8017.67 *6*	1/2$^+$	0	0.43 *5*	E(n)(Lab)=200.88 *3*, gΓ_n=23.8 eV *12*, Γ_γ=0.44 eV *5*.
8018.37 *6*	5/2$^+$	2	1.47 *12*	E(n)(Lab)=201.60 *3*, gΓ_n=156 eV *2*, Γ_γ=0.50 eV *4*.
8019.47 *6*	(1/2)$^-$	1	0.35 *3*	E(n)(Lab)=202.72 *3*, gΓ_n=3 eV, Γ_γ=0.40 eV *3*.
8022.84 *6*	(1/2)$^-$	1	0.48 *5*	E(n)(Lab)=206.14 *3*, gΓ_n=34.2 eV *10*, Γ_γ=0.49 eV *5*.
8023.41 *6*	(1/2)$^-$	1	0.48 *4*	E(n)(Lab)=206.72 *3*, gΓ_n=141.9 eV *40*, Γ_γ=0.48 eV *4*.
8025.45 *7*	1/2$^-$,3/2$^-$	1	0.034 *9*	E(n)(Lab)=208.80 *5*, gΓ_n=3 eV, Γ_γ=0.39 eV *4*.
8025.75 *7*			0.16 *2*	E(n)(Lab)=209.10 *5*, gΓ_n=0.24 eV *5*, Γ_γ=[0.5] eV.
8026.56 *7*			0.12 *2*	E(n)(Lab)=209.92 *5*, gΓ_n=0.15 eV *5*, Γ_γ=[0.5] eV.
8029.67 *7*			0.12 *2*	E(n)(Lab)=213.09 *5*, gΓ_n=0.15 eV *5*, Γ_γ=[0.5] eV.
8030.90 *6*	(3/2)$^-$	1	0.77 *6*	E(n)(Lab)=214.34 *3*, gΓ_n=126 eV *6*, Γ_γ=0.39 eV *3*.
8031.47 *5*	(3/2)$^-$	1	0.99 *6*	E(n)(Lab)=214.92 *2*, gΓ_n=4 eV *1*, Γ_γ=0.66 eV *10*.
8036.73 *6*	(1/2)$^-$	1	0.35 *4*	E(n)(Lab)=220.27 *3*, gΓ_n=76.3 eV *20*, Γ_γ=0.35 eV *4*.
8037.28 *5*	(3/2)$^-$	1	1.37 *12*	E(n)(Lab)=220.82 *2*, gΓ_n=32 eV *1*, Γ_γ=0.72 eV *6*.
8037.61 *5*	(3/2)		0.62 *6*	E(n)(Lab)=221.16 *2*, gΓ_n=80 eV *4*, Γ_γ=0.31 eV *3*.
8040.47 *7*			0.087 *19*	E(n)(Lab)=224.07 *5*, gΓ_n=0.11 eV *6*, Γ_γ=[0.5] eV.
8042.85 *5*	1/2$^-$	1	0.50 *4*	E(n)(Lab)=226.49 *2*, gΓ_n<2 eV.
8045.75 *5*	(3/2)$^-$	1	2.30 *16*	E(n)(Lab)=229.44 *2*, gΓ_n=17.6 eV *16*, Γ_γ=1.32 eV *8*.
8046.69 *5*	5/2$^+$	2	2.27 *46*	E(n)(Lab)=230.39 *2*, gΓ_n=107.4 eV *20*, Γ_γ=0.77 eV *16*.
8049.99 *6*	(3/2)$^-$	1	0.74 *6*	E(n)(Lab)=233.75 *3*, gΓ_n=15.0 eV *7*, Γ_γ=0.39 eV *3*.
8050.35 *6*	(3/2)$^-$	1	0.79 *7*	E(n)(Lab)=234.11 *3*, gΓ_n=9 eV *2*, Γ_γ=0.43 eV *4*.
8051.51 *6*	1/2$^-$,3/2$^-$	1	0.58 *3*	E(n)(Lab)=235.29 *3*, gΓ_n<2 eV.
8053.09 *5*	(3/2)$^-$	1	1.48 *11*	E(n)(Lab)=236.90 *2*, gΓ_n=12 eV *2*, Γ_γ=0.84 eV *6*.
8054.39 *6*	1/2$^-$	1	1.10 *5*	E(n)(Lab)=238.22 *3*, gΓ_n<2 eV.
8054.64 *6*	(1/2)$^-$	1	0.44 *5*	E(n)(Lab)=238.48 *3*, gΓ_n=17 eV *2*, Γ_γ=0.45 eV *5*.
8060.35 *6*	(3/2)$^-$	1	0.62 *4*	E(n)(Lab)=244.28 *3*, gΓ_n=2.5 eV, Γ_γ=0.41 eV *2*.
8062.88 *7*	1/2,3/2$^-$	1	0.15 *2*	E(n)(Lab)=246.86 *5*, gΓ_n=0.21 eV *4*, Γ_γ=[0.5] eV.
8065.03 *6*	3/2$^-$	1	1.89 *14*	E(n)(Lab)=249.04 *3*, gΓ_n=84 eV *6*, Γ_γ=0.97 eV *7*.
8068.04 *5*	1/2$^+$	0	0.95 *9*	E(n)(Lab)=252.10 *1*, gΓ_n=0.566 keV *30*, Γ_γ=0.95 eV *9*.
8068.56 *7*	(3/2)$^-$	1	0.71 *6*	E(n)(Lab)=252.63 *5*, gΓ_n=5 eV *1*, Γ_γ=0.41 eV *3*.
8069.24 *7*	3/2$^-$	1	0.76 *8*	E(n)(Lab)=253.32 *5*, gΓ_n=264 eV *3*, Γ_γ=0.38 eV *4*.
8070.18 *7*			0.05 *1*	E(n)(Lab)=254.28 *5*, gΓ_n=0.06 eV *2*, Γ_γ=[0.5] eV.
8070.52 *7*	(1/2)$^-$	1	0.27 *4*	E(n)(Lab)=254.62 *5*, gΓ_n=36 eV *4*, Γ_γ=0.27 eV *4*.
8072.04 *5*	1/2$^+$	0	1.13 *20*	E(n)(Lab)=256.17 *1*, gΓ_n=887 eV *17*, Γ_γ=1.13 eV *20*.
8072.14 *7*	(3/2)$^-$	1	1.1 *8*	E(n)(Lab)=256.27 *5*, gΓ_n=11 eV *1*, Γ_γ=0.61 eV *8*.
8073.34 *7*	(1/2)$^-$	1	0.17 *4*	E(n)(Lab)=257.49 *5*, gΓ_n=23 eV *3*, Γ_γ=0.17 eV *4*.
8073.74 *5*	1/2$^+$	0	0.59 *9*	E(n)(Lab)=257.90 *1*, gΓ_n=1.840 keV *45*, Γ_γ=0.59 eV *9*.
8074.54 *7*	(3/2)$^-$	1	0.73 *9*	E(n)(Lab)=258.71 *5*, gΓ_n=13 eV *1*, Γ_γ=0.39 eV *5*.
8075.83 *11*	1/2$^-$,3/2$^-$	1	0.14 *2*	E(n)(Lab)=260.02 *10*, gΓ_n=0.20 eV *4*, Γ_γ=[0.5] eV.
8076.85 *7*	(1/2)$^-$	1	0.55 *5*	E(n)(Lab)=261.06 *5*, gΓ_n=51 eV *2*, Γ_γ=0.56 eV *5*.
8078.37 *7*	(1/2)$^-$	1	0.33 *4*	E(n)(Lab)=262.61 *5*, gΓ_n<6 eV, Γ_γ=0.35 eV *4*.
8079.07 *7*	(3/2)$^-$	1	1.21 *11*	E(n)(Lab)=263.32 *5*, gΓ_n=44 eV *4*, Γ_γ=0.62 eV *6*.
8081.49 *7*	1/2$^-$,3/2$^-$	1	0.083 *14*	E(n)(Lab)=265.78 *5*, gΓ_n=0.10 eV *2*, Γ_γ=[0.5] eV.
8081.96 *7*	1/2$^-$	1	0.64 *6*	E(n)(Lab)=266.26 *5*, gΓ_n=58 eV *2*, Γ_γ=0.65 eV *6*.
8084.42 *7*	1/2$^-$	1	0.44 *4*	E(n)(Lab)=268.76 *5*, gΓ_n=1.5 eV, Γ_γ=0.62 eV *8*.
8084.80 *7*	(3/2)$^-$	1	0.85 *7*	E(n)(Lab)=269.14 *5*, gΓ_n=58.6 eV *60*, Γ_γ=0.43 eV *4*.
8085.06 *7*	(3/2)$^-$	1	0.79 *9*	E(n)(Lab)=269.41 *5*, gΓ_n=28.4 eV *30*, Γ_γ=0.41 eV *5*.

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^{60}Ni(n,γ),(n,n):resonances 2018MuZY (continued)

^{61}Ni Levels (continued)

E(level)[†]	Jπ[‡]	L	gΓnΓγ/Γ (eV)[#]	Comments
8089.34 *7*	1/2−	1	0.15 *5*	E(n)(Lab)=273.76 *5*, gΓn=0.22 eV *10*, Γγ=[0.5] eV.
8089.53 *7*			0.10 *3*	E(n)(Lab)=273.95 *5*, gΓn=0.12 eV *5*, Γγ=[0.5] eV.
8092.59 *7*	1/2−	1	0.64 *2*	E(n)(Lab)=277.07 *5*, gΓn=1.2 eV.
8092.87 *7*	(3/2+)	(2)	1.78 *15*	E(n)(Lab)=277.35 *5*, gΓn=44.4 eV *40*, Γγ=0.99 eV *8*.
8093.95 *7*	3/2−	1	0.72 *12*	E(n)(Lab)=278.45 *5*, gΓn=367 eV *11*, Γγ=0.36 eV *6*.
8094.84 *5*	1/2+	0	0.39 *4*	E(n)(Lab)=279.35 *1*, gΓn=250 eV *25*, Γγ=0.39 eV *4*.
8095.85 *7*	3/2−	1	0.94 *10*	E(n)(Lab)=280.38 *5*, gΓn=145 eV *8*, Γγ=0.47 eV *5*.
8097.36 *7*	(1/2)−	1	0.28 *4*	E(n)(Lab)=281.92 *5*, gΓn=14.6 eV *50*, Γγ=0.29 eV *4*.
8098.36 *7*	(3/2)−	1	1.85 *19*	E(n)(Lab)=282.93 *5*, gΓn=175 eV *12*, Γγ=0.94 eV *10*.
8098.77 *7*	3/2−	1	1.38 *16*	E(n)(Lab)=283.35 *5*, gΓn=108 eV *18*, Γγ=0.70 eV *8*.
8101.08 *7*	1/2−	1	0.30 *3*	E(n)(Lab)=285.70 *5*, gΓn=0.74 eV *16*, Γγ=[0.5] eV.
8104.03 *7*	(1/2)−	1	0.54 *32*	E(n)(Lab)=288.70 *5*, gΓn=1.7 eV, Γγ=0.79 eV *47*.
8106.24 *7*	(1/2)−	1	1.02 *5*	E(n)(Lab)=290.95 *5*, gΓn=37 eV *3*, Γγ=0.50 eV *3*.
8107.48 *5*	1/2+	0	0.47 *4*	E(n)(Lab)=292.21 *1*, gΓn=143.6 eV *40*, Γγ=0.47 eV *4*.
8108.22 *7*	3/2−	1	1.20 *6*	E(n)(Lab)=292.96 *5*, gΓn=148 eV *3*, Γγ=0.61 eV *3*.
8109.15 *9*			0.20 *3*	E(n)(Lab)=293.90 *7*, gΓn=0.33 eV *7*, Γγ=[0.5] eV.
8109.61 *9*	(1/2)−	1	0.62 *7*	E(n)(Lab)=294.37 *7*, gΓn=15 eV *2*, Γγ=0.65 eV *8*.
8109.98 *9*	(1/2)−	1	0.20 *7*	E(n)(Lab)=294.75 *7*, gΓn=9 eV *1*, Γγ=0.21 eV *7*.
8111.21 *9*	1/2−	1	0.64 *4*	E(n)(Lab)=296.00 *7*, gΓn=144 eV *4*, Γγ=0.64 eV *4*.
8112.78 *11*	1/2−	1	0.31 *3*	E(n)(Lab)=297.6 *1*, gΓn=138 eV *4*, Γγ=0.31 eV *3*.
8114.83 *9*	1/2−	1	0.21 *2*	E(n)(Lab)=299.68 *7*, gΓn=2 eV.
8115.72 *9*	3/2+	2	1.33 *7*	E(n)(Lab)=300.59 *7*, gΓn=59.6 eV *30*, Γγ=0.65 eV *4*.
8117.50 *7*	3/2+	2	1.59 *7*	E(n)(Lab)=302.40 *5*, gΓn=17.4 eV *20*, Γγ=0.88 eV *4*.
8121.65 *11*	(3/2)−	1	1.03 *8*	E(n)(Lab)=306.62 *10*, gΓn=429 eV *13*, Γγ=0.52 eV *4*.
8122.64 *7*	3/2−	1	2.24 *10*	E(n)(Lab)=307.62 *5*, gΓn=200 eV *10*, Γγ=1.13 eV *5*.
8123.21 *7*			0.48 *5*	E(n)(Lab)=308.20 *5*, gΓn=0.92 eV *20*, Γγ=[0.5] eV.
8123.96 *11*	(3/2)−	1	0.74 *4*	E(n)(Lab)=308.96 *10*, gΓn=3 eV, Γγ=0.49 eV *2*.
8125.72 *7*			0.16 *3*	E(n)(Lab)=310.75 *5*, gΓn=0.24 eV *6*, Γγ=[0.5] eV.
8126.53 *11*	(1/2)−	1	0.46 *4*	E(n)(Lab)=311.58 *10*, gΓn=12.7 eV *20*, Γγ=0.48 eV *4*.
8127.73 *7*			0.27 *3*	E(n)(Lab)=312.80 *5*, gΓn=0.59 eV *15*, Γγ=[0.5] eV.
8128.67 *11*	(3/2+)	(2)	1.54 *6*	E(n)(Lab)=313.75 *10*, gΓn=10 eV *2*, Γγ=0.91 eV *3*.
8132.06 *5*	1/2+	0	1.15 *42*	E(n)(Lab)=317.20 *1*, gΓn=2.866 keV *75*, Γγ=1.15 eV *42*.
8132.08 *11*	(5/2+)	(2)	2.16 *9*	E(n)(Lab)=317.22 *10*, gΓn<12 eV, Γγ=0.89 eV *3*.
8133.27 *7*			0.29 *3*	E(n)(Lab)=318.43 *5*, gΓn=0.7 eV *2*, Γγ=[0.5] eV.
8136.56 *11*	3/2−	1	0.99 *7*	E(n)(Lab)=321.78 *10*, gΓn=20 eV *5*, Γγ=0.52 eV *4*.
8137.63 *11*	(1/2)−	1	0.52 *7*	E(n)(Lab)=322.86 *10*, gΓn=5.2 eV *5*, Γγ=0.58 eV *8*.
8139.38 *11*	1/2−	1	0.14 *4*	E(n)(Lab)=324.64 *10*, gΓn=0.20 eV *7*, Γγ=[0.5] eV.
8140.03 *5*	1/2+	0	2.86 *60*	E(n)(Lab)=325.30 *1*, gΓn=7.27 keV *19*, Γγ=2.86 eV *60*.
8141.11 *11*	1/2−	1	0.57 *6*	E(n)(Lab)=326.4 *1*, gΓn=3 eV.
8142.30 *11*	3/2+	2	2.71 *10*	E(n)(Lab)=327.61 *10*, gΓn=16 eV *2*, Γγ=1.63 eV *5*.
8143.99 *7*	(1/2)−	1	0.66 *8*	E(n)(Lab)=329.31 *5*, gΓn=40 eV *4*, Γγ=0.67 eV *8*. Uncertainty of 0.5 keV listed for E(n) in 2018MuZY seems too large. Evaluator assigns 0.05 keV.
8144.46 *11*	1/2−	1	0.69 *7*	E(n)(Lab)=329.81 *10*, gΓn=2.2 eV.
8145.91 *11*	1/2−	1	0.57 *4*	E(n)(Lab)=331.28 *10*, gΓn=1.3 eV.
8148.98 *11*	3/2−	1	1.15 *8*	E(n)(Lab)=334.41 *10*, gΓn=230 eV, Γγ=0.58 eV *8*.
8150.45 *7*	[1/2]−	1	0.78 *8*	E(n)(Lab)=335.90 *5*, gΓn=27.4 eV *30*, Γγ=0.80 eV *8*.
8150.91 *11*	3/2+	2	1.09 *16*	E(n)(Lab)=336.37 *10*, gΓn=162 eV *3*, Γγ=1.12 eV *5*.
8153.11 *5*	1/2+	0	1.75 *42*	E(n)(Lab)=338.60 *1*, gΓn=3.560 keV *90*, Γγ=2.5 eV *6*.
8153.73 *11*	1/2−	1	0.41 *2*	E(n)(Lab)=339.23 *10*, gΓn=2.26 eV *70*, Γγ=[0.5] eV.
8155.86 *11*	1/2−	1	0.47 *7*	E(n)(Lab)=341.4 *1*, gΓn=110 eV *10*, Γγ=0.20 eV *3*.
8156.08 *11*	1/2−	1	0.64 *7*	E(n)(Lab)=341.62 *10*, gΓn=105 eV *3*, Γγ=0.65 eV *7*.
8157.30 *11*	1/2−	1	1.01 *12*	E(n)(Lab)=342.87 *10*, gΓn=210 eV *4*, Γγ=1.01 eV *12*.
8158.49 *11*	(3/2+)	(2)	1.41 *8*	E(n)(Lab)=344.08 *10*, gΓn=4 eV, Γγ=1.09 eV *10*.
8159.92 *11*	1/2−	1	0.96 *7*	E(n)(Lab)=345.53 *10*, gΓn=2 eV, Γγ=1.86 eV *25*.
8162.76 *5*	(5/2+)	(2)	4.08 *20*	E(n)(Lab)=348.42 *1*, gΓn=94 eV *3*, Γγ=1.42 eV *7*.
8163.38 *11*	[1/2]−	1	1.10 *19*	E(n)(Lab)=349.05 *10*, gΓn=27 eV *1*, Γγ=1.12 eV *20*.

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^{60}Ni(n,γ),(n,n):resonances 2018MuZY (continued)

^{61}Ni Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	L	g$\Gamma_n\Gamma_\gamma/\Gamma$ (eV)[#]	Comments
8163.98 *11*	3/2$^+$	2	1.56 *23*	E(n)(Lab)=349.66 *10*, gΓ_n=20 eV *5*, Γ_γ=1.61 eV *25*.
8164.49 *7*			0.36 *30*	E(n)(Lab)=350.18 *5*, gΓ_n=1.23 eV *40*, Γ_γ=[0.5] eV.
8166.78 *9*	3/2$^+$	2	1.37 *9*	E(n)(Lab)=352.50 *7*, gΓ_n=9 eV *3*, Γ_γ=0.81 eV *6*.
8168.70 *11*	3/2$^+$	2	1.27 *16*	E(n)(Lab)=354.46 *10*, gΓ_n=493 eV *4*, Γ_γ=0.64 eV *8*.
8169.89 *11*	3/2$^+$	2	1.33 *9*	E(n)(Lab)=355.67 *10*, gΓ_n=30 eV *10*, Γ_γ=0.71 eV *5*.
8171.95 *5*	1/2$^+$	0	1.17 *20*	E(n)(Lab)=357.76 *1*, gΓ_n=1.562 keV *60*, Γ_γ=1.17 eV *20*.
8173.06 *11*	1/2$^-$	1	1.74 *14*	E(n)(Lab)=358.89 *10*, gΓ_n=10 eV, Γ_γ=1.81 eV *15*.
8173.75 *11*	3/2$^-$	1	0.95 *18*	E(n)(Lab)=359.59 *10*, gΓ_n=1.256 keV *7*, Γ_γ=0.47 eV *90*.
8175.35 *11*	1/2$^-$	1	0.61 *7*	E(n)(Lab)=361.22 *10*, gΓ_n=7 eV, Γ_γ=0.67 eV *8*.
8180.09 *11*	1/2$^-$	1	1.66 *15*	E(n)(Lab)=366.04 *10*, gΓ_n=60 eV *5*, Γ_γ=1.69 eV *16*.
8182.79 *7*			0.40 *2*	E(n)(Lab)=368.78 *5*, gΓ_n=1.96 eV *60*, Γ_γ=[0.5] eV.
8183.04 *11*	3/2$^+$	2	3.7 *2*	E(n)(Lab)=369.04 *10*, gΓ_n=15 eV *2*, Γ_γ=2.5 eV *2*.
8183.83 *11*	1/2$^-$	1	0.91 *11*	E(n)(Lab)=369.84 *10*, gΓ_n<7 eV, Γ_γ=1.05 eV *15*.
8184.71 *5*	3/2$^+$	2	1.62 *14*	E(n)(Lab)=370.74 *1*, gΓ_n=56 eV *15*, Γ_γ=0.83 eV *8*.
8185.66 *5*	3/2$^+$	2	2.21 *11*	E(n)(Lab)=371.70 *1*, gΓ_n=6.5 eV, Γ_γ=2.83 eV *18*.
8187.03 *7*	(1/2)		0.20 *4*	E(n)(Lab)=373.10 *5*, gΓ_n=0.33 eV *10*, Γ_γ=[0.5] eV.
8187.65 *11*	1/2$^-$	1	0.17 *11*	E(n)(Lab)=373.73 *10*, gΓ_n=30 eV *5*, Γ_γ=0.18 eV *11*.
8188.71 *11*	1/2$^-$	1	0.36 *3*	E(n)(Lab)=374.8 *1*, gΓ_n=1.25 eV *35*, Γ_γ=[0.5] eV.
8190.77 *5*	1/2$^+$	0	2.03 *87*	E(n)(Lab)=376.90 *1*, gΓ_n=3.815 keV *50*, Γ_γ=2.03 eV *87*.
8190.79 *11*	1/2$^-$	1	1.12 *8*	E(n)(Lab)=376.92 *10*, gΓ_n=7 eV, Γ_γ=1.34 eV *12*.
8191.84 *7*	1/2$^-$	1	0.61 *9*	E(n)(Lab)=377.99 *5*, gΓ_n=4.5 eV, Γ_γ=0.70 eV *12*.
8192.51 *11*	(1/2)		0.30 *5*	E(n)(Lab)=378.67 *10*, gΓ_n=0.74 eV *30*, Γ_γ=[0.5] eV.
8193.57 *11*	(1/2$^-$,3/2$^-$)	(1)		E(n)(Lab)=379.75 *10*, gΓ_n=70 eV *40*.
8193.75 *11*	3/2$^-$	1	1.93 *14*	E(n)(Lab)=379.93 *10*, gΓ_n=281.0 eV *17*.
8195.27 *11*	1/2$^-$	1	2.15 *14*	E(n)(Lab)=381.47 *10*, gΓ_n=30 eV *2*, Γ_γ=2.25 eV *15*.
8195.64 *11*	(1/2)		1.16 *11*	E(n)(Lab)=381.85 *10*, gΓ_n=5.0 eV *21*.
8196.39 *7*			0.59 *10*	E(n)(Lab)=382.61 *5*, gΓ_n=2 eV, Γ_γ=0.83 eV *20*.
8197.30 *7*	1/2$^+$	0	1.19 *12*	E(n)(Lab)=383.54 *5*, gΓ_n=375 eV *9*, Γ_γ=1.19 eV *12*.
8199.83 *11*	(3/2)		0.37 *6*	E(n)(Lab)=386.11 *10*, gΓ_n=0.59 eV *16*, Γ_γ=[1] eV.
8200.22 *7*	(1/2)		0.45 *4*	E(n)(Lab)=386.51 *5*, gΓ_n=0.4 eV *34*, Γ_γ=[0.5] eV.
8201.88 *11*	3/2$^+$	2	1.24 *20*	E(n)(Lab)=388.2 *1*, gΓ_n=260 eV *5*, Γ_γ=0.62 eV *10*.
8202.31 *11*	1/2$^-$	1	1.37 *12*	E(n)(Lab)=388.63 *10*, gΓ_n=160 eV *5*, Γ_γ=1.37 eV *6*.
8206.93 *11*	3/2$^{(-)}$	(1)	0.94 *16*	E(n)(Lab)=393.33 *10*, gΓ_n=365 eV *10*, Γ_γ=0.47 eV *8*.
8208.59 *11*	1/2$^-$	1	0.21 *4*	E(n)(Lab)=395.02 *10*, gΓ_n=0.36 eV *11*, Γ_γ=[0.5] eV.
8210.68 *11*	1/2$^-$	1	0.56 *5*	E(n)(Lab)=397.14 *10*, gΓ_n=0.77 eV *9*, Γ_γ=[0.5] eV.
8211.93 *11*	3/2$^+$	2	0.40 *14*	E(n)(Lab)=398.41 *10*, gΓ_n=460 eV *9*, Γ_γ=0.20 eV *7*.
8212.76 *11*	1/2$^-$	1	0.95 *8*	E(n)(Lab)=399.26 *10*, gΓ_n=37 eV *4*.
8214.57 *11*	1/2$^-$	1	0.69 *6*	E(n)(Lab)=401.1 *1*, gΓ_n=3 eV.
8215.80 *11*	1/2$^-$	1	1.23 *7*	E(n)(Lab)=402.35 *10*, gΓ_n=5.4 eV.
8216.63 *11*	3/2$^-$	1	1.72 *10*	E(n)(Lab)=403.19 *10*, gΓ_n=425 eV *25*, Γ_γ=0.86 eV *5*.
8217.35 *11*	1/2$^-$	1	0.67 *8*	E(n)(Lab)=403.93 *10*, gΓ_n=4 eV.
8217.81 *7*			0.36 *5*	E(n)(Lab)=404.39 *5*, gΓ_n=1.23 eV *60*, Γ_γ=[0.5] eV.
8219.22 *7*			0.16 *4*	E(n)(Lab)=405.83 *5*, gΓ_n=0.24 eV *8*, Γ_γ=[0.5] eV.
8220.80 *11*	1/2$^-$	1	0.27 *5*	Uncertainty of 0.50 in resonance strength in 2018MuZY seems a misprint. E(n)(Lab)=407.43 *10*, gΓ_n=30 eV *6*, Γ_γ=0.27 eV *5*.
8221.67 *11*	(3/2)$^-$	1	1.42 *8*	E(n)(Lab)=408.32 *10*, gΓ_n=20 eV *5*, Γ_γ=0.76 eV *4*.
8223.60 *11*	3/2$^+$	2	1.12 *16*	E(n)(Lab)=410.28 *10*, gΓ_n=190 eV *20*, Γ_γ=0.56 eV *8*.
8227.12 *7*	1/2$^+$	0	0.82 *7*	E(n)(Lab)=413.86 *5*, gΓ_n=344 eV *9*, Γ_γ=0.82 eV *7*.
8228.63 *11*	3/2$^+$	2	1.5 *3*	E(n)(Lab)=415.4 *1*, gΓ_n=400 eV *12*, Γ_γ=0.75 eV *15*.
8228.93 *11*	3/2$^+$	2	2.2 *3*	E(n)(Lab)=415.7 *1*, gΓ_n=34 eV *6*, Γ_γ=1.18 eV *15*.
8231.37 *11*			0.35 *4*	E(n)(Lab)=418.18 *10*, gΓ_n=0.54 eV *10*, Γ_γ=[0.5] eV.
8232.11 *11*			0.41 *6*	E(n)(Lab)=418.93 *10*, gΓ_n=68 eV *6*, Γ_γ=0.41 eV *6*.
8233.27 *11*	1/2$^-$	1	1.52 *9*	E(n)(Lab)=420.11 *10*, gΓ_n=20 eV *5*, Γ_γ=0.78 eV *5*.
8235.60 *7*			0.36 *7*	E(n)(Lab)=422.48 *5*, gΓ_n=83 eV *8*, Γ_γ=0.36 eV *7*.
8235.91 *5*	1/2$^+$	0	0.63 *20*	E(n)(Lab)=422.80 *1*, gΓ_n=1.806 eV *55*, Γ_γ=0.63 eV *2*.
8237.29 *7*			0.20 *4*	E(n)(Lab)=424.20 *5*, gΓ_n=0.34 eV *10*, Γ_γ=[0.5] eV.

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^{60}Ni(n,γ),(n,n):resonances 2018MuZY (continued)

^{61}Ni Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	L	g$\Gamma_n\Gamma_\gamma/\Gamma$ (eV)[#]	Comments
8238.11 *11*	3/2$^+$	2	1.76 *11*	E(n)(Lab)=425.04 *10*, gΓ_n=74 eV *5*, Γ_γ=0.90 eV *6*.
8239.73 *11*	1/2$^-$	1	1.07 *6*	E(n)(Lab)=426.68 *10*, gΓ_n=5 eV, Γ_γ=0.68 eV *6*.
8240.48 *11*	1/2$^-$	1	0.63 *6*	E(n)(Lab)=427.45 *10*, gΓ_n=10 eV, Γ_γ=0.68 eV *6*.
8242.84 *11*	1/2$^-$	1	0.7 *2*	E(n)(Lab)=429.84 *10*, gΓ_n=580 eV *20*, Γ_γ=0.7 eV *2*.
8243.62 *11*	3/2$^+$	2	0.99 *8*	E(n)(Lab)=430.64 *10*, gΓ_n=27 eV *2*, Γ_γ=0.51 eV *8*.
8244.39 *11*	1/2$^-$	1	0.22 *9*	E(n)(Lab)=431.42 *10*, gΓ_n=240 eV *10*, Γ_γ=0.22 eV *9*.
8245.48 *11*	3/2$^+$	2	1.60 *12*	E(n)(Lab)=432.53 *10*, gΓ_n=180 eV *8*, Γ_γ=0.81 eV *6*.
8248.80 *21*	3/2$^+$	2	0.79 *16*	E(n)(Lab)=435.9 *2*, gΓ_n=480 eV *30*, Γ_γ=0.40 eV *8*.
8249.99 *21*	1/2$^-$	1	0.59 *5*	E(n)(Lab)=437.12 *20*, gΓ_n=3 eV.
8250.93 *5*	1/2$^+$	0	0.87 *20*	E(n)(Lab)=438.07 *1*, gΓ_n=1.164 keV *55*, Γ_γ=0.87 eV *20*.
8251.78 *11*	3/2$^+$	2	1.81 *11*	E(n)(Lab)=438.94 *10*, gΓ_n=26 eV *3*, Γ_γ=0.97 eV *6*.
8252.26 *7*			0.98 *21*	E(n)(Lab)=439.42 *5*, gΓ_n=32 eV *3*.
8252.88 *7*			0.76 *15*	E(n)(Lab)=440.05 *5*, gΓ_n=38 eV *3*.
8253.53 *7*			1.22 *19*	E(n)(Lab)=440.71 *5*, gΓ_n=0.3 eV *12*, Γ_γ=[1] eV.
8254.16 *11*	3/2$^+$	2	1.20 *31*	E(n)(Lab)=441.36 *10*, gΓ_n=150 eV *2*, Γ_γ=0.61 eV *16*.
8254.91 *7*			0.68 *13*	E(n)(Lab)=442.12 *5*, gΓ_n=1.02 eV *30*, Γ_γ=[1] eV.
8257.33 *21*	1/2$^+$	0	2.51 *12*	E(n)(Lab)=444.58 *20*, gΓ_n=163 eV *14*, Γ_γ=0.26 eV *12*.
8258.41 *7*			0.30 *4*	E(n)(Lab)=445.68 *5*, gΓ_n=0.70 eV *22*, Γ_γ=[0.5] eV.
8259.99 *21*	1/2$^-$	1	0.45 *4*	E(n)(Lab)=447.28 *20*, gΓ_n=1 eV.
8260.85 *7*	1/2$^+$	0	0.11 *17*	E(n)(Lab)=448.16 *5*, gΓ_n=2.63 keV *10*.
8261.69 *7*			0.98 *10*	E(n)(Lab)=449.01 *5*, gΓ_n=32 eV *4*.
8262.18 *7*			0.68 *13*	E(n)(Lab)=449.51 *5*, gΓ_n=1.04 eV *30*.
8264.18 *7*	3/2$^-$	1	1.36 *47*	E(n)(Lab)=451.54 *5*, gΓ_n=131 eV *8*.

[†] Deduced by the evaluator from S(n)+E(n)(c.m.), where S(n)=7820.10 keV *5* for ^{61}Ni (2017Wa10). E(n)(c.m.)=E(n)(lab)[mass of ^{60}Ni/(mass of ^{60}Ni+mass of neutron)].

[‡] Values in square brackets are assumed assignments.

[#] g=statistical weight factor, (2J+1)/2 in this case, where J=spin of resonant state.