

$^{61}\text{Ni}(n,\gamma),(n,n)$:resonances 2006Ko28

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Alan L. Nichols, Balraj Singh, Jagdish K. Tuli		NDS 113, 973 (2012)	15-Apr-2012

$J^\pi(^{61}\text{Ni g.s.})=3/2^-$.

2006Ko28: E(n)=-3.4 keV to 420.0 keV: about 170 resonances; measured transmission spectra, total neutron σ , deduced E(n), resonance parameters, widths, spins using R-matrix analysis. Measurements performed at GELINA, the neutron time-of-flight facility at IRMM.

See also **2006MuZX** evaluation for data for 63 resonances from -6.1 keV to 68.8 keV. Energies of 27 resonances are different from those in **2006Ko28**.

Earlier work: **2003BrZV** (E(n)<100 keV); **1974PaZM** (E(n)=15-100 keV); **1969Ho12** (E(n)=0.1 to 200 keV); **1966Go38** (E(n)=30-60 keV).

g=statistical factor.

^{62}Ni Levels

E(level) [†]	J^π	L	$g\Gamma_0\Gamma_\gamma/\Gamma$ (eV) [‡]	Comments
10592.4? 3	1 ⁻	0		E(level): fictitious level.
10597.1 3	1 ⁻	0	0.21 3	E(n)(lab)=-3.407 keV 10, $g\Gamma_n=217.4$ eV 5, $\Gamma_\gamma=2.2$ eV.
10598.9 3	1 ⁺	1	0.085 20	E(n)(lab)=1.35450 keV 6, $g\Gamma_n=0.127$ eV 1, $\Gamma_\gamma=0.95$ eV 5.
10599.0 3	2 ⁻	0	0.42 6	E(n)(lab)=3.14400 keV 21, $g\Gamma_n=0.087$ eV 4, $\Gamma_\gamma=1.0$ eV.
10602.0 3	1 ⁺	1	0.17 4	E(n)(lab)=3.30585 keV 16, $g\Gamma_n=6.600$ eV 22, $\Gamma_\gamma=2.2$ eV.
10602.2 3	1 ⁺	1	0.47 10	E(n)(lab)=6.3723 keV 6, $g\Gamma_n=0.179$ eV 13, $\Gamma_\gamma=1.0$ eV.
10602.8 3	1 ⁻	0		E(n)(lab)=6.4804 keV 4, $g\Gamma_n=0.548$ eV 17, $\Gamma_\gamma=1.0$ eV.
10603.2 3	2 ⁻	0		E(n)(lab)=7.1300 keV 4, $g\Gamma_n=23.05$ eV 10, $\Gamma_\gamma=2.5$ eV.
10604.1 3	2 ⁻	0		E(n)(lab)=7.5317 keV 5, $g\Gamma_n=117.25$ eV 23, $\Gamma_\gamma=2.2$ eV.
10605.7 3	1 ⁺	1	0.16 2	E(n)(lab)=8.7223 keV 5, $g\Gamma_n=5.06$ eV 6, $\Gamma_\gamma=2.2$ eV.
10608.2 3	2 ⁻	0		E(n)(lab)=10.1263 keV 17, $g\Gamma_n=0.20$ eV 3, $\Gamma_\gamma=1.0$ eV.
10608.9 3	1 ⁺	1	0.29 4	E(n)(lab)=12.6096 keV 8, $g\Gamma_n=45.21$ eV 24, $\Gamma_\gamma=1.8$ eV.
10609.2 3	2 ⁻	0		E(n)(lab)=13.3395 keV 20, $g\Gamma_n=0.42$ eV 6, $\Gamma_\gamma=1.0$ eV.
10609.2 3	2 ⁻	0		E(n)(lab)=13.6031 keV 9, $g\Gamma_n=39.98$ eV 25, $\Gamma_\gamma=1.7$ eV.
10609.5 3	2 ⁺	1		E(n)(lab)=13.9869 keV 9, $g\Gamma_n=7.04$ eV 13, $\Gamma_\gamma=3.1$ eV.
10609.9 3	1 ⁺	1	0.31 5	E(n)(lab)=14.3750 keV 22, $g\Gamma_n=0.49$ eV 7, $\Gamma_\gamma=1.0$ eV.
10612.1 3	1 ⁻	0		E(n)(lab)=16.5843 keV 17, $g\Gamma_n=305.6$ eV 10, $\Gamma_\gamma=2.3$ eV.
10613.3 3	1 ⁻	0		E(n)(lab)=17.8155 keV 14, $g\Gamma_n=56.4$ eV 5, $\Gamma_\gamma=4.1$ eV.
10614.3 3	2 ⁻	0		E(n)(lab)=18.8345 keV 13, $g\Gamma_n=42.0$ eV 4, $\Gamma_\gamma=0.78$ eV.
10616.8 3	2 ⁻	0		E(n)(lab)=21.346 keV 5, $g\Gamma_n=0.64$ eV 13, $\Gamma_\gamma=2.2$ eV.
10616.9 3	1 ⁺	1		E(n)(lab)=21.520 keV 3, $g\Gamma_n=1.09$ eV 15, $\Gamma_\gamma=1.0$ eV.
10619.9 3	1 ⁻	0		E(n)(lab)=24.5525 keV 21, $g\Gamma_n=44.0$ eV 6, $\Gamma_\gamma=1.4$ eV.
10623.5 3	2 ⁻	0	0.56 2	E(n)(lab)=28.142 keV 3, $g\Gamma_n=4.0$ eV 3, $\Gamma_\gamma=2.2$ eV.
10624.3 3	1 ⁻	0		E(n)(lab)=28.978 keV 3, $g\Gamma_n=200.3$ eV 18, $\Gamma_\gamma=2.2$ eV.
10624.4 3	2 ⁻	0		E(n)(lab)=29.112 keV 5, $g\Gamma_n=2.6$ eV 4, $\Gamma_\gamma=1.7$ eV.
10625.8 3	2 ⁻	0		E(n)(lab)=30.563 keV 3, $g\Gamma_n=8.2$ eV 5, $\Gamma_\gamma=2.0$ eV.
10626.3 3	1 ⁻	0		E(n)(lab)=30.989 keV 4, $g\Gamma_n=261$ eV 3, $\Gamma_\gamma=2.2$ eV.
10627.0 3	2 ⁻	0		E(n)(lab)=31.767 keV 4, $g\Gamma_n=6.2$ eV 5, $\Gamma_\gamma=2.2$ eV.
10627.9 3	2 ⁻	0		E(n)(lab)=32.636 keV 3, $g\Gamma_n=131.6$ eV 14, $\Gamma_\gamma=2.2$ eV.
10628.8 3	1 ⁻	0		E(n)(lab)=33.607 keV 3, $g\Gamma_n=16.8$ eV 7, $\Gamma_\gamma=2.8$ eV.
10629.8 3	1 ⁺	1		E(n)(lab)=34.540 keV 11, $g\Gamma_n=1.3$ eV 4, $\Gamma_\gamma=1.0$ eV.
10632.2 3	1 ⁻	0		E(n)(lab)=37.028 keV 6, $g\Gamma_n=26$ eV 5, $\Gamma_\gamma=2.2$ eV.
10632.2 3	2 ⁻	0		E(n)(lab)=37.056 keV 5, $g\Gamma_n=55$ eV 5, $\Gamma_\gamma=2.2$ eV.
10632.5 3	1 ⁺	1		E(n)(lab)=37.333 keV 13, $g\Gamma_n=1.4$ eV 5, $\Gamma_\gamma=1.0$ eV.
10636.4 3	1 ⁻	0		E(n)(lab)=41.242 keV 5, $g\Gamma_n=68.1$ eV 16, $\Gamma_\gamma=2.2$ eV.
10638.6 3	2 ⁻	0		E(n)(lab)=43.522 keV 5, $g\Gamma_n=22.5$ eV 9, $\Gamma_\gamma=2.2$ eV.
10640.4 3	1 ⁻	0		E(n)(lab)=45.381 keV 17, $g\Gamma_n=13$ eV 2, $\Gamma_\gamma=2.2$ eV.
10640.4 3	2 ⁺	1		E(n)(lab)=45.40 keV 2, $g\Gamma_n=8.7$ eV 24, $\Gamma_\gamma=1.0$ eV.
10641.1 3	1 ⁻	0		E(n)(lab)=46.037 keV 6, $g\Gamma_n=16.9$ eV 11, $\Gamma_\gamma=2.2$ eV.

Continued on next page (footnotes at end of table)

$^{61}\text{Ni}(\mathbf{n},\gamma),(\mathbf{n},\mathbf{n})$:resonances 2006Ko28 (continued) ^{62}Ni Levels (continued)

<u>E(level)[†]</u>	<u>J^π</u>	<u>L</u>	<u>Comments</u>
10641.6 3	1 ⁻	0	E(n)(lab)=46.531 keV 12, gΓ _n =3.5 eV 7, Γ _γ =2.2 eV.
10645.3 3	2 ⁻	0	E(n)(lab)=50.376 keV 6, gΓ _n =43.6 eV 16, Γ _γ =2.2 eV.
10645.6 3	2 ⁻	0	E(n)(lab)=50.594 keV 7, gΓ _n =11.1 eV 10, Γ _γ =2.2 eV.
10646.2 3	1 ⁺	1	E(n)(lab)=51.30 keV 4, gΓ _n =1.3 eV 8, Γ _γ =1.0 eV.
10646.4 3	1 ⁺	1	E(n)(lab)=51.442 keV 22, gΓ _n =2.2 eV 9, Γ _γ =1.0 eV.
10647.3 3	1 ⁺	1	E(n)(lab)=52.46 keV 3, gΓ _n =1.6 eV 8, Γ _γ =1.0 eV.
10648.1 3	2 ⁻	0	E(n)(lab)=53.194 keV 6, gΓ _n =89.6 eV 22, Γ _γ =2.2 eV.
10649.6 3	1 ⁻	0	E(n)(lab)=54.667 keV 7, gΓ _n =74 eV 3, Γ _γ =2.2 eV.
10651.3 3	2 ⁻	0	E(n)(lab)=56.392 keV 7, gΓ _n =79.3 eV 23, Γ _γ =2.2 eV.
10652.8 3	2 ⁻	0	E(n)(lab)=57.928 keV 8, gΓ _n =33.0 eV 20, Γ _γ =2.2 eV.
10653.0 3	2 ⁻	0	E(n)(lab)=58.141 keV 7, gΓ _n =50.0 eV 22, Γ _γ =2.2 eV.
10654.1 3	1 ⁺	1	E(n)(lab)=59.264 keV 23, gΓ _n =3.4 eV 11, Γ _γ =1.0 eV.
10655.5 3	2 ⁻	0	E(n)(lab)=60.658 keV 12, gΓ _n =10.1 eV 16, Γ _γ =2.2 eV.
10655.6 3	2 ⁻	0	E(n)(lab)=60.816 keV 11, gΓ _n =12.5 eV 16, Γ _γ =2.2 eV.
10658.0 3	1 ⁺	1	E(n)(lab)=63.227 keV 14, gΓ _n =9.5 eV 16, Γ _γ =1.0 eV.
10658.4 3	1 ⁺	1	E(n)(lab)=63.659 keV 12, gΓ _n =13.0 eV 22, Γ _γ =1.0 eV.
10658.7 3	2 ⁻	0	E(n)(lab)=63.928 keV 9, gΓ _n =329 eV 8, Γ _γ =2.2 eV.
10660.4 3	2 ⁻	0	E(n)(lab)=65.698 keV 10, gΓ _n =722 eV 9, Γ _γ =2.2 eV.
10663.0 3	2 ⁻	0	E(n)(lab)=68.354 keV 9, gΓ _n =214 eV 5, Γ _γ =2.2 eV.
10664.3 3	2 ⁻	0	E(n)(lab)=69.632 keV 19, gΓ _n =20 eV 4, Γ _γ =2.2 eV.
10664.3 3	1 ⁻	0	E(n)(lab)=69.67 keV 4, gΓ _n =12 eV 4, Γ _γ =2.2 eV.
10665.3 3	1 ⁺	1	E(n)(lab)=70.709 keV 25, gΓ _n =6.1 eV 18, Γ _γ =1.0 eV.
10667.5 3	2 ⁻	0	E(n)(lab)=72.916 keV 11, gΓ _n =28.0 eV 23, Γ _γ =2.2 eV.
10671.8 3	2 ⁻	0	E(n)(lab)=77.268 keV 16, gΓ _n =174 eV 15, Γ _γ =2.2 eV.
10671.8 3	1 ⁻	0	E(n)(lab)=77.32 keV 3, gΓ _n =101 eV 17, Γ _γ =2.2 eV.
10673.4 3	1 ⁺	1	E(n)(lab)=78.93 keV 3, gΓ _n =10 eV 3, Γ _γ =1.0 eV.
10673.5 3	2 ⁻	0	E(n)(lab)=79.05 keV 14, gΓ _n =67 eV 4, Γ _γ =2.2 eV.
10674.9 3	2 ⁻	0	E(n)(lab)=80.45 keV 4, gΓ _n =4.7 eV 20, Γ _γ =2.2 eV.
10677.3 3	1 ⁻	0	E(n)(lab)=82.879 keV 17, gΓ _n =219 eV 16, Γ _γ =2.2 eV.
10677.6 3	1 ⁻	0	E(n)(lab)=83.13 keV 2, gΓ _n =52 eV 11, Γ _γ =2.2 eV.
10678.4 3	2 ⁻	0	E(n)(lab)=84.025 keV 19, gΓ _n =18 eV 3, Γ _γ =2.2 eV.
10681.1 3	1 ⁺	1	E(n)(lab)=86.75 keV 4, gΓ _n =9.3 eV 25, Γ _γ =1.0 eV.
10682.8 3	1 ⁻	0	E(n)(lab)=88.45 keV 3, gΓ _n =462 eV 13, Γ _γ =2.2 eV.
10688.3 3	2 ⁻	0	E(n)(lab)=94.017 keV 16, gΓ _n =164 eV 7, Γ _γ =2.2 eV.
10690.6 3	1 ⁻	0	E(n)(lab)=96.43 keV 3, gΓ _n =25 eV 7, Γ _γ =2.2 eV.
10690.9 3	2 ⁺	1	E(n)(lab)=96.724 keV 24, gΓ _n =31 eV 6, Γ _γ =1.0 eV.
10691.2 3	1 ⁺	1	E(n)(lab)=96.99 keV 3, gΓ _n =19 eV 5, Γ _γ =1.0 eV.
10692.2 3	1 ⁻	0	E(n)(lab)=98.014 keV 22, gΓ _n =88 eV 24, Γ _γ =2.2 eV.
10692.5 3	2 ⁻	0	E(n)(lab)=98.317 keV 23, gΓ _n =147 eV 22, Γ _γ =2.2 eV.
10695.7 3	2 ⁻	0	E(n)(lab)=101.55 keV 3, gΓ _n =26 eV 4, Γ _γ =2.2 eV.
10698.7 3	1 ⁻	0	E(n)(lab)=104.62 keV 10, gΓ _n =0.34 keV 3, Γ _γ =2.2 eV.
10699.2 3	2 ⁻	0	E(n)(lab)=105.150 keV 17, gΓ _n =376 eV 18, Γ _γ =2.2 eV.
10700.0 3	1 ⁻	0	E(n)(lab)=105.93 keV 8, gΓ _n =0.48 eV 5, Γ _γ =2.2 eV.
10702.2 3	2 ⁻	0	E(n)(lab)=108.149 keV 20, gΓ _n =108 eV 9, Γ _γ =2.2 eV.
10703.3 3	1 ⁺	1	E(n)(lab)=109.26 keV 4, gΓ _n =33 eV 8, Γ _γ =1.0 eV.
10703.5 3	2 ⁻	0	E(n)(lab)=109.46 keV 3, gΓ _n =184 eV 16, Γ _γ =2.2 eV.
10704.0 3	1 ⁺	1	E(n)(lab)=109.96 keV 4, gΓ _n =25 eV 9, Γ _γ =1.0 eV.
10704.7 3	1 ⁺	1	E(n)(lab)=110.68 keV 5, gΓ _n =14 eV 5, Γ _γ =1.0 eV.
10706.2 3	2 ⁻	0	E(n)(lab)=112.237 keV 22, gΓ _n =842 eV 22, Γ _γ =2.2 eV.
10708.4 3	2 ⁻	0	E(n)(lab)=114.473 keV 21, gΓ _n =97 eV 8, Γ _γ =2.2 eV.
10711.2 3	2 ⁻	0	E(n)(lab)=117.329 keV 23, gΓ _n =408 eV 22, Γ _γ =2.2 eV.
10712.1 3	1 ⁻	0	E(n)(lab)=118.21 keV 3, gΓ _n =125 eV 16, Γ _γ =2.2 eV.
10712.8 3	2 ⁻	0	E(n)(lab)=118.957 keV 24, gΓ _n =93 eV 8, Γ _γ =2.2 eV.
10714.3 3	2 ⁻	0	E(n)(lab)=120.458 keV 24, gΓ _n =92 eV 8, Γ _γ =2.2 eV.
10715.0 3	2 ⁻	0	E(n)(lab)=121.20 keV 6, gΓ _n =16 eV 5, Γ _γ =2.2 eV.
10716.6 3	2 ⁻	0	E(n)(lab)=122.82 keV 3, gΓ _n =57 eV 7, Γ _γ =2.2 eV.

Continued on next page (footnotes at end of table)

$^{61}\text{Ni}(n,\gamma),(n,n)$:resonances **2006Ko28** (continued) ^{62}Ni Levels (continued)

E(level) [†]	J ^π	L	Comments
10719.2 3	2 ⁻	0	E(n)(lab)=125.44 keV 4, gΓ _n =37 eV 7, Γ _γ =2.2 eV.
10720.7 3	2 ⁻	0	E(n)(lab)=127.00 keV 4, gΓ _n =36 eV 8, Γ _γ =2.2 eV.
10721.1 3	1 ⁻	0	E(n)(lab)=127.42 keV 6, gΓ _n =28 eV 9, Γ _γ =2.2 eV.
10721.8 3	2 ⁻	0	E(n)(lab)=128.12 keV 3, gΓ _n =453 eV 22, Γ _γ =2.2 eV.
10723.8 3	1 ⁻	0	E(n)(lab)=130.11 keV 4, gΓ _n =82 eV 15, Γ _γ =2.2 eV.
10724.4 3	1 ⁻	0	E(n)(lab)=130.80 keV 4, gΓ _n =0.13 keV 4, Γ _γ =2.2 eV.
10724.8 3	2 ⁻	0	E(n)(lab)=131.12 keV 3, gΓ _n =0.15 keV 3, Γ _γ =2.2 eV.
10729.7 3	2 ⁻	0	E(n)(lab)=136.11 keV 6, gΓ _n =23 eV 7, Γ _γ =2.2 eV.
10730.7 3	2 ⁻	0	E(n)(lab)=137.18 keV 5, gΓ _n =30 eV 8, Γ _γ =2.2 eV.
10731.7 3	2 ⁻	0	E(n)(lab)=138.20 keV 4, gΓ _n =56 eV 9, Γ _γ =2.2 eV.
10734.2 3	2 ⁻	0	E(n)(lab)=140.76 keV 3, gΓ _n =203 eV 15, Γ _γ =2.2 eV.
10735.4 3	1 ⁻	0	E(n)(lab)=141.92 keV 5, gΓ _n =49 eV 11, Γ _γ =2.2 eV.
10736.1 3	2 ⁻	0	E(n)(lab)=142.64 keV 4, gΓ _n =66 eV 12, Γ _γ =2.2 eV.
10736.8 3	2 ⁻	0	E(n)(lab)=143.34 keV 3, gΓ _n =242 eV 17, Γ _γ =2.2 eV.
10738.6 3	2 ⁻	0	E(n)(lab)=145.14 keV 10, gΓ _n =16 eV 8, Γ _γ =2.2 eV.
10740.7 3	1 ⁺	1	E(n)(lab)=147.32 keV 5, gΓ _n =66 eV 12, Γ _γ =1.0 eV.
10741.2 3	2 ⁻	0	E(n)(lab)=147.83 keV 3, gΓ _n =337 eV 20, Γ _γ =2.2 eV.
10742.7 3	2 ⁻	0	E(n)(lab)=149.35 keV 7, gΓ _n =26 eV 8, Γ _γ =2.2 eV.
10746.3 3	2 ⁻	0	E(n)(lab)=153.01 keV 4, gΓ _n =169 eV 19, Γ _γ =2.2 eV.
10747.1 3	1 ⁻	0	E(n)(lab)=153.83 keV 6, gΓ _n =85 eV 20, Γ _γ =2.2 eV.
10748.0 3	2 ⁻	0	E(n)(lab)=154.73 keV 6, gΓ _n =57 eV 13, Γ _γ =2.2 eV.
10748.5 3	2 ⁻	0	E(n)(lab)=155.24 keV 4, gΓ _n =96 eV 14, Γ _γ =2.2 eV.
10749.7 3	1 ⁻	0	E(n)(lab)=156.45 keV 8, gΓ _n =39 eV 14, Γ _γ =2.2 eV.
10752.3 3	1 ⁻	0	E(n)(lab)=159.06 keV 6, gΓ _n =97 eV 21, Γ _γ =2.2 eV.
10753.1 3	2 ⁻	0	E(n)(lab)=159.95 keV 4, gΓ _n =0.43 keV 3, Γ _γ =2.2 eV.
10754.9 3	2 ⁻	0	E(n)(lab)=161.75 keV 4, gΓ _n =344 eV 24, Γ _γ =2.2 eV.
10757.8 3	1 ⁻	0	E(n)(lab)=164.73 keV 6, gΓ _n =0.23 keV 3, Γ _γ =2.2 eV.
10759.7 3	1 ⁻	0	E(n)(lab)=166.60 keV 6, gΓ _n =121 eV 22, Γ _γ =2.2 eV.
10760.6 3	2 ⁻	0	E(n)(lab)=167.57 keV 4, gΓ _n =197 eV 20, Γ _γ =2.2 eV.
10763.7 3	2 ⁻	0	E(n)(lab)=170.74 keV 4, gΓ _n =0.26 keV 3, Γ _γ =2.2 eV.
10766.1 3	2 ⁻	0	E(n)(lab)=173.09 keV 4, gΓ _n =0.57 keV 8, Γ _γ =2.2 eV.
10767.0 3	1 ⁻	0	E(n)(lab)=174.08 keV 14, gΓ _n =0.73 keV 14, Γ _γ =2.2 eV.
10769.8 3	1 ⁻	0	E(n)(lab)=176.91 keV 7, gΓ _n =83 eV 19, Γ _γ =2.2 eV.
10772.4 3	2 ⁻	0	E(n)(lab)=179.54 keV 5, gΓ _n =0.37 keV 3, Γ _γ =2.2 eV.
10774.7 3	2 ⁻	0	E(n)(lab)=181.83 keV 5, gΓ _n =126 eV 18, Γ _γ =2.2 eV.
10776.5 3	2 ⁻	0	E(n)(lab)=183.72 keV 7, gΓ _n =73 eV 15, Γ _γ =2.2 eV.
10778.3 3	1 ⁻	0	E(n)(lab)=185.51 keV 11, gΓ _n =51 eV 19, Γ _γ =2.2 eV.
10781.5 3	2 ⁻	0	E(n)(lab)=188.83 keV 5, gΓ _n =0.25 keV 3, Γ _γ =2.2 eV.
10786.5 3	1 ⁻	0	E(n)(lab)=193.90 keV 9, gΓ _n =0.11 keV 3, Γ _γ =2.2 eV.
10787.8 3	2 ⁻	0	E(n)(lab)=195.18 keV 5, gΓ _n =0.29 keV 3, Γ _γ =2.2 eV.
10790.9 3	2 ⁻	0	E(n)(lab)=198.40 keV 6, gΓ _n =0.22 keV 3, Γ _γ =2.2 eV.
10793.3 3	1 ⁻	0	E(n)(lab)=200.82 keV 11, gΓ _n =84 eV 27, Γ _γ =2.2 eV.
10796.0 3	2 ⁻	0	E(n)(lab)=203.55 keV 7, gΓ _n =0.19 keV 3, Γ _γ =2.2 eV.
10798.5 3	1 ⁺	1	E(n)(lab)=206.10 keV 11, gΓ _n =0.11 keV 3, Γ _γ =1.0 eV.
10799.1 3	1 ⁻	0	E(n)(lab)=206.69 keV 11, gΓ _n =0.18 keV 5, Γ _γ =2.2 eV.
10800.6 3	1 ⁺	1	E(n)(lab)=208.22 keV 9, gΓ _n =0.15 keV 5, Γ _γ =1.0 eV.
10802.2 3	3 ⁺	1	E(n)(lab)=209.86 keV 6, gΓ _n =0.22 keV 3, Γ _γ =1.0 eV.
10803.0 3	2 ⁻	0	E(n)(lab)=210.62 keV 8, gΓ _n =1.10 keV 11, Γ _γ =2.2 eV.
10804.6 3	3 ⁺	1	E(n)(lab)=212.31 keV 6, gΓ _n =0.45 keV 5, Γ _γ =1.0 eV.
10805.9 3	1 ⁺	1	E(n)(lab)=213.57 keV 13, gΓ _n =64 eV 28, Γ _γ =1.0 eV.
10807.1 3	2 ⁻	0	E(n)(lab)=214.83 keV 10, gΓ _n =3.36 keV 14, Γ _γ =2.2 eV.
10810.3 3	2 ⁻	0	E(n)(lab)=218.06 keV 8, gΓ _n =0.20 keV 4, Γ _γ =2.2 eV.
10812.4 3	2 ⁻	0	E(n)(lab)=220.25 keV 7, gΓ _n =0.38 keV 5, Γ _γ =2.2 eV.
10817.1 3	2 ⁻	0	E(n)(lab)=225.02 keV 9, gΓ _n =0.15 keV 3, Γ _γ =2.2 eV.
10819.2 3	2 ⁻	0	E(n)(lab)=227.13 keV 7, gΓ _n =1.004 keV 8, Γ _γ =2.2 eV.
10822.7 3	2 ⁻	0	E(n)(lab)=230.63 keV 8, gΓ _n =1.020 keV 15, Γ _γ =2.2 eV.

Continued on next page (footnotes at end of table)

$^{61}\text{Ni}(n,\gamma),(n,n)$:resonances 2006Ko28 (continued) ^{62}Ni Levels (continued)

<u>E(level)[†]</u>	<u>J^π</u>	<u>L</u>	<u>Comments</u>
10824.3 4	2 ⁻	0	E(n)(lab)=232.35 keV 23, gΓ _n =0.20 keV 13, Γ _γ =2.2 eV.
10824.4 5	1 ⁻	0	E(n)(lab)=232.5 keV 4, gΓ _n =0.27 keV 16, Γ _γ =2.2 eV.
10827.8 3	2 ⁻	0	E(n)(lab)=235.82 keV 9, gΓ _n =0.19 keV 5, Γ _γ =2.2 eV.
10828.5 3	1 ⁻	0	E(n)(lab)=236.53 keV 16, gΓ _n =0.15 keV 7, Γ _γ =2.2 eV.
10832.2 3	2 ⁻	0	E(n)(lab)=240.36 keV 13, gΓ _n =0.17 eV 4, Γ _γ =2.2 eV.
10832.3 5	1 ⁻	0	E(n)(lab)=240.4 keV 4, gΓ _n =0.30 keV 11, Γ _γ =2.2 eV.
10845.6 3	2 ⁻	0	E(n)(lab)=253.99 keV 9, gΓ _n =0.28 keV 5, Γ _γ =2.2 eV.
10849.8 3	1 ⁻	0	E(n)(lab)=258.26 keV 17, gΓ _n =0.77 keV 19, Γ _γ =2.2 eV.
10851.4 3	2 ⁻	0	E(n)(lab)=259.82 keV 16, gΓ _n =1.14 keV 10, Γ _γ =2.2 eV.
10855.3 3	2 ⁻	0	E(n)(lab)=263.78 keV 12, gΓ _n =0.19 keV 4, Γ _γ =2.2 eV.
10858.7 3	2 ⁻	0	E(n)(lab)=267.23 keV 14, gΓ _n =0.13 keV 4, Γ _γ =2.2 eV.
10868.7 3	2 ⁻	0	E(n)(lab)=277.44 keV 15, gΓ _n =0.13 keV 4, Γ _γ =2.2 eV.
10876.1 3	2 ⁻	0	E(n)(lab)=284.97 keV 16, gΓ _n =0.16 keV 5, Γ _γ =2.2 eV.
10878.9 3	2 ⁻	0	E(n)(lab)=287.82 keV 12, gΓ _n =0.35 keV 6, Γ _γ =2.2 eV.
10882.5 3	2 ⁻	0	E(n)(lab)=291.47 keV 14, gΓ _n =0.25 keV 6, Γ _γ =2.2 eV.
10884.4 3	2 ⁻	0	E(n)(lab)=293.37 keV 17, gΓ _n =0.18 keV 6, Γ _γ =2.2 eV.
10885.7 3	2 ⁻	0	E(n)(lab)=294.74 keV 13, gΓ _n =0.38 keV 8, Γ _γ =2.2 eV.
10888.2 3	2 ⁻	0	E(n)(lab)=297.21 keV 14, gΓ _n =0.25 keV 6, Γ _γ =2.2 eV.
10891.2 3	2 ⁻	0	E(n)(lab)=300.30 keV 14, gΓ _n =0.25 keV 6, Γ _γ =2.2 eV.
10970 20	2 ⁻	0	E(n)(lab)=380 keV 20, gΓ _n =43 keV 16, Γ _γ =2.2 eV.
11010 20	1 ⁻	0	E(n)(lab)=420 keV 20, gΓ _n =158 keV 7, Γ _γ =2.2 eV.

[†] S(n)(^{62}Ni)+E(n)(c.m.); S(n)=10595.8 3 (2011AuZZ). E(n)(c.m.)=E(n)(lab)(0.9837154).

[‡] From 2006MuZX.