^{35}Cl(n,γ),(n,n):res 2006Sa17,2006MuZX

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, John Cameron and Balraj Singh	NDS 113, 1 (2012)	31-Dec-2011

Experimental studies for the measurement of neutron resonance energies and associated parameters:
2006Sa17, 2002Gu17: E(n)=20 eV to 1250 keV. 2006Sa17 analyze data data from their earlier paper 2002Gu17.
1984Ma25: E(n)=4-225 keV.
1974Si25: 20 eV-400 keV.
Others: 1989GlZW (<8 keV), 1979Mc01 (E=slow).
All data are from 2006Sa17 analysis and evaluation, based on 2002Gu17 experimental study. Analysis using multilevel Reich-Moore R-matrix formalism.
J^π(^{35}Cl g.s.)=3/2$^+$.

^{36}Cl Levels

E(level)[†]	J^π[#]	Comments
8252.31?[‡]	(2$^-$)	E(n)(lab)=−336.93, Γ_γ=0.534 eV, Γ_n=38.2 keV.
8579.61?[‡]	(2$^+$)	E(n)(lab)=−0.18065, Γ_γ=0.530 eV, Γ_n=13.3 eV, Γ_p=0.00599 eV.
8580.18 *1*	2$^-$	E(n)(lab)=0.39782 *2*, Γ_γ=0.67 eV *5*, Γ_n=0.0505 eV *20*, Γ_p=0.322 eV *21*.
8583.92 *1*	1$^-$	E(n)(lab)=4.2508 *1*, Γ_γ=0.472 eV *25*, Γ_n=0.63 eV *4*, Γ_p=0.230 eV *22*.
8585.13 *1*	(1$^-$)	E(n)(lab)=5.4910 *8*, Γ_γ=1.0 eV *3*, Γ_n=0.0039 eV *5*.
8594.18 *1*	2$^+$	E(n)(lab)=14.802 *1*, Γ_γ=0.346 eV *24*, Γ_n=32.6 eV *23*, Γ_p=0.028 eV.
8595.69 *1*	(3$^-$)	E(n)(lab)=16.356 *1*, Γ_γ=0.39 eV *8*, Γ_n=6.0 eV *7*, Γ_p=0.164 eV.
8596.44 *1*	3$^-$	E(n)(lab)=17.134 *1*, Γ_γ=0.80 eV *3*, Γ_n=14.1 eV *13*, Γ_p=0.032 eV.
8601.56 *1*	(0$^-$)	E(n)(lab)=22.396 *1*, Γ_γ=1.7 eV *3*, Γ_n=0.97 eV *11*.
8605.66 *1*	2$^+$	E(n)(lab)=26.616 *2*, Γ_γ=0.30 eV *3*, Γ_n=115 eV *11*.
8606.37 *1*	(2$^-$)	E(n)(lab)=27.346 *1*, Γ_γ=0.46 eV *3*, Γ_n=6.0 eV *11*, Γ_p=0.147 eV.
8616.50 *1*	(1$^-$)	E(n)(lab)=37.768 *4*, Γ_γ=0.19 eV *4*, Γ_n=0.44 eV *17*.
8618.93 *1*	(3$^-$)	E(n)(lab)=40.270 *2*, Γ_γ=0.58 eV *21*, Γ_n=0.18 eV *3*.
8622.72 *1*	(1$^-$)	E(n)(lab)=44.166 *2*, Γ_γ=1.04 eV *5*, Γ_n=31 eV *4*.
8629.95 *1*	(3$^-$)	E(n)(lab)=51.608 *5*, Γ_γ=0.045 eV *9*, Γ_n=2.4 eV *6*, Γ_p=0.096 eV.
8631.28 *1*	(2$^-$)	E(n)(lab)=52.974 *3*, Γ_γ=0.56 eV *5*, Γ_n=0.82 eV *17*.
8633.18 *1*	1$^+$	E(n)(lab)=54.932 *3*, Γ_γ=0.37 eV *6*, Γ_n=46 eV *6*.
8635.98 *1*	(2$^-$)	E(n)(lab)=57.812 *3*, Γ_γ=0.54 eV *8*, Γ_n=107 eV *14*, Γ_p=0.998 eV.
8640.81 *1*	1$^-$	E(n)(lab)=62.779 *4*, Γ_γ=0.62 eV *7*, Γ_n=135 eV *19*.
8646.11 *1*	1$^+$	E(n)(lab)=68.236 *5*, Γ_γ=0.3 eV *7*, Γ_n=218 eV *23*.
8653.17 *1*	(2$^+$)	E(n)(lab)=75.495 *17*, Γ_γ=0.806 eV, Γ_n=0.080 eV *25*.
8667.67 *1*	(2$^-$)	E(n)(lab)=90.420 *5*, Γ_γ=0.72 eV *8*, Γ_n=22 eV *4*, Γ_p=0.274 eV.
8667.78 *1*	(2$^-$)	E(n)(lab)=90.526 *22*, Γ_γ=0.13 eV *7*, Γ_n=4.2 eV *20*.
8672.33 *1*	(3$^-$)	E(n)(lab)=95.207 *21*, Γ_γ=0.45 eV *22*, Γ_n=0.16 eV *5*.
8673.69 *1*	(0$^-$)	E(n)(lab)=96.604 *16*, Γ_γ=1.6 eV *4*, Γ_n=2.8 eV *11*.
8676.44 *1*	(3$^-$)	E(n)(lab)=99.441 *13*, Γ_γ=0.23 eV *4*, Γ_n=2.4 eV *14*.
8680.41 *2*	1$^-$	E(n)(lab)=103.52 *1*, Γ_γ=0.39 eV *13*, Γ_n=0.38 keV *6*, Γ_p=1.973 eV.
8688.70 *2*	(3$^-$)	E(n)(lab)=112.05 *2*, Γ_γ=0.32 eV *11*, Γ_n=0.26 eV *8*.
8690.01 *2*	(2$^-$)	E(n)(lab)=113.40 *1*, Γ_γ=0.34 eV *8*, Γ_n=0.14 keV *3*.
8690.21 *2*	(2$^-$)	E(n)(lab)=113.61 *1*, Γ_γ=0.30 eV *11*, Γ_n=0.40 keV *5*.
8691.66 *2*	(1$^+$)	E(n)(lab)=115.10 *1*, Γ_γ=0.74 eV *14*, Γ_n=4.3 eV *17*.
8706.57 *2*	(2$^+$)	E(n)(lab)=130.44 *2*, Γ_γ=0.76 eV *21*, Γ_n=0.77 eV *21*.
8710.02 *2*	(1$^-$)	E(n)(lab)=133.99 *2*, Γ_γ=2.3 eV *5*, Γ_n=0.66 keV *8*.
8711.12 *2*	1$^{(-)}$	E(n)(lab)=135.12 *1*, Γ_γ=0.34 eV *12*, Γ_n=0.19 keV *3*.
8715.95 *2*	(3$^-$)	E(n)(lab)=140.09 *2*, Γ_γ=0.37 eV *9*, Γ_n=3.8 eV *21*.
8716.67 *2*	(2$^-$)	E(n)(lab)=140.83 *1*, Γ_γ=0.55 eV *9*, Γ_n=99 eV *10*.
8717.46 *2*	(3$^-$)	E(n)(lab)=141.64 *2*, Γ_γ=0.31 eV *8*, Γ_n=4 eV *3*.
8718.80 *2*	(2$^-$)	E(n)(lab)=143.02 *1*, Γ_γ=0.49 eV *15*, Γ_n=0.32 keV *3*.
8725.42 *2*	(2$^-$)	E(n)(lab)=149.83 *1*, Γ_γ=0.76 eV *19*, Γ_n=0.113 keV *13*.
8728.42 *4*	(3$^-$)	E(n)(lab)=152.92 *4*, Γ_γ=0.30 eV *13*, Γ_n=0.38 eV *17*.

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^{35}Cl(n,γ),(n,n):res 2006Sa17,2006MuZX (continued)

^{36}Cl Levels (continued)

E(level)[†]	Jπ[#]	Comments
8737.79 *4*	(1⁻)	E(n)(lab)=162.56 *4*, Γγ=0.65 eV *16*, Γn=5.63 eV.
8740.63 *2*	(1⁻)	E(n)(lab)=165.48 *1*, Γγ=1.05 eV *26*, Γn=0.21 keV *3*.
8757.19 *4*	1⁺	E(n)(lab)=182.52 *4*, Γγ=0.7 eV *4*, Γn=1.76 keV *17*.
8758.18 *2*	(3⁻)	E(n)(lab)=183.54 *1*, Γγ=0.33 eV *11*, Γn=0.46 keV *4*.
8759.88 *3*	(3⁻)	E(n)(lab)=185.28 *3*, Γγ=0.47 eV *12*, Γn=4.5 eV *25*.
8762.67 *2*	3(⁻)	E(n)(lab)=188.15 *2*, Γγ=0.50 eV *13*, Γn=0.42 keV *3*.
8764.64 *2*	(3⁻)	E(n)(lab)=190.18 *1*, Γγ=0.29 eV *8*, Γn=102 eV *9*.
8767.07 *3*	(2⁻)	E(n)(lab)=192.68 *3*, Γγ=0.23 eV *10*, Γn=34 eV *6*.
8767.32 *3*	(3⁻)	E(n)(lab)=192.94 *3*, Γγ=0.76 eV *14*, Γn=16 eV *5*.
8773.38 *5*	(3⁻)	E(n)(lab)=199.17 *5*, Γγ=0.26 eV *9*, Γn=2.8 eV *14*.
8775.24 *2*	(2⁻)	E(n)(lab)=201.09 *2*, Γγ=0.29 eV *11*, Γn=37 eV *7*.
8779.99 *5*	(2⁻)	E(n)(lab)=205.97 *5*, Γγ=0.45 eV *25*, Γn=0.6 eV *3*.
8780.62 *6*	(2⁻)	E(n)(lab)=206.62 *6*, Γγ=0.6 eV *3*, Γn=0.6 eV *3*.
8788.32 *4*	(2⁻)	E(n)(lab)=214.55 *4*, Γγ=0.23 eV *12*, Γn=42 eV *10*.
8788.68 *2*	2⁺	E(n)(lab)=214.92 *2*, Γγ=0.35 eV *23*, Γn=0.65 keV *4*.
8789.10 *5*	(2⁻)	E(n)(lab)=215.35 *5*, Γγ=0.8 eV *3*, Γn=5 eV *3*.
8790.80 *2*	2(⁻)	E(n)(lab)=217.10 *2*, Γγ=0.6 eV *3*, Γn=0.58 keV *3*.
8793.61 *8*	(1⁻)	E(n)(lab)=219.99 *8*, Γγ=0.40 eV *24*, Γn=3.85 eV.
8794.97 *3*	(2⁻)	E(n)(lab)=221.39 *3*, Γγ=1.6 eV *4*, Γn=4.1 eV *23*.
8797.62 *2*	1(⁻)	E(n)(lab)=224.11 *2*, Γγ=0.403 eV, Γn=0.76 keV *7*.
8798.62 *2*	(1⁻)	E(n)(lab)=225.14 *2*, Γγ=1.3 eV *4*, Γn=0.57 keV *5*.
8802.26 *8*	(1⁻)	E(n)(lab)=228.89 *8*, Γγ=0.6 eV *3*, Γn=1.77 eV.
8803.41 *4*	(0⁻)	E(n)(lab)=230.07 *4*, Γγ=0.324 eV, Γn=0.81 keV *14*.
8812.81 *2*	(1⁺)	E(n)(lab)=239.74 *2*, Γγ=0.7 eV *3*, Γn=0.27 keV *3*.
8815.59 *2*	2⁺	E(n)(lab)=242.60 *2*, Γγ=0.9 eV *3*, Γn=0.34 keV *3*.
8816.19 *5*	(0⁻)	E(n)(lab)=243.22 *5*, Γγ=0.703 eV, Γn=0.28 keV *6*.
8818.39 *9*	(0⁻)	E(n)(lab)=245.48 *9*, Γγ=0.832 eV, Γn=6.56 eV.
8818.75 *6*	(2⁻)	E(n)(lab)=245.85 *6*, Γγ=0.8 eV *3*, Γn=6 eV *3*.
8822.98 *2*	2(⁻)	E(n)(lab)=250.20 *2*, Γγ=0.41 eV *18*, Γn=0.44 keV *3*.
8834.01 *3*	1(⁻)	E(n)(lab)=261.55 *3*, Γγ=0.8 eV *5*, Γn=1.06 keV *9*.
8851.07 *3*	1(⁻)	E(n)(lab)=279.11 *3*, Γγ=0.377 eV, Γn=1.25 keV *11*.
8855.58 *2*	(2⁻)	E(n)(lab)=283.75 *2*, Γγ=0.6 eV *3*, Γn=0.42 keV *4*.
8856.31 *9*	(1⁻)	E(n)(lab)=284.50 *9*, Γγ=0.9 eV *5*, Γn=4.16 eV.
8856.47 *3*	(2⁺)	E(n)(lab)=284.66 *3*, Γγ=0.5 eV *4*, Γn=1.19 keV *11*.
8857.39 *3*	(2⁻)	E(n)(lab)=285.61 *3*, Γγ=0.8 eV *4*, Γn=1.57 keV *14*.
8858.75 *9*	(2⁻)	E(n)(lab)=287.01 *9*, Γγ=0.55 eV *23*, Γn=21 eV *9*.
8861.74 *2*	(2⁻)	E(n)(lab)=290.08 *2*, Γγ=1.6 eV *4*, Γn=152 eV *23*.
8864.94 *6*	(3⁻)	E(n)(lab)=293.38 *6*, Γγ=1.8 eV *6*, Γn=5.94 eV.
8866.47 *2*	(2⁻)	E(n)(lab)=294.95 *2*, Γγ=0.7 eV *3*, Γn=0.48 keV *4*.
8872.79 *10*	(2⁻)	E(n)(lab)=301.45 *10*, Γγ=0.40 eV *21*, Γn=8.86 eV.
8875.11 *2*	2⁻	E(n)(lab)=303.84 *2*, Γγ=1.7 eV *4*, Γn=0.70 keV *5*.
8877.24 *12*	(1⁻)	E(n)(lab)=306.03 *12*, Γγ=0.6 eV *3*, Γn=7.72 eV.
8878.58 *3*	1(⁻)	E(n)(lab)=307.41 *3*, Γγ=0.640 eV, Γn=1.17 keV *14*.
8884.74 *3*	2⁺	E(n)(lab)=313.75 *3*, Γγ=0.5 eV *3*, Γn=1.48 keV *11*.
8901.58 *9*	(2⁺)	E(n)(lab)=331.07 *9*, Γγ=0.40 eV *25*, Γn=33 eV *15*.
8905.52 *16*	(1⁺)	E(n)(lab)=335.13 *16*, Γγ=0.358 eV, Γn=5.5 keV *9*.
8907.11 *3*	(3⁻)	E(n)(lab)=336.76 *3*, Γγ=0.42 eV *18*, Γn=0.29 keV *3*.
8909.27 *3*	2⁺	E(n)(lab)=338.98 *3*, Γγ=2.4 eV *6*, Γn=0.88 keV *12*.
8910.94 *19*	1⁻	E(n)(lab)=340.70 *19*, Γγ=0.565 eV, Γn=3.9 keV *8*.
8911.6 *7*	(0⁻)	E(n)(lab)=341.3 *7*, Γγ=0.655 eV, Γn=5.7 keV *28*.
8915.65 *8*	(2⁻)	E(n)(lab)=345.55 *8*, Γγ=0.35 eV *21*, Γn=63 eV *19*.
8924.23 *14*	(2⁻)	E(n)(lab)=354.38 *14*, Γγ=0.233 eV, Γn=8.06 eV.
8942.24 *5*	1(⁻)	E(n)(lab)=372.90 *5*, Γγ=2.1 eV *11*, Γn=1.8 keV *3*.
8949.39 *6*	(2)⁺	E(n)(lab)=380.26 *6*, Γγ=0.463 eV, Γn=1.18 keV *15*.
8951.05 *13*	(1⁻)	E(n)(lab)=381.97 *13*, Γγ=8.18 eV, Γn=1.6 eV *8*.

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^{35}Cl(n,γ),(n,n):res 2006Sa17,2006MuZX (continued)

^{36}Cl Levels (continued)

E(level)[†]	Jπ[#]	Comments
8953.48 *10*	(2⁻)	E(n)(lab)=384.47 *10*, Γγ=5.79 eV, Γn=2.0 eV *10*.
8955.38 *4*	2⁺	E(n)(lab)=386.42 *4*, Γγ=0.418 eV, Γn=1.24 keV *17*.
8956.81 *12*	(1⁻)	E(n)(lab)=387.89 *12*, Γγ=0.9 eV *3*, Γn=3.24 keV *24*.
8967.75 *6*	(1)⁺	E(n)(lab)=399.15 *6*, Γγ=0.7 eV *6*, Γn=1.09 keV *19*.
8970.44 *6*	(1⁻)	E(n)(lab)=401.92 *6*, Γγ=0.333 eV, Γn=1.21 keV *19*.
8972.92 *6*	(1⁻)	E(n)(lab)=404.47 *6*, Γγ=1.5 eV *7*, Γn=1.01 keV *16*.
8976.18 *5*	2(⁻)	E(n)(lab)=407.82 *5*, Γγ=0.551 eV, Γn=2.04 keV *22*.
8983.81 *21*	(1⁺)	E(n)(lab)=415.67 *21*, Γγ=0.329 eV, Γn=1.1 keV *3*.
8990.06 *7*	(1⁻)	E(n)(lab)=422.10 *7*, Γγ=2.9 eV *10*, Γn=0.86 keV *14*.
9006.14 *4*	2(⁻)	E(n)(lab)=438.65 *4*, Γγ=0.645 eV, Γn=1.27 keV *14*.
9011.81 *10*	(2⁻)	E(n)(lab)=444.48 *10*, Γγ=0.205 eV, Γn=0.18 keV *4*.
9017.79 *10*	(1⁺)	E(n)(lab)=450.63 *10*, Γγ=0.393 eV, Γn=0.46 keV *17*.
9018.52 *14*	(2⁻)	E(n)(lab)=451.38 *14*, Γγ=1.8 eV *7*, Γn=5.76 eV.
9019.73 *12*	(1⁻)	E(n)(lab)=452.63 *12*, Γγ=0.860 eV, Γn=3.4 keV *6*.
9024.84 *15*	(2⁻)	E(n)(lab)=457.89 *15*, Γγ=1.1 eV *7*, Γn=7.32 eV.
9026.27 *17*	(2⁺)	E(n)(lab)=459.36 *17*, Γγ=0.616 eV, Γn=38.6 eV.
9032.08 *15*	(1⁻)	E(n)(lab)=465.34 *15*, Γγ=0.367 eV, Γn=0.69 keV *20*.
9032.24 *10*	2(⁻)	E(n)(lab)=465.50 *10*, Γγ=0.558 eV, Γn=4.0 keV *3*.
9035.74 *14*	(2⁻)	E(n)(lab)=469.10 *14*, Γγ=1.0 eV *6*, Γn=3.76 eV.
9041.76 *6*	3(⁻)	E(n)(lab)=475.30 *6*, Γγ=0.8 eV *5*, Γn=2.79 keV *22*.
9043.61 *17*	(2⁻)	E(n)(lab)=477.20 *17*, Γγ=0.540 eV, Γn=0.17 keV *7*.
9047.6 *4*	(0⁻)	E(n)(lab)=481.3 *4*, Γγ=0.782 eV, Γn=1.77 keV.
9049.92 *21*	(1⁻)	E(n)(lab)=483.69 *21*, Γγ=1.9 eV *14*, Γn=2.7 keV *8*.
9051.64 *10*	(2⁻)	E(n)(lab)=485.46 *10*, Γγ=1.3 eV *5*, Γn=0.48 keV *13*.
9054.72 *8*	(2⁺)	E(n)(lab)=488.63 *8*, Γγ=0.408 eV, Γn=0.78 keV *15*.
9065.6 *3*	(1⁺)	E(n)(lab)=499.8 *3*, Γγ=0.670 eV, Γn=2.3 keV *8*.
9070.50 *15*	(0⁻)	E(n)(lab)=504.86 *15*, Γγ=0.860 eV, Γn=7 keV *4*.
9075.26 *6*	(3⁻)	E(n)(lab)=509.76 *6*, Γγ=0.860 eV, Γn=0.39 keV *8*.
9079.77 *11*	2⁺	E(n)(lab)=514.40 *11*, Γγ=0.606 eV, Γn=5.3 keV *6*.
9092.93 *8*	(2)⁺	E(n)(lab)=527.94 *8*, Γγ=0.606 eV, Γn=2.8 keV *4*.
9094.83 *6*	(3⁻)	E(n)(lab)=529.90 *6*, Γγ=0.860 eV, Γn=1.35 keV *16*.
9100.03 *7*	(3⁻)	E(n)(lab)=535.25 *7*, Γγ=0.860 eV, Γn=0.45 keV *6*.
9106.81 *8*	(1⁺)	E(n)(lab)=542.22 *8*, Γγ=0.606 eV, Γn=0.52 keV *21*.
9108.32 *7*	(2⁻)	E(n)(lab)=543.78 *7*, Γγ=0.860 eV, Γn=0.69 keV *14*.
9112.28 *16*	(0⁻)	E(n)(lab)=547.85 *16*, Γγ=0.860 eV, Γn=0.76 keV *37*.
9116.93 *14*	(1⁻)	E(n)(lab)=552.63 *14*, Γγ=0.860 eV, Γn=0.28 keV *11*.
9123.15 *13*	(2)⁺	E(n)(lab)=559.03 *13*, Γγ=0.606 eV, Γn=1.8 keV *3*.
9123.36 *22*	(1⁻)	E(n)(lab)=559.25 *22*, Γγ=0.860 eV, Γn=0.6 keV *3*.
9128.54 *7*	(2⁻)	E(n)(lab)=564.58 *7*, Γγ=0.860 eV, Γn=0.54 keV *8*.
9137.58 *8*	(2⁻)	E(n)(lab)=573.88 *8*, Γγ=0.860 eV, Γn=1.47 keV *24*.
9144.68 *19*	(1⁻)	E(n)(lab)=581.18 *19*, Γγ=0.860 eV, Γn=0.21 keV *8*.
9153.60 *12*	(2⁻)	E(n)(lab)=590.36 *12*, Γγ=0.860 eV, Γn=0.76 keV *19*.
9154.04 *13*	(2)⁺	E(n)(lab)=590.81 *13*, Γγ=0.606 eV, Γn=3.2 keV *3*.
9154.6 *3*	(1⁻)	E(n)(lab)=591.3 *3*, Γγ=0.860 eV, Γn=167 eV.
9163.78 *8*	(1⁻)	E(n)(lab)=600.84 *8*, Γγ=0.860 eV, Γn=1.21 keV *19*.
9170.80 *7*	(3⁻)	E(n)(lab)=608.06 *7*, Γγ=0.860 eV, Γn=0.78 keV *13*.
9176.83 *10*	(1⁻)	E(n)(lab)=614.26 *10*, Γγ=0.860 eV, Γn=1.15 keV *21*.
9180.56 *7*	(2⁻)	E(n)(lab)=618.10 *7*, Γγ=0.860 eV, Γn=1.08 keV *15*.
9184.04 *14*	(2⁺)	E(n)(lab)=621.68 *14*, Γγ=0.606 eV, Γn=6.8 keV *8*.
9191.7 *3*	(1⁻)	E(n)(lab)=629.6 *3*, Γγ=0.860 eV, Γn=0.62 keV *20*.
9193.14 *11*	2⁺	E(n)(lab)=631.04 *11*, Γγ=0.606 eV, Γn=1.6 keV *3*.
9195.14 *23*	(2⁻)	E(n)(lab)=633.10 *23*, Γγ=0.860 eV, Γn=0.15 keV *8*.
9202.63 *7*	2⁺	E(n)(lab)=640.81 *7*, Γγ=0.606 eV, Γn=0.86 keV *16*.
9204.51 *10*	(2⁻)	E(n)(lab)=642.74 *10*, Γγ=0.860 eV, Γn=0.95 keV *15*.
9215.66 *12*	(1⁺)	E(n)(lab)=654.21 *12*, Γγ=0.606 eV, Γn=0.52 keV *14*.

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^{35}Cl(n,γ),(n,n):res 2006Sa17,2006MuZX (continued)

^{36}Cl Levels (continued)

E(level)[†]	Jπ[#]	Comments
9219.16 *25*	(2+)	E(n)(lab)=657.81 *25*, Γγ=0.606 eV, Γn=0.21 keV *13*.
9220.7 *3*	(1−)	E(n)(lab)=659.4 *3*, Γγ=0.860 eV, Γn=136 eV.
9226.43 *25*	(1+)	E(n)(lab)=665.29 *25*, Γγ=0.606 eV, Γn=0.14 keV *10*.
9226.92 *15*	(3−)	E(n)(lab)=665.80 *15*, Γγ=0.860 eV, Γn=0.21 keV *4*.
9233.30 *15*	(1+)	E(n)(lab)=672.36 *15*, Γγ=0.606 eV, Γn=0.58 keV *14*.
9234.9 *3*	(3−)	E(n)(lab)=674.0 *3*, Γγ=0.606 eV, Γn=49.0 eV.
9238.8 *3*	(1+)	E(n)(lab)=678.0 *3*, Γγ=0.606 eV, Γn=0.133 keV.
9241.76 *12*	(2)+	E(n)(lab)=681.06 *12*, Γγ=0.606 eV, Γn=0.67 keV *12*.
9242.3 *3*	(3−)	E(n)(lab)=681.7 *3*, Γγ=0.860 eV, Γn=60.3 eV.
9245.60 *24*	(3−)	E(n)(lab)=685.02 *24*, Γγ=0.860 eV, Γn=0.12 keV *5*.
9250.71 *10*	(2)+	E(n)(lab)=690.27 *10*, Γγ=0.606 eV, Γn=0.46 keV *12*.
9255.25 *8*	(1)+	E(n)(lab)=694.94 *8*, Γγ=0.606 eV, Γn=1.8 keV *3*.
9261.14 *10*	(3−)	E(n)(lab)=701.00 *10*, Γγ=0.860 eV, Γn=1.25 keV *17*.
9263.68 *15*	(2−)	E(n)(lab)=703.62 *15*, Γγ=0.860 eV, Γn=0.93 keV *20*.
9272.34 *9*	2(−)	E(n)(lab)=712.53 *9*, Γγ=0.860 eV, Γn=3.3 keV *3*.
9278.03 *17*	(1−)	E(n)(lab)=718.38 *17*, Γγ=0.860 eV, Γn=0.97 keV *19*.
9281.54 *15*	(1−)	E(n)(lab)=721.99 *15*, Γγ=0.860 eV, Γn=0.83 keV *18*.
9284.6 *3*	(1+)	E(n)(lab)=725.2 *3*, Γγ=0.606 eV, Γn=0.167 keV.
9288.92 *14*	(2−)	E(n)(lab)=729.58 *14*, Γγ=0.860 eV, Γn=0.65 keV *11*.
9292.13 *23*	(1−)	E(n)(lab)=732.89 *23*, Γγ=0.860 eV, Γn=2.0 keV *4*.
9294.19 *18*	(2−)	E(n)(lab)=735.01 *18*, Γγ=0.860 eV, Γn=0.38 keV *11*.
9298.86 *10*	2(−)	E(n)(lab)=739.81 *10*, Γγ=0.860 eV, Γn=3.0 keV *4*.
9307.29 *19*	(1−)	E(n)(lab)=748.48 *19*, Γγ=0.860 eV, Γn=1.02 keV *23*.
9313.32 *19*	(1)+	E(n)(lab)=754.69 *19*, Γγ=0.606 eV, Γn=2.7 keV *8*.
9316.01 *12*	3(−)	E(n)(lab)=757.46 *12*, Γγ=0.860 eV, Γn=3.8 keV *3*.
9319.56 *13*	3(−)	E(n)(lab)=761.11 *13*, Γγ=0.860 eV, Γn=2.2 keV *4*.
9323.74 *25*	(1−)	E(n)(lab)=765.41 *25*, Γγ=0.860 eV, Γn=1.5 keV *5*.
9328.48 *10*	(2−)	E(n)(lab)=770.29 *10*, Γγ=0.860 eV, Γn=3.2 keV *4*.
9333.03 *19*	(3−)	E(n)(lab)=774.97 *19*, Γγ=0.860 eV, Γn=0.37 keV *9*.
9337.89 *21*	(2)+	E(n)(lab)=779.97 *21*, Γγ=0.606 eV, Γn=5.3 keV *9*.
9339.34 *23*	(1+)	E(n)(lab)=781.46 *23*, Γγ=0.606 eV, Γn=1.3 keV *7*.
9350.34 *17*	(1−)	E(n)(lab)=792.78 *17*, Γγ=0.860 eV, Γn=1.04 keV *22*.
9355.96 *18*	(2−)	E(n)(lab)=798.56 *18*, Γγ=0.860 eV, Γn=2.9 keV *4*.
9358.65 *21*	(2−)	E(n)(lab)=801.33 *21*, Γγ=0.860 eV, Γn=0.68 keV *21*.
9364.05 *12*	(3−)	E(n)(lab)=806.88 *12*, Γγ=0.860 eV, Γn=0.63 keV *9*.
9367.4 *3*	(1−)	E(n)(lab)=810.3 *3*, Γγ=0.860 eV, Γn=0.51 keV *16*.
9381.61 *13*	2+	E(n)(lab)=824.95 *13*, Γγ=0.606 eV, Γn=2.8 keV *6*.
9384.0 *3*	(2−)	E(n)(lab)=827.4 *3*, Γγ=0.606 eV, Γn=0.44 keV *21*.
9388.1 *5*	(1+)	E(n)(lab)=831.6 *5*, Γγ=0.860 eV, Γn=0.445 keV.
9388.7 *3*	(2−)	E(n)(lab)=832.3 *3*, Γγ=0.860 eV, Γn=1.4 keV *3*.
9392.2 *3*	(2−)	E(n)(lab)=835.9 *3*, Γγ=0.860 eV, Γn=1.2 keV *3*.
9395.22 *23*	(3−)	E(n)(lab)=838.95 *23*, Γγ=0.860 eV, Γn=3.4 keV *5*.
9401.2 *3*	(1−)	E(n)(lab)=845.2 *3*, Γγ=0.860 eV, Γn=4.2 keV *10*.
9404.41 *14*	(2−)	E(n)(lab)=848.41 *14*, Γγ=0.860 eV, Γn=2.4 keV *5*.
9408.38 *11*	(2−)	E(n)(lab)=852.49 *11*, Γγ=0.860 eV, Γn=1.7 keV *3*.
9416.61 *17*	2+	E(n)(lab)=860.96 *17*, Γγ=0.606 eV, Γn=7.2 keV *12*.
9418.22 *14*	(3−)	E(n)(lab)=862.61 *14*, Γγ=0.860 eV, Γn=0.70 keV *18*.
9426.92 *13*	(1−)	E(n)(lab)=871.57 *13*, Γγ=0.860 eV, Γn=2.0 keV *3*.
9432.19 *14*	(2−)	E(n)(lab)=876.99 *14*, Γγ=0.860 eV, Γn=0.58 keV *14*.
9438.01 *15*	(1)+	E(n)(lab)=882.98 *15*, Γγ=0.606 eV, Γn=0.98 keV *4*.
9441.51 *14*	(3−)	E(n)(lab)=886.58 *14*, Γγ=0.860 eV, Γn=3.2 keV *3*.
9449.77 *17*	(2−)	E(n)(lab)=895.07 *17*, Γγ=0.860 eV, Γn=1.51 keV *22*.
9460.25 *24*	(3−)	E(n)(lab)=905.86 *24*, Γγ=0.860 eV, Γn=0.44 keV *11*.
9465.15 *16*	(3−)	E(n)(lab)=910.90 *16*, Γγ=0.860 eV, Γn=3.3 keV *4*.
9469.77 *24*	(2−)	E(n)(lab)=915.65 *24*, Γγ=0.860 eV, Γn=1.0 keV *4*.

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^{35}Cl(n,γ),(n,n):res 2006Sa17,2006MuZX (continued)

^{36}Cl Levels (continued)

E(level)[†]	Jπ[#]	Comments
9476.45 *14*	(2⁻)	E(n)(lab)=922.52 *14*, Γγ=0.860 eV, Γn=1.6 keV *3*.
9486.77 *13*	(2⁻)	E(n)(lab)=933.14 *13*, Γγ=0.860 eV, Γn=0.94 keV *15*.
9490.19 *15*	(1⁻)	E(n)(lab)=936.66 *15*, Γγ=0.860 eV, Γn=0.61 keV *20*.
9497.28 *15*	(1⁻)	E(n)(lab)=943.95 *15*, Γγ=0.860 eV, Γn=0.56 keV *20*.
9499.37 *14*	(2⁻)	E(n)(lab)=946.10 *14*, Γγ=0.860 eV, Γn=0.48 keV *15*.
9503.61 *12*	(3⁻)	E(n)(lab)=950.47 *12*, Γγ=0.860 eV, Γn=0.65 keV *11*.
9506.41 *13*	(2⁻)	E(n)(lab)=953.35 *13*, Γγ=0.860 eV, Γn=1.00 keV *19*.
9527.2 *4*	(1⁻)	E(n)(lab)=974.8 *4*, Γγ=0.860 eV, Γn=3.3 keV *8*.
9533.3 *3*	(2⁻)	E(n)(lab)=981.0 *3*, Γγ=0.860 eV, Γn=4.2 keV *7*.
9536.7 *5*	(1⁻)	E(n)(lab)=984.5 *5*, Γγ=0.860 eV, Γn=1.8 keV *5*.
9543.53 *18*	(2⁻)	E(n)(lab)=991.54 *18*, Γγ=0.860 eV, Γn=4.3 keV *7*.
9551.60 *12*	(2⁻)	E(n)(lab)=999.85 *12*, Γγ=0.860 eV, Γn=3.0 keV *4*.
9558.1 *3*	(2⁻)	E(n)(lab)=1006.5 *3*, Γγ=0.860 eV, Γn=3.6 keV *15*.
9561.9 *4*	(3⁻)	E(n)(lab)=1010.4 *4*, Γγ=0.860 eV, Γn=7.9 keV *13*.
9567.8 *3*	(2⁻)	E(n)(lab)=1016.5 *3*, Γγ=0.860 eV, Γn=4.0 keV *8*.
9579.5 *3*	(2⁻)	E(n)(lab)=1028.5 *3*, Γγ=0.860 eV, Γn=2.4 keV *5*.
9584.5 *2*	(3)⁻	E(n)(lab)=1033.7 *2*, Γγ=0.860 eV, Γn=3.6 keV *5*.
9600.9 *2*	(2⁻)	E(n)(lab)=1050.6 *2*, Γγ=0.860 eV, Γn=1.3 keV *3*.
9603.7 *4*	2⁺	E(n)(lab)=1053.4 *4*, Γγ=0.606 eV, Γn=2.0 keV *6*.
9605.7 *4*	(2⁻)	E(n)(lab)=1055.5 *4*, Γγ=0.860 eV, Γn=3.9 keV *7*.
9612.1 *4*	(3⁻)	E(n)(lab)=1062.1 *4*, Γγ=0.860 eV, Γn=0.42 keV *11*.
9621.0 *3*	(3⁻)	E(n)(lab)=1071.2 *3*, Γγ=0.860 eV, Γn=1.9 keV *3*.
9623.7 *4*	(2⁻)	E(n)(lab)=1074.0 *4*, Γγ=0.860 eV, Γn=1.0 keV *3*.
9629.7 *4*	(2⁻)	E(n)(lab)=1080.2 *4*, Γγ=0.860 eV, Γn=0.75 keV *25*.
9634.8 *7*	(3⁻)	E(n)(lab)=1085.4 *7*, Γγ=0.860 eV, Γn=0.134 keV.
9638.0 *3*	(2⁻)	E(n)(lab)=1088.7 *3*, Γγ=0.860 eV, Γn=5.2 keV *11*.
9641.2 *5*	(1⁻)	E(n)(lab)=1092.0 *5*, Γγ=0.860 eV, Γn=2.0 keV *6*.
9652.5 *2*	(3⁻)	E(n)(lab)=1103.7 *2*, Γγ=0.860 eV, Γn=1.61 keV *16*.
9657.9 *4*	(1⁺)	E(n)(lab)=1109.2 *4*, Γγ=0.606 eV, Γn=2.7 keV *10*.
9664.2 *3*	(2⁻)	E(n)(lab)=1115.7 *3*, Γγ=0.860 eV, Γn=3.4 keV *7*.
9664.5 *9*	(2⁻)	E(n)(lab)=1116.0 *9*, Γγ=0.860 eV, Γn=44 keV *4*.
9669.3 *5*	(3⁻)	E(n)(lab)=1120.9 *5*, Γγ=0.860 eV, Γn=0.39 keV *15*.
9675.1 *4*	(3⁻)	E(n)(lab)=1126.9 *4*, Γγ=0.860 eV, Γn=0.62 keV *16*.
9680.1 *3*	(2⁻)	E(n)(lab)=1132.0 *3*, Γγ=0.860 eV, Γn=1.5 keV *4*.
9685.8 *3*	(2⁺)	E(n)(lab)=1137.9 *3*, Γγ=0.606 eV, Γn=1.8 keV *5*.
9686.6 *6*	(1⁻)	E(n)(lab)=1138.7 *6*, Γγ=0.860 eV, Γn=1.0 keV *5*.
9692.6 *3*	(3⁻)	E(n)(lab)=1144.9 *3*, Γγ=0.860 eV, Γn=1.6 keV *3*.
9702.7 *2*	(3⁻)	E(n)(lab)=1155.3 *2*, Γγ=0.860 eV, Γn=1.58 keV *23*.
9712.4 *2*	(2⁻)	E(n)(lab)=1165.3 *2*, Γγ=0.860 eV, Γn=7.3 keV *8*.
9719.0 *3*	(2⁻)	E(n)(lab)=1172.1 *3*, Γγ=0.860 eV, Γn=1.5 keV *4*.
9723.8 *4*	(1⁻)	E(n)(lab)=1177.0 *4*, Γγ=0.860 eV, Γn=1.5 keV *6*.
9736.1 *2*	(3⁻)	E(n)(lab)=1189.7 *2*, Γγ=0.860 eV, Γn=7.3 keV *8*.
9744.7 *2*	(2⁻)	E(n)(lab)=1198.5 *2*, Γγ=0.860 eV, Γn=3.2 keV *7*.
9751.7	(1⁺)	E(n)(lab)=1205.7, Γγ=0.606 eV, Γn=0.643 keV.
9754.9	(3⁻)	E(n)(lab)=1209.0, Γγ=0.860 eV, Γn=3.49 keV.
9763.7	(2⁻)	E(n)(lab)=1218.1, Γγ=0.860 eV, Γn=3.25 keV.
9770.7	(1⁻)	E(n)(lab)=1225.3, Γγ=0.860 eV, Γn=1.81 keV.
9782.3	(3⁻)	E(n)(lab)=1237.2, Γγ=0.860 eV, Γn=5.89 keV.
9788.4	(2⁻)	E(n)(lab)=1243.5, Γγ=0.860 eV, Γn=3.10 keV.
9802.2	(2⁺)	E(n)(lab)=1257.7, Γγ=0.606 eV, Γn=1.75 keV.
9812.8	(3⁻)	E(n)(lab)=1268.6, Γγ=0.860 eV, Γn=2.39 keV.
9821.7	(3⁻)	E(n)(lab)=1277.7, Γγ=0.860 eV, Γn=2.98 keV.
9827.6	(2⁻)	E(n)(lab)=1283.8, Γγ=0.860 eV, Γn=5.04 keV.
9854.8	(2⁻)	E(n)(lab)=1311.8, Γγ=0.860 eV, Γn=0.795 keV.
9858.0	(3⁻)	E(n)(lab)=1315.1, Γγ=0.860 eV, Γn=12.1 keV.
9879.4	(2⁻)	E(n)(lab)=1337.1, Γγ=0.860 eV, Γn=4.85 keV.

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^{35}Cl(n,γ),(n,n):res 2006Sa17,2006MuZX (continued)

^{36}Cl Levels (continued)

E(level)†	Jπ#	Comments
9895.4	(1⁻)	E(n)(lab)=1353.6, Γ_γ=0.860 eV, Γ_n=38.8 keV.
9895.9	(2⁻)	E(n)(lab)=1354.1, Γ_γ=0.860 eV, Γ_n=11.0 keV.
9907.6	(2⁻)	E(n)(lab)=1366.1, Γ_γ=0.860 eV, Γ_n=8.35 keV.
9931.5	(3⁻)	E(n)(lab)=1390.7, Γ_γ=0.860 eV, Γ_n=5.50 keV.
9944.3	(2⁻)	E(n)(lab)=1403.9, Γ_γ=0.860 eV, Γ_n=8.07 keV.
9965.2	(3⁻)	E(n)(lab)=1425.4, Γ_γ=0.860 eV, Γ_n=13.8 keV.
9973.9	(2⁻)	E(n)(lab)=1434.3, Γ_γ=0.860 eV, Γ_n=5.42 keV.
9975.0	(1⁻)	E(n)(lab)=1435.5, Γ_γ=0.860 eV, Γ_n=5.37 keV.
9980.8	(2⁻)	E(n)(lab)=1441.4, Γ_γ=0.860 eV, Γ_n=1.61 keV.
10023.3	(3⁻)	E(n)(lab)=1485.1, Γ_γ=0.860 eV, Γ_n=10.5 keV.
10099.1	(2⁺)	E(n)(lab)=1563.1, Γ_γ=0.384 eV, Γ_n=621.9 keV. E(n)(lab)=7563.1 in table IV of 2006Sa17 seems a misprint.

† Deduced by the evaluators from E(n)(lab) in 2006Sa17 and S(n)=8579.79 *1* for ^{36}Cl (2011AuZZ).
‡ Fictitious level.
# From multilevel Reich-Moore R-matrix formalism (2006Sa17).