Adopted Levels

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	31-Jan-2016

S(n)=21820 *SY*; S(p)=−1.8×10^3 *1*; Q(α)=−8400 *SY* 2012Wa38,2015Mu13
Estimated uncertainties (2012Wa38): 720 for S(n), 570 for Q(α).
S(p) from 2015Mu13. S(n) and Q(α) from 2012Wa38. S(p)=−2410 *430* (syst,2012Wa38).
S(2n)=40610 (theory,1997Mo25), S(2p)=90 *400* (2012Wa38).
Non-observation of ^{29}Cl events in 1996PoZZ, assigned an upper limit of half-life based on expected cross section.
Evidence of proton-unbound ground state and first excited state in ^{29}Cl provided by 2015Mu13 from the proton decay of (2$^+$) excited state of ^{30}Ar. The ground state of ^{30}Ar decays by two-proton emission to ^{28}S.

^{29}Cl Levels

Cross Reference (XREF) Flags

A ^{30}Ar p decay:(2$^+$) state

E(level)[†]	J$^\pi$[‡]	$T_{1/2}$	XREF	Comments
0.0	(1/2$^+$)	<20 ns	A	%p≈100 Decays to ground state of ^{28}S (2015Mu13). E(level): the ground state is deduced at E(p)=1.8 MeV *1* (2015Mu13). $T_{1/2}$: <20 ns from 1996PoZZ.
0.5×10^3	(3/2$^+$)		A	%p≈100 Decays to ground state and first 2$^+$ state of ^{28}S (2015Mu13). E(level): from E(p)=1.8 MeV and 2.3 MeV peaks in proton spectrum (2015Mu13).

[†] From measured positions and angular correlations of ^{30}Ar in-flight decay products such as coincident two protons (emitted by the decay of ^{30}Ar) and heavy-ion recoil such as ^{28}S (2p-decay daughter of ^{30}Ar) (2015Mu13).
[‡] From analogy with mirror nuclide ^{29}Mg, where the 3/2$^+$ ground state and the first excited state, presumably 1/2$^+$, are separated by only 55 keV (see ^{29}Mg Adopted Levels) (2015Mu13).