

^{34}Cl ε decay (1.5266 s) 2006Ia05,1983Ko22,1976Wi08

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, Balraj Singh		NDS 113, 1563 (2012)	28-May-2012

Parent: ^{34}Cl : E=0; $J^\pi=0^+$; $T_{1/2}=1.5266$ s 4; $Q(\varepsilon)=5491.634$ 43; % ε +% β^+ decay=100.0

^{34}Cl - $J^\pi, T_{1/2}$: From ^{34}Cl Adopted Levels.

^{34}Cl - $Q(\varepsilon)$: From 2011AuZZ. Other: 5492.01 15 (2003Au03).

Half-life measurements: 2006Ia05, 1983Ko22, 1976Wi08, 1973Ry01, 1972Ha82, 1965Eb01, 1965Fr06, 1961Ja22, 1960Ja12, 1958Mi85, 1954Ki36.

β^+ spectrum measurement: 1956Gr07, 1953St42, 1951Ru24.

β polarization measurement: M. Deutsch et al., Phys. Rev. 107, 1733 (1957).

Energy balance: total decay energy of 5491.88 keV 18 deduced (using RADLIST code) from proposed decay scheme is in agreement with the expected value of 5491.63 keV 4, indicating that decay scheme is complete.

 ^{34}S Levels

E(level)	J^π	$T_{1/2}$
0	0^+	stable

 ε, β^+ radiations

E(decay)	E(level)	$I\beta^+$ †	$I\varepsilon$ †	Log ft	$I(\varepsilon + \beta^+)$ †	Comments
(5491.63 4)	0	99.9208 8	0.0792 8	3.48448 12	100	av $E\beta=2052.18$; $\varepsilon K=0.0007161$; $\varepsilon L=6.738 \times 10^{-5}$; $\varepsilon M+=8.233 \times 10^{-6}$ Measured $E\beta=4500$ 30 (1956Gr07).

† Absolute intensity per 100 decays.