^{35}S β^- decay (87.61 d)

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Lijie Sun and Jun Chen	NDS 211,1 (2026)	30-Sep-2025

Parent: ^{35}S: E=0; $J^\pi=3/2^+$; $T_{1/2}$=87.61 d *24*; Q(β^-)=167.322 *26*; %β^- decay=100

^{35}S-Q(β^-): From 2021Wa16.

^{35}S-J^π,$T_{1/2}$: From the Adopted Levels of ^{35}S.

1983Ra04: Q(β^-)=166.74 keV *26*.

1985Ap01: Q(β^-)=167.29 keV *3*.

1985Oh06: Q(β^-)=167.4 keV *1*.

1985Al11: Upper limit for 17 keV neutrino: 0.4%.

1985Oh06, 1992Hi06, 1993Ab11, 1993Be21, 1993Mo01: Deduced evidence against 17 keV neutrino.

1994Bo33: Deduced spurious 17 keV neutrino signal origin.

1995Bo43: Q(β^-)=167.60 keV *5* and upper limit for 17 keV neutrino is 1.8×10^{-3}.

1995Mo17: Proposed 17 keV neutrino hypothesis exclusion.

Others: 2008Al39, 2000Ho13, 1999Oh09, 1996Je06, 1994Gr04, 1994Ho35, 1994Mu26, 1993Gi08, 1993Gr07, 1992Ch27, 1989Ba04, 1989Ta08, 1988Ch45, 1987Ge04, 1987Na22, 1985Ma59, 1999Pa18.

^{35}S decay leads only to the ground state of ^{35}Cl.

^{35}Cl Levels

E(level)	J^π	Comments
0	$3/2^+$	J^π: From the Adopted Levels.

β^- radiations

av Eβ: Additional information 1.

E(decay)	E(level)	Iβ^- [†]	Log *ft*	Comments
(167.3 *14*)	0	100	5.023 *2*	av Eβ=48.2760 *84*

[†] Absolute intensity per 100 decays.