^{99}Sr β^-n decay (0.269 s)

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, Balraj Singh	NDS 164, 1 (2020)	15-Feb-2020

Parent: ^{99}Sr: E=0.0; $J^\pi=3/2^+$; $T_{1/2}$=0.269 s *2*; Q(β^-n)=1702 *9*; %β^-n decay=0.096 *16*

^{99}Sr-Q(β^-n): From 2017Wa10.

^{99}Sr-J^π,$T_{1/2}$: From ^{99}Sr Adopted Levels in the ENSDF database (July 2017 update), where value is from 1986ReZU. Half-life uncertainty is inflated by evaluators here from 0.001 s to 0.002 s Others: 0.42 s *+12−9* (2012Qu01), 0.285 s *30* and 0.270 s *20* (1987PfZX, measured using ISOLDE and OSTIS), 0.270 s *10* (1985Pe02), 0.266 *5* (1983Wo10), 0.300 s *30* (1982Ga24, OSTIS), 0.290 s *40* (1978Ko29).

^{99}Sr-%β^-n decay: %β^-n=0.096 *16* from weighted average of 0.093 *12* (1986ReZU, values of 0.095 *6* in 1986Wa17 and 0.31 *11* in 1983Re10 are superseded by that in 1986ReZU), 0.18 *10* and 0.35 *15* (1987PFZX, measured in two laboratories: ISOLDE and OSTIS). Others: 3.4 *24* (1975As04) is discrepant; 0.35 *15* in 1982Ga24 (OSTIS) could be from the same measurement as the one from the OSTIS lab in 1987PfZX. Value is 0.100 *19* in ^{99}Sr Adopted Levels in the ENSDF database (July 2017 update), where value is from 1993Ru01 evaluation.

Measured $T_{1/2}$ and %β^-n: 1986ReZU (also 1986ReZS,1986Wa17, 1983Re10), 1982Ga24, 1975As04, 1974RiYE, 1971Tr02.

Measured $T_{1/2}$ (^{99}Sr isotope): 1985Pe02, 1983Wo10, 1983DeZI, 1978Ko29.

Additional information 1.

%β^-n=0.100 *19* (1993Ru01).

^{98}Y Levels

E(level)
0.0