^{26}F β^-n decay (2.2 ms) 2013Le03

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia, Anagha Chakraborty	NDS 205,1 (2025)	31-May-2025

Parent: ^{26}F: E=643.4 *1*; J^π=(4$^+$); $T_{1/2}$=2.2 ms *1*; Q(β^-n)=12.64×10^3 *11*; %β^-n decay=12 *8*

^{26}F-E,J^π,$T_{1/2}$: from ^{26}F Adopted Levels in 2016Ba18.

^{26}F-Q(β^-n): from 2021Wa16: AME-2021.

^{26}F-%β^-n decay: 65% *18* of 18% *11* β^- decay branch of the isomer (2013Le03 − e-mail communication with A. Lepailleur (1st author of 2013Le03: dated Sept 10, 2015)). Note that no explanation or methodology for the extraction of this value is given in 2013Le03.

^{26}F was produced from fragmentation of a primary beam of ^{36}S, E=77.6 MeV/nucleon on a Be target (thickness=237 mg/cm^2), separated by LISE spectrometer at GANIL, identified from energy loss in a stack of Si detectors and time-of-flight, and implanted in a 1 mm-thick double-sided Si stripped (DSSSD) detector surrounded by four clover HPGe detectors. Measured half-life of ^{26}F g.s. and isomer, β^-n branch.

^{25}Ne Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	1/2$^+$	603 ms *8*	E(level): assumed that the ground state of ^{25}Ne is populated in this decay. J^π,$T_{1/2}$: from Adopted Levels.