
Adopted Levels:unobserved

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia, A. Chakraborty		NDS 197,1 (2024)	31-May-2024

$Q(\beta^-)=25680$ syst; $S(n)=-740$ syst [2021Wa16](#)

$\Delta Q(\beta^-)=560$, $\Delta S(n)=730$ (syst,[2021Wa16](#)).

$S(2n)=590$ 510, $Q(\beta^-n)=22490$ 520 (syst,[2021Wa16](#)).

[1999Sa06](#): Unstable to ground state neutron emission. Reaction: $\text{Ta}(^{40}\text{Ar},x)$, $E=94.1$ MeV/nucleon, at RIKEN facility. Magnetic fragment separator, identification by measurements of energy loss, time-of-flight, magnetic rigidity for each fragment, etc. No ^{30}F events were identified. Similar results were reported in [2004Lu19](#).

Structure calculation:

[2022Fo03](#): Performed large-scale shell model calculations including continuum states to investigate the properties of the neutron-rich isotopes of fluorine. Predicted the occupancy and role of the $\nu p_{3/2}$ shell of the heaviest fluorine isotopes including ^{30}F .

 ^{30}F Levels

E(level)	Comments
0.0	$\%n=?$ ^{30}F is most likely particle unstable, since $S_n=-740$ 730 (sy) and no events were identified in the experimental work of 1999Sa06 , 2004Lu19 .