

Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja	NDS 130, 183 (2015)	30-Sep-2015

$Q(\beta^-) = -4540$ SY; $S(n) = 6740$ SY; $S(p) = 3630$ SY; $Q(\alpha) = 7660$ SY [2012Wa38](#)
 $\Delta(Q(\beta^-)) = 280$, $\Delta(S(n)) = 170$, $\Delta(S(p)) = 220$ and $\Delta(Q(\alpha)) = 150$ (syst, [2012Wa38](#)).

Experimental Studies:

[2010AsZX](#): Determined $t_{1/2}$ of ^{241}Cf from decay curve analysis.

[1970Si19](#): ^{241}Cf identified through ^{234}U , ($^{12}\text{C}, 5n$). Alpha spectrum was measured with a Si(Au) detector.

[1967Nu01](#): Studied alpha decay of ^{245}Fm .

Theoretical/Systematical Studies:

[2013IS13](#): Prediction of spins from systematic studies of preformation probability for α decay and the neutron number of parent.

 ^{241}Cf Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	$(7/2^-)$	3.78 min 70	$\% \alpha \approx 25$; $\% \epsilon + \% \beta^+ \approx 75$ The electron-capture branch has not been observed. The 7342α from ^{241}Cf is assumed by the evaluator to be a favored transition with HF=2.0. This gives $\% \alpha \approx 25$ and thus $\% \epsilon + \% \beta^+ \approx 75$. $T_{1/2}$: From 1970Si19 . Others: 2.35 m 18 (2010AsZX).
≈ 155	$(1/2^+)$		J^π : An analogy to ^{235}U and ^{237}Pu , both with 143 neutrons, suggest the configuration $7/2[743]$. J^π : the HF for α decay from ^{245}Fm determines the configuration to be the same as that of the ^{245}Fm g.s. If configuration = $1/2[631]$ for ^{245}Fm , in analogy to ^{241}Cm , ^{239}Pu , and ^{237}U with 145 neutrons, then that configuration applies also to this level.