Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Y. Akovali	NDS 94,131 (2001)	1-Aug-2001

Q(β^-)=−8.5×10^2 *syst*; S(n)=6.02×10^3 *syst*; S(p)=3.79×10^3 *syst*; Q(α)=6.83×10^3 *syst* 2012Wa38
Note: Current evaluation has used the following Q record −801 syst 5976 syst 3742 syst 6878 syst 1995Au04.

For calculations of fission barrier, see for example, 1980Ku14 and 1991Os05.

^{250}Es Levels

E(level)	J$^\pi$	T$_{1/2}$	Comments
0.0	(6$^+$)	8.6 h *1*	%ε>97; %α<3 T$_{1/2}$: measured by 1977Fr03. Earlier measurement: 8.3 h *2* (1970Ah01). J$^\pi$: the log *ft* values for ε decays to (5)$^-$ and (6)$^-$ states in ^{250}Cf suggest J=5 or 6. In analogy to ^{245}Pu, ^{247}Cm and ^{249}Cf, the 155th odd neutron probably is in the n 9/2[734] state; analogy to ^{249}Es suggests p 3/2[521] orbital, analogy to ^{251}Es, ^{253}Es suggests p 7/2[633] for the 99th proton. The most probable assignment is, therefore, 6$^+$,(p 3/2[521],n 9/2[734]). The ε decays to 1457-, 1478- and 1499-keV levels in ^{250}Cf are consistent with ε transitions from p 7/2[633] to n 9/2[734], from p 3/2[521] to n 3/2[622], and from p 3/2[521] to n 1/2[620] states, respectively. α decay was not observed, and an upper limit of 3% was given by 1970Ah01.
0.0+x	1$^{(-)}$	2.22 h *5*	%ε≤100 T$_{1/2}$: measured by 1980Ah03; earlier measurement: 2.1 h *2* (1970Ah01). J$^\pi$: J=1 from the log *ft* values for ε decays to 0$^+$, 2$^+$, and 2$^-$ states in ^{250}Cf. 1980Ah03 assigned 1$^-$,(p 7/2[633],n 9/2[734]) configuration. Only the ε decay was studied; no α′s were observed. E(level): the level energy has not been determined. The authors of 1980Ah03 assigned this level to an isomeric state by using the Gallagher-Moszkowski rule. The 8$^-$,(p 7/2[633],n 9/2[734]) state is expected to lie lower than the 1$^-$,(p 7/2[633],n 9/2[734]) state, suggesting, therefore, the 1$^-$ is not the g.s.