^{245}Cf ε decay

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja	NDS 189,1 (2023)	14-Feb-2023

Parent: ^{245}Cf: E=0.0; $J^{\pi}=1/2^{+}$; $T_{1/2}$=45.0 min *14*; Q(ε)=1571.4 *26*; %ε+%β^{+} decay=64.9 *40*

^{245}Cf-Q(ε): From 2021Wa16.

^{245}Cf-%ε+%β^{+} decay: From the intensity of the 252-keV γ ray from ^{245}Bk ε decay (I(252γ)=31.2%) relative to the alpha-particle intensity from ^{245}Cf α decay (1996Ma72). The evaluator has adjusted the branching ratio using the current absolute intensity for (I(252γ)=30.4 *% 27*).

1993MaZV: ^{245}Cf produced by bombarding ^{12}C ions on uranium target which was followed by rapid separation using the anion-exchange method. Measured x-γ coincidence.

^{245}Bk Levels

E(level)	J^{π}	$T_{1/2}$	Comments
0.0	(3/2^{-})	4.96 d *3*	J^{π},$T_{1/2}$: From Adopted Level.

γ(^{245}Bk)

E_{γ}[†]	E_i(level)
[x]570.6	
[x]600.8	
[x]616.2	

[†] From preliminary results in 1993MaZV.

[x] γ ray not placed in level scheme.