

$^{255}\text{Cf} \beta^-$ decay

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 114, 1041 (2013)	1-Nov-2011

Parent: ^{255}Cf : E=0; $J^\pi=(7/2^+)$; $T_{1/2}=85$ min 18; $Q(\beta^-)=720$ SY; $\% \beta^-$ decay=100.0

^{255}Es $Q(\beta^-)=720$ 200 (systematics,[2011AuZZ](#)).

If $J^\pi(^{255}\text{Cf})=7/2^+[613]$, then the expected main β^- feeding will be to the $7/2^+$ and $9/2^+$ levels of the $7/2[633]$ g.s. band in ^{255}Es .

[1992So06](#) suggest that allowed, hindered transitions in this region have $6.0 < \log ft \leq 7.5$. With 100% decay going to the $7/2^+[633]$ g.s., $\log ft=5.7$ 5.

 ^{255}Es Levels

E(level)	J^π
0	$(7/2^+)$

 β^- radiations

E(decay)	E(level)	$I\beta^-$ [†]	Log ft	Comments
(720 SY)	0	<100	≥ 5.7	av E β =218 syst

[†] Absolute intensity per 100 decays.