^{255}No ε decay   1976SiZS

History

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

Parent: ^{255}No: E=0; J$^\pi$=(1/2$^+$); T$_{1/2}$=3.1 min 2; Q(ε)=1963 16; %ε+%β^+ decay=38.6 25

^{255}No-%ε+%β^+ decay: from 1976SiZS.

Production: ^{249}Cf(^{12}C,α2n) E=86 MeV, ion chem. Measured α decays of: ^{255}No, ^{255}Md (ε daughter of ^{255}No) and ^{255}Fm (ε daughter of ^{255}Md). Deduced %ε+%β^+=38.6 25.

The decay scheme has not been studied.

^{255}Md Levels

E(level)†	J$^{\pi\dagger}$
0	(7/2$^-$)
12 SY	(1/2$^-$)

† From Adopted Levels.

ε,β^+ radiations

ε branchings are likely to feed the 1/2[521] and 3/2[521] bands in ^{255}Md; in ^{249}Cm β-decay the analogous log ft's to the bandheads are 5.8 and 5.9, respectively.

E(decay)	E(level)	Log ft	I(ε+β^+)†	Comments
(1951 16)	12	>5.0	<100	I(ε+β^+): ≈20% ε+β^+ branch would give log ft≈5.7 indicating that at least 80% of the decay will populate higher-energy levels.

† Absolute intensity per 100 decays.