^{252}Cf SF decay 1993Bu12

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 152, 331 (2018)	1-Apr-2018

Parent: ^{252}Cf: E=0.0; $J^{\pi}=0^+$; $T_{1/2}$=2.645 y *8*; %SF decay=?

1993Bu12: Measured Eγ, Iγ, $\gamma\gamma$ with an array of 20 Compton-suppressed Ge detectors. Identified transitions in ^{136}Te using coincidences with the complementary fragments of ^{112,114}Pd.

Other: 1999Hw04: Measured Eγ, Iγ, $\gamma\gamma$; deduced scission neutron yield.

^{136}Te Levels

E(level)†	J^{π}‡
0.0	0^+
606.0	2^+
1029.9	4^+
1382.3	6^+
2132.0	8^+
2792.3	10^+

† From Eγ.

‡ From the Adopted Levels.

$\gamma(^{136}Te)$

E$_\gamma$	I$_\gamma$†	E$_i$(level)	J_i^{π}	E$_f$	J_f^{π}
352.4	51	1382.3	6^+	1029.9	4^+
423.9	100	1029.9	4^+	606.0	2^+
606.0		606.0	2^+	0.0	0^+
660.3	14	2792.3	10^+	2132.0	8^+
749.7	27	2132.0	8^+	1382.3	6^+

† Obtained in a gate on the 606γ. General statement by the authors that ΔIγ ranges from 5% for low-spin states to 30% for high-spin states.

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Level Scheme

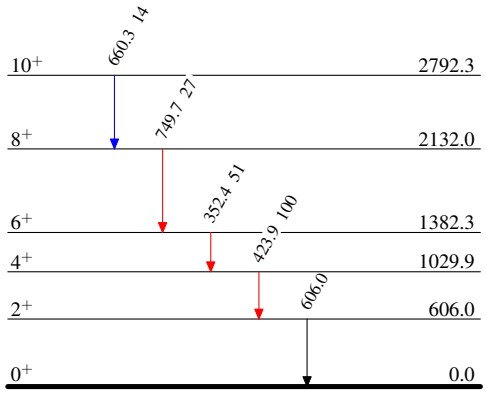
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{136}_{52}Te_{84}$