252 Cf SF decay 2006 Jo 01

History

Type Author Citation Literature Cutoff Date
Full Evaluation E. A. Mccutchan and A. A. Sonzogni NDS 115, 135 (2014)

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Parent: 252 Cf: E=0.0; J^{π} =0+; $T_{1/2}$ =2.645 y 8; %SF decay=3.092 8

2006Jo01: Measured E γ , I γ , $\gamma\gamma$ using Gammasphere array with 102 Compton-suppressed Ge detectors. Identification of γ ray in ⁸⁸Se was achieved by gating on a known $\gamma\gamma$ cascade in complementary (fission partner) nuclide ¹⁶²Gd.

In the SF decay of ²⁴⁸Cm, 2013Rz02 assign the 886γ to ⁸⁷Se. This is based on coincidences with the complementary fission partner of ¹⁵⁸Sm and coincidences with a 92γ. 2013Ma22 observed a 92γ in the decay of ⁸⁷As into ⁸⁷Se, providing further support for the assignment to ⁸⁷Se. Thus, the 886γ and corresponding 886-keV level are not adopted.

⁸⁸Se Levels

E(level) J^{π} Comments $0.0 \quad 0^{+}$ 886.0? (2^{+}) J^{π} : systematics of even-even nuclides.

 γ (88Se)

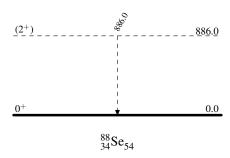
$$\frac{E_{\gamma}}{886.0^{\dagger}}$$
 $\frac{E_{i}(\text{level})}{886.0?}$ $\frac{J_{i}^{\pi}}{(2^{+})}$ $\frac{E_{f}}{0.0}$ $\frac{J_{f}^{\pi}}{0.0}$

Legend

252 Cf SF decay 2006 Jo01

Level Scheme

---- γ Decay (Uncertain)



[†] Placement of transition in the level scheme is uncertain.