

^{252}Cf SF decay 2008Hw03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 114, 1293 (2013)	1-Sep-2013

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

^{252}Cf - $T_{1/2}$: From 1986LoZT.

2008Hw03: ^{252}Cf source (α decay intensity of 62 μCi) placed between two 13-micron thick Fe foils inside a 7.62 cm polyethylene ball; Gammasphere array (101 Compton-suppressed Ge detectors); measured E_γ ($E>33$ keV), I_γ , $\gamma\gamma$ coin, (Sm x ray)- γ coin, Sm-Kr cross coin. The γ rays from Kr were identified by gating on transitions in the Sm fission partner.

 ^{91}Kr Levels

E(level) [†]	J^π	Comments
0.0	5/2 ⁽⁺⁾	J^π : from Adopted Levels.
1155.5		
1916.2		

[†] From E_γ .

 $\gamma(^{91}\text{Kr})$

E_γ	I_γ	$E_i(\text{level})$	E_f	J_f^π	Comments
760.7	53 28	1916.2	1155.5		I_γ : from $I(1156\gamma)/I(761\gamma)=1.9$ 10.
1155.5	100	1155.5	0.0	5/2 ⁽⁺⁾	

 ^{252}Cf SF decay 2008Hw03Level Scheme

Intensities: Relative I_γ

Legend

$\longrightarrow$	$I_\gamma < 2\% \times I_\gamma^{\text{max}}$
$\longrightarrow$	$I_\gamma < 10\% \times I_\gamma^{\text{max}}$
$\longrightarrow$	$I_\gamma > 10\% \times I_\gamma^{\text{max}}$

