

$^{252}\text{Cf}$  SF decay    1999Sa58

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 110, 507 (2009)	1-Oct-2008

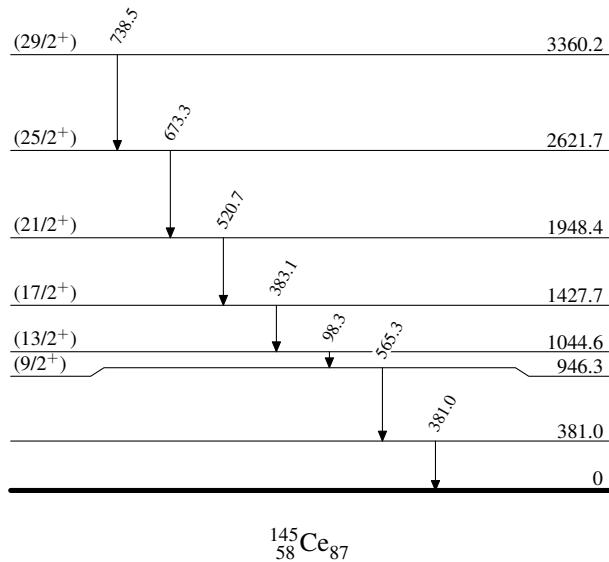
Parent:  $^{252}\text{Cf}$ : E=0.0;  $J^\pi=0^+$ ;  $T_{1/2}=2.645$  y; %SF decay=?**Additional information 1.**Measured  $E\gamma$ , and  $\gamma\gamma$  using the Gammasphere array of 72 Compton suppressed Ge detectors. $^{145}\text{Ce}$  Levels

E(level)	$J^\pi$	Comments
0		$J^\pi=(5/2^-)$ in Adopted Levels.
381.0		
946.3	(9/2 <sup>+</sup> )	
1044.6 <sup>†</sup>	(13/2 <sup>+</sup> )	
1427.7 <sup>†</sup>	(17/2 <sup>+</sup> )	
1948.4 <sup>†</sup>	(21/2 <sup>+</sup> )	
2621.7 <sup>†</sup>	(25/2 <sup>+</sup> )	
3360.2 <sup>†</sup>	(29/2 <sup>+</sup> )	

<sup>†</sup> Band(A): Yrast band built on  $\nu i_{13/2}$  state. $\gamma(^{145}\text{Ce})$ 

$E_\gamma$ <sup>†</sup>	$E_i$ (level)	$J_i^\pi$	$E_f$	$J_f^\pi$	Comments
98.3	1044.6	(13/2 <sup>+</sup> )	946.3	(9/2 <sup>+</sup> )	
381.0	381.0		0		
383.1	1427.7	(17/2 <sup>+</sup> )	1044.6	(13/2 <sup>+</sup> )	
520.7	1948.4	(21/2 <sup>+</sup> )	1427.7	(17/2 <sup>+</sup> )	
565.3	946.3	(9/2 <sup>+</sup> )	381.0		
673.3	2621.7	(25/2 <sup>+</sup> )	1948.4	(21/2 <sup>+</sup> )	
738.5	3360.2	(29/2 <sup>+</sup> )	2621.7	(25/2 <sup>+</sup> )	This $\gamma$ -ray transition does not belong to the yrast band ( <a href="#">2005Ve09</a> ).

<sup>†</sup> Different level scheme placement in  $^{208}\text{Pb}(^{18}\text{O},X\gamma)$  ([2005Ve09](#)).

$^{252}\text{Cf SF decay} \quad 1999\text{Sa58}$ Level Scheme

$^{252}\text{Cf}$  SF decay    1999Sa58

Band(A): Yrast band  
built on  $\nu i_{13/2}$  state

(29/2<sup>+</sup>)      3360.2

738

(25/2<sup>+</sup>)      2621.7

673

(21/2<sup>+</sup>)      1948.4

521

(17/2<sup>+</sup>)      1427.7

383

(13/2<sup>+</sup>)      1044.6

$^{145}_{58}\text{Ce}_{87}$