

$^{252}\text{Cf}$  SF decay [1997Ha64](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 172, 1 (2021)	31-Jan-2021

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

$^{252}\text{Cf}$ - $T_{1/2}$ : From the Adopted Levels of  $^{252}\text{Cf}$ .

$^{252}\text{Cf}$ -%SF decay: %SF=3.092 8 for  $^{252}\text{Cf}$  SF decay.

[1997Ha64](#) (also [1998JoZX](#)): measurements were carried out at Oak Ridge with 20 Compton-suppressed Ge detector and later with Gammasphere array. Measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma$ -coin,  $\gamma\gamma\gamma$ -coin. Deduced levels, J,  $\pi$ .

[Additional information 1](#).

 $^{100}\text{Sr}$  Levels

E(level) <sup>†</sup>	$J^\pi$ <sup>‡</sup>
0.0 <sup>#</sup>	0 <sup>+</sup>
129.8 <sup>#</sup> 5	(2 <sup>+</sup> )
417.7 <sup>#</sup> 7	(4 <sup>+</sup> )
852.0 <sup>#</sup> 9	(6 <sup>+</sup> )
1418.3 <sup>#</sup> 10	(8 <sup>+</sup> )
2108.1 <sup>#</sup> 11	(10 <sup>+</sup> )

<sup>†</sup> From  $E_\gamma$  data, assuming 0.5 keV uncertainty for each  $E_\gamma$ .

<sup>‡</sup> Probable assignment to g.s. yrast band.

<sup>#</sup> Band(A): g.s. band.

 $\gamma(^{100}\text{Sr})$ 

$E_\gamma$	$I_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$
129.8		129.8	(2 <sup>+</sup> )	0.0	0 <sup>+</sup>
287.9	100	417.7	(4 <sup>+</sup> )	129.8	(2 <sup>+</sup> )
434.3	50	852.0	(6 <sup>+</sup> )	417.7	(4 <sup>+</sup> )
566.3	25	1418.3	(8 <sup>+</sup> )	852.0	(6 <sup>+</sup> )
689.8	5	2108.1	(10 <sup>+</sup> )	1418.3	(8 <sup>+</sup> )

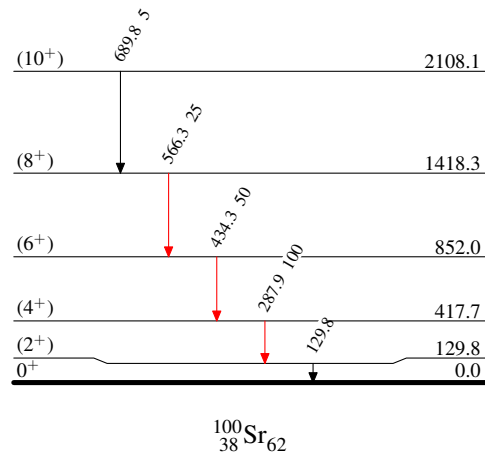
$^{252}\text{Cf}$  SF decay **1997Ha64**

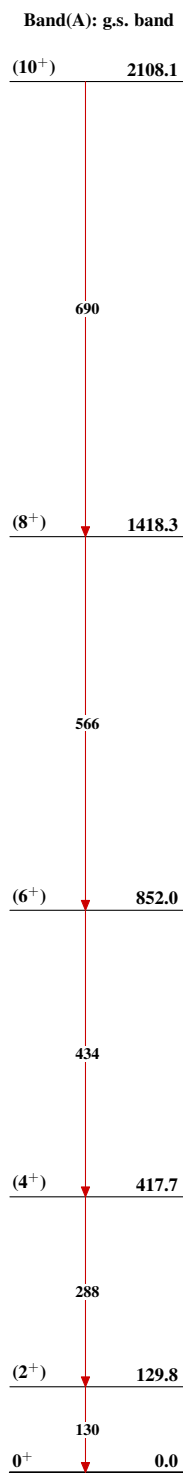
## Level Scheme

Intensities: Relative  $I_\gamma$ 

## Legend

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



$^{252}\text{Cf}$  SF decay     $^{1997}\text{Ha64}$  $^{100}_{38}\text{Sr}_{62}$