

$^{252}\text{Cf}$  SF decay    2006Jo01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	A. A. Sonzogni, M. Fadil, and B. Pfeiffer		NDS 110,2815 (2009)	30-Sep-2009

Parent:  $^{252}\text{Cf}$ : E=0;  $J^\pi=0^+$ ;  $T_{1/2}=2.645$  y 8; %SF decay=3.092 8Measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$  using Gammasphere array with 102 Compton-suppressed Ge detectors. $^{84}\text{Se}$  Levels

E(level) <sup>†</sup>	$J^\pi$ <sup>‡</sup>	Comments
0.0 <sup>#</sup>	$0^+$	
1455.1 <sup>#</sup> 10	(2 <sup>+</sup> )	
2122.2 <sup>#</sup> 14	(4 <sup>+</sup> )	
3371.8 17		
3482.2? 17		This level is uncertain in view of a 1361.5 $\gamma$ feeding 3537 level from a 4898 level in <a href="#">2013DrZY</a> and <a href="#">2004Pr10</a> .
3537.2 16	(5 <sup>+</sup> )	
3702.2 <sup>#</sup> 16	(6 <sup>+</sup> )	
4405.7 19	(7 <sup>+</sup> )	

<sup>†</sup> From least-squares fit  $E\gamma$ , assuming  $\Delta E\gamma=1$  keV.<sup>‡</sup> From Adopted Levels.

# Band(A): Yrast sequence.

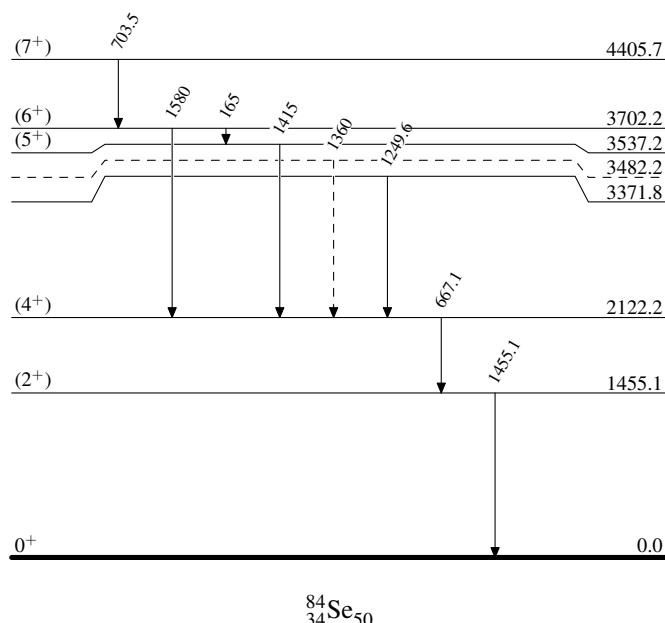
 $\gamma(^{84}\text{Se})$ 

$E\gamma$	$E_i$ (level)	$J_i^\pi$	$E_f$	$J_f^\pi$	Comments
165	3702.2	(6 <sup>+</sup> )	3537.2	(5 <sup>+</sup> )	
667.1	2122.2	(4 <sup>+</sup> )	1455.1	(2 <sup>+</sup> )	
703.5	4405.7	(7 <sup>+</sup> )	3702.2	(6 <sup>+</sup> )	
1249.6	3371.8		2122.2	(4 <sup>+</sup> )	
1360 <sup>†</sup>	3482.2?		2122.2	(4 <sup>+</sup> )	Note that a 1361.5 $\gamma$ in $^{238}\text{U}(\text{p},\text{F}\gamma)$ is placed from a 4898 to 3537 level, and similar placement for a 1361.4 $\gamma$ in $^{208}\text{Pb}(^{18}\text{O},\text{X}\gamma)$ .
1415	3537.2	(5 <sup>+</sup> )	2122.2	(4 <sup>+</sup> )	
1455.1	1455.1	(2 <sup>+</sup> )	0.0	$0^+$	
1580	3702.2	(6 <sup>+</sup> )	2122.2	(4 <sup>+</sup> )	

<sup>†</sup> Placement of transition in the level scheme is uncertain.

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Legend

- - - - - ►  $\gamma$  Decay (Uncertain)

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Band(A): Yrast sequence

 $(6^+)$       3702.2

1580

 $(4^+)$       2122.2

667

 $(2^+)$       1455.1

1455

 $0^+$       0.0 $^{84}_{34}\text{Se}_{50}$