

$\text{Sn}(^{80}\text{Se}, ^{80}\text{Se}'\text{xn}\gamma)$  1994Ma48,1992Ma27

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. M. Symochko, E. Browne, J. K. Tuli		NDS 110,2945 (2009)	1-Dec-2008

1994Ma48, 1992Ma27: E=344 MeV, enriched  $^{122}\text{Sn}$  and  $^{124}\text{Sn}$  targets (>98% enriched); measured  $\gamma$ ,  $\gamma\gamma$ ,  $\gamma\gamma(t)$  with twelve Compton suppressed Ge detectors.

 $^{119}\text{Sn}$  Levels

E(level) <sup>‡</sup>	J <sup>π</sup> <sup>†</sup>	T <sub>1/2</sub>	Comments
0	1/2 <sup>+</sup> <sup>#</sup>		
23.870 8	3/2 <sup>+</sup> <sup>#</sup>		
89.530 13	11/2 <sup>-</sup> <sup>#</sup>	293 d 1	
1309.3 9	(15/2 <sup>-</sup> )		
1378.8 9	(13/2 <sup>-</sup> )		
2127.0 10	(19/2 <sup>+</sup> )	9.6 μs 12	T <sub>1/2</sub> : from off-beam $\gamma\gamma(t)$ (1992Ma27).
2415.3 14	(19/2 <sup>-</sup> )		
2928.3 17	(23/2 <sup>-</sup> )		
3103.3 20	(27/2 <sup>-</sup> )	34 ns 10	T <sub>1/2</sub> : from $\gamma\gamma(t)$ (1994Ma48).

<sup>†</sup> Given by authors based on systematics and calculation of seniority scheme of h<sub>11/2</sub> level energies, except as noted.

<sup>‡</sup> From a least-squares fit by the evaluators to E( $\gamma$ 's).

<sup>#</sup> From Adopted Levels.

 $\gamma(^{119}\text{Sn})$ 

E <sub><math>\gamma</math></sub> <sup>†</sup>	E <sub>i</sub> (level)	J <sub>i</sub> <sup>π</sup>	E <sub>f</sub>	J <sub>f</sub> <sup>π</sup>	Mult.	$\alpha^{\#}$
23.870 <sup>‡</sup> 8	23.870	3/2 <sup>+</sup>	0	1/2 <sup>+</sup>		
65.66 <sup>‡</sup> 1	89.530	11/2 <sup>-</sup>	23.870	3/2 <sup>+</sup>		
175 1	3103.3	(27/2 <sup>-</sup> )	2928.3	(23/2 <sup>-</sup> )	[E2]	0.223
513 1	2928.3	(23/2 <sup>-</sup> )	2415.3	(19/2 <sup>-</sup> )		
748 1	2127.0	(19/2 <sup>+</sup> )	1378.8	(13/2 <sup>-</sup> )		
818 1	2127.0	(19/2 <sup>+</sup> )	1309.3	(15/2 <sup>-</sup> )		
1106 1	2415.3	(19/2 <sup>-</sup> )	1309.3	(15/2 <sup>-</sup> )		
1220 1	1309.3	(15/2 <sup>-</sup> )	89.530	11/2 <sup>-</sup>		
1289 1	1378.8	(13/2 <sup>-</sup> )	89.530	11/2 <sup>-</sup>		

<sup>†</sup> From 1994Ma48. Uncertainty of 1 keV has been assigned by the evaluators.

<sup>‡</sup> From Adopted Gammas.

<sup>#</sup> Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on  $\gamma$ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

Sn( $^{80}\text{Se}, ^{80}\text{Se}'\text{xn}\gamma$ ) 1994Ma48,1992Ma27Level Scheme