^{122}Sn(n,γ) E=thermal 1979BaYJ,2007Eg02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 174, 1 (2021)	15-Apr-2021

1979BaYJ: measured Eγ, Iγ. γ rays are not placed by the authors.
2007Eg02: E=th neutrons were produced from the WWR-M reactor of Petersburg Nuclear Physics Institute (PNPI). Measured Eγ, Iγ, σ(Eγ). Deduced absolute intensities.
Others: 1975SlZW, 1968HaZW, 1966HaZY.

^{123}Sn Levels

E(level)†	J$^\pi$†
0.0	11/2$^-$
24.6	3/2$^+$
150.4	1/2$^+$
920.0	(3/2)$^+$
1136.3	(1/2,3/2,5/2)$^+$
2156.0	(1/2,3/2,5/2)

† From Adopted Levels. Energies are rounded values.

γ(^{123}Sn)

γ rays are placed by the evaluator based on Adopted Levels, Gammas. γ rays from 1979BaYJ are not placed by the authors.

E$_\gamma$†	I$_\gamma$†	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Comments
125.76‡ *4*	28.4‡ *11*	150.4	1/2$^+$	24.6	3/2$^+$	
769.5‡ *2*	6.2‡ *16*	920.0	(3/2)$^+$	150.4	1/2$^+$	
985.3		1136.3	(1/2,3/2,5/2)$^+$	150.4	1/2$^+$	E$_\gamma$: rounded value from Adopted Gammas.
1019.7‡ *1*	24.7‡ *37*	2156.0	(1/2,3/2,5/2)	1136.3	(1/2,3/2,5/2)$^+$	
x1138.4 *4*	0.8 *5*					
x1466.0 *8*	1.4 *2*					
x1953 *1*	1.3 *3*					
x2131.3 *6*	2.4 *2*					
x2149.8 *4*	1.8 *3*					
x2500.9 *5*	1.6 *2*					
x2521.3 *8*	0.6 *1*					
x2561.4 *4*	4.0 *2*					
x2598.1 *4*	2.4 *2*					
x2717.4 *8*	0.9 *2*					
x3197.4 *3*	2.1 *1*					
x3233.7 *2*	2.4 *1*					
x3294.4 *3*	0.93 *7*					
x3360.1 *3*	1.3 *1*					
x3555.0 *6*	0.2 *1*					
x3571.5 *4*	0.56 *4*					
x3643.9 *2*	1.4 *1*					
x3681.2 *5*	0.56 *6*					
x3891 *1*	0.4 *1*					
x3967.5 *6*	0.59 *8*					
x4005 *1*	0.18 *3*					
x4016.0 *3*	0.82 *5*					
x4064.1 *6*	0.21 *4*					

Continued on next page (footnotes at end of table)

^{122}Sn(n,γ) E=thermal 1979BaYJ,2007Eg02 (continued)

$\gamma(^{123}Sn)$ (continued)

E_γ †	I_γ †	E_i(level)
[x]4098.0 *3*	0.74 *1*	
[x]4687.8 *8*	0.25 *4*	
[x]4735 *3*	0.2 *1*	
[x]5793.4 *7*	0.24 *3*	

† From 1979BaYJ for all unplaced γ rays, unless otherwise noted. Intensities are relative values.
‡ From 2007Eg02. Intensities are absolute γ emission probabilities.
[x] γ ray not placed in level scheme.

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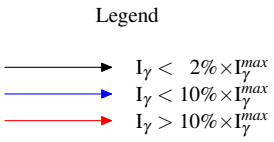
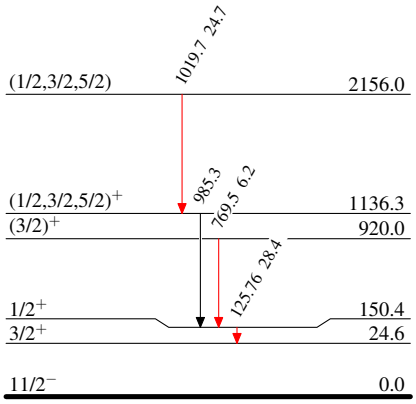
Level Scheme

Intensities: Relative I_γ





$^{123}_{50}Sn_{73}$