^{129}Sn IT decay (3.40 μs)   2002Ge07,2008Lo07

Parent: ^{129}Sn: E=1761.6 10; J$^\pi$=(19/2$^+$); T$_{1/2}$=3.40 μs 13; %IT decay=100.0

^{129}Sn Levels

E(level)[†]	J$^{\pi}$[†]	T$_{1/2}$[†]	Comments
35.15 5	11/2$^-$	6.9 min 1	%β^-=100; %IT<2×10^{-3}
1171.48 7	(15/2$^-$)		
1359.40 7	(13/2$^-$)		
1741.89 7	(15/2$^+$)		
1761.6 10	(19/2$^+$)	3.40 μs 13	%IT=100

[†] From Adopted Levels.

$\gamma(^{129}$Sn)

E$_\gamma$[†]	I$_\gamma$[‡]	E$_i$(level)	J$^\pi_i$	E$_f$	J$^\pi_f$	Mult.[†]	α[#]	Comments
19.7 10		1761.6	(19/2$^+$)	1741.89	(15/2$^+$)	(E2)	1.0×10^3 3	α(L)=7.8×10^2 23; α(M)=1.6×10^2 5; α(N)=27 9; α(O)=0.58 17 Mult.: half-life is characteristic of an E2 transition (2002Ge07).
382.49 2	69 7	1741.89	(15/2$^+$)	1359.40	(13/2$^-$)			
570.41 3	100 10	1741.89	(15/2$^+$)	1171.48	(15/2$^-$)			
1136.31 5	88 9	1171.48	(15/2$^-$)	35.15	11/2$^-$			
1324.25 5	65 7	1359.40	(13/2$^-$)	35.15	11/2$^-$			

[†] From Adopted Gammas.
[‡] From 2008Lo07.
[#] Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

^{129}Sn IT decay (3.40 μs)   **2002Ge07,2008Lo07**

Decay Scheme

Intensities: Relative I$_\gamma$

%IT=100.0

Legend

I$_\gamma$ < 2%×I$_\gamma^{max}$
I$_\gamma$ < 10%×I$_\gamma^{max}$
I$_\gamma$ > 10%×I$_\gamma^{max}$

19.7 (E2)
570.41 100
382.49 69
1324.25 65
1136.31 88

(19/2$^+$)   1761.6   3.40 μs 13
(15/2$^+$)   1741.89
(13/2$^-$)   1359.40
(15/2$^-$)   1171.48
11/2$^-$ 35.15   6.9 min 1

$^{129}_{50}\text{Sn}_{79}$