

^{119}Sb ϵ decay **1957OI05**

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

Parent: ^{119}Sb : $E=0$; $J^\pi=5/2^+$; $T_{1/2}=38.19$ h 22; $Q(\epsilon)=591$ 8; $\% \epsilon$ decay=100.0

[Additional information 1.](#)

1957OI05: activity: daughter from $\text{Sb}(d,xn)$ and $\text{Sn}(\alpha,xn)$; scin.

Measured γ , β , ce, $\gamma(t)$, $\gamma X(t)$.

 ^{119}Sn Levels

E(level)	J^π [†]	$T_{1/2}$	Comments
0	$1/2^+$	stable	
23.871 8	$3/2^+$	18.03 ns 7	$T_{1/2}$: From Adopted Levels.

[†] From Adopted Levels.

 ϵ radiations

E(decay)	E(level)	I_ϵ [†]	Log ft	Comments
(567 8)	23.871	100	5.061	$\epsilon K=0.8510$; $\epsilon L=0.11831$ 14; $\epsilon M+=0.03069$ 4

[†] Absolute intensity per 100 decays.

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

E_γ [‡]	I_γ # [@]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [‡]	δ [‡]	α [†]	$I_{(\gamma+ce)}$ [@]	Comments
23.870 8	16.5 2	23.871	$3/2^+$	0	$1/2^+$	M1+E2	<0.003	5.06 8	100	$\alpha(\text{exp})=6.3$ 4 (1957OI05) $\alpha(L)=4.09$ 6; $\alpha(M)=0.803$ 12; $\alpha(N+..)=0.1636$ 23 $\alpha(N)=0.1506$ 22; $\alpha(O)=0.01291$ 19

[†] [Additional information 2.](#)

[‡] From Adopted Gammas.

From $I(\gamma+ce)=100$ and $\alpha=5.06$ 8.

@ Absolute intensity per 100 decays.

^{119}Sb ϵ decay 1957O105Decay SchemeIntensities: $I_{(\gamma+ce)}$ per 100 parent decays