

$^{124}\text{Sb}$  IT decay (93 s) [1962Va18,1969Me04](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. Katakura, Z. D. Wu		NDS 109, 1655 (2008)	1-Apr-2008

Parent:  $^{124}\text{Sb}$ :  $E=10.86$ ;  $J^\pi=5^+$ ;  $T_{1/2}=93$  s 5; %IT decay= $75$  5

$^{124}\text{Sb}$ -%IT decay: From  $\beta^-/\text{ce}(10.86\gamma)=0.25$  5 ([1962Va18](#)).

[1962Va18](#): measured  $E_\gamma$ , ce.

[1969Me04](#):  $^{123}\text{Sb}(n,\gamma)$ , fission; measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma$  coin.

 $^{124}\text{Sb}$  Levels

E(level)	$J^\pi$ <sup>†</sup>	$T_{1/2}$ <sup>†</sup>
0.0	$3^-$	60.20 d 3
10.86	$5^+$	93 s 5

<sup>†</sup> From Adopted Levels.

 $\gamma(^{124}\text{Sb})$ 

$I_\gamma$  normalization: From  $I(\gamma+\text{ce})(10.86\gamma)=100$ .

$E_\gamma$	$I_\gamma$ <sup>†</sup>	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult.	$\alpha$ <sup>‡</sup>	$I_{(\gamma+\text{ce})}$ <sup>†</sup>	Comments
10.86	0.00457	10.86	$5^+$	0.0	$3^-$	[M2]	$2.19 \times 10^4$	100	$\alpha(\text{L})=1.799 \times 10^4$ ; $\alpha(\text{M})=3.93 \times 10^3$ $E_\gamma$ : from (n, $\gamma$ ). $E_\gamma \approx 10$ keV was deduced from $E(\text{ce}(\text{L}))=5.7$ keV and $E(\text{ce}(\text{M}))=9.4$ keV <a href="#">(1962Va18)</a> .

<sup>†</sup> For absolute intensity per 100 decays, multiply by 0.75 5.

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

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 $^{124}\text{Sb}$  IT decay (93 s) 1962Va18,1969Me04Decay Scheme

Intensities:  $I_{(\gamma+ce)}$  per 100 parent decays  
%IT=75.5

