

^{93}Y IT decay

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 112, 1163 (2011)	15-Dec-2010

Parent: ^{93}Y : E=758.723 19; $J^\pi=(9/2)^+$; $T_{1/2}=0.82$ s 4; %IT decay=100.0
[1979Bo26](#), [1975Ca01](#), [1974Sc39](#).

 ^{93}Y Levels

E(level) [†]	J^π [‡]	$T_{1/2}$	Comments
0.	$1/2^-$		
590.240 23	$(3/2)^-$		
758.739 24	$(9/2)^+$	0.82 s 4	$T_{1/2}$: from 168 γ (t) and 590 γ (t) (1975Ca01). Others: 1.7 s 5 (1974Sc39), 0.085 s 15 (1974Ac04).

[†] From E_γ .

[‡] From Adopted Levels.

 $\gamma(^{93}\text{Y})$

I γ normalization: From %IT=100, assuming $\alpha(168\gamma)=0.952$.

E_γ [†]	I_γ [‡]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [†]	$\alpha^\#$	$I_{(\gamma+ce)}$ [‡]	Comments
168.499 4	51.23	758.739	$(9/2)^+$	590.240	$(3/2)^-$	E3	0.952	100	ce(K)/($\gamma+ce$)=0.387 4; ce(L)/($\gamma+ce$)=0.0845 13; ce(M)/($\gamma+ce$)=0.01471 23; ce(N+)/($\gamma+ce$)=0.00185 3 ce(N)/($\gamma+ce$)=0.00179 3; ce(O)/($\gamma+ce$)=5.86 $\times 10^{-5}$ 10
590.238 23	99.80	590.240	$(3/2)^-$	0.	$1/2^-$	M1		100	ce(K)/($\gamma+ce$)=0.001739 25; ce(L)/($\gamma+ce$)=0.000191 3; ce(M)/($\gamma+ce$)=3.26 $\times 10^{-5}$ 5; ce(N+)/($\gamma+ce$)=4.70 $\times 10^{-6}$ 7 ce(N)/($\gamma+ce$)=4.40 $\times 10^{-6}$ 7; ce(O)/($\gamma+ce$)=3.08 $\times 10^{-7}$ 5

[†] From Adopted Gammas.

[‡] Absolute intensity per 100 decays.

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

${}^{93}\text{Y}$ IT decay

Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
%IT=100.0

Legend

- $I_{\gamma} < 2\% \times I_{\gamma}^{max}$
- $I_{\gamma} < 10\% \times I_{\gamma}^{max}$
- $I_{\gamma} > 10\% \times I_{\gamma}^{max}$

