^{87}Y IT decay (13.37 h)   1984Pr01,1966Sa16

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	T. D. Johnson and W. D. Kulp(a)	NDS 129, 1 (2015)	27-Jul-2015

Parent: ^{87}Y: E=380.82 7; J^{π}=9/2$^+$; $T_{1/2}$=13.37 h 3; %IT decay=98.43 10

^{87}Y-%IT decay: calculated from measured $I_{\beta+}$=0.75 5 and theoretical $\varepsilon/\beta+$ ratio for decay to ^{87}Sr.

This state also decays by electron capture.

^{87}Y Levels

E(level)	J^{π}	$T_{1/2}$	Comments
0.0	1/2$^-$	79.8 h 3	J^{π},$T_{1/2}$: from ^{87}Y Adopted Levels.
380.79 7	9/2$^+$	13.37 h 3	%IT=98.43 10; %ε+%β^+=1.57 10
			J^{π},$T_{1/2}$: from ^{87}Y Adopted Levels.

$\gamma(^{87}$Y)

E_γ	I_γ[‡]	E_i(level)	J^{π}_i	E_f	J^{π}_f	Mult.	α[†]	Comments
380.79 7	79.3	380.79	9/2$^+$	0.0	1/2$^-$	M4	0.256	α(K)exp=0.207 4 (1966Sa16)
								B(M4)(W.u.)=2.705 12
								α(K)=0.217 3; α(L)=0.0329 5; α(M)=0.00575 8
								α(N)=0.000753 11; α(O)=4.46×10^{-5} 7
								E_γ: from ^{87}Y Adopted γ's.
								α(K)exp: deduced from theoretical α_K=0.181 3 for the 388 M4 γ in
								^{87}Sr and the measured ratio Ice$_K$(381)/Ice$_K$(388)=1.135 19
								(1966Sa16).

[†] Additional information 1.
[‡] For absolute intensity per 100 decays, multiply by 0.9843 10.

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Decay Scheme

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

%IT=98.43 *10*

$9/2^+$ 380.79   13.37 h *3*

380.79 M4 98.04

$1/2^-$ 0.0   79.8 h *3*

${}^{87}_{39}\text{Y}_{48}$