

^{87}Y ε decay (13.37 h) [1969Zo04](#),[1967Mi13](#)

Type	Author	History	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; $J^\pi=9/2^+$; $T_{1/2}=13.37$ h 3; $Q(\varepsilon)=1861.7$ 11; $\% \varepsilon + \% \beta^+$ decay = 1.57 10

[1969Zo04](#) and [1967Mi13](#) observed a β^+ branch a half-life of 13 h to the ground state of ^{87}Sr . [1971Ja24](#) did not observe this branch and suggest the reported β^+ 's are from the decay of 14.7 h ^{86}Y .

 ^{87}Sr Levels

E(level)	J^π †
0.0	9/2 ⁺

† From ^{87}Sr Adopted Levels.

 ε, β^+ radiations

E(decay)†	E(level)	I_{β^+} #	I_ε #	Log ft	$I(\varepsilon + \beta^+)$ ‡#	Comments
(2242.5 11)	0.0	0.75 5	0.82 6	7.44 3	1.57 11	av $E_{\beta^+}=535.1$ 7; $\varepsilon\text{K}=0.4567$ 9; $\varepsilon\text{L}=0.05369$ 10; $\varepsilon\text{M}+=0.011711$ 21

† $Q=2172$ 40 keV from measured $E_{\beta^+}=1150$ 40 ([1969Zo04](#)). Other E_{β^+} measurements: 1540 ([1967Mi13](#)), 1500 ([1970Ak05](#)). From the Q value, $E_{\beta^+}=1220.4$ 11.

‡ From the logft systematics ([1998Si17](#)) and the data of [1969Zo04](#), one can obtain upper limits on the intensities of the ε branches to the excited levels in ^{87}Sr . From the logft systematics these limits are: 388-keV level, $1.0 \times 10^{-13}\%$; 873-keV level, $1.0 \times 10^{-10}\%$; 1228-keV level, $1.0 \times 10^{-4}\%$; 1253-keV level, 1.0%; and 1740-keV level, $2.0 \times 10^{-5}\%$. From the measurements of [1969Zo04](#), the branches to the 1228 and 1740 levels are $<0.05\%$.

Absolute intensity per 100 decays.