

^{53}Co ε decay (247 ms) [1970Ce04,1972Ce01](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Huo Junde	NDS 110,2689 (2009)	31-Mar-2007

Parent: ^{53}Co : E=3197 29; $J^\pi=(19/2^-)$; $T_{1/2}=247$ ms 12; $Q(\varepsilon)=8300$ 18; $\% \varepsilon + \% \beta^+$ decay ≈ 98.5

^{53}Co - $\% \varepsilon + \% \beta^+$ decay: Probability of proton emission $\approx 1.5\%$ ([1972Ce01](#)).

Produced in $^{54}\text{Fe}(p,2n)$, measured: β^+ , γ .

 ^{53}Fe Levels

E(level)	J^π
0.0	$7/2^-$
3041	$19/2^-$

 ε, β^+ radiations

E(decay)	E(level)	$I_{\beta^+}^\dagger$	I_{ε}^\dagger	Log ft	$I(\varepsilon + \beta^+)^\dagger$	Comments
(8.46×10^3) 4)	3041	99.902	0.098	3.6	100.000	av $E\beta = 3507$ 9; $\varepsilon K = 0.000873$ 7; $\varepsilon L = 9.24 \times 10^{-5}$ 7; $\varepsilon M = 1.614 \times 10^{-5}$ 12

† For absolute intensity per 100 decays, multiply by ≈ 0.985 .