

^{94}Ru ε decay **1967Ei01**

Type	Author	History	Citation	Literature Cutoff Date
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Parent: ^{94}Ru : $E=0.0$; $J^\pi=0^+$; $T_{1/2}=51.8$ min 6; $Q(\varepsilon)=1586$ 13; $\% \varepsilon + \% \beta^+$ decay=100.0

 ^{94}Tc Levels

E(level)	J^π [†]	$T_{1/2}$ [†]	Comments
0.0	7 ⁺	293 min 1	$\% \varepsilon + \% \beta^+ = 100$; $\% \text{IT} < 0.1$
76 3	(2) ⁺	52.0 min 10	$\% \varepsilon + \% \beta^+ = 100$
442.5 20	1 ⁺		
966.9 20	1 ⁺		

[†] From Adopted Levels.

 ε, β^+ radiations

Sum(I_β)<0.5% deduced from $I_\gamma(511\gamma)$.

E(decay)	E(level)	I_β [‡]	I_ε [‡]	Log ft	$I(\varepsilon + \beta^+)$ ^{†‡}	Comments
(619 13)	966.9		27 6	3.80 10	27 6	$\varepsilon K=0.8638$ 2; $\varepsilon L=0.11036$ 13
(1144 13)	442.5	0.004 3	73 10	3.92 6	73 10	av $E_\beta=60.4$; $\varepsilon K=0.8670$; $\varepsilon L=0.10777$ 4

[†] From intensity balance.

[‡] Absolute intensity per 100 decays.

 $\gamma(^{94}\text{Tc})$

I_γ normalization: from $\Sigma I_g((2)^+)=100$.

1967Ei01: 2 Ge(Li) detectors, measured E_γ , I_γ . 2 NaI for $\gamma\gamma$.

Other: level scheme and E_γ have been confirmed by **1973Gr40**.

E_γ	I_γ ^{†‡}	$E_i(\text{level})$	J_i^π	E_f	J_f^π	$I_{(\gamma+ce)}$ [#]	Comments
(76 3)		76	(2) ⁺	0.0	7 ⁺	<0.1	E_γ : deduced from Adopted Levels, γ has not been experimentally observed. $I_{(\gamma+ce)}$: from $I_\gamma(76\gamma)/I_\gamma(871\gamma, ^{94}\text{Mo}) < 0.1\%$.
367.2 5	100 10	442.5	1 ⁺	76	(2) ⁺		I_γ : 2.0 5 (1967Ei01), 2.7 3 (1973Gr40).
525 1	2.4 3	966.9	1 ⁺	442.5	1 ⁺		I_γ : 40 4 (1967Ei01), 26.0 30 (1973Gr40).
891.2 5	33 7	966.9	1 ⁺	76	(2) ⁺		

[†] Average of **1967Ei01** and **1973Gr40**.

[‡] For absolute intensity per 100 decays, multiply by 0.752.

[#] Absolute intensity per 100 decays.

⁹⁴Ru ε decay 1967Ei01

Decay Scheme

Intensities: I_γ per 100 parent decays

- Legend
- I_γ < 2% × I_γ^{max}
 - I_γ < 10% × I_γ^{max}
 - I_γ > 10% × I_γ^{max}
 - ▶ γ Decay (Uncertain)

