

^{114}In ε decay (71.9 s) 1969Co04

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113, 515 (2012)	1-Jan-2012

Parent: ^{114}In : $E=0.0$; $J^\pi=1^+$; $T_{1/2}=71.9$ s *I*; $Q(\varepsilon)=1447.2$ 9; $\% \varepsilon + \% \beta^+$ decay=0.50 15

^{114}In - $\% \varepsilon + \% \beta^+$ decay: from $I\beta^+=0.0035\%$ 10 (1956Gr35) and $\varepsilon/\beta^+=142$ (theory).

Measured: $T_{1/2}$ (1968Ko25, 1956Gr35, 1956Br87, 1937La05), β^+ s (1957Dz64), γ Ge(Li) (1969Co04).

See also ^{114}In β^- decay (71.9 s).

 ^{114}Cd Levels

E(level)	J^π †	$T_{1/2}$
0.0	0^+	stable
558.43 3	2^+	
1134.2 2	0^+	
1305.7 4	0^+	

† From Adopted Levels.

 ε, β^+ radiations

E(decay)	E(level)	$I\beta^+$ †	$I\varepsilon$ †	Log <i>ft</i>	$I(\varepsilon + \beta^+)$ †	Comments
(141.5 10)	1305.7		<0.0002	>6.1	<0.0002	$\varepsilon\text{K}=0.8164$ 14; $\varepsilon\text{L}=0.1457$ 11; $\varepsilon\text{M}+=0.0380$ 3
(313.0 9)	1134.2		0.0042	5.5	0.0042	$\varepsilon\text{K}=0.8457$ 2; $\varepsilon\text{L}=0.12305$ 16; $\varepsilon\text{M}+=0.03127$ 5
(888.8 9)	558.43		≤ 0.07	≥ 5.3	≤ 0.07	$\varepsilon\text{K}=0.8586$; $\varepsilon\text{L}=0.11306$ 2; $\varepsilon\text{M}+=0.028349$ 5
(1447.2 9)	0.0	0.0034 11	0.46 15	4.89 15	0.46 15	av $E\beta=196.7$ 13; $\varepsilon\text{K}=0.8548$ 2; $\varepsilon\text{L}=0.11031$ 3; $\varepsilon\text{M}+=0.027581$ 8 E(decay): $E\beta+=397$ 24 weighted average of 400 25 (1956Gr35) and 395 20 (1957Dz64).

† Absolute intensity per 100 decays.

 $\gamma(^{114}\text{Cd})$

E_γ †	I_γ ‡#	E_i (level)	J_i^π	E_f	J_f^π
558.43 3	<48	558.43	2^+	0.0	0^+
575.8 2	2.8 3	1134.2	0^+	558.43	2^+
747.8 2	<0.13	1305.7	0^+	558.43	2^+

† From 1969Co04, 1974HeYW.

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For absolute intensity per 100 decays, multiply by 0.0014 4.

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Decay Scheme

Legend

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

Intensities: $I_{(\gamma+ce)}$ per 100 decays through this branch