^{114}In ε decay (49.51 d) 1969Co04

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

Parent: ^{114}In: E=190.2682 *8*; $J^\pi=5^+$; $T_{1/2}$=49.51 d *1*; Q(ε)=1447.2 *9*; %ε+%β^+ decay=3.25 *24*

Measured: Eγ, Iγ (1969Co04); ε (1956Gr35); ce (1967El02); double ce (1962Ba43,1964Kl02,1966Gr24,1969Vu02); polarization of ce (1961Sp09,1965Ka06,1966Lo01,1966Va06,1970Va03).

$\gamma\gamma(\theta)$ (1967Fr03,1970Mu11); Xγ (1970Mu11).

Other measurements: 1956Ke48, 1957Gr75, 1957Ho64, 1961Da01, 1964An12, 1966Bl10, 1967Ra16, 1974Va07.

For the %(ε+β^+) and branching see ^{114}In Adopted Levels.

See also ^{114}In IT decay, ^{114}In ε decay (71.9 s), ^{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^+	
1283.67 *4*	4^+	

ε,β^+ radiations

E(decay)	E(level)	Iε[†]	Log *ft*	I($\varepsilon+\beta^+$)[†]	Comments
351 *5*	1283.67	4.4 *3*	7.41 *3*	4.4 *3*	εK=0.8481 *2*; εL=0.12118 *13*; εM+=0.03072 *4*

[†] Absolute intensity per 100 decays.

$\gamma(^{114}$Cd)

E$_\gamma$[†]	I$_\gamma$[‡]	E$_i$(level)	J_i^π	E$_f$	J_f^π	Mult.	α[#]	Comments
558.43 *3*	28.5 *20*	558.43	2^+	0.0	0^+	[E2]	0.00493	α(K)=0.00421; α(L)=0.00054
725.24 *3*	28.5 *20*	1283.67	4^+	558.43	2^+	[E2]	0.00247	α(K)=0.00212; α(L)=0.00026

[†] From 1969Co04, 1974HeYW.

[‡] For absolute intensity per 100 decays, multiply by 0.154 *10*.

[#] Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

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Decay Scheme

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