

^{114}In IT decay (49.51 d) 1969Co04,1994Co02

Type	Author	History 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 I; %IT decay=96.75 24

Measured: E_γ , I_γ (1969Co04); ε (1956Gr35); ce (1967El02); double ce (1962Ba43,1964KI02,1966Gr24,1969Vu02); polarization of ce (1961Sp09,1965Ka06,1966Lo01,1966Va06,1970Va03); $I_\gamma(190\gamma)$ (1994Co02, value revised in Priv. Comm. from F. Schima, May 1995).

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

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

See also ^{114}In ε decay (49.51 d).

 ^{114}In Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	1^+	71.9 s I	
190.27 3	5^+	49.51 d I	$T_{1/2}$: from 1972Me01. Others: 1939Ba03, 1940La07, 1949Bo52, 1949Ma38, 1957Wr37, 1959Ca12.

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

E_γ^\dagger	I_γ^\ddagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	$\alpha^\#$	Comments
190.27 3	15.56 15	190.27	5^+	0.0	1^+	E4	5.22 6	$\alpha(\text{K})=2.58$; $\alpha(\text{L})=2.052$; $\alpha(\text{M})=0.431$; $\alpha(\text{N}+..)=0.0868$ $\alpha(\text{K})_{\text{exp}}=2.00$ 9 (1976Re14) $\text{B}(\text{E4})(\text{W.u.})=0.0237$ 7 I_γ : from 1994Co02. $\alpha(\text{K})_{\text{exp}}$: $\alpha(\text{K})_{\text{exp}}$ (1976Re14) is 19% smaller than the theoretical value. α : from a comparison of %IT deduced from $\%I_\gamma(190\gamma)(1+\alpha)$ with the value deduced from $\%IT=100-\%I_\gamma(190\gamma) \times I_\gamma(725\gamma)/I_\gamma(190\gamma)$. The E4 theory is 5.15 (uncorrected), and 5.02 corrected with the prescription of 1990Ne01. See Adopted Levels for the intensity ratio data.

† From 1974HeYW.

‡ Absolute intensity per 100 decays.

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

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Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 decays through this branch
%IT=96.75 24

