

^{144}Tb IT decay (4.25 s) 1986Re11

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. A. Sonzogni	NDS 93, 599 (2001)	1-Dec-2000

Parent: ^{144}Tb : E=396.9 5; $J^\pi=(6^-)$; $T_{1/2}=4.25$ s 15; %IT decay=66.0

Source: ^{35}Cl on ^{112}Sn , ms. Measured (K x ray) γ -coin.

 ^{144}Tb Levels

E(level) [‡]	J^π [†]	$T_{1/2}$	Comments
0.0	1 ⁺	≈ 1 s	J^π : from log ft from 0 ⁺ parent and to 0 ⁺ daughter in β decay.
283.9	(3 ⁺)		
396.9	(6 ⁻)	4.25 s 15	

[†] From Adopted Levels.

[‡] As given by authors.

 $\gamma(^{144}\text{Tb})$

E_γ	I_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	α [‡]	Comments
113.0 3	4.3 4	396.9	(6 ⁻)	283.9	(3 ⁺)	E3	22.7	$\alpha(\text{K})=3.04$ 10; $\alpha(\text{L})=14.9$ 5; $\alpha(\text{M})=3.70$ 11; $\alpha(\text{N}+..)=1.03$ 3 Mult., $\alpha(\text{exp})$: from intensity balance, $\alpha(\text{exp})\approx 24$. Additional information 1.
283.9 3	100 10	283.9	(3 ⁺)	0.0	1 ⁺	[E2]	0.0744	

[†] For absolute intensity per 100 decays, multiply by 0.66.

[‡] 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.

^{144}Tb IT decay (4.25 s) 1986Re11

Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
%IT=66.0

Legend

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

