^{50}Sc IT decay (0.35 s) 1984Al18,1964Sh14,1963Ka21

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh	NDS 157, 1 (2019)	15-Apr-2019

Parent: ^{50}Sc: E=256.895 *10*; $J^\pi=2^+$; $T_{1/2}$=0.35 s *4*; %IT decay=99.5 *5*

^{50}Sc-%IT decay: 2017Ga25 obtain $\%\beta^-<1\%$ from examining γ-intensities in ^{50}Sc and ^{50}Ti in their study of ^{50}Ca β^- decay. Other: <2.5% from Iβ(to ^{50}Ti 1554) and <5% from $\beta\gamma$-coin (1984Al18).

1984Al18, 1964Sh14, 1963Ka21: measured Eγ.

^{50}Sc Levels

E(level)	J^π†	$T_{1/2}$†	Comments
0.0	5^+	102.5 s *5*	
256.895 *10*	2^+	0.35 s *4*	$T_{1/2}$: 0.35 s *4* (1964Sh14), 0.35 s *5* (1963Ka21).

† From Adopted Levels.

$\gamma(^{50}Sc)$

E_γ	I_γ†	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α‡	$I_{(\gamma+ce)}$†	Comments
256.894 *10*	96.8 *1*	256.895	2^+	0.0	5^+	(M3)	0.0335 *8*	100	E_γ,Mult.: from Adopted Gammas. I_γ: from I(γ+ce)=100 and α.

† For absolute intensity per 100 decays, multiply by 0.995 *5*.

‡ 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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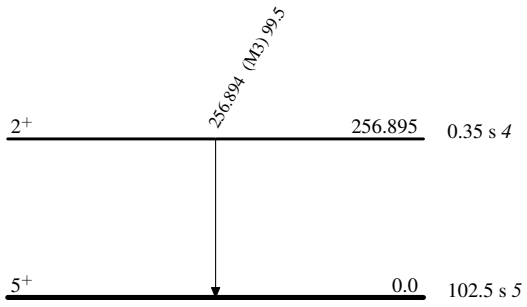
Decay Scheme

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

%IT=99.5 *5*



$^{50}_{21}Sc_{29}$