^{97}Tc IT decay 1959Un01,1969Ag04

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 111, 525 (2010)	19-Nov-2009

Parent: ^{97}Tc: E=96.5; $J^\pi=1/2^-$; $T_{1/2}$=91.0 d *6*; %IT decay=96.06 *18*
^{97}Tc-%IT decay: From 1998Ko27.

^{97}Tc Levels

Influence of electronic structure on the (Kα x ray)/(Kβ x ray) ratio investigated (1985Ya14).

E(level)	J^π[†]	$T_{1/2}$
0.0	$9/2^+$	4.21×10^6[†] y *16*
96.5	$1/2^-$	91.0[†] d *6*

[†] From Adopted Levels.

$\gamma(^{97}Tc)$

Iγ normalization: Ti(96.5γ)=100.

E_γ	I_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α[‡]	Comments
96.5 *1*	100	96.5	$1/2^-$	0.0	$9/2^+$	M4	311	α(K)=197 *3*; α(L)=92.1 *15*; α(M)=18.5 *3*; α(N+..)=2.87 *5* α(N)=2.77 *5*; α(O)=0.0919 *14* Mult.: L1/L2=5.0 *16*, L1/L3=0.95 *10*, L2/L3=0.21 *7* (1969Ag04); K:L:M=1:0.48 *5*:0.13 *2* (1959Un01); K/LM=1.7 *2* (1954Bo24); K/LM=1.6 *2* (1950Me21). (theory: L1:L2:L3=0.980: 0.218: 1.00).

[†] For absolute intensity per 100 decays, multiply by 0.003205 *34*.
[‡] 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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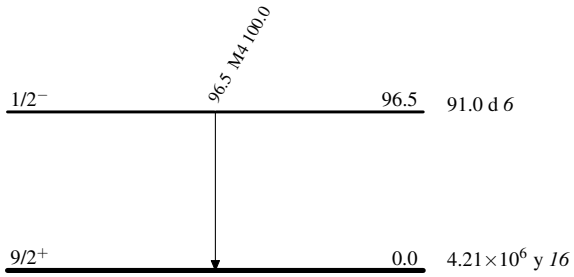
Decay Scheme

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

%IT=96.06 *18*



$^{97}_{43}Tc_{54}$