^{127}Te IT decay (106.1 d) 1970Ap02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. Hashizume	NDS 112, 1647 (2011)	1-Oct-2009

Parent: ^{127}Te: E=88.26 *8*; $J^\pi=11/2^-$; $T_{1/2}$=106.1 d *7*; %IT decay=97.6 *2*
1970Ap02: source ^{126}Te(n,γ), semi γ.
1972Ka61: source ^{126}Te(n,γ), magnetic spectrometer ce.
1972Ka31: source ^{126}Te(n,γ), magnetic spectrometer ce.
Others: 1956Kn20, 1965Au01, 1966Ne02, 1971Bu27, 1977So06.
See also ^{127}Te β^- decay (3.85 d).

^{127}Te Levels

E(level)†	J^π†	$T_{1/2}$
0.0	$3/2^+$	9.35 h *7*
88.26 *8*	$11/2^-$	106.1 d *7*

† From Adopted Levels.

γ(^{127}Te)

Iγ normalization: IT decay to g.s. is 97.6% *2* from the comparison of γ intensities between the ^{127m}Te+^{127g}Te in equilibrium source and ^{127g}Te source (1970Ap02).

E_γ	I_γ‡	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α†	$I_{(\gamma+ce)}$‡	Comments
88.26 *8*	0.0858 *27*	88.26	$11/2^-$	0.0	$3/2^+$	M4	1136	100	α(K)exp=484 *23* (1977So06); K/L=0.99 *5* (1972Ka61) ce(K)/(γ+ce)=0.427 *7*; ce(L)/(γ+ce)=0.444 *7*; ce(M)/(γ+ce)=0.1057 *22*; ce(N+)/(γ+ce)=0.0221 *5* ce(N)/(γ+ce)=0.0204 *5*; ce(O)/(γ+ce)=0.00176 *4* ce(K)/(I_γ+I_{ce})=0.427 *7*; ce(L)/(I_γ+I_{ce})=0.444 *7*; ce(M)/(I_γ+I_{ce})=0.1057 *22*; ce(N+)/(I_γ+I_{ce})=0.0221 *5*. K:L:M:N=0.99 *5*:1.0:0.248 *24*:0.050 *4*, L1:L2:L3=0.599 *19*:0.144 *8*:1.0, M1:M2+M3:M4+M5=1.0:2.29 *14*:0.093 *23* (1972Ka61); N+O/L=0.050 *4* (1972Ka31). Mult.: from α_K(exp). Additional information 1.

† Theoretical conversion coefficients are calculated using BrIcc code for assigned mult. The ce/(I_g+I_{ce})'s are shown in the text.
‡ For absolute intensity per 100 decays, multiply by 0.976 *2*.

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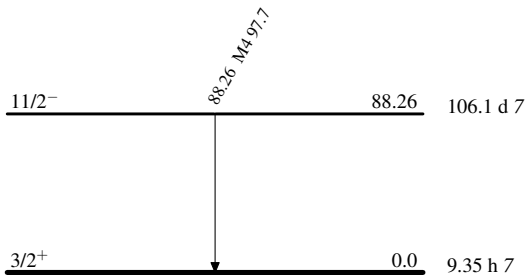
Decay Scheme

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

%IT=97.6 *2*



$^{127}_{52}Te_{75}$