

^{133}Te IT decay (55.4 min) 1984Wa04,1984Br31

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Yu. Khazov and A. Rodionov, F. G. Kondev		NDS 112,855 (2011)	31-Oct-2010

Parent: ^{133}Te : E=334.26 4; $J^\pi=(11/2^-)$; $T_{1/2}=55.4$ min 4; %IT decay=16.5 20

^{133}Te -%IT decay: from 1984Br31.

1984Wa04: $^{133\text{m}}\text{Te}(\beta^-)$, (IT) [from $^{235}\text{U}(n,F)$, E=thermal]; measured $T_{1/2}$, E_γ , I_γ , $\gamma\gamma$ -coin. HPGe detectors.

1984Br31: $^{133,133\text{m}}\text{Te}(\beta^-)$ from ^{133}Sb β^- decay; measured absolute I_γ ; deduced β^- , IT-decay branching ratios. Fission products, radiochemical methods, mass separation.

Others: 1968Pa03, 1968Mc09 and 1968Be64.

 ^{133}Te Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	(3/2 ⁺)	12.5 min 3	$J^\pi, T_{1/2}$: from Adopted Levels.
334.27 4	(11/2 ⁻)	55.4 min 4	E(level): from E_γ . $T_{1/2}$: from $\gamma(t)$ 1968Be64. Other: 53 min 4 (1957Al35).

 $\gamma(^{133}\text{Te})$

E_γ	I_γ^\ddagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	α^\dagger	Comments
334.26 4	41.43 24	334.27	(11/2 ⁻)	0.0	(3/2 ⁺)	M4	1.414	$\alpha(K)=1.095$ 16; $\alpha(L)=0.254$ 4; $\alpha(M)=0.0539$ 8; $\alpha(N+..)=0.01157$ 17 $\alpha(N)=0.01053$ 15; $\alpha(O)=0.001047$ 15 K/L=4.31 9 E_γ : from 1979Bo26 ($E_\gamma=334.274$ keV 35). Mult.: $\alpha(K)_{\text{exp}}=1.3$ 1 (1974Fu13); K/L=4.5 6 (1957Al35) and 4.3 6 (1968Be64).

[†] Additional information 1.

[‡] For absolute intensity per 100 decays, multiply by 0.165 20.

 ^{133}Te IT decay (55.4 min) 1984Wa04,1984Br31Decay Scheme

Intensities: I_γ per 100 parent decays
%IT=16.5 20

