

^{128}I ϵ decay **1979Sc06**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Zoltan Elekes and Janos Timar		NDS 129, 191 (2015)	28-Feb-2015

Parent: ^{128}I : $E=0.0$; $J^\pi=1^+$; $T_{1/2}=24.99$ min 2; $Q(\epsilon)=1255$ 4; $\% \epsilon + \% \beta^+$ decay=6.9 8
 ^{128}I - $\% \epsilon + \% \beta^+$ decay: $\% \beta^- = 93.1$ 8 in ^{128}I β^- decay. See comment for ^{128}I β^- decay.
1979Sc06: $^{127}\text{I}(n,\gamma)$, no chemical separation; Ge G.
1994Mi35: $^{127}\text{I}(n,\gamma)$, no chemical separation: semi γ , β , $\beta\gamma$.
 $T_{1/2}$: from Adopted Levels.

 ^{128}Te Levels

E(level)	J^π	$T_{1/2}$
0.0	0^+	7.7×10^{24} y 4
743.50 10	2^+	3.30 ps 3

 ϵ, β^+ radiations

E(decay)	E(level)	$I_{\beta^+}^\dagger$	I_{ϵ}^\dagger	Log ft	$I(\epsilon + \beta^+)^\dagger$	Comments
(512 4)	743.50		1.67 5	6.01 6	1.67 5	$\epsilon K=0.8458$ 2; $\epsilon L=0.1217$ 1; $\epsilon M+=0.03252$ 3
(1255 4)	0.0	0.038 3	98.3 3	5.05 5	98.3 3	av $E\beta=113.7$ 18; $\epsilon K=0.8540$; $\epsilon L=0.11510$ 2; $\epsilon M+=0.030471$ 6

† For absolute intensity per 100 decays, multiply by 0.069 8.

 $\gamma(^{128}\text{Te})$

E_γ	$I_\gamma^{\dagger\#}$	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. ‡	Comments
743.5 1	100	743.50	2^+	0.0	0^+	E2	I_γ : $I_\gamma=0.115$ 3 per 100 decays of the parent (1994Mi35).

† Relative to $I(442.901\gamma)$ in $^{128}\text{Xe}=100$.

‡ From Adopted Levels, Gammas.

$^\#$ For absolute intensity per 100 decays, multiply by 0.00115 14.

^{128}I ϵ decay 1979Sc06Decay SchemeIntensities: $I_{(\gamma+ce)}$ per 100 parent decays