^{137}Te β^- decay   **1985Sa15**

		History	
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 108,2173 (2007)	1-Oct-2006

Parent: ^{137}Te: E=0.0; J^π=(7/2$^-$); $T_{1/2}$=2.49 s *5*; Q(β^-)=6.94×10^3 *12*; %β^- decay=100.0

Measured: γ, $\gamma\gamma$, $\beta\gamma$ (1985Sa15), γ (1977Pf01), delayed neutrons (1975As04,1984Ma39).

^{137}I Levels

E(level)	J^π
0.0	(7/2$^+$)
243.3	(5/2$^+$)
372.6	
601.2	
712.7	
1169.0	

β^- radiations

E(decay)†	E(level)
6.79×10^3 *30*	243.3

† Eβ^-=6790 *300* coin with 243.3γ (1985Sa15).

γ(^{137}I)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	E_γ	I_γ	E_i(level)	E_f	J_f^π
129.0 *3*	138 *19*	372.6		243.3	(5/2$^+$)	^{x}554.0 *2*	336 *30*			
243.3 *1*	1000 *60*	243.3	(5/2$^+$)	0.0	(7/2$^+$)	601.2 *2*	82.0 *57*	601.2	0.0	(7/2$^+$)
341.1 *2*	125 *14*	712.7		372.6		712.7 *4*	124 *19*	712.7	0.0	(7/2$^+$)
358.6 *2*	188 *17*	601.2		243.3	(5/2$^+$)	^{x}896.2 *3*	127 *20*			
372.6 *1*	153 *16*	372.6		0.0	(7/2$^+$)	925.7 *4*	104 *20*	1169.0	243.3	(5/2$^+$)
469.1 *3*	205 *44*	712.7		243.3	(5/2$^+$)					

^{x} γ ray not placed in level scheme.

^{137}Te β^- decay   1985Sa15

Decay Scheme

Intensities: Relative I_γ

Legend

$I_\gamma < \ 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$

(7/2$^-$)   0.0   2.49 s 5

$Q_{\beta^-}=6.94\times10^3$ 12 %β^-=100

$^{137}_{52}Te_{85}$

925.7 104

712.7 124
469.1 205
341.1 125
601.2 82.0
358.6 188
372.6 153
129.0 138
243.3 1000

1169.0

712.7

601.2

(5/2$^+$)

372.6

243.3

(7/2$^+$)   0.0

$^{137}_{53}I_{84}$