

^{155}Yb ε decay **1991To08**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 160, 1 (2019)	21-Oct-2019

Parent: ^{155}Yb : $E=0.0$; $J^\pi=(7/2^-)$; $T_{1/2}=1.793$ s 19; $Q(\varepsilon)=6123$ 19; $\% \varepsilon + \% \beta^+$ decay=11 4

[Additional information 1.](#)

1991To08: sources with mass 155 were produced in the $^{95}\text{Mo}+^{64}\text{Zn}$ reaction, followed by mass separation and transported to detection systems. Si particle ΔE -E telescope, plastic scintillator, HPGe and Ge detectors. Measured E_α , E_γ , I_γ , $\gamma\gamma$, γX , $\alpha\gamma$, $\gamma(t)$.

The decay scheme is incomplete (**1991To08**).

 ^{155}Tm Levels

E(level)	J^π^\dagger	$T_{1/2}$
0.0	$11/2^-$	21.6 s 2
174.9 1	$(7/2^-, 9/2^-)$	
236.2 1	$(7/2^-, 9/2^-)$	
361.6 1	$(7/2^-, 9/2^-)$	
380.0 2		
614.2 2		

† From the Adopted Values.

 $\gamma(^{155}\text{Tm})$




E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
125.4 3	6 2	361.6	$(7/2^-, 9/2^-)$	236.2	$(7/2^-, 9/2^-)$
174.9 1	55 6	174.9	$(7/2^-, 9/2^-)$	0.0	$11/2^-$
205.1 2	18 4	380.0		174.9	$(7/2^-, 9/2^-)$
236.2 1	100	236.2	$(7/2^-, 9/2^-)$	0.0	$11/2^-$
361.6 1	46 5	361.6	$(7/2^-, 9/2^-)$	0.0	$11/2^-$
378.0 2	26 6	614.2		236.2	$(7/2^-, 9/2^-)$

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Decay Scheme

Intensities: Relative I_γ

Legend

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

