

$^{154}\text{Tm } \varepsilon+\beta^+$  decay (8.1 s) 1997To12

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 200,2 (2025)	22-Aug-2022

Parent:  $^{154}\text{Tm}$ :  $E=0$ ;  $J^\pi=(2^-)$ ;  $T_{1/2}=8.1 \text{ s}$  3;  $Q(\varepsilon)=8178 \text{ keV}$  15;  $\% \varepsilon+\% \beta^+$  decay=46 5

$^{154}\text{Tm}-Q(\varepsilon+\beta^+)$ : From 2021Wa16.

$^{154}\text{Tm}-\% \varepsilon+\% \beta^+$  decay: From 1997To12.

[Additional information 2.](#)

1997To12: Source material produced by ( $^{64}\text{Zn},3\text{pxn}$ ) on  $^{92}\text{Mo}$  and  $^{94}\text{Mo}$ , followed by isotope separation. Coincidences among  $\alpha$ ,  $\beta^+$ , and  $\gamma$  with Si, Ge, and plastic scintillation detectors.

Level scheme is incomplete.

 $^{154}\text{Er}$  Levels

E(level)	$J^\pi$ †	$T_{1/2}$
0	$0^+$	3.73 min 9
560.8	$2^+$	

† From  $^{154}\text{Er}$  Adopted Levels.

 $\gamma(^{154}\text{Er})$ 

$I_\gamma$  normalization: [Additional information 4.](#)

$E_\gamma$	$I_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult.†	$\alpha^\ddagger$	Comments
560.8	100	560.8	$2^+$	0	$0^+$	E2	0.01231 17	$\alpha(\text{K})=0.00992 \text{ 14}$ ; $\alpha(\text{L})=0.001859 \text{ 26}$ ; $\alpha(\text{M})=0.000422 \text{ 6}$ $\alpha(\text{N})=9.75 \times 10^{-5} \text{ 14}$ ; $\alpha(\text{O})=1.332 \times 10^{-5} \text{ 19}$ ; $\alpha(\text{P})=5.54 \times 10^{-7} \text{ 8}$

† From  $^{154}\text{Er}$  Adopted  $\gamma$  radiations.

‡ [Additional information 3.](#)

$^{154}\text{Tm}$   $\epsilon + \beta^+$  decay (8.1 s) 1997To12

Decay Scheme

Intensities: Relative  $I_\gamma$

