

^{152}Ho α decay (49.8 s) 1987LiZT

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 208,1 (2026)	17-Jan-2026

Parent: ^{152}Ho : E=160 l; $J^\pi=9^+$; $T_{1/2}=49.8$ s 2; $Q(\alpha)=4507.4$ l3; % α decay=10.8 l7

^{152}Ho -Q(α): From 2021Wa16.

^{152}Ho -% α decay: av of 1979To09 and 1981Ga36; others: 0.064 l3 and 0.04 l (1974Sc19), 0.19 5 (1963Ma17).

Measured: E α (1973BoXL,1970To16,1963Ma17), α - γ coin (1987LiZT) branching (1979To09,1978ToZZ,1974Sc19,1963Ma17).

 ^{148}Tb Levels

E(level)	J^π [†]	$T_{1/2}$ [†]
90.1 3	9 ⁺	2.20 min 5
328	7 ⁺	4.5 ns 4
406	8 ⁺	≤0.7 ns

[†] From Adopted Levels.

 α radiations

E α #	E(level)	I α #@	HF ^{†‡}	Comments
4146	406	<0.2	14.3 l9	
4222	328	<0.2	42 5	
4454	90.1	100	2.1 4	Others: 4453 3 (1973BoXL), 4460 l0 (1970To16), 4450 20 (1963Ma17).

[†] Additional information 1.

[‡] The nuclear radius parameter $r_0(^{148}\text{Tb})=1.5645$ 63 is deduced from interpolation of radius parameters of the adjacent even-even nuclides in 2020Si16.

From 1987LiZT.

@ For absolute intensity per 100 decays, multiply by 0.108 l7.

 $\gamma(^{148}\text{Tb})$

E γ	E $_i$ (level)	J^π_i	E $_f$	J^π_f
78	406	8 ⁺	328	7 ⁺
238	328	7 ⁺	90.1	9 ⁺
316	406	8 ⁺	90.1	9 ⁺

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Decay Scheme

