^{155}Er α decay (5.3 min) 1974To07,1969To06,1970To16

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 110, 1 (2009)	20-Nov-2008

Parent: ^{155}Er: E=0.0; $J^{\pi}=7/2^{-}$; $T_{1/2}$=5.3 min *3*; Q(α)=4118 *5*; %α decay=0.022 *7*

^{155}Er-J^{π}, $T_{1/2}$ and related comments are from A=155 evaluation (2005Re01).

^{155}Er-J^{π}: favored α transition to $J=7/2^{(-)}$ g.s. of ^{151}Dy. γ from 531.7, $11/2^{-}$ level indicates $\pi=-$. Assignment consistent with systematics of nearby N=87 isotones ^{151}Gd and ^{153}Dy. ν $f_{7/2}$ spherical shell-model state.

^{155}Er-$T_{1/2}$: from measured Iα(t) (1969To06).

^{155}Er-%α decay: %α=0.022 *7* from I(Kα_1 x ray)/Iα (1974To07). 1974To07 consider this as an underestimated value since no correction was made for a contribution to the Kα x ray peak from ^{156}Er and for possible decay to ^{155}Ho excited states.

Other: 1974PeZS.

Source from ^{147}Sm + ^{12}C reaction.

He-gas jet technique.

Measured: E(α), γ, x rays, X(t) and α(t).

^{151}Dy Levels

E(level)	J^{π}
0.0	$7/2^{(-)}$

α radiations

Eα	E(level)	Iα[†]	Comments
4012 *5*	0.0	100	Eα: from 1974To07 and evaluation by 1991Ry01.

[†] For absolute intensity per 100 decays, multiply by 0.00022 *7*.