^{157}Ta α decay (10.1 ms) 1997Ir01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 170, 1 (2020)	16-Aug-2020

Parent: ^{157}Ta: E=0.0; $J^{\pi}=1/2^{+}$; $T_{1/2}$=10.1 ms *4*; Q(α)=6355 *6*; %α decay=96.6 *12*

^{157}Ta-%α decay: From p-decay intensity of 3.4% *12* (1997Ir01) and assuming no significant $\varepsilon+\beta+$ decay.

Experimental methods:

1996Pa01: produced by heavy-ion fusion-evaporation reaction with products separated in recoil mass spectrometer. Measured α's with Si strip detector.

^{153}Lu Levels

E(level)	J^{π}	Comments
80 *5*	$1/2^{+}$	E(level): Level populated by α decay is deduced (1997Ir01) to be $s_{1/2}$ state.

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
6117 *4*	80	100	1.43 *7*	Eα: From 1997Ir01. Iα: Value assumes that all of the α decay is via this branch.

[†] The nuclear radius parameter $r_0(^{153}Lu)$=1.5551 *66* is deduced from interpolation (or unweighted average) of radius parameters of the adjacent even-even nuclides.

[‡] For absolute intensity per 100 decays, multiply by 0.966 *12*.