^{159}Ta α decay (1.04 s) 1996Pa01,1997Da07

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

Parent: ^{159}Ta: E=0.0; $J^\pi=1/2^+$; $T_{1/2}$=1.04 s *9*; Q(α)=5681 *6*; %α decay=34 *5*

^{159}Ta-J^π: Additional information 1.

^{159}Ta-$T_{1/2}$: Additional information 2.

^{159}Ta-%α decay: From 1997Da07.

Additional information 3.

1996Pa01: source material produced in heavy-ion fusion reactions initiated by ^{58}Ni and ^{70}Ge bombardment of ^{102}Pd, ^{106}Cd and ^{112}Sn targets, with bombarding energies ranging from 290 MeV to 354 MeV. Reaction products separated in a recoil mass separator and analyzed using a double-sided Si strip detector.

1997Da07: material as α decay product of ^{167}Ir, produced via the ^{92}Mo(^{78}Kr,p2n) reaction with E(^{78}Kr)=357 and 384 MeV. Reaction products separated in a fragment mass analyzer and analyzed using a thin position-sensitive parallel grid avalanche counter, followed by implantation into a double-sided Si strip detector.

The information from 1997Da07 on the α-decay chain headed by ^{167}Ir is also reported in 2001Da31.

Other: 1979Ho10.

^{155}Lu Levels

E(level)	J^π
20 *6*	$1/2^+$

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
5518 *5*	20	100	2.0 *4*	Eα: weighted average of 5519 *5* (1997Da07) and 5516 *5* (1996Pa01).

[†] The nuclear radius parameter $r_0(^{155}Lu)$=1.5588 *47* is deduced from interpolation (or unweighted average) of radius parameters of the adjacent even-even nuclides.

[‡] For absolute intensity per 100 decays, multiply by 0.34 *5*.