^{160}Ta α decay (1.55 s) 1996Pa01,1979Ho10

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. W. Reich	NDS 113, 2537 (2012)	1-Mar-2012

Parent: ^{160}Ta: E=y; $J^\pi=9^+$; $T_{1/2}$=1.55 s *4*; Q(α)=5451 *5*; %α decay34.0 *CA*

^{160}Ta-E: Additional information 1.

^{160}Ta-J^π: Additional information 2.

^{160}Ta-$T_{1/2}$: Additional information 3.

^{160}Ta-Q(α): Additional information 4.

^{160}Ta-%α decay: Theoretically derived value (1979Ho10).

Additional information 5.

1996Pa01: Source material produced in ^{58}Ni+^{102}Pd reactions. Reaction products separated using a recoil mass separator and detected in a double-sided Si-strip detector. Measured $T_{1/2}$ and E(α).

1979Ho10: Source material produced in ^{58}Ni reactions on various targets. Reaction products separated with velocity selector and α-counted in a position-sensitive Si detector to define decay chains. Report E(α) and I(α).

Other studies: 1986Ru05, ^{130}Ba(^{35}Cl,5nγ), E(^{35}Cl)=200 MeV. (Results also reported in 1988MeZY); 1981HoZM (report results from 1979Ho10).

1996Pa01 also report an α transition with E(α)=5313 *5* and $T_{1/2}$=1.7 s *2* from ^{160}Ta. The evaluator has assumed that this corresponds to a separate activity in ^{160}Ta.

^{156}Lu Levels

E(level)	J^π	Comments
x	9^+	E(level): Final state for the α transition is not established. J^π: From adopted values.

α radiations

Eα	E(level)	Iα[†]	Comments
5412 *5*	x	100	Eα: Evaluated value from 1991Ry01. Others: 5413 *5* (1996Pa01); 5400 *6* (1992Ha10); and 5413 *5* (1979Ho10). Iα: Only one α transition is assumed to be associated with the decay of this state.

[†] For absolute intensity per 100 decays, multiply by calc 0.34.