

$^{156}\text{Ta}$   $\epsilon$  decay (106 ms) 2011Da12

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

Parent:  $^{156}\text{Ta}$ :  $E=0$ ;  $J^\pi=(2^-)$ ;  $T_{1/2}=106$  ms 4;  $Q(\epsilon)=12053$  SY;  $\% \epsilon + \% \beta^+$  decay=29 3

$^{156}\text{Ta}$ -E: From 2011AuZZ.

$^{156}\text{Ta}$ - $T_{1/2}$ : From 2011Da12.

$^{156}\text{Ta}$ - $J^\pi$ : From the adopted values.

**Additional information 1.**

Source material produced from the  $^{106}\text{Cd}(^{58}\text{Ni},p3n)$  reaction,  $E(^{58}\text{Ni})=290, 300$  MeV, on a  $1.1\text{-mg/cm}^2$ -thick self-supporting  $^{106}\text{Cd}$  target, 96.5% enrichment. Reaction products were separated in the gas-filled separator RITU then implanted in the double-sided Si-strip detectors of the GREAT spectrometer. Report  $E(p)$ ,  $\%p$ ,  $T_{1/2}$ ,  $E\alpha$  and  $\% \alpha$ . From the relative intensities of the proton peak from  $^{156}\text{Ta}$  decay and the  $\alpha$  peak from  $^{156}\text{Hf}$  decay, 2011Da12 deduce a value for the p and  $\alpha$  branching from the  $^{156}\text{Ta}$  state.

2011Da12 report that the  $^{156}\text{Hf}$  g.s. is fed in the decay of 106 ms  $^{156}\text{Ta}$  and that the  $8^+$   $\alpha$ -decaying state is not, but provide no information on the radiations or on the levels that are populated.

The p branching from this level is 71% 3 (2011Da12).