

^{161}W α decay **1981Ho10,1989Wo02,1996Pa01**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 132, 1 (2016)	4-Dec-2015

Parent: ^{161}W : $E=0.0$; $T_{1/2}=409$ ms 18; $Q(\alpha)=5923$ 4; $\% \alpha$ decay=73 3

^{161}W - $T_{1/2}$ from 2011Re14 quoting 1996Pa01; $Q(\alpha)$ from 2012Wa38.

^{161}W - $\% \alpha$ decay: from 2011Re14, quoting 1996Pa01; others (also quoted by 2011Re14): 82% 26 (1981Ho10) and 90% 29 (1989Wo02).

^{161}W produced by $^{144}\text{Sm}(^{24}\text{Mg},7n)$ and $^{107}\text{Ag}(^{58}\text{Ni},xnyp)$ reactions. Products from latter reaction separated with velocity selector and implanted in position-sensitive detector.

Experimental methods:

1973Ea01: produced by $^{144}\text{Sm}(^{24}\text{Mg},7n)$ with $E(^{24}\text{Mg})=180$ MeV. Tentatively suggest $E(\alpha) = 5.75$ MeV.

1979Ho10, 1981Ho10: produced by $^{107}\text{Ag}(^{58}\text{Ni},xnyp)$ with $E(^{58}\text{Ni})=263$ and 275 MeV. Products separated with velocity selector and implanted in position-sensitive detector.

1981HoZM: Conference report; see 1981Ho10.

1989Wo02: produced by $^{110}\text{Cd}(^{58}\text{Ni},x)$ with $E(^{58}\text{Ni})=260$ MeV in recoil mass spectrometer.

1996Pa01: Produced by $^{112}\text{Sn}(^{58}\text{Ni},x)$ or other reactions and separated in recoil mass separator. α 's measured in silicon strip detector with parent-daughter correlation. Measured $E\alpha$, $I\alpha$, $T_{1/2}$ for a large number of isotopes.

 ^{157}Hf Levels

E(level)	Comments
0.0+x	E(level): Level populated by α decay is not known, but it may be the ground state.

 α radiations

$E\alpha$	E(level)	$I\alpha^\dagger$	Comments
5775 5	0.0+x	100	$E\alpha$: from 1996Pa01; others: 5776 5 from recalibration of 1991Ry01; 5777 5 from 1979Ho10 (and 1981HoZM and 1981Ho10 by same authors). $I\alpha$: Only one α branch reported.

† For absolute intensity per 100 decays, multiply by 0.73 3.