

^{162}W α decay

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	N. Nica	NDS 141, 1 (2017)	1-Feb-2017

Parent: ^{162}W : $E=0$; $J^\pi=0^+$; $T_{1/2}=1.19$ s 12; $Q(\alpha)=5677.3$ 27; $\% \alpha$ decay=45.2 6

^{162}W - $\% \alpha$ decay: from ^{162}Hf Adopted Levels and based on 0.46 4 (1981Ho10), 0.49 4 (1989Wo02), and 0.44 2 (1996Pa01).

$T_{1/2}$: from ^{162}Hf Adopted Levels, Gammas dataset.

$Q_\alpha(^{162}\text{W})$: from 2012Wa38.

Experimental methods:

1973Ea01: Produced by $^{144}\text{Sm}(^{24}\text{Mg},6n)$; α 's measured with Si detector.

1975To05: Produced by $^{156}\text{Dy}(^{16}\text{O},10n)$; α 's measured with Si detector.

1979Ho10, 1981Ho10, 1981HoZM: Produced by ^{58}Ni bombardment; α 's measured with Si detector following velocity selector.

1982De11: Produced by ^{63}Cu bombardment.

1989Wo02: Produced by $^{110}\text{Cd}(^{58}\text{Ni},x)$.

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.

Other: 2015Da03 observe (among others) the 5536 α of ^{162}W to ^{158}Hf in α - γ coin measurements (Fig. 6a).

 ^{158}Hf Levels

<u>E(level)</u>	<u>J^π</u>
0	0^+

 α radiations

<u>E_α</u>	<u>E(level)</u>	<u>I_α^\dagger</u>	<u>Comments</u>
5536 3	0	100	E_α : Weighted average of 5528 10 (1975To05), 5538 5 (1979Ho10), 5534 4 (1982De11), and 5541 5 (1996Pa01); other: 5530 (1973Ea01).

† For absolute intensity per 100 decays, multiply by 0.452 6.