

^{176}Os ε decay [1970DeZF,1968KoZW](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	M. S. Basunia	NDS 107, 791 (2006)	15-Sep-2005

Parent: ^{176}Os : $E=0.0$; $J^\pi=0^+$; $T_{1/2}=3.6$ min 5; $Q(\varepsilon)=2960$ 40; $\% \varepsilon + \% \beta^+$ decay=100.0

[1970DeZF](#), [1968KoZW](#): activity produced by $^{180}\text{W}(^3\text{He},7n)$, $E=70$ MeV. Isotopic assignment was based on cross bombardment using targets of ^{182}W and ^{184}W . Measured E_γ , I_γ . Detectors:Ge(Li).

[1970Ar15](#): activity produced by bombardment of Au targets with 660-MeV protons. Measured E_γ , I_γ . Detectors:Ge(Li). Observed γ rays were assigned to the ε decay of ^{176}Os or ^{177}Os .

[1972Be89](#): activity produced by bombardment of Hg targets with 1-GeV protons. Measured E_γ , I_γ . Detectors:Ge(Li). Observed γ rays were assigned to the ε decay of ^{176}Os or ^{177}Os .

Decay scheme is preliminary, and based on γ -ray energy differences ([1970DeZF,1968KoZW](#)).

 ^{176}Re LevelsE(level)

0.0
81.5?
857.3?
1290.8?

 $\gamma(^{176}\text{Re})$

<u>E_γ [†]</u>	<u>I_γ [‡]</u>	<u>$E_i(\text{level})$</u>	<u>E_f</u>
81.5 [#]	36	81.5?	0.0
775.8 [#]	98	857.3?	81.5?
857.2 [#]	69	857.3?	0.0
1209.2 [#]	71	1290.8?	81.5?
1290.9 [#]	100	1290.8?	0.0

[†] From [1970DeZF](#), [1968KoZW](#). Assignment to ^{176}Os is not certain.

[‡] From [1970DeZF](#).

[#] Placement of transition in the level scheme is uncertain.

^{176}Os ε decay **1970DeZF,1968KoZW**
