

^{176}Os ε decay 1970DeZF,1968KoZW

Type	Author	History
Full Evaluation		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; % ε +% β^+ 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 $E\gamma$, $I\gamma$. Detectors:Ge(Li).

1970Ar15: activity produced by bombardment of Au targets with 660-MeV protons. Measured $E\gamma$, $I\gamma$. 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 $E\gamma$, $I\gamma$. 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?

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

E_γ^\dagger	I_γ^\ddagger	$E_i(\text{level})$	E_f
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.

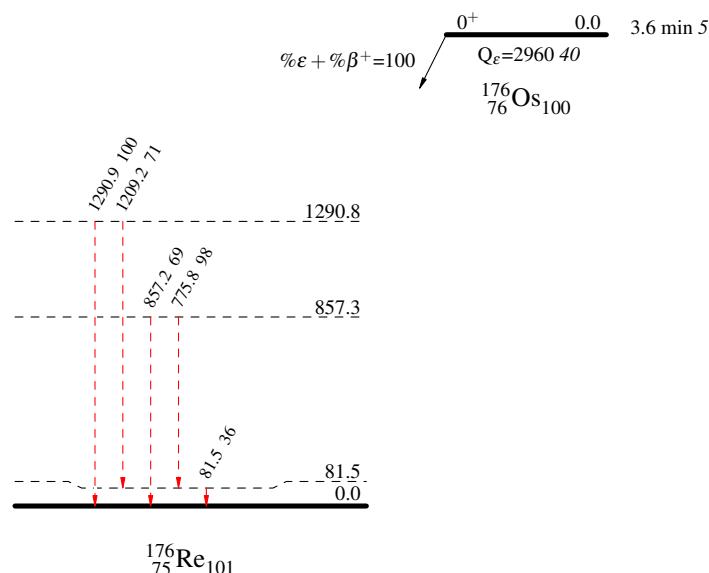
[‡] From [1970DeZF](#).

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

$^{176}\text{Os} \varepsilon$ decay 1970DeZF,1968KoZW

Legend

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$
- - - - - γ Decay (Uncertain)

Decay SchemeIntensities: Relative I_γ  $^{176}_{75}\text{Re}_{101}$