

^{180}Pt α decay [1968De01,1966Si08](#)

<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: ^{180}Pt : $E=0.0$; $J^\pi=0^+$; $T_{1/2}=56$ s 2; $Q(\alpha)=5.24\times 10^3$ 3; $\% \alpha$ decay=0.30 15

[Additional information 1.](#)

$T_{1/2}(^{180}\text{Pt})=56$ s 2 is the adopted half-life in [2003Wu10](#).

$Q(\alpha)(^{180}\text{Pt})=5.24\times 10^3$ 3 ([2003Au03](#)).

 ^{176}Os Levels

<u>E(level)</u>	<u>J^π</u>
0.0	0^+

 α radiations

<u>$E\alpha$</u>	<u>E(level)</u>	<u>$I\alpha^\ddagger$</u>	<u>HF†</u>	<u>Comments</u>
5140 10	0.0	92 8	1.0	$E\alpha$: From 1966Si08. Other value: 5139 keV 19 (1968De01). $E\alpha=5124$ 29 from $Q(\alpha)=5.24\times 10^3$ 3. $I\alpha$: only one α group has been observed. An upper limit of 16.3% of α decay is obtained for the intensity of an unobserved 5008-keV α to the 135.1, 2^+ state by requiring $\text{Hf}(5008\alpha)>\text{Hf}(5124\alpha)$. $I\alpha(5124\alpha)=92$ 8 per 100 α decays is used in calculations.

† $r_0(^{176}\text{Os})=1.53$ 4 ([1998Ak04](#)) is calculated from $\text{Hf}(5124\alpha)=1.0$. $I\alpha(5124\alpha)=92$ 8 ($I\alpha>84$) per 100 α decays is used in computation.

‡ For absolute intensity per 100 decays, multiply by 0.0030 15.