
 ^{184}Pt α decay [1995Bi01](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 126, 151 (2015)	1-Feb-2015

Parent: ^{184}Pt : $E=0.0$; $J^\pi=0^+$; $T_{1/2}=17.3$ min 2; $Q(\alpha)=4598$ 8; $\% \alpha$ decay=0.0017 7

α branching=0.0017% 7 was obtained by [1995Bi01](#). $\% \alpha \approx 0.0010$ was adopted by [1989Fi11](#) from the earlier measurements of [1963Gr08](#) and [1966Si08](#).

 ^{180}Os Levels

$E(\text{level})$	J^π
0.0	0^+

 α radiations

$E\alpha$	$E(\text{level})$	$I\alpha^\ddagger$	$\text{HF}^\dagger$	Comments
4502 10	0.0	94 6	1.0	$E\alpha$: measured by 1995Bi01 . $E\alpha=4490$ 15 is adopted in 1989Fi11 from $E\alpha=4480$ 20 and 4500 20 measured by 1963Gr08 and 1966Si08 , respectively. $I\alpha$: only one α group has been observed. $I\alpha$ deduced by evaluator assuming by assuming that hindrance factors for possible α 's to the first 2^+ , 132 level and the second 0^+ , 736 level should be larger than that for the 4502-keV α giving $I\alpha(4373\alpha \text{ to } 2^+) < 12.3$, $I\alpha(3771\alpha \text{ to } 0^+ \text{ at } 736) < 0.0004$ per 100 α decays. $I\alpha(4502\alpha)=94$ 6 ($I\alpha > 87.8$) per 100 α decays is used to calculate the radius parameter.

† $r_0(^{180}\text{Os})=1.536$ 31 is calculated by requiring $\text{HF}(4502\alpha)=1.0$.

‡ For absolute intensity per 100 decays, multiply by 1.7×10^{-5} 7.