

^{181}Pt α decay 1995Bi01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 159, 1 (2019)	30-Aug-2019

Parent: ^{181}Pt : $E=0.0$; $J^\pi=1/2^-$; $T_{1/2}=52.0$ s 22; $Q(\alpha)=5150$ 5; $\% \alpha$ decay=0.074 10

$^{181}\text{Pt}-Q\alpha$ is from 2017Wa10.

$^{181}\text{Pt}-\% \alpha$ decay: From 1995Bi01.

1995Bi01: Activity produced by the bombardment of Yb with a 165-MeV ^{19}F beam. Mass separated sources. Detectors: two counting stations: Station 1 with a cooled Si(Li) detector and a Ge(Li) γ -ray detector; Station 2 with a Si(Au) surface barrier detector and two Ge(Li) γ -ray detectors. Measured $E\alpha$, $I\alpha$, $T_{1/2}$, $\% \alpha$, $\% \epsilon + \% \beta^+$, $\alpha\gamma$ coin, $E\alpha$ - $\gamma\gamma$ coin. The coincidence time window was 50 ns.

Others: 1966Si08.

 ^{177}Os Levels

E(level)	J^π †	$T_{1/2}$ †	Comments
0.0#	$1/2^-$	3.0 min 2	
88‡# 11			E(level): Probable population of both, the 75.6 keV, $J^\pi=(3/2^-)$ and 90.6 keV, $J^\pi=5/2^-$, levels.

† From Adopted Levels.

‡ From the measured α decay energies (1995Bi01).

$\nu 1/2[521]$ ($p_{3/2}$).

 α radiations

$E\alpha$ †	E(level)	$I\alpha$ †#	HF‡	Comments
4950 10	88	3.8	13	
5036 5	0.0	96.2	1.6	$E\alpha$: Other: 5020 20 (1966Si08).

† From 1995Bi01.

‡ Calculated using $r_0(^{177}\text{Os})=1.547$ 17, unweighted average from the r_0 values of 1.53 4 (^{176}Os) and 1.563 7 (^{178}Os), deduced using HF=1.0.

For absolute intensity per 100 decays, multiply by 0.00074 10.