
 ^{174}Os α decay [1972Be89](#),[1971Bo06](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	C. M. Baglin ¹ , E. A. Mccutchan ² , S. Basunia ¹		NDS 153, 1 (2018)	1-Oct-2018

Parent: ^{174}Os : E=0.0; $J^\pi=0^+$; $T_{1/2}=44$ s 4; $Q(\alpha)=4870$ 10; $\% \alpha$ decay=0.020 10

^{174}Os - $\% \alpha$ decay: from 0.020 +10-4 ([1971Bo06](#)).

[1971Bo06](#): sources produced by $^{164}\text{Er}(^{16}\text{O},6n)$, E=90-154 MeV; semi; measured $E\alpha$, α branching.

[1972Be89](#): sources produced by 1-GeV proton bombardment of Hg targets.

 ^{170}W Levels

E(level)	J^π
0.0	0^+

 α radiations

$E\alpha$	E(level)	$I\alpha^{\dagger\#}$	$\text{HF}^{\ddagger}$	Comments
4760 10	0.0	100	1.0	$E\alpha$: measured by 1971Bo06 .

[†] Only the 4760 α to the g.s. has been observed. $I\alpha$ for a possible unobserved 4607 α to the 156.9-keV 2^+ state in ^{170}W is estimated to be less than 11% of α decay by requiring its hindrance factor to be greater than 1.0. This does not affect significantly the computation of the r_0 parameter.

[‡] $r_0(^{170}\text{W})=1.54$ 3, assuming $\text{Hf}(4760\alpha)=1.0$, $T_{1/2}(^{174}\text{Os})=44$ s 4 (weighted average of 45 s 5 ([1973Be67](#)) and 42 s 6 ([1972Be89](#))), $Q(\alpha)(^{174}\text{Os})=4870$ 10 ([2017Wa10](#)) and $\% \alpha(^{174}\text{Os})=0.020$ +10-4 ([1971Bo06](#)).

[#] For absolute intensity per 100 decays, multiply by 0.00020 10.