

^{205}Fr α decay [1974Ho27](#),[1967Va20](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	F. G. Kondev	NDS 187,355 (2023)	20-Sep-2022

Parent: ^{205}Fr : $E=0$; $J^\pi=9/2^-$; $T_{1/2}=3.90$ s 7; $Q(\alpha)=7054.7$ 24; $\% \alpha$ decay=98.5 4

^{205}Fr - $J^\pi, T_{1/2}$: From [2020Ko17](#).

^{205}Fr - $Q(\alpha)$: From [2021Wa16](#).

^{205}Fr - $\% \alpha$ decay: From [2020Ko17](#).

 ^{201}At Levels

<u>E(level)</u>	<u>J^π[†]</u>	<u>$T_{1/2}$[†]</u>
0	$9/2^-$	87.6 s 13

[†] From Adopted Levels.

 α radiations

<u>$E\alpha$</u>	<u>E(level)</u>	<u>$I\alpha$[‡]</u>	<u>HF[†]</u>	<u>Comments</u>
6915.4 24	0	100	1.70 8	$E\alpha$: Weighted average $E\alpha=6910$ keV 20 (1964Gr04), 6917 keV 5 (1967Va20), 6912 keV 5 (1974Ho27), 6917 keV 5 (1981Ri04), 6915 keV 7 (1995Le04) and 6916 keV 5 (2005De01).

[†] Using $r_0(^{201}\text{At})=1.516$ 13, unweighted average of $r_0(^{202}\text{Rn})=1.5287$ 42 and $r_0(^{200}\text{Po})=1.5026$ 13 ([2020Si16](#)).

[‡] For absolute intensity per 100 decays, multiply by 0.985 4.