

^{217}Ac α decay: E=1.15 MeV

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	M. S. Basunia	NDS 181, 475 (2022)	1-Jan-2022

Parent: ^{217}Ac : E=1149.1; $J^\pi=15/2^-$; $T_{1/2}<10$ ns; $Q(\alpha)=9832$ 10; $\% \alpha$ decay<0.31

^{217}Ac -E: [1985De14](#) show a doublet parent of 1147 ($17/2^-$) and 1150 ($15/2^-$), which are 1146.6 and 1149.1, respectively, in [2018Ko01](#) (A=217 evaluation).

^{217}Ac - J^π : From [2018Ko01](#) (A=217 evaluation).

^{217}Ac - $T_{1/2}$: From [1985De14](#).

^{217}Ac - $Q(\alpha)$: From [2021Wa16](#).

^{217}Ac - $\% \alpha$ decay: From ≤ 0.27 4 in ([1985De14](#)).

 ^{213}Fr Levels

<u>E(level)</u>	<u>J^π</u>	<u>$T_{1/2}$</u>	<u>Comments</u>
0.0	$9/2^-$	34.17 s 6	$J^\pi, T_{1/2}$: From Adopted Levels.

 α radiations

<u>E_α</u>	<u>E(level)</u>	<u>I_α^\ddagger</u>	<u>HF†</u>	<u>Comments</u>
10780 15	0.0	100	>8000	E_α : measured by 1985De14 . The 9.65 and 10.54 MeV α 's from the g.s. and 740-ns isomer of ^{217}Ac were used as calibration energies. Other: 10820 keV (1982SaZO). I_α : α intensity per 100 α decays from the level.

† Using $r_0(^{213}\text{Fr})=1.5460$ 27, unweighted average of $r_0(^{212}\text{Rn})=1.5433$ 36 and $r_0(^{214}\text{Ra})=1.5487$ 30 ([2020Si16](#)).

‡ For absolute intensity per 100 decays, multiply by <0.0031.