

$^{217}\text{Fr}$   $\alpha$  decay

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

Parent:  $^{217}\text{Fr}$ :  $E=0.0$ ;  $J^\pi=9/2^-$ ;  $T_{1/2}=22 \mu\text{s}$  5;  $Q(\alpha)=8469$  4; % $\alpha$  decay=100.0

$^{217}\text{Fr}$ - $J^\pi, T_{1/2}$ : From [2018Ko01](#) (A=217 evaluation).

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

 $^{213}\text{At}$  Levels

E(level)	$J^\pi$	$T_{1/2}$	Comments
0.0	$9/2^-$	125 ns 6	$J^\pi, T_{1/2}$ : From Adopted Levels.

 $\alpha$  radiations

$E_\alpha$	E(level)	$I_\alpha^\ddagger$	$\text{HF}^\dagger$	Comments
8313 5	0.0	100	1.2 3	$E_\alpha$ : Weighted average of 8315 8 ( <a href="#">1970Bo13</a> ) and 8312 5 ( <a href="#">1988Hu08</a> ), uncertainty is the lower input value. Other measured value: 8310 20 ( <a href="#">1968Ha14</a> ).

$^\dagger$  Using  $r_0(^{213}\text{At})=1.5656$  5, unweighted average of  $r_0(^{212}\text{Po})=1.5658$  6 (Perhaps 1.5658 59 in [2020Si16](#) is a misprint of 1.56580 59) and  $r_0(^{214}\text{Rn})=1.5655$  13 ([2020Si16](#)).

$^\ddagger$  Absolute intensity per 100 decays.