

${}^{217}\text{U}$ α decay [2000Ma65](#),[2005Le42](#)

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

Parent: ${}^{217}\text{U}$: $E=0$; $T_{1/2}=16$ ms $+21-6$; $Q(\alpha)=8430$ 80; $\% \alpha$ decay=100.0

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

${}^{217}\text{U}$ - J^π : In [2005Le42](#), $J^\pi=(1/2^-)$ was proposed.

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

[2000Ma65](#): ${}^{217}\text{U}$ was produced through ${}^{182}\text{W}({}^{40}\text{Ar},5n){}^{217}\text{U}$; Target 92% enriched; $E=193$ MeV; multi-strip silicon detector; $E\alpha$, $T_{1/2}$ measured.

[2005Le42](#): ${}^{217}\text{U}$ was produced through ${}^{182}\text{W}({}^{40}\text{Ar},5n){}^{217}\text{U}$; $E=186$ MeV, double-sided silicon detector; $E\alpha$, $T_{1/2}$ measured.

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

E(level)	J^π [†]	$T_{1/2}$ [†]
0	$5/2^-$	146 ms $+22-19$

[†] From Adopted Levels.

 α radiations

$E\alpha$	E(level)	$I\alpha$ [‡]	HF [†]	Comments
8018 14	0	100	<6	$E\alpha$: Weighted average of 8005 20 (2000Ma65), 8024 14 (2005Le42). Uncertainty is the lower input value. HF: Limit based on the calculated value of 2 4, where HF \neq 0.

[†] Using $r_0({}^{213}\text{Th})=1.499$ 24 is deduced from interpolation (or unweighted average) of $r_0({}^{214}\text{Th})=1.512$ 14 and $r_0({}^{212}\text{Th})=1.486$ 33 ([2020Si16](#)).

[‡] Absolute intensity per 100 decays.