
 ^{219}U α decay (42 μs) [1993An07,1994Ye08](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	B. Singh	NDS 114, 2023 (2013)	23-Sep-2013

Parent: ^{219}U : $E=0.0$; $J^\pi=(9/2^+)$; $T_{1/2}=42\ \mu\text{s} +34-13$; $Q(\alpha)=9940\ 50$; $\% \alpha$ decay=100.0

^{219}U - $T_{1/2}$: From ^{219}U Adopted Levels. Other: 0.08 ms $+10-3$ ([2007Le14](#)).

^{219}U - J^π : Proposed by [2007Le14](#) based on hindered α decays in N=127 isotones.

^{219}U - $Q(\alpha)$: From [2012Wa38](#).

[1993An07](#): ^{219}U produced and identified in $^{197}\text{Au}(^{27}\text{Al},\text{X})$, reaction at $E=5.5$ MeV/nucleon; measured $E\alpha$, $I\alpha$, $\alpha\alpha$ -correlation; deduced half-life, Q value for α decay.

[Additional information 1](#).

[2007Le14](#) (also [2005Le42](#)): ^{219}U produced in $^{182}\text{W}(^{40}\text{Ar},\text{X})$, $E=191,197$ MeV at JYFL, Jyvaskyla facility, RITU separator, GREAT spectrometer for particle detection. Measured α -particle spectrum and half-life.

No HF deduced since r_0 parameter for ^{216}Th is not known.

 ^{215}Th Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	(1/2 $^-$)	1.2 s 2	$J^\pi, T_{1/2}$: from Adopted Levels.

 α radiations

$E\alpha$	E(level)	$I\alpha^\dagger$	Comments
9774 18	0.0	100	$E\alpha$: from 2007Le14 . Other: 9680 40 (1993An07).

† Absolute intensity per 100 decays.