

^{219}Th α decay (1.05 μs) 1973Ha32

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. Kumar, B. Singh, K. Rojeeta Devi, A. Rohilla		NDS 114, 2023 (2013)	23-Sep-2013

Parent: ^{219}Th : $E=0.0$; $J^\pi=(9/2^+)$; $T_{1/2}=1.05 \mu\text{s}$ 3; $Q(\alpha)=9510.50$; $\% \alpha$ decay=100.0

^{219}Th - $J^\pi, T_{1/2}$: From Adopted Levels of ^{219}Th in ENSDF database.

^{219}Th - $Q(\alpha)$: From 2012Wa38.

^{219}Th activity was produced by $^{206}\text{Pb}(^{16}\text{O},3n)$, $E=80-90$ MeV. Isotopic assignment is based on its genetic relationship to ^{215}Ra , and on measured excitation functions. Measured $E\alpha$. Detector: semi.

 ^{215}Ra Levels

<u>E(level)</u>	<u>J^π</u>	<u>$T_{1/2}$</u>	<u>Comments</u>
0.0	(9/2 ⁺)	1.66 ms 2	$J^\pi, T_{1/2}$: from Adopted Levels.

 α radiations

<u>$E\alpha$</u>	<u>E(level)</u>	<u>$I\alpha^\ddagger$</u>	<u>HF[†]</u>
9340 20	0.0	100	2.0 2

[†] Using $r_0(^{215}\text{Ra})=1.560$ 9, interpolated value deduced from $r_0(^{214}\text{Ra})=1.554$ 9 and $r_0(^{216}\text{Ra})=1.566$ 9 (1998Ak04).

[‡] Absolute intensity per 100 decays.