

^{210}Rn α decay

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 201,346 (2025)	21-Jan-2025

Parent: ^{210}Rn : $E=0.0$; $J^\pi=0^+$; $T_{1/2}=2.42$ h 5; $Q(\alpha)=6159.0$ 22; $\% \alpha$ decay=96 1

^{210}Rn - $Q(\alpha)$: From [2021Wa16](#).

^{210}Rn - $T_{1/2}$: Weighted average 2.42 h 5 ([1968Cr02](#)) and 2.4 h 1 ([1971Go35](#)).

^{210}Rn - $\% \alpha$ decay: From [1971Go35](#).

 ^{206}Po Levels

<u>E(level)[†]</u>	<u>J^π[†]</u>	<u>$T_{1/2}$[†]</u>
0.0	0 ⁺	8.8 d 1
700.66 3	2 ⁺	4.3 ps 7

[†] From Adopted Levels.

 α radiations

<u>$E\alpha$</u>	<u>E(level)</u>	<u>$I\alpha^\ddagger$</u>	<u>HF[†]</u>	Comments
5354 22	700.66	0.0056	6.9	$E\alpha$: From $Q(\alpha)$ and level energy. $I\alpha$: From 1971Go35 .
6041 3	0.0	99.9944	1	$E\alpha$: Recommended by 1991Ry01 .

[†] $r_0(^{206}\text{Po})=1.4565$ 15, calculated from $\text{HF}(6041\alpha)=1.0$.

[‡] For absolute intensity per 100 decays, multiply by 0.96 1.