

^{207}Ra α decay (1.2 s) [1995Uu01](#),[1987He10](#),[1967Va22](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 177, 509, 2021	4-Jul-2021

Parent: ^{207}Ra : $E=0.0$; $J^\pi=(3/2^-)$; $T_{1/2}=1.2$ s I ; $Q(\alpha)=7270$ 60; $\% \alpha$ decay ≈ 86.0

^{207}Ra - $J^\pi, T_{1/2}$: From [2011Ko04](#).

^{207}Ra - $Q(\alpha)$: From [2021Wa16](#).

^{207}Ra - $\% \alpha$ decay: From [2011Ko04](#).

 ^{203}Rn Levels

<u>E(level)[†]</u>	<u>J^π[†]</u>	<u>$T_{1/2}$[†]</u>
0.0	$3/2^-$	44.2 s 16

[†] From Adopted Levels.

 α radiations

<u>$E\alpha$</u>	<u>E(level)</u>	<u>$I\alpha$[‡]</u>	<u>HF[†]</u>	<u>Comments</u>
7131 4	0.0	100	≈ 1.4	$E\alpha$: Weighted average of 7136 keV 12 (1995Uu01), 7131 keV 5 (1967Va22) and 7128 keV 10 (1987He10). Other: 7144 keV 9 (2015Ma63), corresponds to the decay of both ^{208}Ra and ^{207}Ra .

[†] Using $r_0(^{205}\text{Ra})=1.513$ 22, weighted average of 1.539 +27-50 in ^{206}Ra (N=118) and 1.510 27 in ^{208}Ra (N=120), determined using $HF_\alpha=1$.

[‡] For absolute intensity per 100 decays, multiply by ≈ 0.86 .