

^{203}Rn α decay (26.9 s) [1993Wa04](#)

Type	History		Literature Cutoff Date
	Author	Citation	
Full Evaluation	Balraj Singh	ENSDF	01-Dec-2015

Parent: ^{203}Rn : $E=362.5$; $J^\pi=(13/2^+)$; $T_{1/2}=26.9$ s 5; $Q(\alpha)=6629.8$ 21; $\% \alpha$ decay=75 10

^{203}Rn -E, J^π , $T_{1/2}$: From ^{203}Rn Adopted Levels in ENSDF database. [2012Au07](#) give level energy as 360 keV 4.

^{203}Rn -Q(α): From [2012Wa38](#).

^{203}Rn - $\% \alpha$ decay: $\% \alpha=75$ 10 for $^{203\text{m}}\text{Rn}$ α decay taken from ^{203}Rn Adopted Levels in ENSDF database. Measured values of $\% \alpha$ are: 80 10 ([1998Bo14](#)), 75 10 ([1987He10](#)), ≈ 100 ([1971Ho01](#)). No evidence of IT decay to ^{203}Rn or for ε decay to ^{203}At ([1971Ho01](#)).

Others: [1996Ta18](#), [1996Le09](#), [1995Le04](#), [1987He10](#), [1971Ho01](#), [1967Va17](#).

 ^{199}Po Levels

E(level)	J^π [†]
310 2	(13/2 ⁺)

[†] From Adopted Levels.

 α radiations

E_α	E(level)	I_α [‡]	HF [†]	Comments
6550.3 10	310	100	1.2 3	E_α : weighted average of 6551 1 (1996Ta18), 6548 3 (1996Le09), 6552 3 (1995Le04), 6549.0 25 (1993Wa04), 6550 10 (1987He10), 6547 3 (1967Va17).

[†] $r_0(^{199}\text{Po})=1.508$ 10.

[‡] For absolute intensity per 100 decays, multiply by 0.75 10.