
 ^{197}Rn α decay (55 ms) [2008An05](#),[1995Mo14](#),[1996En02](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 143, 1 (2017)	31-Mar-2017

Parent: ^{197}Rn : $E=0.0$; $J^\pi=(3/2^-)$; $T_{1/2}=55$ ms $+7-5$; $Q(\alpha)=7411$ 7; % α decay ≤ 100.0

^{197}Rn - J^π : From ^{197}Rn Adopted Levels ([2005Hu03](#)).

^{197}Rn - $T_{1/2}$: Weighted average of 53 ms $+7-5$ (maximum-likelihood method from α decay curve,[2008An05](#)); 65 ms $+25-14$ ([1996En02](#)), 51 ms $+35-15$ ([1995Mo14](#)). Uncertainty is the lowest input value.

Measured $E\alpha$ ([1995Mo14](#),[1996En02](#)), half-life ([2008An05](#),[1995Mo14](#),[1996En02](#)) of ^{197}Rn isotope.

 ^{193}Po Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	$(3/2^-)$	388 ms 40	E(level), J^π , $T_{1/2}$: From Adopted Levels.

 α radiations

$E\alpha$	E(level)	$I\alpha^\ddagger$	HF †	Comments
7260 7	0.0	100	1.8	$E\alpha$: From 1996En02 . Other value: 7261 keV 30 (1995Mo14). HF: assumed 100% α decay.

† Deduced using $r_0=1.568$ 13, from interpolation of radius=1.585 fm 16 for ^{192}Po and 1.551 fm 10 for ^{194}Po .

‡ For absolute intensity per 100 decays, multiply by ≤ 1.0 .