

^{216}Rn α decay 1961Ru06,1970Va13

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	K. Auranen and E. A. Mccutchan		NDS 168, 117 (2020)	1-Aug-2020

Parent: ^{216}Rn : $E=0.0$; $J^\pi=0^+$; $T_{1/2}=45 \mu\text{s}$ 5; $Q(\alpha)=8197$ 6; $\% \alpha$ decay=100.0
 ^{216}Rn - $T_{1/2}$: from 1961Ru06. Other: $29 \mu\text{s}$ 4 (2018Sa45).

 ^{212}Po Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	0^+	294.3 ns 8	$T_{1/2}$: from the Adopted Levels.

 α radiations

$E\alpha$	E(level)	$I\alpha^\ddagger$	HF †	Comments
8050 10	0.0	100	1.0	$E\alpha$: from 1970Va13. Other: 8047 10 (1961Ru06). The original energy given by 1961Ru06 has been increased by 7 keV due to a change in calibration energy. $I\alpha$: only one α group has been observed. Upper limit for the intensity of an unobserved 7334-keV α to the 2^+ , 727.330-keV level has been estimated to be $\leq 0.7\%$ by assuming its hindrance factor to be ≥ 1 .

† $r_0(^{212}\text{Po})=1.5658$ 59, deduced by evaluators by taking $\text{HF}(8050\alpha)=1.0$.

‡ Absolute intensity per 100 decays.