

$^{204}\text{Rn}$   $\alpha$  decay

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 192,1 (2023)	1-Aug-2023

Parent:  $^{204}\text{Rn}$ :  $E=0.0$ ;  $J^\pi=0^+$ ;  $T_{1/2}=1.242$  min 23;  $Q(\alpha)=6546.7$  18;  $\% \alpha$  decay=72.4 9

$^{204}\text{Rn}$ - $T_{1/2}$ : From [2010Ch02](#).

$^{204}\text{Rn}$ - $\% \alpha(^{204}\text{Rn})$  from [2010Ch02](#).

 $^{200}\text{Po}$  Levels

E(level)	$J^\pi$	$T_{1/2}$	Comments
0.0	$0^+$	11.54 min 9	$T_{1/2}$ : From Adopted Levels.

 $\alpha$  radiations

$E_\alpha$	E(level)	$I_\alpha^\ddagger$	HF $^\dagger$	Comments
6418.8 14	0.0	100	1.0	$E_\alpha$ : Weighted average of $E_\alpha=6418.9$ keV 25 ( <a href="#">1993Wa04</a> ), 6420 keV 2 ( <a href="#">1996Ta18</a> ) and 6416 keV 3 ( <a href="#">1967Va17</a> ). Others: 6409 keV 3 ( <a href="#">1995Le04</a> ) and 6408 keV 8 ( <a href="#">2015Ma63</a> ).

$^\dagger$   $r_0(^{200}\text{Po})=1.5026$  13 from [2020Si16](#).

$^\ddagger$  For absolute intensity per 100 decays, multiply by 0.724 9.