

^{204}At α decay 1993Wa04,1963Ho18,1974Ho27

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

Parent: ^{204}At : $E=0.0$; $J^\pi=7^+$; $T_{1/2}=9.23$ min 12; $Q(\alpha)=6070.4$ 12; $\% \alpha$ decay=3.91 16

^{204}At - $T_{1/2}$: Weighted average of 9.3 min 3 (1961La02), 9.3 min 2 (1963Ho18), 8.9 min 2 (1964Th07), 9.1 min 2 (1970DaZM) and 9.6 min 2 (2010Ka29). Others: 7.9 min 6 (1968Go12), 9 min 3 (1961Fo04), 8.0 min 13 (1975BaYI).

^{204}At - $\% \alpha$ from 2010Ch02; $Q(\alpha)$ from 2021Wa16.

 ^{200}Bi Levels

E(level)	J^π	$T_{1/2}$
0.0	7^+	36.4 min 5

 α radiations

E_α	E(level)	I_α^\ddagger	HF †	Comments
5950.6 12	0.0	100	2.77 15	E_α : Weighted average of $E_\alpha=5948$ keV 5 (1974Ho27), 5952 keV 2 (1968Go12), 5948 keV 3 (1963Ho18), 5947 keV 3 (1967Tr06), 5952 keV 3 (1975BaYI) and 5953 keV 3 (1981Va27). Other: $E_\alpha=5900$ keV 30 (1961Fo04).

† Using $r_0(^{200}\text{Bi})=1.488$ 10 weighted average of 1.4720 20 (^{202}Po), 1.4625 22 (^{204}Po), 1.5026 13 (^{204}Rn) and 1.4917 27 (^{206}Rn) from 2020Si16.

‡ For absolute intensity per 100 decays, multiply by 0.0391 16.