

^{206}Po α decay [1967Ti04](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	F. G. Kondev	NDS 196,342 (2024)	1-Sep-2023

Parent: ^{206}Po : $E=0.0$; $J^\pi=0^+$; $T_{1/2}=8.8$ d I ; $Q(\alpha)=5327.0$ $I3$; $\% \alpha$ decay=5.45 5

[1967Ti04](#): ^{206}Po sample was made by $^{209}\text{Bi}(p,4n)$. $E(p)=110$ to 130 MeV with proton flux of 10^{13} protons/sec. Target: 0.5 to 1 g/cm² bismuth-oxide powder. Irradiation time: 10 to 30 min. ^{206}Po chemically separated. Si(Li) detector.

Others: [1969Go23](#), [1970Ra14](#).

 ^{202}Pb Levels

<u>E(level)</u>	<u>J^π</u>	<u>$T_{1/2}$</u>
0.0	0^+	5.25×10^4 y 28

 α radiations

<u>$E\alpha$</u>	<u>E(level)</u>	<u>$I\alpha^\ddagger$</u>	<u>HF[†]</u>	<u>Comments</u>
5223.5 $I5$	0.0	100	1.000	$E\alpha$: Weighted average of $E\alpha=5224$ keV 4 (1967Ti04), 5224 keV 2 (1969Go23) and 5222 keV 3 (1970Ra14). Others: 5229 keV 5 (1970AfZZ),

[†] $r_0(^{202}\text{Pb})=1.4547$ $I0$ is calculated from $\text{HF}(5223.5\alpha)=1.0$.

[‡] For absolute intensity per 100 decays, multiply by 0.0545 5 .