

^{214}Bi β^- α decay [1965Le08](#), [1975HaZA](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 121, 561 (2014)	31-Mar-2014

Parent: ^{214}Bi : $E=0.0$; $J^\pi=1^-$; $T_{1/2}=19.9$ min 4; $Q(\beta^- \alpha)=3270$ 11; $\% \beta^- \alpha$ decay=0.003

^{214}Bi - $\% \beta^- \alpha$ decay: From Σ $I\alpha$. Also in [2012Au07](#).

Other $E\alpha$ and $I\alpha$ measurements: [1934Le01](#) – The 8430-keV α group was not seen in [1934Le01](#).

[1965Le08](#): Measured β^- delayed $E\alpha$ and $I\alpha$.

[1975HaZA](#): Placements of long-range α groups are suggested in [1975HaZA](#).

 ^{210}Pb Levels

<u>E(level)</u>	<u>J^π</u>
0.0	0^+
799.7	2^+

Delayed Alphas (^{210}Pb)

<u>$E(\alpha)$</u>	<u>$E(^{210}\text{Pb})$</u>	<u>$I(\alpha)^{\dagger\dagger}$</u>	<u>$E(^{214}\text{Po})$</u>	<u>$E(\alpha)$</u>	<u>$E(^{210}\text{Pb})$</u>	<u>$I(\alpha)^{\dagger\dagger}$</u>	<u>$E(^{214}\text{Po})$</u>
8287 6	0.0	0.00012	609.3	9670 8	0.0	0.00004	2017.3
8430 6	799.7	0.00006	1543.4?	9802 6	0.0	0.00012	2147.8
8950 8	0.0	0.00002	1274.8	9907 6	0.0	0.00007	2266.7
9080 6	0.0	0.0022	1415.5	10082 6	0.0	0.00014	2447.8
9320 6	0.0	0.00005	1661.3	10150 8	0.0	0.00002	2505.6
9378 8	0.0	0.00002	1729.6	10332 6	0.0	0.00008	2694.7
9500 6	0.0	0.0001	1847.4	10505 10	0.0	0.00002	2861

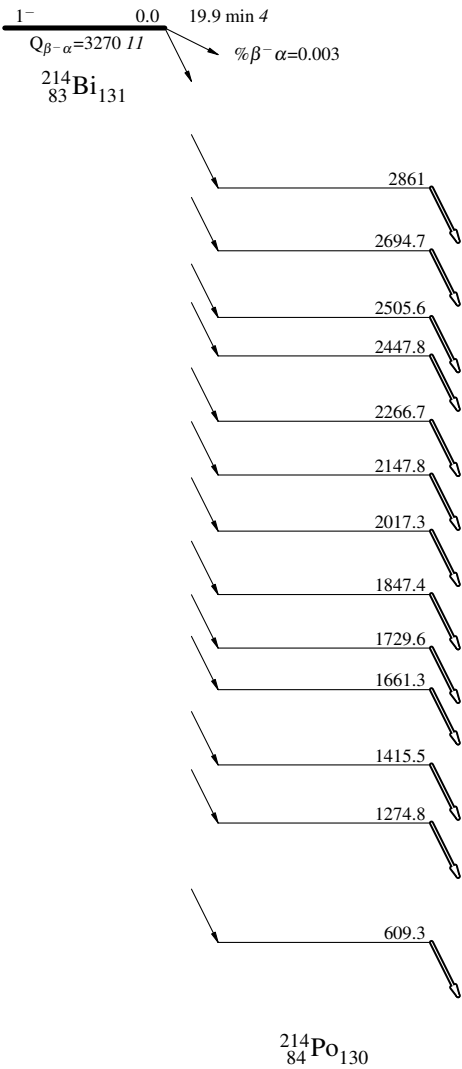
† Alpha intensities relative to $I(7688\alpha)$ from ^{214}Po g.s.)=100. The intensities represent $I\alpha$'s per 100 ^{214}Bi β^- decays (a ^{222}Rn source was utilized).

‡ Absolute intensity per 100 decays.

²¹⁴Bi β⁻α decay 1965Le08,1975HaZA

Decay Scheme

I(α) Intensities: I(α) per 100 parent decays



E(α)	I(α)	E(²¹⁴ Po)	E(²¹⁰ Pb)
8287	0.00012	609.3	0.0
8950	0.00002	1274.8	0.0
9080	0.0022	1415.5	0.0
9320	0.00005	1661.3	0.0
9378	0.00002	1729.6	0.0
9500	0.0001	1847.4	0.0
9670	0.00004	2017.3	0.0
9802	0.00012	2147.8	0.0
9907	0.00007	2266.7	0.0
10082	0.00014	2447.8	0.0
10150	0.00002	2505.6	0.0
10332	0.00008	2694.7	0.0
10505	0.00002	2861	0.0

