

^{212}Po α decay (17.1 ns) [1978Li14](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	M. J. Martin	NDS 108,1583 (2007)	1-Jun-2007

Parent: ^{212}Po : $E=1476.4$ 2; $J^\pi=(8^+)$; $T_{1/2}=17.1$ ns 2; $Q(\alpha)=8954.12$ 11; $\% \alpha$ decay ≈ 42.0

^{212}Po - $\% \alpha$ decay: $\% \alpha \approx 42$ from $I_\alpha(9.6\text{-}10.7 \text{ MeV } \alpha)/I_\alpha(^{212}\text{Po g.s.})=9.4$ 4 ([1984Es01](#)) and $I_\alpha(\text{from } 8^+ \text{ 1473 level})=46\%$ of all β^- delayed α 's from 25.0 min ^{212}Bi ([1978Ba44](#)). The assumptions made are that (1) contribution from α 's with unmeasured intensities, observed by [1980Le27](#), is negligible; and (2) the 4^+ and 6^+ levels in ^{212}Po are not fed directly by β^- decay from 9 $^-$ 25.0 min ^{212}Bi . Other: $\% \alpha=6$ 1 ([1978Li14](#)).

 ^{208}Pb Levels

<u>E(level)</u>	<u>J^π</u>
0.0	0^+

 α radiations

<u>E_α</u>	<u>E(level)</u>	<u>I_α^\ddagger</u>	<u>HF†</u>
10180 30	0.0	100	≈ 155

† $r_0(^{208}\text{Pb})=1.5212$ 4.

‡ For absolute intensity per 100 decays, multiply by ≈ 0.42 .