^{224}Ac

In "Artificial collateral chains to the thorium and actinium families" Ghiorso et al. discovered ^{224}Ac in 1948 (1948Gh01). Thorium targets were irradiated with 80 MeV deuterons from the Berkeley 184-inch cyclotron. The α-decay chains beginning at ^{227}Pa and ^{228}Pa were measured following chemical separation. "After the decay of the above-described series, a second group of alpha-particle emitters can be resolved. This second series, which decays with the 22-hour half-life of its protactinium parent, is a collateral branch of the 4n radioactive family as follows: $_{91}$Pa^{228} $\xrightarrow{\alpha}$ $_{89}$Ac^{224} $\xrightarrow{\alpha}$ $_{87}$Fr^{220} $\xrightarrow{\alpha}$ $_{85}$At^{216} $\xrightarrow{\alpha}$." The decay energies and half-lives of the decay chains were listed in a table, assigning a half-life of $\sim$2.5 h to ^{224}Ac.

Adapted from reference (2013Fr03)

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