^{223}Ac

In "Artificial collateral chains to the thorium and actinium families" Ghiorso et al. discovered ^{223}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. "Prominent soon after bombardment are a number of alpha-particle groups, which decay with the 38-minute half-life of the protactinium parent. These are due to the following collateral branch of the 4n+3 radioactive family: $_{91}Pa^{227} \xrightarrow{\alpha} {}_{89}Ac^{223} \xrightarrow{\alpha} {}_{87}Fr^{219} \xrightarrow{\alpha} {}_{85}At^{215} \xrightarrow{\alpha}$." The decay energies and half-lives of the decay chains were listed in a table, assigning a half-life of $\sim$2 min to ^{223}Ac.

Adapted from reference (2013Fr03)

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Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"