^{243}Am

Street et al. published "The isotopes of americium" in 1950, reporting the first observation of ^{243}Am (1950St61). Americium was irradiated with neutrons in the Argonne uranium-heavy water pile forming ^{243}Am in two successive neutron captures on ^{241}Am and ^{244}Am in the ^{243}Am(n,γ) reaction. ^{243}Am was identified by mass spectrometry and chemical analysis. "Mass spectrographic analysis of the americium of this bombardment showed Am^{243} present to the extent of ca. 0.5 percent. This together with the yield of Np^{239} determined in the chemical extraction experiments gives a partial half-life for alpha-particle emission for Am^{243} of roughly 10^4 years."

Adapted from reference (2013Fr02)

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