^{246}Am

In the 1955 paper "The new isotopes Pu^{246} and Am^{246}" Engelkemeir et al. from Argonne National Laboratory reported the discovery of ^{246}Am (1955En16). ^{246}Am was detected in the debris of the November 1952 thermonuclear test. The mass assignment was made based on mass spectrometric measurements. Beta- and gamma-ray spectra were measured with a scintillation spectrometer following chemical separation. "The beta-emitting plutonium isotope decayed with a half-life of 11.2±0.2 days, while the half-life of the americium isotopes was 25±0.2 minutes... Re-examination of the Pu^{246} content of this plutonium after 10 days disclosed a decrease in 246 mass consistent with a half-life of 11.2±0.2 days. On this basis the mass number was conclusively shown to be 246." The observed state corresponds to an isomer and the ground state half-life of 40(7) min was first observed twelve years later by Orth et al. (1967Or02).

Adapted from reference (2013Fr02)

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