^{236}Am

^{236}Am was discovered by Tsukada et al. as described in the 1998 paper "Half-life of the electron capture decaying isotope ^{236}Am" (1998Ts02). Enriched ^{235}U was bombarded with 46−50 MeV ^{6}Li beams from the JAERI tandem accelerator producing ^{236}Am in the (5n) fusion-evaporation reaction. ^{236}Am was separated with the gas-jet coupled JAERI-ISOL on-line separator. X- and γ-rays were measured with a planar type Ge and a coaxial n-type HPGe detector. "From these facts, we conclude that the PuK x rays in [the figure] are solely ascribable to the EC decay of ^{236}Am. The decay curves of the PuK$_{\alpha 1}$ and K$_{\alpha 2}$ x-ray intensities are shown in [the figure], and each half-life determined is 4.4±1.0 and 4.5±1.5 min, respectively. Thus the half-life of ^{236}Am is evaluated to be 4.4±0.8 min." Previous evidence of a 0.6 y isomeric state of ^{236}Am (1987Ma21) could not be confirmed.

Adapted from reference (2013Fr02)

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