^{122}La

In the 1984 article "Beta-delayed proton emission observed in new lanthanide isotopes" Nitschke et al. reported the first observation of ^{122}La (1984Ni03). A 196 MeV ^{36}Ar beam from the Berkeley SuperHILAC was used to form ^{122}La in the fusion-evaporation reaction ^{92}Mo(^{36}Ar,αpn). Beta-delayed protons and characteristic X-rays were measured in coincidence at the on-line isotope separator OASIS. "A=122: Two experiments were performed at this mass value: one with a dual proton telescope where a total of about 1800 protons were recorded and one with the tape system where x- and γ-rays were measured in coincidence with protons. The x-ray spectrum in the second experiment showed only Ba K_α- and K_β- lines which leads us to the conclusion that the new beta-delayed proton precursor is ^{122}La."

Adapted from reference (2012Ma48)

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