^{96}Cd

In 2008, Bazin et al. reported the discovery of ^{96}Cd in "Production and β Decay of rp-Process Nuclei ^{96}Cd, ^{98}In, and ^{100}Sn" (2008Ba53). At the National Superconducting Cyclotron Laboratory at Michigan State University a 120 MeV/nucleon ^{112}Sn primary beam reacted with a 195 mg/cm^2 ^{9}Be target and produced ^{96}Cd, ^{98}In, and ^{100}Sn. The A1900 fragment separator and the Radio Frequency Fragment Separator were then used to purify the products which were identified by energy loss, time-of-flight measurements, and γ-ray tagging. The half-lives of the isotopes were measured after implentation in the NSCL beta counting system. "The half-life of ^{96}Cd, which was the last experimentally unkown waiting point half-life of the astrophysical *rp* process, is $1.03^{+0.24}_{-0.21}$ s."

Adapted from reference (2010Am04)

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