^{89}Ru

The discovery of ^{89}Ru is credited to Yennello et al. with their 1992 paper "New Nuclei Near the Proton-Drip Line Around Z = 40" (1992Ye04). At the National Superconducting Cyclotron Laboratory at Michigan State University, a 70 MeV/A ^{92}Mo beam was produced by the K1200 cyclotron and impinged on a ^{58}Ni target. ^{89}Ru was identified with the A1200 fragment analyzer by measuring the time-of-flight and energy loss of the fragments. "The mass spectra for residues with Z from 39 to 44 are shown in [the figure] with the new isotopes marked by arrows. Although both ^{84}Mo and ^{86}Mo have been previously observed, no reference to the identification of ^{85}Mo was found. The other new isotopes observed in this study are ^{78}Y, ^{82}Nb, ^{86}Tc, and ^{89,90}Ru."

Adapted from reference (2012Ny02)

1992Ye04 S. J. Yennello, J. A. Winger, T. Antaya, W. Benenson *et al.*, Phys. Rev. C **46**, 2620 (1992).

2012Ny02 A. Nystrom and M. Thoennessen, At. Data Nucl. Data Tables **98**, 95 (2012).

Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"