^{82}Ni

The discovery of ^{82}Ni was described by Sumikama et al. in the 2017 paper "Observation of new neutron-rich Mn, Fe, Co, Ni, and Cu isotopes in the vicinity of ^{78}Ni" (2017Su15). A 3-mm-thick beryllium target was irradiated with a 345 MeV/nucleon ^{238}U from the RIKEN Radioactive Isotope Beam Factory (RIBF). Fission fragments were identified after the BigRIPS separator and the ZeroDegree spectrometer: "The particle-identification plot for the in-flight fission fragments highlights the first observation of eight new isotopes: ^{73}Mn, ^{76}Fe, ^{77,78}Co, ^{80,81,82}Ni, and ^{83}Cu."

2017Su15 T. Sumikama, S. Nishimura, H. Baba, F. Browne *et al.*, Phys. Rev. C **95**, 051601 (2017).

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