^{157}Nd

Van Schelt et al. reported the observation of ^{157}Nd in the 2012 paper "Mass measurements near the r-process path using the Canadian Penning Trap mass spectrometer" (2012Va02). ^{252}Cf fission fragments were captured in a helium gas catcher and their mass measured in the Canadian Penning Trap mass spectrometer at Argonne National Laboratory. "^{157}Nd: The mass of this neodymium isotope has never before been measured by any means, directly or indirectly. The AME03 extrapolates a mass excess of $-56.790(200)$ MeV (2003Au03), 1.6σ lighter than this work's $-56.464(43)$ MeV."

2003Au03 G. Audi, A. H. Wapstra, and C. Thibault, Nucl. Phys. A **729**, 337 (2003).

2012Va02 J. Van Schelt, D. Lascar, G. Savard, J. A. Clark *et al.*, Phys. Rev. C **85**, 045805 (2012).

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