^{79}Zn

^{79}Zn was first reported in a referee publication in 1986 by Ekström et al. in "Decay Properties of $^{75-80}$Zn and Q_β-Values of Neutron-Rich Zn and Ga Isotopes" (1986Ek01) Fission fragments were separated with the OSIRIS ISOL facility at Studsvik. Gamma-rays were measured with a coaxial Ge detector and several spectra were recorded consecutively. "The current multispectrum studies yielded half lives of (1.0±0.1)s and (0.53±0.05)s for ^{79}Zn and ^{80}Zn, respectively." In the original compilation (2012Gr02), credit for the discovery of ^{79}Zn was given to a publication by Rudstam et al. (1981Ru07), however, the paper was published in Nuclear Instruments and Methods as part of the proceedings of the 10^{th} International Conference on Electromagnetic Isotope Separators and Techniques Related to their Applications (EMIS) in 1980. Also, in two previous papers Rudstam et al. reported a half-life of 2.63(9) s but they were not able to uniquely identify the element and assigned it to ^{79}(Zn,Ga) (1976Ru01, 1977Ru09).

Adapted from reference (2015Th03)

1976Ru01 G. Rudstam and E. Lund, Phys. Rev. C **13**, 321 (1976).

1977Ru09 G. Rudstam and E. Lund, Nucl. Sci. Eng. **64**, 749 (1977).

1981Ru07 G. Rudstam, P. Aagaard, P. Hoff, B. Johansson, and H. U. Zwicky, Nucl. Instrum. Methods **186**, 365 (1981).

1986Ek01 B. Ekstrom, B. Fogelberg, P. Hoff, E. Lund, and A. Sangariyavanish, Phys. Scr. **34**, 614 (1986).

2012Gr02 J. L. Gross, J. Claes, J. Kathawa, and M. Thoennessen, At. Data Nucl. Data Tables **98**, 75 (2012).

2015Th03 M. Thoennessen, Int. J. Mod. Phys. E **24**, 1530002 (2015).

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