

## <sup>80</sup>Zn

<sup>80</sup>Zn was discovered by Gill et al. as reported in “Half-Life of <sup>80</sup>Zn: The First Measurement for an r-Process Waiting-Point Nucleus” (1986Gi07) in 1986. Neutrons from the high-flux beam reactor HFBR at Brookhaven National Laboratory irradiated a <sup>235</sup>U target and the fission fragments were separated with the mass separator TRIS-TAN. Time-sequential  $\gamma$ -ray spectra as well as  $\gamma$ - $\beta$  coincidence spectra were recorded. “Analysis of the time-sequential spectra identified several  $\gamma$  rays as belonging to the <sup>80</sup>Zn decay. Strong  $\gamma$  rays of 713 and 715 keV were used to determine a <sup>80</sup>Zn half-life of  $0.55 \pm 0.02$  s.” Only two months later Ekström et al. independently reported the measurement of <sup>80</sup>Zn (1986Ek01).

In the original compilation (2012Gr02), credit for the discovery of <sup>80</sup>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<sup>th</sup> International Conference on Electromagnetic Isotope Separators and Techniques Related to their Applications (EMIS) in 1980.

Adapted from reference (2015Th03)

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Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”