

⁵⁹Zn

Honkanen et al. identified ⁵⁹Zn in the 1981 paper “Beta Decay and Delayed Proton Emission of a New Nuclide ⁵⁹Zn” (1981Ho19). Enriched ⁵⁸Ni was bombarded with 25 MeV tritons from the MC-20 cyclotron at the University of Jyväskylä and ⁵⁹Zn was produced in the reaction ⁵⁸Ni(³He,2n). The recoil products were transported by a helium-jet system and deposited on a mylar tape where protons were measured with a Si(Au) surface barrier detector. “The β^+ decay of a new nuclide ⁵⁹Zn has been identified by β -delayed proton and γ -ray emission. Two γ -rays and 15 proton groups have been associated with the decay of ⁵⁹Zn.” Arai et al. submitted their independent identification of ⁵⁹Zn less than three month later (1981Ar13).

Adapted from reference (2012Gr02)

- 1981Ar13 Y. Arai, M. Fujioka, E. Tanaka, T. Shinozuka *et al.*, Phys. Lett. B **104**, 186 (1981).
1981Ho19 J. Honkanen, M. Kortelahti, K. Eskola, and K. Vierinen, Nucl. Phys. A **366**, 109 (1981).
2012Gr02 J. L. Gross, J. Claes, J. Kathawa, and M. Thoennessen, At. Data Nucl. Data Tables **98**, 75 (2012).

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