

⁵⁹Ni

Brosi et al. identified ⁵⁹Ni in 1951 as reported in the paper “Characteristics of Ni⁵⁹ and Ni⁶³” (1951Br05). Enriched ⁵⁸Ni targets were irradiated at the Oak Ridge reactor and activities were measured with Geiger-Müller counters following chemical separation. “The data used in the calculation are given in [the table] along with estimated probable errors. These data give $7.5 \pm 1.3 \times 10^4$ yrs for the K electron capture half-life of Ni⁵⁹.” Less than three months earlier, Wilson had estimated the half-life of ⁵⁹Ni to be between 1.8×10^5 y and 8×10^5 y (1950Wi58). Six months after the submission of Brosi et al., Wilson confirmed Brosi’s results (1951Wi14). Earlier reports of ⁵⁹Ni were based on unpublished work (1948Se40).

Adapted from reference (2012Ga06)

- 1948Se40 G. T. Seaborg and I. Perlman, Rev. Mod. Phys. **20**, 585 (1948).
1950Wi58 H. W. Wilson, Phys. Rev. **79**, 1032 (1950).
1951Br05 A. R. Brosi, C. J. Borkowski, E. E. Conn, and J. C. Griess Jr., Phys. Rev. **81**, 391 (1951).
1951Wi14 H. W. Wilson, Phys. Rev. **82**, 548 (1951).
2012Ga06 K. Garofali, R. Robinson, and M. Thoennessen, At. Data Nucl. Data Tables **98**, 356 (2012).

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