

¹³⁸Nd

In 1964, Gromov et al. discovered ¹³⁸Nd in “Decay of Neutron-Deficient Neodymium Isotopes. A New Isotope Nd¹³⁸” ([1964Gr32](#)). Erbium oxide or tantalum targets were irradiated with 660 MeV protons from the Dubna synchrocyclotron. Conversion electron and γ -ray spectra were measured to identify ¹³⁸Nd. “Observation of the E0 transition conversion lines, whose intensity decays with a $\approx$ 5-hour half-life, is experimental proof of the assumed isotope Nd¹³⁸ with this half-life.” An activity of 22(2) m, most likely the half-life of ¹³⁹Nd, had previously been assigned incorrectly to ¹³⁸Nd ([1951St03](#)).

The discovery date was changed from the original assignment to credit the original Russian publication.

Adapted from reference ([2012Gr02](#))

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| 1951St03 | B. J. Stover, Phys. Rev. 81 , 8 (1951). |
| 1964Gr32 | K. Y. Gromov, A. S. Danagulyan, L. N. Nikityuk, V. V. Muraveva <i>et al.</i> , Zh. Eksperim. i Teor. Fiz. 47 , 1644 (1964). |
| 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](https://doi.org/10.11578/frib/2279152)”