

¹⁴⁶Gd

The observation of ¹⁴⁶Gd was reported by Gorodinskii et al. in the 1957 paper “Neutron-deficient isotopes of the rare earth elements forming as a result of spallation of Ta under bombardment with 660 MeV protons” ([1957Go72](#)). A tantalum target was bombarded with 660 MeV protons from the JINR synchrocyclotron. Resultant activities were measured following chromatographic separation. “We attributed an activity with a period of ~60 days, observed in the Gd fraction to Gd¹⁴⁵, an isotope not hitherto described in the literature.” A note added in proof stated “We are now of the opinion that the Gd and Eu isotopes described in this section actually have mass number 146.”

Adapted from reference ([2013Ma01](#))

[1957Go72](#) G. M. Gorodinskii, A. N. Murin, V. N. Pokrovskii, and B. K. Preobrazhenskii, Columbia Tech. Transl. **21**, 1611 (1958).

[2013Ma01](#) E. May and M. Thoennessen, At. Data Nucl. Data Tables **99**, 1 (2013).

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