

¹⁵⁴Dy

The discovery of ¹⁵⁴Dy was reported in the 1961 paper “Dysprosium-154, a long-lived α -emitter” by Macfarlane ([1961Ma18](#)). Gadolinium oxide samples enriched in ¹⁵⁴Gd were irradiated with 48 MeV and 37 MeV α particles from the Berkeley 60 in cyclotron. Alpha spectra were obtained using a Frisch-grid argon-methane flow-type ion chamber following chemical separation. “From these data, the alpha half-life of ¹⁵⁴Dy was determined to be 1×10^6 years, uncertain by a factor of three.” A previously reported half-life of 13(2) h ([1958To27](#)) was incorrect.

Adapted from reference ([2013Fr10](#))

- [1958To27](#) K. S. Toth and J. O. Rasmussen, Phys. Rev. **109**, 121 (1958).
[1961Ma18](#) R. D. Macfarlane, J. Inorg. Nucl. Chem. **19**, 9 (1961).
[2013Fr10](#) C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 520 (2013).

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