

¹⁷⁰Re

In 1974, Berlovich et al. reported the discovery of ¹⁷⁰Re in the paper “Decay of the new isotopes ¹⁷⁰Re and ¹⁷²Re” ([1974Be59](#)). A thallium sulfate solution was irradiated with a 1-GeV proton beam from the Leningrad synchrotron. Gamma-ray spectra were measured following chemical separation. “[The table] lists the gamma lines for which the half-life is 9 ± 2 sec. The 156.6 keV line has the same energy as the $2^+ \rightarrow 0^+$ transition of the main rotational band of ¹⁷⁰W, which is the basis for associating this half-life with ¹⁷⁰Re.” Later in the year Sterna et al. reported independently a half-life of 8.0(5) s ([1975St02](#)).

Adapted from reference ([2012Ro36](#))

- [1974Be59](#) E. E. Berlovich, P. P. Vaishnis, V. D. Vitman, E. I. Ignatenko *et al.*, Bull. Acad. Sci. USSR, Phys. Ser. **38**, 14 (1974).
- [1975St02](#) L. L. Sterna, P. E. Haustein, E. J. Ansaldo, R. A. Naumann, and T. E. Ward, Phys. Lett. B **53**, 432 (1975).
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