

¹⁷⁹Re

Harmatz and Handley reported the discovery of ¹⁷⁹Re in their 1960 paper “Nuclear spectroscopy of neutron-deficient Lu, Ta, and Re isotopes” ([1960Ha18](#)). Enriched ¹⁸⁰W targets were irradiated with 22 MeV protons from the ORNL 86-in. cyclotron. Conversion electron spectra were measured following chemical separation. “Targets enriched in W¹⁸⁰ (6.6%) were irradiated with protons, and Re was extracted by distillation. An activity attributable to Re¹⁷⁹ was observed, and a very approximate value of 20±5 minutes for the half-life was estimated from the rate of decrease of intensity of the conversion lines on successive films.”

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

[1960Ha18](#) B. Harmatz, T. H. Handley, and J. W. Mihelich, Phys. Rev. **119**, 1345 (1960).

[2012Ro36](#) R. Robinson and M. Thoennessen, At. Data Nucl. Data Tables **98**, 911 (2012).

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