

²⁰¹Fr

The first observation of ²⁰¹Fr was reported in “Alpha decay studies of new neutron-deficient francium isotopes and their daughters” by Ewan et al. in 1980 ([1980Ew03](#)). A uranium target was bombarded with 600 MeV protons from the CERN synchrocyclotron producing ²⁰¹Fr in spallation reactions. Alpha-particle spectra were measured with a silicon surface-barrier detector following mass separation with the isotope separator ISOLDE. “The only hitherto unreported line in the spectrum is the 7388 ± 15 keV line, whose decay, as obtained from the measurement with the position-sensitive detector. This line is assigned to ²⁰¹Fr, for which a half-life of 48 ± 15 ms thus was derived...”

Adapted from reference ([2013Fr09](#))

[1980Ew03](#) G. T. Ewan, E. Hagberg, B. Jonson, S. Mattsson, and P. Tidemand-Petersson, *Z. Phys. A* **296**, 223 (1980).

[2013Fr09](#) C. Fry and M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 497 (2013).

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)”