

⁷¹Fe

Bernas et al. observed ⁷¹Fe for the first time in 1997 as reported in their paper “Discovery and cross-section measurement of 58 new fission products in projectile-fission of 750-A MeV ²³⁸U” (1997Be70). Uranium ions were accelerated to 750 A·MeV by the GSI UNILAC/SIS accelerator facility and bombarded a beryllium target. The isotopes produced in the projectile-fission reaction were separated using the fragment separator FRS and the nuclear charge Z for each was determined by the energy loss measurement in an ionization chamber. “The mass identification was carried out by measuring the time of flight (TOF) and the magnetic rigidity Bρ with an accuracy of 10⁻⁴.” Thirty-nine counts of ⁷¹Fe were observed.

Adapted from reference (2010Sc18)

- 1997Be70 M. Bernas, C. Engelmann, P. Armbruster, S. Czajkowski *et al.*, Phys. Lett. B **415**, 111 (1997).
2010Sc18 A. Schuh, A. Fritsch, M. Heim, A. Shore, and M. Thoennessen, At. Data Nucl. Data Tables **96**, 817 (2010).

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)”