

⁶⁹Fe

In their paper “New neutron-rich isotopes in the scandium-to-nickel region, produced by fragmentation of a 500 MeV/u ⁸⁶Kr beam”, Weber et al. presented the first observation of ⁶⁹Fe in 1992 at GSI ([1992We04](#)). ⁶⁹Fe was produced in the fragmentation reaction of a 500 A·MeV ⁸⁶Kr beam from the heavy-ion synchrotron SIS on a beryllium target and separated with the zero-degree spectrometer FRS. “The isotope identification was based on combining the values of $B\rho$, time of flight (TOF), and energy loss (ΔE) that were measured for each ion passing through the FRS and its associated detector array.” Twelve counts of ⁶⁹Fe were recorded.

Adapted from reference ([2010Sc18](#))

[1992We04](#) M. Weber, C. Donzaud, J. P. Dufour, H. Geissel *et al.*, *Z. Phys. A* **343**, 67 (1992).

[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)”