^{87}Kr

In 1943, Born and Seelmann-Eggebert were the first to identify ^{87}Kr in Berlin in their paper "Über die Identifizierung einiger Uranspaltprodukte mit entsprechenden durch (nα)- und (np)-Prozesse erhaltenen Isotopen" (1943Bo01). Rubidium and strontium salts were irradiated with neutrons from the high-voltage facility of the Kaiser Wilhelm Institut für Physik and decay curves following chemical separation were measured. "Widerspruchslos läßt sich unter diesen Voraussetzungen das 75-Min.-Krypton der Masse 87 zuordnen." [Without objections, the 75 m krypton can be assigned under these circumstances to mass 87.] A month earlier the authors detected the 75 m activity in the neutron-induced fission of uranium without assigning it to a specific mass (1943Se01). Even earlier, in 1937, Snell (1937Sn02) had also measured a 74(2) m activity, but could not assign it to a specific isotope. It also should be mentioned that Clancy had argued to assign the (^{85}Kr) 4 h activity to ^{87}Kr (1941Cl02, 1940Cl01).

Adapted from reference (2010He02)

1937Sn02 A. H. Snell, Phys. Rev. **52**, 1007 (1937).
1940Cl01 E. P. Clancy, Phys. Rev. **58**, 88 (1940).
1941Cl02 E. P. Clancy, Phys. Rev. **60**, 87 (1941).
1943Bo01 H. J. Born and W. Seelmann-Eggebert, Naturwissenschaften **31**, 86 (1943).
1943Se01 W. Seelmann-Eggebert and H. J. Born, Naturwissenschaften **31**, 59 (1943).
2010He02 M. Heim, A. Fritsch, A. Schuh, A. Shore, and M. Thoennessen, At. Data Nucl. Data Tables **96**, 333 (2010).

Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"