

⁹³Y

In 1948, Katcoff et al. published the first identification of ⁹³Y in “Ranges in Air and Mass Identification of Plutonium Fission Fragments” (1948Ka09). Plutonium targets were irradiated with neutrons in the Los Alamos homogeneous pile and activities and ranges of the fission fragments were measured following chemical separation. “From the range-mass curve drawn for well-known masses, definite assignments of 92,93, and 132 were given to 3.5-hr. Y, 10-hr. Y, and 77-hr. Te, respectively. Highly probable assignments of 94 and 134 were given to 20-min. Y and 54-min. I, respectively.” Hahn and Strassmann had observed half-lives of 20 min and 11.6 h but could only determine that the mass was larger than 91 (1943Ha10, 1943Ha09).

Adapted from reference (2012Ny02)

- 1943Ha09 O. Hahn and F. Strassmann, Z. Phys. **121**, 729 (1943).
1943Ha10 O. Hahn and F. Strassmann, Naturwissenschaften **31**, 249 (1943).
1948Ka09 S. Katcoff, J. A. Miskel, and C. W. Stanley, Phys. Rev. **74**, 631 (1948).
2012Ny02 A. Nystrom and M. Thoennessen, At. Data Nucl. Data Tables **98**, 95 (2012).

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