

⁹³Sr

The first observation of ⁹³Sr was reported in “Radiations of ⁹³Y and ⁹⁴Y and half-lives of ⁹³Sr and ⁹⁴Sr,” in 1959 by Knight et al. ([1959Kn38](#)). Neutrons from the Los Alamos Water Boiler reactor irradiated ²³⁵U and the fission fragments were chemically separated and β -decay curves were recorded. “The ⁹³Sr half-life was obtained by measurement of the amount of the 10.25 hr ⁹³Y component in yttrium samples milked from fission-product strontium as described in the previous section... The ⁹³Sr half-life obtained from these measurements was 8.2 ± 0.8 min. The ⁹⁴Sr half-life was obtained in a similar manner... the indicated ⁹⁴Sr half-life is 1.3 ± 0.2 min.” A 7-min half-life had been reported previously without a mass assignment ([1939Li10](#)) and a 2 min half-life could only be assigned to a mass >91 ([1943Ha10](#)).

Adapted from reference ([2012Pa21](#))

- [1939Li10](#) C. Lieber, *Naturwissenschaften* **27**, 421 (1939).
[1943Ha10](#) O. Hahn and F. Strassmann, *Naturwissenschaften* **31**, 249 (1943).
[1959Kn38](#) J. D. Knight, D. C. Hoffman, B. J. Dropesky, and D. L. Frasco, *J. Inorg. Nucl. Chem.* **10**, 183 (1959).
[2012Pa21](#) A. M. Parker and M. Thoennessen, *At. Data Nucl. Data Tables* **98**, 812 (2012).

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)”