

⁹¹Sr

⁹¹Sr was first correctly identified by Seelmann-Eggebert in “Über einige aktive Yttrium-Isotope” at the Kaiser Wilhelm Institut für Chemie in Berlin-Dahlem, Germany in 1943 ([1943Se03](#)). Zirconium was irradiated with fast Li/D neutrons and several yttrium activities were measured following chemical separation. “Es konnte festgestellt werden, daß das mit dem 57 Tage Yttrium isomere 50 Minuten-Yttrium der angeregte Zustand ist, und daß die Muttersubstanz dieser Isomeren, das 10 Stunden-Strontium, auch bei Bestrahlung des Zirkons mit schnellen Neutronen durch n,α Prozeß entsteht. Die Masse dieser Reihe ist daher 91.” [It could be determined that the 50-min yttrium isomer of the 57-day yttrium corresponds to the excited state and that the 10-hour strontium mother substance of these isomers could also be produced in the n,α process by bombarding zirconium with fast neutrons. The mass of this chain is thus 91.] Götte had previously linked a 8.5 h half-life to the 50-min. yttrium, however, without a mass assignment ([1941Go04](#)).

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

- [1941Go04](#) H. Gotte, *Naturwissenschaften* **29**, 496 (1941).
[1943Se03](#) W. Seelmann-Eggebert, *Naturwissenschaften* **31**, 510 (1943).
[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)”