

¹⁹⁹Rn

In 1980, DiRienzo et al. reported the observation of ¹⁹⁹Rn in “New isotope ¹⁹⁹Rn and evidence for an isomeric state ¹⁹⁹Rn^m” (1980Di07). A 200 MeV ³⁵Cl beam from the BNL three-stage Tandem Accelerator bombarded a ¹⁶⁹Tm target forming ¹⁹⁹Rn in the (5n) fusion-evaporation reaction. Recoil products were separated with a zero-degree recoil separator and implanted in a surface barrier detector which also measured subsequent α decay. “The other two lines at 6.990 ± 0.015 MeV and 7.060 ± 0.012 MeV are assigned to a new isotope ¹⁹⁹Rn.” These two energies correspond to decays of the ground state and an isomeric state.

Adapted from reference (2013Fr09)

1980Di07 A. C. DiRienzo, H. A. Enge, S. B. Gazes, M. K. Salomaa *et al.*, Phys. Rev. C **21**, 2101 (1980).

2013Fr09 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 497 (2013).

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)”