

⁷⁹Rb

In the 1957 paper “Etude de la transmutation du cuivre par l’azote et l’oxygene” Beydon et al. reported the existence of ⁷⁹Rb ([1957Be46](#)). Fusion evaporation reactions with beams of ¹⁴N and ¹⁶O from the Saclay cyclotron were used to produce ⁷⁹Rb. “Nous avons pu mettre en évidence la formation d’un nouvel isotope léger du rubidium de nombre de masse 79, de période 24 ± 1 min, émetteur β^+ , présentant un spectre γ complexe, la raie la plus visible ayant une énergie de 150 ± 10 keV.” [We were able to demonstrate the formation of a new light isotope of rubidium of mass number 79; a β^+ emitter with a period of 24 ± 1 min. It has a complex γ -ray spectrum with the most intense line at 150 ± 10 keV.] It is interesting to note that very similar information was included in three additional papers submitted on the same date by various coauthors from Saclay and Stockholm and published in the same issue ([1957At38](#), [1957Cr70](#), [1957Ch31](#)). In the quote Beydon et al. refers to the paper by Chaminade et al. ([1957Ch31](#)).

The assignment was changed from the original compilation ([2012Pa21](#)) which credited the second of the four paper with the discovery because it was quoted in subsequent publications about ⁷⁹Rb ([1961Ch16](#), [1968To05](#)) and the ENSDF ([2016Si14](#)).

- [1957At38](#) H. Atterling, J. Beydon, M. Crut, and J. Olkowsky, Nucl. Phys. **2**, 619 (1957).
- [1957Be46](#) J. Beydon, R. Chaminade, M. Crut, H. Faraggi *et al.*, Nucl. Phys. **2**, 593 (1957).
- [1957Ch31](#) R. Chaminade, M. Cros, I. Gratot, and M. Le Pape, Nucl. Phys. **2**, 634 (1957).
- [1957Cr70](#) M. Crut, H. Faraggi, J. Olkowsky, and H. Atterling, Nucl. Phys. **2**, 624 (1957).
- [1961Ch16](#) K. F. Chackett and G. A. Chackett, J. Inorg. Nucl. Chem. **19**, 13 (1961).
- [1968To05](#) C. J. Toeset and A. H. W. Aten Jr., Radiochim. Acta **9**, 55 (1968).
- [2012Pa21](#) A. M. Parker and M. Thoennessen, At. Data Nucl. Data Tables **98**, 812 (2012).
- [2016Si14](#) B. Singh, Nucl. Data Sheets **135**, 193 (2016).

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)”