

²¹⁴Ra

The first identification of ²¹⁴Ra was reported in 1966 by Rotter et al. in the paper “The new isotope Ac²¹⁶” ([1966Ro12](#)). Lead and bismuth targets were bombarded with 80 MeV carbon ion beams from the JINR cyclotron that were degraded with aluminum foils. Recoils were collected on a foil and α particles that were ejected were registered by a silicon surface barrier detector. “...in the case of a lead target it was the 7,17 MeV line of Ra²¹⁴. These lines were clearly discriminated in all measured spectra.” Rotter et al. did not consider this observation a new discovery referring to a book by Hyde et al. [] which quoted unpublished results by Griffioen and Macfarlane. Over a year later Valli et al. independently reported a 7.136(5) MeV α energy for ²¹⁴Ra [?].

The discovery date was changed from the original assignment to credit the original Russian publication.

Adapted from reference ([2013Fr09](#))

- [1964Hy02](#) E. K. Hyde, I. Perlman, and G. T. Seaborg, The Nuclear Properties of the Heavy Elements, Vol. II, Prentice-Hall, Inc. , Englewood Cliffs, N. J. (1964).
- [1966Ro12](#) H. Rotter, A. G. Demin, L. P. Pashchenko, and H. F. Brinckmann, Yad. Fiz. **4**, 246 (1966).
- [2013Fr09](#) C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 497 (2013).

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