

²¹²Pb

At McGill University, Rutherford reported an activity later identified as ²¹²Pb in the 1900 paper “Radioactivity produced in substances by the action of thorium compounds” (1900Ru02). The decay curves of “excited activities” following the decay of thorium emanation (²²⁰Rn) were measured. “The intensity of the radiation emitted falls off in a geometrical progression with the time, decreasing to half its value in about 11 hours. The decay of intensity is independent of the state of concentration of the radioactivity or the nature of the substance.” In 1905, Rutherford labeled this “excited activity” as ThA (1905Ru03). ThA was later reclassified as ThB.

The assignment was changed from the original compilation (2013Fr04) which credited a later paper by Rutherford (1905Ru03) with the discovery of ²¹²Pb.

- 1900Ru02 E. Rutherford, Phil. Mag. **49**, 161 (1900).
1905Ru03 E. Rutherford, Philos. Trans. R. Soc. **204**, 169 (1905).
2013Fr04 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 365 (2013).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152”