

²⁰⁴Rn

Valli et al. reported the discovery of ²⁰⁴Rn in the 1967 article “Alpha-decay properties of neutron-deficient isotopes of emanation” (1967Va17). Platinum, gold, mercury, and thallium targets were bombarded with ¹⁶O, ¹⁴N, and ¹²C beams from the Berkeley HILAC. Alpha-particle spectra were measured with a Si(AU) detector following chemical separation. “Emanation-204: An α activity at 6.416 MeV with a half-life of 75 ± 2 sec was prominent in the emanation fraction from gold targets bombarded with ¹⁴N or ¹⁶O nuclei or from platinum targets bombarded with ¹⁶O nuclei... the agreement of the α energy with the approximate value to be expected from systematic trends in α -decay energies confirm the assignment of the new activity to ²⁰⁴Em... ” Stoner and Hyde had reported a 3 min half-life and assigned it to either ²⁰⁴Rn or ²⁰⁵Rn (1957St10).

Adapted from reference (2013Fr09)

- 1957St10 A. W. Stoner and E. K. Hyde, *J. Inorg. Nucl. Chem.* **4**, 77 (1957).
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