

²¹⁸Ra

In 1970, Torgerson and MacFarlane reported the first observation of ²¹⁸Ra in “Alpha decay of the ²²¹Th and ²²²Th decay chains” (1970To07). A 10.6 MeV/nucleon ¹⁶O beam from the Yale heavy ion accelerator was used to bombard a target of ²⁰⁸Pb. Ejected recoils were collected and plated onto a stainless steel surface and activity was detected by a Si(Au) surface barrier detector. “²¹⁸Ra: ...We observed a group at 8.392 MeV with an intensity relative to the ²²²Th group that was expected if it were an α -decay daughter of that nuclide.” Later in the same month Valli et al. published similar results (1970Va13).

Adapted from reference (2013Fr09)

- 1970To07 D. F. Torgerson and R. D. Macfarlane, Nucl. Phys. A **149**, 641 (1970).
1970Va13 K. Valli, E. K. Hyde, and J. Borggreen, Phys. Rev. C **1**, 2115 (1970).
2013Fr09 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 497 (2013).

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