

¹⁸⁵Pb

Cabot et al. announced the first observation of ¹⁸⁵Pb in the 1975 paper “Ca induced reactions on ¹⁴¹Pr and ¹⁵⁰Sm: new gold and lead isotopes ¹⁷⁶Au, ¹⁷⁵Au, ¹⁸⁵Pb” (1975Ca06). ¹⁵⁰Sm targets were bombarded with 200–245 MeV ⁴⁰Ca beams from the Orsay ALICE accelerator. Recoil nuclei were collected with a helium jet and subsequent α decay was measured. “Thus we conclude that the 6.40 and 6.48 MeV activities are characteristic of the new isotope ¹⁸⁵Pb produced by the (Ca,5n) reaction. This assignment is supported by the systematics of α -decay for the Pb isotopes, as shown in [the figure].” The two α -decay energies correspond to the ground state and an isomeric state.

Adapted from reference (2013Fr04)

1975Ca06 C. Cabot, C. Deprun, H. Gauvin, B. Lagarde *et al.*, Nucl. Phys. A **241**, 341 (1975).

2013Fr04 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 365 (2013).

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