

²¹⁵Th

²¹⁵Th was discovered in 1968 by Valli and Hyde in “New isotopes of thorium studied with an improved helium-jet recoil transport apparatus” (1968Va18). ¹⁶O beams with a maximum energy of 166 MeV from the Berkeley heavy ion linear accelerator HILAC bombarded ²⁰⁶Pb targets to produce ²¹⁵Th in (7n) fusion-evaporation reactions. Recoil products were deposited on a metallic surface in front of a semiconductor detector with a helium gas jet. “Thorium-215: ...We assign three groups in our spectra to ²¹⁵Th: 7.522±0.008 MeV, (40±3)%; 7.393±0.008 MeV, (52±3)%; and 7.331±0.010 MeV, (8±3)%. A half-life of 1.2±0.2 sec was measured for all three groups.”

Adapted from reference (2013Fr03)

1968Va18 K. Valli and E. K. Hyde, Phys. Rev. **176**, 1377 (1968).

2013Fr03 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 345 (2013).

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