^{153}Tm

"Alpha-decay properties of some thulium and ytterbium isotopes near the 82-neutron shell" by Macfarlane announced the discovery of ^{153}Tm in 1964 (1964Ma45). Praseodymium oxide and neodymium oxide (enriched in ^{142}Nd) were bombarded with 131−195 MeV ^{20}Ne and 121−185 MeV ^{19}F beams from the Berkeley heavy-ion linear accelerator Hilac. ^{153}Tm was formed in (8n) fusion evaporation reactions and identified by measuring excitation functions and α-decay spectra. "The highest energy Tm alpha group observed has an alpha-particle energy of 5.11±0.02 MeV and decays with a half-life of 1.58 sec. This activity is tentatively assigned to the 84-neutron isotope Tm^{153} on the basis of alpha-decay systematics."

Adapted from reference (2013Fr10)

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