^{153}Ho

Macfarlane and Griffioen identified ^{153}Ho as reported in the 1963 paper "Alpha decay properties of some holmium isotopes near the 82-neutron closed shell" (1963Ma17). ^{16}O beams were accelerated to 75–137 MeV by the Berkeley HILAC and bombarded ^{141}Pr targets to produce holmium isotopes in the fusion-evaporation reactions ^{141}Pr(^{16}O,xn). A Frisch-grid ionization chamber was used to measured subsequent α decays. "A search was made for evidence of Ho^{153} alpha activity by looking at products of the Pr^{14l}+O^{16} reaction at incident energies in the range of 70 to 90 MeV. At these low energies a small peak was observed at an alpha particle energy of 3.92 MeV which was found to decay with a half-life of 9 min." This level corresponds to an isomeric state and the ground state half-life of 2.0(1) min was reported eight years later by Toth and Hahn (1971To01).

Adapted from reference (2013Fr10)

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