

¹⁵¹Ho

Macfarlane and Griffioen identified ¹⁵¹Ho as reported in the 1963 paper “Alpha decay properties of some holmium isotopes near the 82-neutron closed shell” (1963Ma17). ¹⁶O beams were accelerated to 75–137 MeV by the Berkeley HILAC and bombarded ¹⁴¹Pr targets to produce holmium isotopes in the fusion-evaporation reactions ¹⁴¹Pr(¹⁶O,xn). A Frisch-grid ionization chamber was used to measured subsequent α decays. “Measurements on one of the two prominent new alpha activities that was formed from the Pr¹⁴¹+O¹⁶ reaction gave as values of the half life and alpha-particle decay energy 35.6±0.4 sec and 4.51 MeV, respectively, A weak alpha group decaying with a half-life of 42±4 sec was observed at an alpha-particle energy of 4.60 MeV.”

The latter half-life corresponds to an isomeric state of ¹⁵¹Ho.

Adapted from reference (2013Fr10)

- 1963Ma17 R. D. Macfarlane and R. D. Griffioen, Phys. Rev. **130**, 1491 (1963).
2013Fr10 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 520 (2013).

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