

¹⁴⁰Ho

The discovery of ¹⁴⁰Ho was reported in “Proton emitters ¹⁴⁰Ho and ¹⁴¹Ho: Probing the structure of unbound Nilsson orbitals” by Rykaczewski et al. in 1999 ([1999Ry04](#)). An enriched ⁹²Mo target was bombarded with 315-MeV ⁵⁴Fe at the Holifield Radioactive Ion Beam Facility at Oak Ridge. Reaction products were separated with the RMS recoil mass separator, identified with a position-sensitive avalanche counter and implanted in a double-sided silicon strip detector (DSSD). The DSSD also measured time-correlated decay events. “Two new proton emitting states in the deformed nuclei ¹⁴⁰Ho ($E_p=1086\pm 10$ keV, $T_{1/2} = 6\pm 3$ ms) and ^{141m}Ho ($E_p=1230\pm 20$ keV, $T_{1/2}=8\pm 3$ μ s) have been identified.”

Adapted from reference ([2013Fr10](#))

- [1999Ry04](#) K. Rykaczewski, J. C. Batchelder, C. R. Bingham, T. Davinson *et al.*, Phys. Rev. C **60**, 011301 (1999).
[2013Fr10](#) C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 520 (2013).

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