^{158}Tb

Hammer and Stewart published the observation of ^{158}Tb in the 1957 paper "Isomeric transitions in the rare-earth elements" (1957Ha12). Terbium oxides were irradiated with x-rays from the 75 MeV Iowa State College synchrotron and ^{158}Tb was produced in the photonuclear (γ,n) reaction. Decay curves and X- and γ-ray spectra were recorded. "Since Tb is a single isotope of mass 159, the isomeric transition therefore occurs in Tb^{158}." The measured half-life of 11.0(1) s corresponds to an isomeric state and the half-life of the ground state was measured 27 years later by Prestwood et al. (1984Pr07) to be 180(11) years. A previously assigned 3.6 min half-life (1938Po05) was incorrect.

Adapted from reference (2013Ma01)

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