^{171}Tm

^{171}Tm was first identified by DeBenedetti and McGowan in the 1948 paper "Short-lived isomers of nuclei" (1948De05). Radioactive sources of ^{171}Er were produced by neutron capture in the Oak Ridge pile and delayed coincidences between the β-particles and γ-rays were measured with two Geiger counters. "Out of 60 nuclei investigated, 4 short-lived isomeric states were found. These are: Ta^{181*} (22 μsec.), Re^{187*} (0.65 μsec.), Tm^{169*} (1 μsec.), and Tm^{171*} (2.5 μsec.)." Following an (unobserved) 308 keV transition the measured 113 keV transition populated the ground state. The first observation of the long-lived ground-state half life (680 d) was reported in the same year as a conference abstract (1948Ke11) and only seven years later in the refereed literature by Bisi et al. (1955Bi65).

Adapted from reference (2013Fr10)

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