

¹⁵⁹Ho

“A new holmium activity, ¹⁵⁹Ho” was published in 1958 announcing the discovery of ¹⁵⁹Ho by Toth ([1958To32](#)). The Berkeley 60-in. cyclotron was used to bombard a Tb₂O₃ target with 48 MeV α -particles forming ¹⁵⁹Ho through an (α ,4n) reaction. Decay curves were measured with a Geiger counter and X- and γ -ray spectra were measured with a NaI(Tl) scintillation spectrometer. “From the evidence presented, one can draw the following conclusion: an activity that had at least four characteristic γ -rays was seen in the holmium fraction at full bombarding energy. Each of the photopeaks decayed with a half-life of about 33 min. The four γ -transitions were missing in the holmium fraction when the experiment was carried out below the (α ,4n) threshold. The new activity must therefore be ¹⁵⁹Ho.”

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

[1958To32](#) K. S. Toth, J. Inorg. Nucl. Chem. **7**, 1 (1958).

[2013Fr10](#) C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 520 (2013).

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