

¹⁴O

The first observation of ¹⁴O was reported by Sherr et al. in 1949: “Radioactivity of C¹⁰ and O¹⁴” ([1949Sh25](#)). Nitrogen gas and nitrogen compounds were bombarded by 17 MeV protons from the Princeton cyclotron. Radioactive gases from the target were collected and chemically separated. ¹⁴O was formed in the (p,n) charge-exchange reaction and positrons and γ -rays were detected. “A new activity, O¹⁴, has been produced from N¹⁴ by a (p,n) reaction and is found to decay with a half-life of 76.5 ± 2 sec. by the emission of 1.8 ± 0.1 Mev positrons and a 2.3 Mev gamma-ray.”

Adapted from reference ([2012Th01](#))

[1949Sh25](#) R. Sherr, H. R. Muether, and M. G. White, Phys. Rev. **75**, 282 (1949).
[2012Th01](#) M. Thoennessen, At. Data Nucl. Data Tables **98**, 43 (2012).

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