^{15}O

In 1934, Livingston and McMillan discovered ^{15}O in "The production of radioactive oxygen" (1934Li04). At Berkeley, deuterons accelerated by 2 MV bombarded nitrogen gas to produce ^{15}O. The γ-ray emission from the positron annihilation was measured and the activated sample was chemically separated. "The probable nuclear reactions are: $_{7}N^{14} + _{1}H^{2} \rightarrow _{8}O^{15} + _{0}n^{1}$, $_{8}O^{15} \rightarrow _{7}N^{15} + _{1}e^{+}$. The neutrons given by [the] reaction were found to be produced in the activating process in about the expected numbers." The observed half-life was 126 s.

Adapted from reference (2012Th01)

1934Li04 M. S. Livingston and E. McMillan, Phys. Rev. **46**, 437 (1934).
2012Th01 M. Thoennessen, At. Data Nucl. Data Tables **98**, 43 (2012).

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