

^{12}N

^{12}N was discovered in 1949 by Alvarez as reported in “Nitrogen 12” ([1949A105](#)). Protons accelerated to 30 MeV by a linear accelerator at Berkeley bombarded a carbon target. ^{12}N was produced in the (p,n) charge exchange reaction and identified by recording the positron activity in coincidence with a pair of trays of Geiger counters. “ N^{12} is shown to have a half-life of 12.5 ± 1 milliseconds, and a positron upper limit of 16.6 ± 0.2 Mev... The mass of N^{12} is 12.0228 ± 0.00015 , and the beta-transition is allowed.”

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

[1949A105](#) L. W. Alvarez, Phys. Rev. **75**, 1815 (1949).

[2012Th01](#) M. Thoennessen, At. Data Nucl. Data Tables **98**, 43 (2012).

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