

⁴¹Ca

The first identification of ⁴¹Ca was described in “A Study of the Protons from Calcium under Deuteron Bombardment” by Davidson in 1939 ([1939Da01](#)). CaO targets were bombarded by 3.1 MeV deuterons at the Yale University cyclotron and proton absorption spectra were recorded. A group of protons with a range of 66 cm was attributed to the formation of ⁴¹Ca. “Since calcium is predominantly Ca⁴⁰ (96.76 percent), one can almost certainly attribute this group to the reaction Ca⁴⁰+H² →Ca⁴¹+H¹, giving positive evidence for the actual formation of Ca⁴¹.” The measurement of a 8.5±1.0 d half-life for ⁴¹Ca reported about four weeks later ([1940Wa03](#)) was incorrect.

Adapted from reference ([2011Am01](#))

- [1939Da01](#) W. L. Davidson Jr., Phys. Rev. **56**, 1061 (1939).
[1940Wa03](#) H. Walke, F. C. Thompson, and J. Holt, Phys. Rev. **57**, 177 (1940).
[2011Am01](#) S. Amos, J. L. Gross, and M. Thoennessen, At. Data Nucl. Data Tables **97**, 383 (2011).

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