

⁴⁰Ca

⁴⁰Ca was first observed by Dempster in 1922 at the Ryerson Physical Laboratory of the University of Chicago. He reported his result in “Positive-ray Analysis of Potassium, Calcium and Zinc” (1922De01). Positive-ray analysis was used to identify ⁴⁰Ca. “With the calcium thus prepared it was found that the component at 44 was still present, and was approximately 1/70 as strong as the main component. We therefore conclude that calcium consists of two isotopes with atomic weights 40 and 44.” A year earlier Thomson observed a broad peak around mass 40, however, the resolution was not sufficient to determine which and how many of the isotopes 39, 40 and 41 exist (1921Th03).

Adapted from reference (2011Am01)

- 1921Th03 G. P. Thomson, *Phil. Mag.* **42**, 857 (1921).
1922De01 A. J. Dempster, *Phys. Rev.* **20**, 631 (1922).
2011Am01 S. Amos, J. L. Gross, and M. Thoennessen, *At. Data Nucl. Data Tables* **97**, 383 (2011).

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