

²⁰⁴Pb

Schüler and Jones from the Astrophysikalisches Observatorium of the Laboratorium des Einstein Institutes in Berlin Potsdam reported first evidence of ²⁰⁴Pb in the 1932 paper “Über den spektroskopischen Nachweis einer neuen Blei-Isotope” (1932Sc02). Spectroscopic studies of the hyperfine structure revealed the presence of ²⁰⁴Pb. “Unsere Beobachtungen an den Pb-I-Linien $\lambda\lambda$ 7228, 5201, und 5005 und der Pb-II-Linie λ 5609 zeigen nun, daß in allen Strukturbildern eine überzählige Komponente erscheint, die, im Hinblick auf den Isotopenverschiebungseffekt, immer dort liegt, wo die Isotope Pb₂₀₄ zu erwarten ist.” [Our observations of the Pb-I-lines $\lambda\lambda$ 7228, 5201, and 5005 and the Pb-II-line λ 5609 now show, that there is an additional component in all pictures, which occurs—considering the isotope effect—always at the location where one would expect the isotope Pb²⁰⁴.] Aston submitted his mass spectroscopic results less than three months later (1932As03).

Adapted from reference (2013Fr04)

- 1932As03 F. W. Aston, *Nature* **129**, 649 (1932).
1932Sc02 H. Schuler and E. G. Jones, *Naturwissenschaften* **20**, 171 (1932).
2013Fr04 C. Fry and M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 365 (2013).

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