

## $^{12}\text{C}$

The 1919 paper “The constitution of the elements” by Aston can be considered the discovery of  $^{12}\text{C}$  ([1919As01](#)).  $^{12}\text{C}$  was identified using the positive-ray mass spectrograph in Cambridge, England. “Of the elements involved hydrogen has yet to be investigated; carbon and oxygen appear, to use the terms suggested by Paneth, perfectly “pure”... A fact of the greatest theoretical interest appears to underlie these results, namely, that of more than forty different values of atomic and molecular mass so far measured, all, without a single exception, fall on whole numbers, carbon and oxygen being taken as 12 and 16 exactly, and due allowance being made for multiple charges.”

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

[1919As01](#) F. W. Aston, *Nature* **104**, 393 (1919).

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

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