

¹⁰⁸Cd

Aston described the discovery of ¹⁰⁸Cd in the 1934 article “Constitution of Carbon, Nickel, and Cadmium” (1934As04). The mass spectra were measured at the Cavendish Laboratory in Cambridge, UK: “Further work with cadmium has yielded much more intense mass-spectra. These confirm mass numbers 114, 112, 110, 111, 113, 116 and reveal three new faint ones 106, 108, 115 in this order of intensity.” Aston questioned a previous observation (1933Sv01): “Svensson has already claimed to have demonstrated the presence of isotopes 118 and 108 by observations on the band spectra of cadmium hydride. The new mass-spectra show that the former cannot be present even to the extent of 0.3 per cent. This discrepancy, and his failure to detect the more abundant isotope 106, suggest that the arguments on which his claim is based are not strictly valid.” It should be mentioned that Aston’s observation of ¹¹⁵Cd was incorrect.

This assignment was changed from the original compilation (2010Am04) which credited a later paper by Aston (1935As01).

- 1933Sv01 E. Svensson, *Nature* **131**, 28 (1933).
1934As04 F. W. Aston, *Nature* **134**, 178 (1934).
1935As01 F. W. Aston, *Proc. Roy. Soc. (London)* **149**, 396 (1935).
2010Am04 S. Amos and M. Thoennessen, *At. Data Nucl. Data Tables* **96**, 855 (2010).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152”