^{187}Os

In 1931, Aston reported the first observation of the stable osmium isotope ^{187}Os in "Constitution of osmium and ruthenium" (1931As01). Osmium tetroxide was used in the Cavendish mass spectrograph. "In consequence the admission could only be by very small periodical doses during the exposure, and it was only with the greatest difficulty that spectra of adequate density were obtained. These indicate four strong isotopes and two very weak ones, one of the latter being isobaric with tungsten, W^{186}. Fortunately it was easy to photograph on the same plate several short exposures of the mercury group, which is sufficiently near in mass to provide a reasonably reliable density scale. The mass numbers and provisional relative abundance are as follows: Mass-number (Percentage abundance): 186 (1.0), 187 (0.6), 188 (13.5), 189 (17.3), 190 (25.1), 192 (42.6)."

Adapted from reference (2012Ro36)

1931As01 F. W. Aston, Nature **127**, 233 (1931).

2012Ro36 R. Robinson and M. Thoennessen, At. Data Nucl. Data Tables **98**, 911 (2012).

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