^{58}Fe

The existence of ^{58}Fe was demonstrated by deGier and Zeeman at the University of Amsterdam in 1935 and reported in the paper "The Isotopic Constitution of Iron" (1935De07). DeGier and Zeeman succeeded with the identification of ^{58}Fe with a very pure sample of carbonyl. "With properly chosen canals the intensity of the iron lines could be increased so far that isotope 58 can be seen in the reproduction... The appearance of line 58 could now be followed closely when varying the circumstances of the experiments. In this way we obtained several convincing plates of the new isotope." In early 1935 Aston was not confident in the observation of ^{58}Fe: "Line 58 was present but weakened as the work proceeded and was most probably due to traces of nickel still left in the tube" (1935As01).

Adapted from reference (2010Sc18)

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