

^{64}Ni

The existence of stable ^{64}Ni was demonstrated by deGier and Zeeman at the University of Amsterdam in 1935 and reported in the paper “The Isotopes of Nickel” (1935De08). Volatile carbonyl of nickel was used in a discharge tube in front of a mass spectrograph. “The very first photos were already interesting. Line 56 was absent and 64 was clearly visible... Line 64 was easy to get and appeared to have the same relative intensity during the whole experiment. This indicated clearly that it was not due to an adventitious compound.” In 1934, Aston was not confident in the observation of ^{64}Ni : “The analysis of nickel by means of its carbonyl has been repeated, and the more intense mass-spectra obtained reveal two new isotopes 62 and 61. Lines at 56 and 64 present to less than 1 per cent are probably due to isotopes, but this is not yet certain.”

Adapted from reference (2012Ga06)

- 1935De08 J. de Gier and P. Zeeman, Proc. Acad. Soc. Amsterdam **38**, 810 (1935).
2012Ga06 K. Garofali, R. Robinson, and M. Thoennessen, At. Data Nucl. Data Tables **98**, 356 (2012).

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