

⁶⁸Ni

In their paper “Masses of ⁶²Fe and the New Isotope ⁶⁸Ni from (¹⁸O,²⁰Ne) Reactions,” Bhatia et al. presented the first observation of ⁶⁸Ni in 1977 ([1977Bh03](#)). At the Heidelberg MP tandem beams of ¹⁸O with energies of 81-84 MeV were incident on enriched ⁷⁰Zn targets. Reaction products were detected by a ΔE-E counter and analyzed by a Q3D Spectrograph. “The utility of the (¹⁸O,²⁰Ne) reaction at small angles for the mass determination of highly neutron rich nuclei is demonstrated by a determination of the mass excess of ⁶²Fe as (−58.946±0.022) MeV and of ⁶⁸Ni as (−63.466±0.028) MeV.”

Adapted from reference ([2012Ga06](#))

[1977Bh03](#) T. S. Bhatia, H. Hafner, R. Haupt, R. Maschuw, and G. J. Wagner, *Z. Phys. A* **281**, 65 (1977).

[2012Ga06](#) K. Garofali, R. Robinson, and M. Thoennessen, *At. Data Nucl. Data Tables* **98**, 356 (2012).

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