

⁵⁶Ni

In his 1952 paper “Nickel 56,” Worthington reported on the discovery of ⁵⁶Ni ([1952Wo15](#)). At Berkeley, a 340 MeV proton beam irradiated zinc foils and ⁵⁶Ni was identified by measuring the decay with a Geiger counter following chemical separation. “From this work it may be deduced that (1) the half-life of Ni⁵⁶ should be 6.0±0.5 days; (2) there are at least four gamma-rays associated with the disintegration, with energies of approximately 0.16, 0.5, 0.8, and >1.4 Mev; (3) the decay is mainly by electron capture rather than positron emission.” An independent observation ([1952Sh30](#)) of ⁵⁶Ni was submitted only three weeks after the submission by Worthington. It should be mentioned that Aston had reported tentative evidence that ⁵⁶Ni would be stable ([1934As04](#)).

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

- [1934As04](#) F. W. Aston, Nature **134**, 178 (1934).
[1952Sh30](#) R. K. Sheline and R. W. Stoughton, Phys. Rev. **87**, 1 (1952).
[1952Wo15](#) W. J. Worthington Jr., Phys. Rev. **87**, 158 (1952).
[2012Ga06](#) K. Garofali, R. Robinson, and M. Thoennessen, At. Data Nucl. Data Tables **98**, 356 (2012).

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