

²⁰⁰At

In the 1963 paper “Alpha decay of neutron-deficient astatine isotopes”, Hoff et al. reported the first observation of ²⁰⁰At ([1963Ho18](#)). A gold foil was bombarded with a ¹²C beam with energies up to 125 MeV from the Berkeley Hilac. Alpha-particle spectra were measured with a 180° double-focusing spectrograph. “Two α -groups with a half-life 0.9 ± 0.2 min and energies of 6.412 ± 0.009 and 6.465 ± 0.011 MeV have been tentatively assigned to ²⁰⁰At.” Earlier, Barton et al. reported half-lives of 43 s and 1.7 min, but were only able to assign them to astatine isotopes with $A < 202$ and $A < 203$, respectively ([1951Ba14](#)).

Adapted from reference ([2013Fr09](#))

- [1951Ba14](#) G. W. Barton Jr., A. Ghiorso, and I. Perlman, Phys. Rev. **82**, 13 (1951).
[1963Ho18](#) R. W. Hoff, F. Asaro, and I. Perlman, J. Inorg. Nucl. Chem. **25**, 1303 (1963).
[2013Fr09](#) C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 497 (2013).

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