^{201}At

In the 1963 paper "Alpha decay of neutron-deficient astatine isotopes", Hoff et al. reported the first observation of ^{201}At (1963Ho18). A gold foil was bombarded with a ^{12}C beam with energies up to 125 MeV from the Berkeley Hilac. Alpha-particle spectra were measured with a 180° double-focusing spectrograph. "An α-emitter with a half-life of 1.5±0.1 min and an α-particle energy of 6.342±0.006 MeV has been assigned to ^{201}At." 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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