

^{206}At

The paper “ α -particle branching ratios for neutron-deficient astatine isotopes” by Latimer et al. reported the observation of ^{206}At in 1961 (1961La02). Gold and platinum foils were irradiated with 50–125 MeV ^{12}C and 65–130 MeV ^{14}N beams, respectively, from the Berkeley HILAC. Alpha-particle spectra were measured with a gridded ionization chamber following chemical separation. “A least-squares analysis of several of the curves for which the statistics were good yielded a value of 29.5 ± 0.6 min for the half-life of ^{206}At .” An earlier report of a 2.6 h half-life (1951Ba14) was incorrect. Also, about three months later Forsling et al. independently reported a 20(10) min half-life (1961Fo04) and in 1959 Hoff et al. had reported a half-life of 31.0(15) min in a conference abstract (1959Ho86).

Adapted from reference (2013Fr09)

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