^{220}At

In 1989, Liang et al. reported the first observation of ^{220}At in "A new isotope $^{220}_{85}At_{135}$" (1989Li04). Thorium oxide was bombarded with 200 MeV protons from the Orsay synchrocyclotron. ^{220}At was separated with the ISOCELE II on-line mass separator and transported to a measuring station consisting of a 4π β-detector and two Ge(Li) detectors. "A new isotope ^{220}At has been identified among the mass-separated products of a spallation reaction of ThO_2. Its half-life has been found to be 3.71±0.04 min." Less than three months later, Burke et al. independently reported a half-life of 3.73(13) min (1989Bu09).

Adapted from reference (2013Fr09)

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