

## <sup>208</sup>At

In 1950, Hyde et al. reported the first observation of <sup>208</sup>At in the paper “Low mass francium and emanation isotopes of high alpha-stability” ([1950Hy27](#)). Thorium foils were bombarded with up to 350 MeV protons from the Berkeley 184-inch cyclotron. <sup>212</sup>Fr was chemically separated and <sup>208</sup>At was populated by  $\alpha$ -decay. Alpha spectra were measured with an ionization chamber. “High volatility is characteristic of astatine, and this 5.65 Mev activity was judged to be the At<sup>208</sup> daughter of Fr<sup>212</sup>.” The measured half-life was 1.7 h.

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

[1950Hy27](#) E. K. Hyde, A. Ghiorso, and G. T. Seaborg, Phys. Rev. **77**, 765 (1950).  
[2013Fr09](#) C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 497 (2013).

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