

## <sup>192</sup>At

In the 2006 paper “ $\alpha$ -decay spectroscopy of the new isotope <sup>192</sup>At”, Andreyev et al. announced the discovery of <sup>192</sup>At ([2006An04](#)). A <sup>144</sup>Sm target was bombarded with a 230 MeV <sup>51</sup>V beam from the GSI UNILAC heavy ion accelerator producing <sup>192</sup>At in the (3n) fusion-evaporation reaction. Recoil products were separated with the velocity filter SHIP and implanted in a 16-strip position-sensitive silicon detector which also measured subsequent  $\alpha$  decay. “Two  $\alpha$ -decaying isomeric states with half-lives of 88(6) ms and 11.5(6) ms were identified in the new isotope <sup>192</sup>At, both of them having complex decay paths to the excited states in the daughter nucleus <sup>188</sup>Bi.” The ground state and isomeric state assignment is still debated ([2012Ba36](#),[2021Ko07](#)).

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

- [2006An04](#) A. N. Andreyev, S. Antalic, D. Ackermann, S. Franchoo *et al.*, Phys. Rev. C **73**, 024317 (2006).  
[2012Ba36](#) C. M. Baglin, Nucl. Data Sheets **113**, 1871 (2012).  
[2013Fr09](#) C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 497 (2013).  
[2021Ko07](#) F. G. Kondev, M. Wang, W. J. Huang, S. Naimi, and G. Audi, Chin. Phys. C **45**, 030001 (2021).

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