

## **<sup>216</sup>Bi**

In the 1989 paper “New neutron-rich isotopes of astatine and bismuth” Burke et al. described the observation of <sup>216</sup>Bi ([1989Bu09](#)). A thorium/tantalum metal-foil target was bombarded with 600 MeV protons from the CERN synchro-cyclotron. Astatine isotopes were produced in spallation reactions and separated with the ISOLDE-II on-line separator. <sup>216</sup>Bi was observed from the  $\alpha$ -decay of <sup>220</sup>At. “The 8% alpha branch of <sup>220</sup>At feeds the daughter nucleus <sup>216</sup>Bi, the half-life of which has been determined to be 6.6(21) min.” This half-life corresponds to an isomeric state. The ground state was measured for the first time eleven years later by Kurpeta et al. ([2000Ku06](#)).

Adapted from reference ([2013Fr04](#))

- [1989Bu09](#) D. G. Burke, H. Folger, H. Gabelmann, E. Hagebo *et al.*, *Z. Phys. A* **333**, 131 (1989).  
[2000Ku06](#) J. Kurpeta, A. Andreyev, J. Aysto, A. H. Evensen *et al.*, *Eur. Phys. J. A* **7**, 49 (2000).  
[2013Fr04](#) C. Fry and M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 365 (2013).

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