

²⁶⁶Bh

The discovery of ²⁶⁶Bh was reported by Wilk et al. in the 2000 paper “Evidence for new isotopes of element 107: ²⁶⁶Bh and ²⁶⁷Bh” (2000Wi15). A ²⁴⁹Bk target was bombarded with 117 MeV and 123 MeV ²²Ne beams from the Berkeley 88-in. cyclotron and ²⁶⁶Bh was formed in (5n) fusion-evaporation reactions. Recoil products were swept with helium gas containing KCl aerosols onto a merry-go-round rotating wheel system. Alpha-decays were then recorded with six pairs of passivated, ion-implanted planar silicon detectors. “Five atoms of ²⁶⁷Bh, E_α ranging from 8.73 to 8.87 MeV and one atom of ²⁶⁶Bh with an E_α of 9.29 MeV were identified during the experiment.” The single event of ²⁶⁶Bh was observed at 123 MeV beam energy, while for ²⁶⁷Bh two events were measured at 123 MeV and three events at 117 MeV.

Adapted from reference (2013Th02)

2000Wi15 P. A. Wilk, K. E. Gregorich, A. Turler, C. A. Laue *et al.*, Phys. Rev. Lett. **85**, 2697 (2000).

2013Th02 M. Thoennessen, At. Data Nucl. Data Tables **99**, 312 (2013).

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