

¹⁸⁶Po

Andreyev et al. announced the discovery of ¹⁸⁶Po in the 2005 article “Cross section systematics for the lightest Bi and Po nuclei produced in complete fusion reactions with heavy ions” (2005An17). ⁴⁶Ti beams of 202–242 MeV from the GSI UNILAC bombarded a SmF₃ target enriched in ¹⁴⁴Sm forming ¹⁸⁶Po in (4n) fusion-evaporation reactions. Reaction products were separated with the velocity filter SHIP and implanted into a position-sensitive silicon detector which also measured subsequent α and proton emission. ¹⁸⁶Po was identified with the method of genetically correlated events. “For the sake of completeness, in [the table] we also provide preliminary cross section values for the new isotopes ^{186,187}Po, produced recently at SHIP in, respectively, the 4n and 3n evaporation channels of the complete fusion reaction ⁴⁶Ti+¹⁴⁴Sm→¹⁹⁰Po*.” Andreyev et al. refer to a paper “to be published” for further details (2006An04).

Adapted from reference (2013Fr04)

- 2005An17 A. N. Andreyev, D. Ackermann, S. Antalic, I. G. Darby *et al.*, Phys. Rev. C **72**, 014612 (2005).
2006An04 A. N. Andreyev, S. Antalic, D. Ackermann, S. Franchoo *et al.*, Phys. Rev. C **73**, 024317 (2006).
2013Fr04 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 365 (2013).

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