^{194}At

In 2009, Andreyev et al. reported the observation of ^{194}At in the paper "α decay of ^{194}At" (2009An11). ^{141}Pr targets were bombarded with a 259 MeV ^{56}Fe beam from the GSI UNILAC producing ^{194}At in (3n) fusion-evaporation reactions. Residues were separated with the velocity filter SHIP and implanted in a 16-strip position-sensitive silicon detector which also recorded subsequent α decay. "Thus, two different half-life values for decays attributed to ^{194}At identify two α-decaying isomeric states in this nucleus. The 310(8) ms isomer decaying to ^{190}Bi^{m1} will further be denoted as ^{194}At^{m1} while the 253(10) ms isomer decaying to ^{190}Bi^{m2} will be denoted as ^{194}At^{m2}." Previously, a half-life of 180(80) ms was reported in a conference proceeding (1995Le15).

Adapted from reference (2013Fr09)

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