^{191}Bi

The first observation of ^{191}Bi was described by Gauvin et al. in 1972 in "α decay of neutron-deficient isotopes of bismuth and lead produced in (Ar,xn) and (Kr,xn) reactions" (1972Ga27). The ALICE accelerator at Orsay was used to bombard a ^{159}Tb target with 302−500 MeV ^{40}Ar beams forming ^{191}Bi in (8n) fusion-evaporation reactions. Recoil products were identified with a helium jet technique and α-decay spectroscopy. "We observed α emission from bismuth nuclides and isomers with A = 190−197 and from lead isotopes with A = 186−190." These observations were not considered discoveries referring to an overview article by Eskola (1967Es05), who listed results for these isotopes based on a private communication by Siivola. The measured half-life was 12.0(7) s for ^{191}Bi.

Adapted from reference (2013Fr04)

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