^{107}Sb

The discovery of ^{107}Sb was reported in the 1994 article "In-beam spectroscopy at the proton-drip line. First observation of excited states in ^{106}Sb and ^{107}Sb" by Seweryniak et al. (1994Se01). A 270 MeV ^{58}Ni beam from the Roskilde tandem accelerator bombarded an enriched ^{54}Fe target. ^{107}Sb was populated in the (1p1α) fusion-evaporation reaction and identified with the NORDBALL detector array. "Evaporation residues were identified by detecting protons and α particles in a 4π charged particle multi-detector set-up and neutrons in a 1π neutron detector wall in coincidence with γ rays. Excited states of the proton drip line nucleus ^{106}Sb and of ^{107}Sb were identified for the first time." At the time of this observation only the α-decay energy of the parent nucleus ^{111}I was known (1979Sc22). The half-life of the ground state was measured three years later (1997Sh13).

Adapted from reference (2013Ka01)

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