^{111}Xe

In the 1979 paper "Alpha decay studies of tellurium, iodine, xenon and cesium isotopes" Schardt et al. described the observation of ^{111}Xe (1979Sc22). A 290 MeV ^{58}Ni beam from the GSI UNILAC accelerator bombarded a ^{58}Ni target to produce ^{111}Xe in the (2p3n) fusion-evaporation reaction. ^{111}Xe was separated with the GSI on-line mass separator and subsequent α decay was measured with a detector telescope. "The 3.463 MeV line and the 3.560 MeV line are both correlated with the 3.833 MeV line. Therefore we assign the first two lines to the decay of ^{111}Xe and the 3.833 MeV line, which is fed by the two ^{111}Xe decays, to ^{107}Te... From the decay data for the 3.560 MeV α-line of ^{111}Xe shown in [the figure], a half-life of 0.9$\pm$0.2 s is determined."

Adapted from reference (2013Ka01)

1979Sc22 D. Schardt, R. Kirchner, O. Klepper, W. Reisdorf *et al.*, Nucl. Phys. A **326**, 65 (1979).

2013Ka01 J. Kathawa, C. Fry, and M. Thoennessen, At. Data Nucl. Data Tables **99**, 22 (2013).

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