^{107}Te

In the 1979 paper "Alpha decay studies of tellurium, iodine, xenon and cesium isotopes" Schardt et al. described the observation of ^{107}Te (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 ^{107}Te was then populated by α-decay which were measured with a detector telescope. "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. Using the signals of both detectors the half-life of ^{107}Te was determined by the method of maximum likelihood to be $3.6^{+0.6}_{-0.4}$ ms." An earlier reported 2.2(2) s half-life (1965Ma12) was later reassigned to ^{108}Te (1973Bo15, 1977Ki11).

Adapted from reference (2013Ka01)

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