^{109}Te

In the 1967 paper "Proton emitters among Te isotopes", Karnaukhov et al. identified ^{109}Te (1966Ka15). ^{92}Mo and ^{94}Mo targets were bombarded with a ^{20}Ne beam from the Dubna 300 cm heavy-ion cyclotron forming ^{109}Te in the (3n) and (5n) fusion-evaporation reactions, respectively. ^{109}Te was identified by measuring excitation functions of proton emitters which were detected with a charged-particle spectrometer consisting of a flat proportional counter and a silicon surface barrier detector. "Proton activities were observed with the half-lives 4.2±0.2, 19±0.7, 13±2, and 60-80 sec. The first two emitters are probably Te isotopes with the respective mass numbers 109 and 111." Essential the identical paper was submitted to Nuclear Physics A about five months later (1967Ka01). A previous assignment of a 5.3(4) s half-life to ^{108}Te (1965Ma12, 1965Si04) was later changed to ^{109}Te (1973Bo20, 1977Ki11).

Adapted from reference (2013Ka01)

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