

^{109}Te

In the 1966 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](#)).

The discovery date was changed from the original assignment to credit the original Russian publication.

Adapted from reference ([2013Ka01](#))

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