^{149}Tm

"Observation of ^{149}Tm decay to ^{149}Er levels and β-delayed proton emission" reported the discovery of ^{149}Tm in 1987 by Toth et al. (1987To12). An enriched ^{94}Mo target was bombarded with a 259 MeV ^{58}Ni beam from the Berkeley SuperHILAC and ^{149}Tm was formed in the fusion-evaporation reaction ^{94}Mo(^{58}Ni,p2n). Reaction products were separated with the OASIS on-line mass separator and γ-rays, X-rays and positrons were measured. "A new activity ($T_{1/2}$=0.9$\pm$0.2 s), with at least seven γ rays following its β decay, was observed in the A=149 mass chain. It is assigned to the hitherto unknown isotope ^{149}Tm because the γ rays are in coincidence with Er K x rays and because several of them are also in coincidence with the 111.3-keV transition seen in ^{149}Er^{m} isomeric decay."

Adapted from reference (2013Fr10)

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