^{143}Dy

In the 1983 article "New beta-delayed proton emitter in the lanthanide region" Nitschke et al. reported the first observation of ^{143}Dy (1983Ni05). A ^{92}Mo target was bombarded with 275 MeV ^{56}Fe and 292 MeV ^{58}Ni from the Berkeley SuperHILAC and ^{143}Dy was formed in the fusion-evaporation reactions ^{92}Mo(^{56}Fe,αn) and ^{92}Mo(^{58}Ni,α2pn), respectively. Beta-delayed protons and characteristic X-rays were measured in coincidence at the on-line isotope separator OASIS. "In two experiments with ^{58}Ni and ^{56}Fe beams on ^{92}Mo targets, beta-delayed protons with similar half-lives and similar energy distributions were observed. The weighted average half-life of 4.1$\pm$0.3 s is in agreement with the calculated value of 3.2 s for ^{143}Dy.".

Adapted from reference (2013Fr10)

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