^{229}Np

In the 1968 article "New neptunium isotopes, ^{230}Np and ^{229}Np" Hahn et al. reported the discovery of ^{229}Np (1968Ha14). Enriched ^{233}U targets were bombarded with 32−41.6 MeV protons from the Oak Ridge Isochronous Cyclotron forming ^{229}Np in (p,5n) reactions. Reaction products were implanted on a catcher foil which was periodically rotated in front of a surface barrier Si(Au) detector. "From [the equation], it is apparent that the short-lived daughters attained transient equilibrium with the 4.0 min parent before counting began so no growth portion is seen in the data. The 6.89 MeV α-particle is accordingly assigned to ^{229}Np, the α-decay progenitor of ^{225}Pa" The measured half-life was 4.0(2) min.

Adapted from reference (2013Fr02)

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