

^{241}Np

In the 1959 paper “Decay of Np^{241} ” Vandenbosch identified ^{241}Np (1959Va32). Uranium foils were irradiated with 32 and 43 MeV α particles from the Argonne cyclotron to form ^{241}Np in the reaction $^{238}\text{U}(\alpha,p)$. Decay curves were recorded with 2π and end-window proportional counters and β - and γ -ray spectra were measured with an anthracene and sodium iodide crystal, respectively, following chemical separation. “The decay of a 16-minute neptunium activity attributed to Np^{241} has been studied with anthracene and sodium iodide scintillation counters. The principal mode of decay appears to be a beta group decaying to the ground state of Pu^{241} with a beta end-point energy of 1.36 ± 0.10 Mev.” The 1953 Table of Isotopes assigned a 60 min half-life to ^{241}Np (1953Ho01) based on an unpublished report by Orth and Street. This half-life was later reassigned to an isomer of ^{240}Np (1960Le03).

Adapted from reference (2013Fr02)

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