^{53}Ni

Vieira et al. reported the observation of excited states of ^{53}Ni in 1976 in the paper "Extension of the $T_z = -3/2$ Beta-Delayed Proton Precursor Series to ^{57}Zn" (1976Vi02). The Berkeley 88-in. cyclotron accelerated ^{16}O beams to 60 and 65 MeV which then bombarded calcium targets and ^{53}Ni was produced in the fusion-evaporation reaction ^{40}Ca(^{16}O,3n). Beta-delayed protons were measured with a semiconductor counter telescope. "The most reasonable source of the 1.94 MeV activity is β-delayed proton emission following the decay of ^{53}Ni produced via the ^{40}Ca(^{16}O,3n) reaction." The measured half-life was 45(15) ms.

Adapted from reference (2012Ga06)

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