^{149}Yb

The discovery of ^{149}Yb by Xu et al. was announced in the 2001 paper "New β-delayed proton precursor ^{149}Yb near the proton drip line" (2001Xu06). A 232 MeV ^{40}Ca beam from the Lanzhou sector-focusing cyclotron bombarded an enriched ^{122}Sn target and ^{149}Yb was formed in the ^{122}Sn(^{40}Ca,3n) fusion-evaporation reaction. A helium-jet fast tape transport system was used to move the recoils in front of silicon surface barrier and HPGe detectors for protons-γ-ray coincidence measurements. "The decay curve of the 647 keV γ line coincident with 2.5-6.4 MeV protons is shown in the inset of [the figure] from which the half-life of ^{149}Yb was extracted to be 0.7$\pm$0.2 s."

Adapted from reference (2013Fr10)

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