^{131}Sm

The first observation of ^{131}Sm was reported by Wilmarth et al. in their 1986 paper entitled "Beta-delayed proton emission in the lanthanide region" (1986Wi15). A 208 MeV ^{40}Ca beam from the Berkeley Super HILAC bombarded a ^{96}Ru target and ^{131}Sm was produced in the fusion-evaporation reaction ^{96}Ru(^{40}Ca,2p3n). Beta-delayed particles, X-rays and γ-rays were measured following mass separation with the on-line isotope separator OASIS. "A 1.2$\pm$0.2 s β-delayed proton activity coincident with Pm K x-rays identified the new isotope ^{131}Sm"

Adapted from reference (2013Ma01)

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