^{132}Sm

Wadsworth et al. discovered ^{132}Sm in 1989 as reported in "Yrast band spectroscopy of ^{132}Sm and ^{130}Nd" (1989Wa21). A ^{96}Ru target was bombarded with a 195 MeV ^{40}Ca beam to produce ^{132}Sm in the fusion-evaporation reaction ^{96}Ru(^{40}Ca,2p2n). Reaction products were separated with the Daresbury recoil separator and γ-rays and neutrons were measured with 10 bismuth germanate suppressed germanium detectors and five NE213 liquid scintillators, respectively. "Transitions in ^{132}Sm were assigned to ^{132}Sm by comparison of gamma-ray spectra gated by mass 132 recoils and a single coincident neutron. The identification was helped by a further comparison with a 2n-γ spectrum. This latter spectrum made it possible to distinguish between gamma-rays from ^{132}Pr(3pn channel) and ^{132}Sm(2p2n)."

Adapted from reference (2013Ma01)

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