^{131}Eu

Davids et al. observed ^{131}Eu in 1998 and published their results in "Proton radioactivity from highly deformed nuclei" (1998Da03). A 222 MeV ^{40}Ca beam from the Argonne ATLAS accelerator bombarded a ^{96}Ru target and ^{131}Eu was formed in the fusion evaporation reaction ^{96}Ru(^{40}Ca,p4n). Reaction products were separated with the Fragment Mass Analyzer and implanted in a double-sided silicon strip detector where subsequent protons were recorded. "A peak clearly visible at an energy of 950(8) keV (also calibrated using the ^{147}Tm ground-state proton decay line) which we assign to the proton decay of ^{131}Eu, produced with a cross section $\sigma \sim 90$ nb."

Adapted from reference (2013Ma01)

1998Da03 C. N. Davids, P. J. Woods, D. Seweryniak, A. A. Sonzogni *et al.*, Phys. Rev. Lett. **80**, 1849 (1998).

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