^{137}Sm

Redon et al. described the first observation of ^{137}Sm in the 1986 paper "New Exotic neutron-deficient nuclei near N=82" (1986Re11). Enriched ^{106}Cd targets were bombarded with a 191 MeV ^{35}Cl beam from the Grenoble SARA accelerator and ^{137}Sm was formed in the fusion evaporation residue reaction ^{106}Cd(^{35}Cl,3p1n). The residues were separated with an on-line mass separator and a He-jet system. X-ray and γ-ray spectra were measured. "A number of γ-rays with $T_{1/2}$=45$\pm$4 s were observed in the ^{35}Cl + ^{106}Cd reaction products. That confirms the result of Westgaard et al. on a (44$\pm$8)s activity obtained with a 600 Mev proton beam bombarding a molten Gd-La target." The previous work by Westgaard et al. mentioned in the quote was only published in a conference proceeding (1973WeZK).

Adapted from reference (2013Ma01)

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