^{285}Cn

^{285}Cn was first identified by Oganessian et al. in "Measurements of cross sections for the fusion-evaporation reactions ^{244}Pu(^{48}Ca,xn)$^{292-x}$114 and ^{245}Cm(^{48}Ca,xn)$^{293-x}$116" in 2004 (2004Og07). ^{48}Ca beams of 243, 250, and 257 MeV from the Dubna U400 cyclotron bombarded a PuO_2 target enriched ^{244}Pu and a CmO_2 target enriched in ^{245}Cm. ^{284}Cn and ^{285}Cn were populated by α decay following (4n) and (3n) reactions forming ^{289}114 and ^{290}114, respectively, on the PuO_2 target. The residues were separated with a gas-filled recoil separator and implanted in a semiconductor detector array. Subsequent α particle decay and spontaneous fission events were recorded in this array and in eight detectors arranged in a box configuration around the implantation detector. The decay properties are listed in a table. Eight α decays were recorded for ^{285}Cn with a half-life of 34^{+17}_{-9} s. Based on these results the previous assignment for the observation of ^{284}Cn (2000Og05, 2000Og07) had to be changed to ^{285}112. A comprehensive overview of the reviewing the status of the discovery of these isotopes is presented in reference (2007Og01).

Adapted from reference (2013Th02)

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