

^{279}Ds

^{279}Ds was first identified by Oganessian et al. in “Measurements of cross sections for the fusion-evaporation reactions $^{244}\text{Pu}(^{48}\text{Ca},\text{xn})^{292-x}\text{114}$ and $^{245}\text{Cm}(^{48}\text{Ca},\text{xn})^{293-x}\text{116}$ ” in 2004 (2004Og07). ^{48}Ca beams of 243 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 . ^{279}Ds was populated by α decays from $^{291}\text{116}$ and $^{287}\text{114}$ which were formed in (2n) and (5n) evaporation reactions on the CmO_2 and PuO_2 targets, respectively. 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 observation of ^{279}Ds was not specifically mentioned in the text but a table listed the spontaneous fission half-life to be $0.29^{+0.35}_{-0.10}$ s. Three decay chains ending in ^{279}Ds were reported.

Adapted from reference (2013Th02)

2004Og07 Yu. Ts. Oganessian, V. K. Utyonkov, Yu. V. Lobanov, F. Sh. Abdullin *et al.*, Phys. Rev. C **69**, 054607 (2004).

2013Th02 M. Thoennessen, At. Data Nucl. Data Tables **99**, 312 (2013).

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