

²⁹³Lv

²⁹³Lv was identified by Oganessian et al. in “Measurements of cross sections for the fusion-evaporation reactions $^{244}\text{Pu}(^{48}\text{Ca},\text{xn})^{292-x}114$ and $^{245}\text{Cm}(^{48}\text{Ca},\text{xn})^{293-x}116$ ” in 2004 (2004Og07). A 257 MeV ^{48}Ca beam from the Dubna U400 cyclotron bombarded a PuO_2 target enriched in ^{244}Pu . 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 earlier assignment of the isotope ^{292}Lv was changed to ^{293}Lv based on the reassignment of three $Z = 114$ decay chains from $A = 288$ to $A = 289$: “Note, in this interpretation of the data, the previously observed decay of the parent nuclei discovered in the reactions $^{244}\text{Pu}+^{48}\text{Ca}$ and $^{248}\text{Cm}+^{48}\text{Ca}$ originated from the isotopes $^{289}114$ and $^{293}116$.” This reassignment affected one decay chain published in (2001Og01, 2001Og06) and two additional decay chains in reference (2002Og09). The latter two chains were also mentioned in a note added in proof in reference (2001Og06).

Adapted from reference (2013Th02)

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- 2001Og06 Yu. Ts. Oganessian, V. K. Utyonkov, and K. J. Moody, Phys. Atomic Nuclei **64**, 1349 (2001).
- 2002Og09 Y. T. Oganessian, V. K. Utyonkov, Y. V. Lobanov, F. S. Abdullin *et al.*, Eur. Phys. J. A **15**, 201 (2002).
- 2004Og07 Yu. Ts. Oganessian, V. K. Utyonkov, Yu. V. Lobanov, F. Sh. Abdullin *et al.*, Phys. Rev. C **69**, 054607 (2004).
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