^{189}Lu

Haak et al. discovered ^{189}Lu in the 2023 paper "Production and discovery of neutron-rich isotopes by fragmentation of ^{198}Pt" (2023Ha31). The Coupled Cyclotron Facility at the NSCL on the campus of Michigan State University accelerated a ^{198}Pt beam to 85 MeV/u which then impinged on a 47 mg/cm^2 beryllium target. Fragmentation projects were separated with a combination of the A1900 fragment separator and the S800 analysis beam line and identified in a PIN diode telescope. "During the course of the experiment and the measurement of production cross sections, three new isotopes, namely ^{189}Lu and ^{191,192}Hf, were discovered. [...] The measured cross sections of these nuclides were found to be 0.037(24), 0.13(5), and 0.061(44) nb, respectively.

Adapted from reference (2024Th02)

2023Ha31 K. Haak, O. B. Tarasov, P. Chowdhury, A. M. Rogers *et al.*, Phys. Rev. C **108**, 034608 (2023).

2024Th02 M. Thoennessen, Int. J. Mod. Phys. E **33**, 2430001 (2024).

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