

^{122}Ce

The “First observation of very neutron-deficient ^{122}Ce ” was reported in 2005 by Smith et al. (2005Sm07). A 260 MeV ^{64}Zn from the ATLAS facility at Argonne National Laboratory was used to produce ^{122}Ce in the fusion-evaporation reaction $^{64}\text{Zn}(^{64}\text{Zn},\alpha 2n)$. Gamma-rays were measured with Gammasphere in coincidence with neutrons and charged particles detected in the Washington University Neutron Shell and Microball, respectively. “The excited states have been unambiguously assigned to ^{122}Ce by detecting gamma-ray transitions in coincidence with the evaporated charged particles and neutrons.”

Adapted from reference (2009Gi07)

2005Sm07 J. F. Smith, C. J. Chiara, M. P. Carpenter, H. J. Chantler *et al.*, Phys. Lett. B **625**, 203 (2005).

2009Gi07 J. Q. Ginepro, J. Snyder, and M. Thoennessen, At. Data Nucl. Data Tables **95**, 805 (2009).

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