^{125}Pr

"Observation of excited states in the near-drip-line nucleus ^{125}Pr" was published in 2002 by Wilson et al. describing the identification of ^{125}Pr (2002Wi10). A 240 MeV ^{64}Zn beam from the ATLAS accelerator at Argonne bombarded a zinc target and ^{125}Pr was formed in the fusion-evaporation reaction ^{64}Zn(^{64}Zn,p2n). Evaporation residues were detected with the Fragment Mass Analyzer (FMA), charged particles, neutrons and γ rays were measured with the Microball, the Neutron Shell, and Gammasphere, respectively. "The isotope ^{125}Pr has previously been identified in a mass-separation experiment by its β^+ decay to ^{125}Ce (1995Os03); the half-life of the ground state was measured as 3.3 s, but no excited states or γ-ray decays were observed. In the present work, γ-ray transitions have been observed to high spins in ^{125}Pr." Reference (1995Os03) was a conference proceeding and the result were never published in the refereed literature.

Adapted from reference (2012Ma48)

1995Os03 A. Osa, M. Asai, M. Koizumi, T. Sekine *et al.*, Nucl. Phys. A **588**, 185 (1995).

2002Wi10 A. N. Wilson, D. R. LaFosse, J. F. Smith, C. J. Chiara *et al.*, Phys. Rev. C **66**, 021305 (2002).

2012Ma48 E. May and M. Thoennessen, At. Data Nucl. Data Tables **98**, 960 (2012).

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