^{137}Pm

Nowicki et al. reported the observation of ^{137}Pm in the 1975 paper "The level scheme of ^{137}Nd from (α, xn) reactions and from β-decay of the 11/2$^-$ isomer of ^{137}Pm" (1975No08). A 104 MeV α-particle beam from the Karlsruhe isochronous cyclotron was used to irradiate a praseodymium target and ^{137}Pm was formed in the reaction ^{141}Pr(α,8n). γ-ray singles and coincidences were measured after an electromagnetic mass separator. "After irradiation of ^{141}Pr with 104 MeV α-particles the γ-rays following the ^{137m}Nd decay have been observed with a half life of 2.4$\pm$0.1 min and with intensity ratios different from those of the isomeric decay. As a 2.4 min activity is not found after irradiating ^{140}Ce with α-particles, this activity was associated to the decay of a ^{137}Pm level."

Adapted from reference (2012Ma48)

1975No08 G. P. Nowicki, J. Buschmann, A. Hanser, H. Rebel *et al.*, Nucl. Phys. A **249**, 76 (1975).

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

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