

^{131}Pm

“Yrast structures in the neutron-deficient $^{127}_{59}\text{Pr}_{69}$ and $^{131}_{61}\text{Pm}_{70}$ nuclei” was published in 1998 by Parry et al. documenting their observation of ^{131}Pm (1998Pa09). ^{131}Pm was produced in the fusion evaporation reactions $^{96}\text{Ru}(^{40}\text{Ca},\alpha\text{p})$ and $^{96}\text{Ru}(^{39}\text{K},2\text{p}2\text{n})$ at beam energies of 195 MeV and 200 MeV, respectively, at the TASCC facility at Chalk River Laboratory, Canada. Gamma-rays and charged particles were measured with the 8π detector array and the ALF miniball. “From systematics we assign the new bands as the $\pi h_{11/2}$ yrast bands of ^{131}Pm and ^{127}Pr , respectively.”

Adapted from reference (2012Ma48)

1998Pa09 C. M. Parry, A. J. Boston, C. Chandler, A. Galindo-Uribarri *et al.*, Phys. Rev. C **57**, 2215 (1998).

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

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