

^{129}Sm

Xu et al. first identified ^{129}Sm in 1999 and reported the results in “New β -delayed proton precursors in the rare-earth region near the proton drip line” (1999Xu05). A 165 MeV ^{36}Ar beam was accelerated with the Lanzhou sector-focused cyclotron and bombarded an enriched ^{96}Ru target. Proton- γ coincidences were measured in combination with a He-jet type transport system. “A 134-keV γ line found in the proton coincident $\gamma(x)$ -ray spectrum in the $^{36}\text{Ar}+^{96}\text{Ru}$ reaction was assigned to the γ -ray transition between the lowest-energy 2^+ state and 0^+ ground state in the ‘daughter’ nucleus ^{128}Nd of the βp precursor ^{129}Sm .”

Adapted from reference (2013Ma01)

1999Xu05 S. W. Xu, Z. K. Li, Y. X. Xie, Q. Y. Pan *et al.*, Phys. Rev. C **60**, 061302 (1999).

2013Ma01 E. May and M. Thoennessen, At. Data Nucl. Data Tables **99**, 1 (2013).

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