

^{126}Nd

Suzuki et al. discovered ^{126}Nd in “Discovery of Proton-Rich Radioactive Isotopes in the Z = 60 Region Produced by the Projectile Fragmentation of a 345-MeV/Nucleon ^{238}U Beam” ([2025Su21](#)). The RI Beam Factory at RIKEN delivered the 345-MeV/Nucleon primary ^{238}U Beam to a 1-mm thick beryllium production target. The fast fragments were separated with the BigRIPS in-flight separator and identified by the measurements of time of flight (TOF), the magnetic rigidities before and after a degrader, and the energy loss. “The new isotopes observed in our present study were 13 nuclides in total: $^{118,119}_{57}\text{La}$, $^{119,120}_{58}\text{Ce}$, $^{122,123}_{59}\text{Pr}$, $^{123,124,126}_{60}\text{Nd}$, $^{125,126,127}_{61}\text{Pm}$, and $^{128}_{62}\text{Sm}$.” Previously, the identification of ^{126}Nd in the fragmentation reaction of a 30 MeV/nucleon ^{197}Au had only been reported in a conference proceedings contribution ([2000So11](#)).

[2000So11](#) G. A. Souliotis, Phys. Scr. T **88**, 153 (2000).

[2025Su21](#) H. Suzuki, N. Fukuda, H. Takeda, Y. Shimizu *et al.*, Prog. Theor. Exp. Phys. **2025**, 113 (2025).

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