^{166}Pm

^{166}Pm was discovered in 2022 by Kiss et al. as reported in "Measuring the β-decay Properties of Neutron-rich Exotic Pm, Sm, Eu, and Gd Isotopes to Constrain the Nucleosynthesis Yields in the Rare-earth Region" (2022Ki23). A 345 MeV/nucleon ^{238}U primary beam impinged on a 5 mm thick ^{9}Be target at the RIKEN Nishina Center and the fragmentation products were separated with the large-acceptance BigRIPS separator and deposited in the AIDA implantation detector which consisted of a stack of six double-sided silicon strip detectors. "Only a few hundred (or even fewer) ions of the most neutron-rich isotopes (^{166}Pm, ^{167,168}Sm, ^{170}Eu, and $^{170-172}$Gd) were implanted in the AIDA detector." ^{166}Pm had previously been reported in an RIKEN accelerator progress report (2015FuZX).

Adapted from reference (2023Th03)

2015FuZX N. Fukuda, N. Inabe, D. Kameda, H. Suzuki *et al.*, REPT-RIKEN **48**, p. 72 (2015).

2022Ki23 G. G. Kiss, A. Vitez-Sveiczer, Y. Saito, A. Tarifeno-Saldivia *et al.*, Astrophys. J. **936**, 107 (2022).

2023Th03 M. Thoennessen, Int. J. Mod. Phys. E **32**, 2330001 (2023).

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