^{166}Gd

Ichikawa et al. reported the first observation of ^{166}Gd in "β-decay half-lives of new neutron-rich rare-earth isotopes ^{159}Pm, ^{162}Sm, and ^{166}Gd" in 2005 (2005Ic02). ^{238}U targets were bombarded with 15.5 MeV protons from the JAERI tandem accelerator facility. ^{166}Gd was separated with a gas-jet coupled thermal ion source system in the JAERI-ISOL. Beta- and X/gamma-rays were measured with a sandwich-type plastic scintillator and two Ge detectors, respectively. "Thus, it was found that these γ rays were attributed to the β^- decay of ^{166}Gd. The half-life of ^{166}Gd was determined to be 4.8$\pm$1.0 s as a weighted average."

Adapted from reference (2013Ma01)

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