^{144}Gd

The 1968 paper "Zerfallseigenschaften der Gadolinium-Isotope ^{145}Gd und ^{144}Gd" by Keller and Münzel reported the discovery of ^{144}Gd (1968Ke14). An enriched $^{144}Sm_2O_3$ target was bombarded with 52 MeV α-particles from the Karlsruhe isochronous cyclotron and ^{144}Gd was formed in the reaction ^{144}Sm(α,4n). Beta-decay curves and γ-ray spectra were measured following chemical separation. "Die Analyse der β-Abfallkurven ergab eine Halbwertszeit von 4.5$\pm$0.1 min... Auf Grund der chemischen Abtrennung kann diesem Radionuklid die Ordnungszahl Z = 64 und über die Massentrennung die Nukleonenzahl A = 144 zugeschrieben werden." [The analysis of the β-decay curves resulted in a half-life of 4.55$\pm$0.1 min... An atomic number of Z = 64 and a nucleon number A = 144 can be assigned to this nuclide based on the chemical separation, and mass separation, respectively.]

Adapted from reference (2013Ma01)

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