^{138}Eu

"Very neutron deficient isotopes of samarium and europium" by Nowicki et al. reported the discovery of ^{138}Eu in 1982 (1982No15). An enriched ^{112}Sn target was bombarded with a 190 MeV ^{32}S beam from the Dubna U-300 cyclotron. The reaction products were identified with the on-line BEMS-2 mass separator and by measuring X- and γ-rays. "Three isotopes: ^{136}Sm, ^{137}Eu, and ^{138}Eu (with half-lives 40$\pm$5 s, 11$\pm$2 s and 12$\pm$2 s respectively) were observed for the first time" Previously reported half-lives of 1.5(4) s and 35(6) s (1977Bo02) were incorrect.

Adapted from reference (2013Ma01)

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