^{138}Sm

"Very neutron deficient isotopes of samarium and europium" by Nowicki et al. reported the observation of ^{138}Sm 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. The observation of ^{138}Sm is not discussed in detail and the measured half-life of 3.0(3) min is only listed in a table. Nowicki et al. did not consider their observation a discovery quoting a previous measurement by Westgaard et al. However, these results were only published in a conference proceeding (1973WeZK).

Adapted from reference (2013Ma01)

1973WeZK L. Westgaard, P. G. Hansen, B. Jonson, H. L. Ravn, and S. Sundell, CONF-MUNICH(NUCL PHYS) **1**, p. 696 (1973).

1982No15 M. Nowicki, D. D. Bogdanov, A. A. Demyanov, and Z. Stachura, Acta Phys. Pol. B **13**, 879 (1982).

2013Ma01 E. May and M. Thoennessen, At. Data Nucl. Data Tables **99**, 1 (2013).

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