

^{140}Eu

In 1982, “Very neutron deficient isotopes of samarium and europium” by Nowicki et al. reported the observation of ^{140}Eu ([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 ^{140}Eu is not discussed in detail and previously measured half-lives of 1.3(2) s and 20 s were approximately confirmed as 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](#)). The 20_{-10}^{+15} s half-life previously reported ([1972Ha23](#)) was incorrect.

Adapted from reference ([2013Ma01](#))

- [1972Ha23](#) D. Habs, H. Klewe-Nebenius, R. Lohken, S. Goring *et al.*, *Z. Phys.* **250**, 179 (1972).
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- [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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