^{242}Fm

In the 1975 paper "Synthesis of the new neutron-deficient isotopes ^{250}102, ^{242}Fm, and ^{254}Ku" Ter-Akopyan et al. reported the first observation of ^{242}Fm (1975Te01). ^{40}Ar beams with energies up to 225 MeV from the Dubna U-300 cyclotron bombarded ^{204}Pb and ^{206}Pb targets and ^{242}Fm was populated in the (2n) and (4n) fusion-evaporation reactions, respectively. Spontaneous fission fragments were measured with mica detectors. "A comparison of the ^{204}Pb and ^{206}Pb target yields permits the assignment of the 0.8 msec activity to the isotope ^{242}Fm." This half-life has been recommended in an IUPAC technical report (2000Ho27), however, more recently, the data could not be reproduced (2008Kh10).

Adapted from reference (2013Th02)

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