^{162}W

In 1973, Eastham and Grant were the first to produce ^{162}W as reported in "Alpha Decay of Neutron-Deficient Isotopes of Tungsten" (1973Ea01). Magnesium beams of energies between 110 and 204 MeV from the Manchester University Hilac were used on samarium targets. ^{162}W was produced in the fusion-evaporation reaction ^{144}Sm(^{24}Mg,6n). The isotope was identified by its radioactivity using a helium jet technique. The α decay energy was found to be $E_\alpha = 5.53(1)$ MeV and only an upper limit for the lifetime was quoted: "We have not been able to measure the lifetime of ^{162}W. Practically no events at all are seen at 5.53 MeV in the observation of a catcher plate flipped out of the helium jet, so the lifetime must be considerably shorter than the dead time of 1/4 s." This limit was later found to be incorrect (1979Ho10).

Adapted from reference (2010Fr08)

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