^{171}W

^{171}W was discovered by Arciszewski et al. in 1983 as reported in "Band-crossing phenomena in ^{167,168}Hf and ^{170,171}W" (1983Ar09). The Louvain-la-Neuve CYCLONE Cyclotron accelerated ^{20}Ne to 110 MeV and ^{171}W was produced in the fusion-evaporation reaction ^{155}Gd(^{20}Ne,4n). Two Compton-suppression spectrometers located at +90° and −90° with respect to the beam direction recorded γ-γ-coincidences. "Since the other rotational band could be assigned to ^{169}W or ^{171}W, or even to a tantalum isotope (through an xnp channel), excitation function measurements were undertaken... The comparison of fig. 3 clearly shows that the newly observed band belongs to ^{171}W." A previous half-life measurement of ^{171}W reported a value of 9.0(15) m (1971Na28) which differs by almost a factor of four from the correct value of 2.38(4) min (2018Ba33) and was thus not credited for the discovery of ^{171}W.

Adapted from reference (2010Fr08)

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