^{261}Db

The first observation of ^{261}Db was reported in 1970 by Flerov et al. from Dubna in "The synthesis of element 105" (1970Fl16). A 114 MeV ^{22}Ne beam bombarded a ^{243}Am target forming ^{261}Db in the (4n) fusion-evaporation reactions. Recoil products were implanted on a nickel ribbon moving at a constant speed passing by 105 phosphate glass fission fragment detectors. "Considering the data obtained altogether, we arrive at the conclusion that the product experiencing spontaneous fission with a half-life of $\sim$2 sec observed in the reaction of Am^{243} + Ne^{22} is an isotope of element 105... The most probable mass number of the isotope of the new element is 261." The same results were submitted to Nuclear Physics a month later (1971Fl02). A month earlier, α-decay with a half-life of 1.4 s was assigned to either ^{260}Db or ^{261}Db (1971Dr01).

Adapted from reference (2013Th02)

1970Fl16 G. N. Flerov, Y. T. Oganesyan, Y. V. Lobanov, Y. A. Lazarev *et al.*, Sov. At. Energy **29**, 967 (1970).

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Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"