^{259}Db

The first observation of ^{259}Db was reported by Gan et al. in the 2001 article "A new alpha-particle-emitting isotope ^{259}Db" (2001Ga20). The Lanzhou Sector Focus Cyclotron (SFC) was used to bombard a ^{241}Am target with a 132 MeV ^{22}Ne beam to populate ^{259}Db in the ^{241}Am(^{22}Ne,4n) fusion-evaporation reaction. Recoil products were transported with helium gas and collected on a rotating wheel which was located in front of four groups of three Si(Au) surface-barrier detectors. "An obvious α-peak with the energy of 9.47 MeV appearing in [the figure] is assigned to ^{259}Db in the present work. Its half-life is measured to be 0.51$\pm$0.16 s."

Adapted from reference (2013Th02)

2001Ga20 Z. G. Gan, Z. Qin, H. M. Fan, X. G. Lei *et al.*, Eur. Phys. J. A **10**, 21 (2001).

2013Th02 M. Thoennessen, At. Data Nucl. Data Tables **99**, 312 (2013).

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