^{268}Sg

In 2023, ^{268}Sg was discovered by Oganessian et al. in "New isotope ^{276}Ds and its decay products ^{272}Hs and ^{268}Sg from the ^{232}Th + ^{48}Ca reaction" (2023Og03). The DC280 cyclotron at the SHE Factory at JINR in Dubna accelerated a ^{48}Ca beam to 230−250 MeV impinging on ^{232}Th targets. Evaporation residues from the reaction ^{232}Th(^{48}Ca,4n) were separated and identified with the gas-filled separator DGFRS-2 which also detected subsequent α decays. "Three new nuclides were synthesized for the first time: a spontaneously fissioning (SF) ^{268}Sg with the half-life $T_{SF} = 13^{+17}_{-4}$ s;..."

Adapted from reference (2024Th02)

2023Og03 Yu. Ts. Oganessian, V. K. Utyonkov, M. V. Shumeiko, F. Sh. Abdullin *et al.*, Phys. Rev. C **108**, 024611 (2023).

2024Th02 M. Thoennessen, Int. J. Mod. Phys. E **33**, 2430001 (2024).

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