^{138}Gd

In 1985, ^{138}Gd was identified by Lister et al. in "Deformation of very light rare-earth nuclei" (1985Li13). A ^{50}Cr beam from the Daresbury Laboratory Van de Graaff accelerator was incident on a ^{94}Mo target at 220 and 230 MeV. Gamma rays, neutrons and charged particles were detected and new ground-state bands observed. "This letter reports results on the ground-state bands in the even-even nuclei $^{128}_{58}Ce_{68}$, $^{128,130,132}_{60}Nd_{68,70,72}$, $^{134,136}_{62}Sm_{72,74}$, and $^{138,140}_{64}Gd_{74,76}$."

Adapted from reference (2013Ma01)

1985Li13 C. J. Lister, B. J. Varley, R. Moscrop, W. Gelletly *et al.*, Phys. Rev. Lett. **55**, 810 (1985).

2013Ma01 E. May and M. Thoennessen, At. Data Nucl. Data Tables **99**, 1 (2013).

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