

Superdeformed Oblate Superheavy Nuclei?

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We study stability of superdeformed oblate (SDO) superheavy $Z \geq 120$ nuclei predicted by systematic macroscopic-microscopic calculations in 12D deformation space and confirmed by the Hartree-Fock calculations with the realistic SLy6 force. We include into consideration high- K isomers that very likely form at the SDO shape. Although half-lives $T_{1/2} \lesssim 10^{-5}$ s are calculated or estimated for even-even spin zero systems, decay hindrances known for high- K isomers suggest that some SDO superheavy nuclei may be detectable by the present experimental technique.