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# Shape Coexistence for $^{179}$Hg in Relativistic Mean-Field Theory

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Abstract: The potential energy surface of $^{179}$Hg is traced and the multi-shape coexistence phenomenon in that nucleus is studied within the relativistic mean-field theory with quadrupole moment constraint. The calculation results of binding energies and charge radii of mercury isotopes are in good agreement with the experimental data.

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Key words: relativistic mean-field theory, shape coexistence, binding energy

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