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Description of the Superdeformed Bands of Odd-Odd Nuclei in A \sim 80 Region

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Abstract: Properties of the superdeformed bands of odd-odd nuclei in A \sim 80 mass region are investigated systematically within the supersymmetry scheme including many-body interactions and a perturbation possessing the SO(5) (or SU(5)) symmetry on the rotational symmetry. The obtained γ -ray energies, and the dynamical moments of inertia agree with experimental data. It shows that this approach is quite powerful in describing odd-odd nuclei in A \sim 80 mass region.

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