

## Description of the Superdeformed Bands of the Odd-Odd Nuclei in $A \sim 150$ Region

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**Abstract:** With the supersymmetry scheme including many-body interactions, the global property and the  $\Delta I=4$  bifurcation in the superdeformed (SD) bands of odd-odd nuclei in  $A \sim 150$  mass region are investigated systematically. Good results for the  $\gamma$ -ray energies, the dynamical moments of inertia, and energy differences  $\Delta E_\gamma - \Delta E_\gamma^{\text{ref}}$  are obtained. It shows that this approach is quite powerful in describing not only the SD bands in even-even and odd-A nuclei but also those in odd-odd nuclei in the mass region.

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**Key words:** superdeformed band, dynamical moment of inertia,  $\Delta I=4$  bifurcation, odd-odd nuclei

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