

SHELL EFFECTS IN SUPERDEFORMED MINIMA¹

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Recent and planned experiments aiming at the observation of the direct links between superdeformed and normal-deformed structures in the $A \sim 190$ mass region may offer unique information on the absolute nuclear binding energy in the 2:1 minima, and hence on the magnitude of shell effects in the superdeformed well. In the present paper, the self-consistent mean-field theory with density-dependent pairing interaction is used to explain, at the same time, the two-particle separation energies in the first and second wells, and the excitation energies of superdeformed states in the $A \sim 190$ and $A \sim 240$ mass regions.

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