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Stability of catalitic TM-nanoclusters TM₁₄₇₋₅₆₁:Ni,Pd (2D-spacers)

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*Supervising author; ⁺Corresponding author Keywords: structural transformation, nanocluster, MD-simulation, thermostability, scale effects.

Abstract

In this paper, using physically reasonable potentials, we conducted computer molecular dynamics simulation of heating the face-centered cubic lattice (FCC) of nanoclasters TM₁₄₇₋₅₆₁:Ni,Pd and detected specific thermal dimensional effects of structural stability loss initiated by isomeric transformation of FCCcube octahedrons into icosahedrons.

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- 2. Computational simulation and evaluation of the interatomic interaction in nanoclusters.
- 3. Analysis of the results of nanoclusters thermal evolution simulation by the molecular dynamics method.
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