1. Переклад статей з журналів “Physical Review B”, “Physical Review Letters”, “Review of Modern Physics”, “Journal of Physics” та ін.

Як приклад перекласти уривок з журналу “Physical Review B” та створити відповідний словник.

We present converged *first-principles* calculations for the atomic and electronic structure of diamond (111) surfaces based on density-functional theory in the local-density approximation. Single- and triple-danglingbond surfaces with 1×1, 2×1, and (√3×√3)*R*30° translational symmetry are studied by means of totalenergy minimizations. The ground-state geometries and electronic band structures are computed. In contrast to earlier work we find the p-bonded chains to be nearly undimerized and unbuckled in the 2×1 Pandey reconstruction. Consequently, the electronic band structure exhibits no optical gap. Other structures are higher in total energy (p-bonded molecule model, relaxed truncated-bulk structure! or represent only saddle points at the Born-Oppenheimer energy surface (graphitelike surface, strongly dimerized chains). Chain and trimer reconstructions at the triple-dangling-bond C(111) surface are very close in energy and domains of different reconstructions can compete. These structures may explain recent scanning tunneling microscopy findings on films grown by chemical vapor deposition.

2. Переклад статей з журналів “Journal of Physics and Chemistry of Solids”, “Solid State Physics”, “Solid State Communications” та ін.

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