

RECONSTRUCTION  
AND RADIATION-STIMULATED  
STABILIZATION OF SURFACE Si(001)

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S u m m a r y

The real structure of (001)Si surface is investigated by the molecular dynamics method with classical potentials. We adduce curves of the radial distribution of atoms and angles between bonds, which indicate the disorder of four near-surface layers at high temperature. The structure is characterized by the presence of abnormal rings with the number of vertices equal to 2 - 8 and abnormal nodes with broken bonds. Irradiation of the surface by low-energy ions broken leads to enhanced relaxation of (001)Si surface and to amendment of the structure of external layers.