Kinetics of structural changes on GaSb(001) singular and vicinal surfaces during the UHV annealing

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The dynamics of processes of antimony desorption was investigated on the singular and vicinal GaSb(001) surface by RHEED method. The role of the terraces edges was determined during antimony evaporation in Langmuir desorption mode. It is shown that the structural transition $(2 \times 5) \rightarrow (1 \times 3)$ is a complex of two transitions — *order* → *disorder* and *disorder* → *order*. The influence of the degree of surface miscut from the singular face on the dimension of the transition $(2 \times 5) \rightarrow$ DO was studied. The activation energies of structural transitions $ex(2 \times 5) \rightarrow (2 \times 5)$, $(2 \times 5) \rightarrow$ DO and DO $\rightarrow (1 \times 3)$ on singular and vicinal faces GaSb(001) were determined.

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