

2.3.3 AlSb, Aluminum Antimonide

AlSb(100)

Early studies of AlSb(100) surfaces revealed $c(4\times 4)$ and (1×3) surfaces [97T]. The latter are similar to the anion-dimer-based surfaces that also occur on GaAs(100) [96H1, 97X, 99J], whereas the latter consists of Sb dimers on top of an Sb-dimer-terminated surface. This surface, as well as the corresponding GaSb(100) surfaces, are expected to be metallic, somewhat unusual for a semiconductor surface reconstruction. The influence of the metallic Sb was seen in an STM-based electrochemical study [06M]. The same surface reconstructions were observed in a later work [98N2], and interfaces of InAs-on-AlSb and AlSb-on-InAs were also studied.

References for 2.3.3

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