

MECHANISMS OF SURFACE
EVOLUTION DURING THE GROWTH
OF UNDOPED NANOSILICON FILMS

N.G. Nakhodkin, T.V. Rodionova, A.S. Sutyagina

Taras Shevchenko National University of Kyiv
(4g, Academician Glushkov Prosp., Kyiv 03022, Ukraine)

S u m m a r y

The thickness dependence of the surface roughness and the grain size of nanosilicon films, produced by low-pressure chemical vapour deposition, has been found, by using atomic force microscopy. A correlation between the surface roughness, grain size, and transformation of a film structure from the equiaxial structure into a fibrous one is established. Possible mechanisms of surface evolution are analyzed.