

Fundamentals of Surface Science

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Abstract

In these lectures dedicated to PhD students in Materials Science, Physics, and Chemistry we will introduce the concepts of epitaxial growth of thin films and monolayers, including graphene, hexagonal boron nitride and other two-dimensional systems. We then focus on the kinetics of epitaxial growth and its use for the self-assembly of nanostructures at surfaces. We finally turn to the electronic structure, magnetism, and heterogeneous catalysis of surface supported nanostructures.

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