Nanopatterning and nanofabrication

tutorial

February 13, 2019 | 4:00 pm Lecture Hall MPI | B.1.11



Abstract

Spintronics and nanoelectronics often require the fabrication of nanostructures. There are multiple ways to achieve this goal, however, they have to be carefully chosen. In most cases the nanostructures are patterned out of thin films and in many cases nanopatterning already starts with the choice of the appropriate deposition method for the material of choice. The patterning step itself can either be additive or subtractive for example by controlled growth of nanostructures or by etching of a thin film respectively. In all cases, however, nanolithography is necessary to define the desired pattern which is then to be transferred into the material. In the lecture different deposition methods, etching techniques and lithography systems and their interplay will be discussed to allow an appropriate choice among the available processes.



Max Planck Institute of Microstructure Physics Weinberg 2 | 06120 Halle (Saale) | Germany





