

## **Recent Advances in Scanning Tunneling Microscopy involving Magnetic Probes and Samples**

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We report on recent developments in the field of STM performed with magnetic probes and samples. The choice of appropriate magnetic sensors and their in situ preparation will be described. We further focus on the information obtained in spin-polarized scanning tunnelling microscopy (SPSTM) as well as on possible modes of operation for simultaneous acquisition topographic and magnetic data. The prospects for SPSTM and related magnetic sensitive SXM techniques will be discussed.