Nanoscale Analysis of Biofunctional Molecules and Components

W. Metzger, M. Oberringer, J. Hu, M.Q. Li, U. Hartmann

In basic medical research, as well as in concrete clinical applications, the nanoscale analysis of biofunctional units is of strongly increasing relevance. Dedicated investigations on molecules, molecular composites or functional units can efficiently be performed ex or in situ by scanning probe methods and, namely, by scanning force microscopy. In the following investigations, the folding behavior of DNA is presented as an example of basic research in medicine. In contrast, the investigation of bioadsorption phenomena in systems on which apheresis therapies are based provides a real contribution to applied medicine.