**DESCRIPTION**

Expectations of a technological revolution are associated with nanotechnology, and indeed the generation, modification and utilization of objects with tiniest dimensions already permeates science and research in a way that the absence of nanotechnology is no longer conceivable. It has progressed to an independent interdisciplinary field, its great success due to the purposeful combination of physical, mechanical and molecular techniques.

This book starts out with the most important fundamentals of microtechnology and chemistry on which the understanding of shaping nanoscale structures are based. Next, a variety of examples illustrate the fabrication of nanostructures from different materials, before, finally, methods for characterization of the generated structures are presented.

This fascinating introduction provides both scientists and engineers with insights into the "other side" of nanotechnology.

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**ABOUT THE AUTHOR**

Michael Köhler is a Professor of Physical Chemistry and Microreaction Technology at the Technical University of Ilmenau, Germany, since 2001 and at the same time Visiting Scientist at the Institute for Physical High Technology (IPHT) in Jena, also Germany. He studied chemistry and completed his Ph.D in Halle an der Saale and Jena and completed his habilitation in general and physical chemistry, giving lectures at Wuppertal University and serving from 1993 on as lecturer at the Friedrich-Schiller-University in Jena for microlithography, microsystem technology and nanotechnology.
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