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Nota di contenuto	Foreword / Brian J. Thompson -- Preface -- 1. Editorial / Akhlesh Lakhtakia -- 2. Sculptured thin films / Akhlesh Lakhtakia and Russell Messier -- 3. Photonic band gap structures / Joseph W. Haus -- 4. Quantum dots : phenomenology, photonic and electronic properties, modeling and technology / Fredrik Boxberg and Jukka Tulkki -- 5. Nanoelectromagnetics of low-dimensional structures / Sergey A. Maksimenko and Gregory Ya. Slepian -- 6. Atomistic simulation methods / Pierre A. Deymier, Vivek Kapila and Krishna Muralidharan -- 7. Nanomechanics / Vijay B. Shenoy -- 8. Nanoscale fluid mechanics / Petros Koumoutsakos, Urs Zimmerli, Thomas Werder and Jens H. Walther -- 9. Introduction to quantum information theory / Mary Beth Ruskai -- Index.
Sommario/riassunto	This volume is a researcher's reference handbook to the many aspects of nanometer structures. Although intended as a source for the serious researcher, novices will find a great deal of interesting content. The theories covered include nanostructured thin films, photonic bandgap structures, quantum dots, carbon nanotubes, atomistic techniques, nanomechanics, nanofluidics, and quantum information processing. Modeling and simulation research on these topics have now reached a stage of maturity to merit inclusion as well.

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