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Altri autori (Persone)	OhtsuMotoichi
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Near-Field Excitation Dynamics in Molecules: Nonuniform Light-Matter Interaction Theory beyond a Dipole Approximation -- Novel Excitonic Properties of Carbon Nanotube -- Fabrication of Ultrahigh-Density Self-Assembled InAs Quantum Dots by Strain Compensation -- Wavelength Up-Conversion using a Phonon-Assisted Excitation Process and its Application to Optical Pulse-Shape Measurement -- Micro and Extended-Nano Fluidics and Optics for Chemical and Bioanalytical Technology.
Sommario/riassunto	This book focuses the recent progress in nanophotonics technology to be used to develop novel nano-optical devices, fabrication technology, and advanced systems. It begins with a review of near-field excitation dynamics in molecules. Further topics include: wavelength up-converting a phonon-assisted excitation process with degenerate beams and non-degenerate beams in dye grains, a fabrication method of semiconductor quantum dots including self-assembly of InAs quantum dots based on the Stranski-Krastanov growth mode, single-nanotube spectroscopy and time-resolved spectroscopy for studying novel excitonic properties of single-walled carbon nanotubes. The striking features of excitons in the carbon nanotube, multiple-exciton states, and microfluidic and extended-nano fluidic techniques. These topics are reviewed by nine leading scientists. This overview is a variable resource for engineers and scientists working in the field of nanophotonics.

