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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Nanoplasmonics: from Present into Future -- Plasmonics for Enhanced Vibrational Signatures -- Plasmonically Enhanced Dye-Sensitized Solar Cells -- Silicon Plasmonics -- Ultrafast Nonlinear Plasmonics -- Second-order Nonlinear Optical Properties of Plasmonic Nanostructures -- Ultrafast and Nonlinear Plasmon Dynamics.-Controlling Thermal Radiation with Surface Waves -- Aperiodic Order in Nanoplasmonics -- Waves on Subwavelength Metallic Surfaces: A Microscopic View Point -- Plasmonic Functionalities Based on Detuned Electrical Dipoles -- Plasmonics with a Twist: Taming Optical Tornadoes on the Nanoscale -- Spin optics in Plasmonics -- Plasmonics and Super-Hydrophobicity: A New Class of Nano-bio-devices -- Cooperative Effects in Plasmonics.
Sommario/riassunto	This contributed volume summarizes recent theoretical developments in plasmonics and its applications in physics, chemistry, materials science, engineering, and medicine. It focuses on recent advances in several major areas of plasmonics including plasmon-enhanced spectroscopies, light scattering, many-body effects, nonlinear optics, and ultrafast dynamics. The theoretical and computational methods used in these investigations include electromagnetic calculations, density functional theory calculations, and nonequilibrium electron

dynamics calculations. The book presents a comprehensive overview of these methods as well as their applications to various current problems of interest.

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