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Nota di contenuto	Raman Spectroscopy, Modeling and Simulation Studies of Carbon Nanotubes -- Laser Optogalvanic Spectroscopy and Collisional State Dynamics Associated with Hollow Cathode Discharge Plasmas -- Applications of Fluorescence Anisotropy in Understanding Protein Conformational Disorder and Aggregation -- Nuclear Magnetic Resonance Spectroscopy in Nanomedicine -- An Efficient Coupled Dipole Method for the accurate calculation of van der Waals interactions at the nanoscale -- Adsorption of Gases in Nanomaterials: Theory and Simulations -- AtomPrecise Metal Nanoclusters -- Plasmonic Properties of Metallic Nanostructures, Two Dimensional Materials, and Their Composites -- Application of Graphene within Optoelectronic

Devices and Transistor -- The Versatile Role of Graphene in Organic Photovoltaic Device Technology -- Nanomaterials in Nanomedicine.

Sommario/riassunto

This book focuses on several areas of intense topical interest related to applied spectroscopy and the science of nanomaterials. The eleven chapters in the book cover the following areas of interest relating to applied spectroscopy and nanoscience: · Raman spectroscopic characterization, modeling and simulation studies of carbon nanotubes, · Characterization of plasma discharges using laser optogalvanic spectroscopy, · Fluorescence anisotropy in understanding protein conformational disorder and aggregation, · Nuclear magnetic resonance spectroscopy in nanomedicine, · Calculation of Van der Waals interactions at the nanoscale, · Theory and simulation associated with adsorption of gases in nanomaterials, · Atom-precise metal nanoclusters, · Plasmonic properties of metallic nanostructures, two-dimensional materials, and their composites, · Applications of graphene in optoelectronic devices and transistors, · Role of graphene in organic photovoltaic device technology, · Applications of nanomaterials in nanomedicine.