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Nota di contenuto	Frontmatter -- Preface -- Contents -- 1. Introduction -- 2. Semiconductor nanoparticles -- 3. Metal nanoparticles -- 4. Metal oxide nanoparticles -- 5. Organic and biological nanoparticles -- 6. Hybrid and composite nanoparticles -- 7. Nanoparticle interactions with biomolecules and cells -- 8. Nanoparticle assemblies -- Further reading -- Index
Sommario/riassunto	Nanoparticles presents the remarkable variety of nanoparticle families, compositions, structures, and functions. The book discusses nanoparticles made of semiconductors, metals, metal-oxides, organics, biological and hybrid constituents. Through a wealth of examples and case studies, supplemented by numerous figures, readers that are not necessarily active or experts in this area acquire a broad overview of this exciting field at the interface between scientific research and practical technologies. The contents summarize the contributions to this field of diverse scientific and technological disciplines - chemistry, physics, biology, electronics and others providing a comprehensive

knowledge - the types of nanoparticles, their compositions and how the relationships between the atomic constituents affect their properties, as well as potential applications of nanoparticles.- Covers diverse uses of nanoparticles in scientific research and industrial applications, underscoring their extraordinary diversity and potential utilization.- Experimental and conceptual approaches applied to the study of nanoparticles are discussed extensively. Additional references provide the reader with a basis for further study.- Also available by Professor Jelinek: Biomimetics - A Molecular Perspective (2013), ISBN: 978-3-11-028117-0
