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Nota di contenuto	Front Cover; Contents; Preface; Chapter 1 - Biogenic and Biomimetic Magnetic Nanoparticles and Their Assemblies; Chapter 2 - Controlling the Structure and Properties of Nanostructured Magnetic Materials Produced by Depositing Gas-Phase Nanoparticles; Chapter 3 - Time-Dependent Phenomena in Nanoparticle Assemblies; Chapter 4 - Elementary Excitations in Magnetic Nanoparticles Probed with <sup>57</sup> Fe Nuclear Magnetic Resonance and Mossbauer Spectroscopy; Chapter 5 - Magnetic Properties of Spinel Ferrite Nanoparticles: Influence of the Magnetic Structure Chapter 6 - FePt Films with Graded Anisotropy for Magnetic Recording Chapter 7 - Fabrication of Patterned Nanoparticle Assemblies via Lithography; Chapter 8 - Magnetic Behavior of Composite Nanoparticle Assemblies; Back Cover
Sommario/riassunto	Magnetic nanoparticles with diameters in the range of a few nanometers are today at the cutting edge of modern technology and innovation because of their use in numerous applications ranging from engineering to biomedicine. A great deal of scientific interest has been focused on the functionalization of magnetic nanoparticle assemblies. The understanding of interparticle interactions is necessary to clarify the physics of these assemblies and their use in the development of

high-performance magnetic materials. This book reviews prominent research studies on the static and dynamic magnetic prope

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