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Nota di contenuto	1. Introductory Chapter: Incredible Spicy Iron Oxide Nanoparticles -- 2. New Approaches in Synthesis and Characterization Methods of Iron Oxide Nanoparticles -- 3. Enzyme-Like Property (Nanozyme) of Iron Oxide Nanoparticles -- 4. Iron Oxide Nanoparticles and Nano-Composites: An Efficient Tool for Cancer Theranostics -- 5. Magnetite Nanoparticles (Fe3O4) for Radio-Frequency and Microwave Applications -- 6. Application of Iron Oxide in Supercapacitor -- 7. Green Energy Applications of Hematite (-Fe2O3), Magnetite (Fe3O4), and Maghemite (-Fe2O3) Nanoparticles Based Hydroelectric Cell.
Sommario/riassunto	Increasingly, iron oxide nanoparticles are being synthesized due to their unique properties and applications. They are some of the most abundant minerals on Earth and they exist in varying phases and possess different crystal structures, sizes, and shapes in nature. This book provides a comprehensive and updated review of iron oxide nanoparticles, including their newly discovered properties, their application prospects in biomedicine and green energy, and their synthesis. In addition to serving as a valuable reference, this book also provides a bridge between research in the fields of minerals, chemistry, geology, biology, agronomy, medicine, green energy, and nanotechnology.