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Nota di contenuto	Chapter 1. Visible-Light-responsive Nanostructured Materials for Photocatalytic Degradation of Persistent Organic Pollutants in Water -- Chapter 2. Surface Modification of Highly Magnetic Nanoparticles for Water Treatment to Remove Radioactive Toxins -- Chapter 3. FeS2 Pyrite Nanostructures: An Efficient Performer in Photocatalysis -- Chapter 4. Green Synthesized Metal Oxide Nanomaterials Photo Catalysis in Combating Bacterial Infection -- Chapter 5. Progression in Fenton Process for the Waste Water Treatment -- Chapter 6. Electrochemical Aspects for Wastewater Treatment -- Chapter 7. TiO2 Based Nanocomposites for Photodegradation of Organic Dyes -- Chapter 8. Light Activated Nanoparticles for Antibacterial Studies -- Chapter 9. Green Technologies for Wastewater Treatment -- Chapter 10. Mesoporous Materials for Degradation of Textile Dyes.

Sommario/riassunto

This book presents comprehensive chapters on the latest research and applications in wastewater treatment using green technologies. Topics include mesoporous materials, TiO2 nanocomposites and magnetic nanoparticles, the role of catalysts, treatment methods such as photo-Fenton, photocatalysis, electrochemistry and adsorption, and anti-bacterial solutions. This book will be useful for chemical engineers, environmental scientists, analytical chemists, materials scientists and researchers.