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Nota di contenuto	Chapter 01 Photocatalytic Remediation of Organic Pollutants in Waste -- Chapter 02 Carbon Nitride/Metal Oxide Hybrids for Visible Light Harvesting and Water Remediation -- Chapter 03 Metal and Carbon Quantum Dots Photocatalysts for Water Purification -- Chapter 04 Photocatalytic Degradation of Azo Dyes in Water -- Chapter 05 Sonochemical Treatment of Textile Wastewater -- Chapter 06 Degradation Mechanism of Pollutants using Sono-Hybrid Advanced Oxidation Processes -- Chapter 07 Photocatalytic Nanomaterials for Bacterial Disinfection -- Chapter 08 Role of Membranes in Wastewater Treatment -- Chapter 09 Nanomaterials for the Photoremediation of Pollutants -- Chapter 10 Bismuth-Based Compounds as Visible Light Photocatalyst for Remediation and Water Splitting -- Chapter 11 Solar Photocatalytic Treatment of Tannery Effluents -- Chapter 12 Functionalized Ionic Liquids for fhe Photodegradation of Dyes -- Chapter 13 Photocatalytic Degradation of Chlorophenols and Antibiotics from Wastewater.
Sommario/riassunto	In the context of climate change and fossil fuel pollution, solar energy appears as a cheap and sustainable fuel for many environmental applications, yet the efficiency of techniques has to be improved. This book reviews recent methods and applications of photocatalysis for the treatment of wastewater containing bacteria, heavy metals, organic pollutants, dyes and tannery effluents. Basics of water pollution, polluted river ecosystems and membranes are also detailed.