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Autore	Singh Amit Kumar
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Altri autori (Persone)	SinghAjaya Kumar SusanAbu Bin Hasan
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Sommario/riassunto

This book presents a comprehensive exploration of the latest research in nanomaterial development for environmental pollution control. It delves into various themes, including the utilization of nanosensors in environmental monitoring, the creation of nano adsorbents and nanocatalysts for pollutant removal and degradation, and the potential application of nanomaterials and nanotechnology in remediating contaminated sites. The book also addresses potential risks associated with using nanomaterials in environmental pollution control, discussing nanotoxicology and the potential environmental and health impacts of nanomaterials. Furthermore, it explores the existing regulatory framework for nanomaterial usage in environmental pollution control and outlines future directions for developing and implementing nanomaterials in this domain. Featuring collected contributions from an international cross-section of active researchers in this broad and interdisciplinary field, this book caters to scientists, researchers, students, and professionals in environmental science, chemistry, materials science, and nanotechnology. It provides a detailed overview of recent advancements in nanomaterial development and application for environmental pollution control, emphasizing how nanotechnology holds promise for delivering effective solutions to environmental challenges.