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Soggetti	Food—Biotechnology Agriculture Nanochemistry Biotechnology Public health Water pollution Food Science Public Health Waste Water Technology / Water Pollution Control / Water Management / Aquatic Pollution
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Nanotechnology in food -- Strategic role of nanotechnology in fertilizers: Potentials and limitations.- Nano-fertilizers for balanced

crop nutrition.- Nanofertilizers and their smart delivery system.- Nanotechnology applied in agriculture: controlled release of agrochemicals -- Nanobiotechnology strategies for delivery of antimicrobials in agriculture and food.- Nano-developments for food packaging and labeling applications.- Strategic role of nanobiosensors in food: Benefits and bottlenecks.- Role of nanocarriers in delivery of nitric oxide for sustainable agriculture.- Nanoparticles- based delivery systems in plant genetic transformation.- Perspectives in nanocomposites for the slow and controlled release of agrochemicals: fertilizers and pesticides.- Nano-enhanced biotreatment for agricultural waste water -- Nanoecotoxicology: The-state-of-the-art -- Uptake and accumulation of engineered nanomaterials and their phytotoxicity to agricultural crops.

Sommario/riassunto

This book presents a comprehensive overview of new and emerging nanotechnologies. It includes aspects of nanoparticle monitoring, toxicity, and public perception, and covers applications that address both crop growing and treatment of agricultural wastewater. Topics include nanoagrochemicals (nanofertilizers, -pesticides, -herbicides), nanobiosensors, and nanotechnologies for food processing, packaging, and storage, crop improvement and plant disease control. The group of expert authors is led by an experienced team of editors. .
