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Titolo	Green Photocatalysts // edited by Mu. Naushad, Saravanan Rajendran, Eric Lichtfouse
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-15608-7
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (xv, 287 pages) : illustrations
Collana	Environmental Chemistry for a Sustainable World, , 2213-7114 ; ; 34
Disciplina	541.395
Soggetti	Environmental chemistry Water pollution Nanochemistry Nanotechnology Environmental Chemistry Waste Water Technology / Water Pollution Control / Water Management / Aquatic Pollution
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Principles and mechanisms of green photocatalysis -- Chapter 2. Synthesizing Green Photocatalyst using Plant Leaf Extract for Water Pollutant Treatment -- Chapter 3. Nanomaterials with different morphologies for photocatalysis -- Chapter 4. Metal and non-metal doped metal oxides and sulphides -- Chapter 5. Surface plasmon-enhanced photocatalysts -- Chapter 6. Reduced Graphene Oxide based Photocatalysis -- Chapter 7. Functionalized polymer-based composite photocatalysts -- Chapter 8. Role of conducting polymer nanostructures for advanced photocatalytic applications -- Chapter 9. Heterogenous Type I and Type II Catalysts for Degradation -- Chapter 10. Advances and Challenges in BiOX (X: Cl, Br, I)-Based Materials for Harvesting Sunlight.
Sommario/riassunto	This book presents advanced photocatalytic technologies for wastewater treatment. The fabrication, surface modification, roles and mechanisms of green catalysts are detailed. The catalysts include nanostructured catalysts, semiconductors, metal and non-metal doped

catalysts, surface plasmon materials, graphene oxide-based materials, polymer-based composite materials, heterogenous type I and type II catalysts.

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