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Descrizione fisica	1 online resource (396 pages)
Collana	De Gruyter Textbook
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Soggetti	Photocatalysis
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Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Frontmatter -- Preface -- Contents -- List of Contributing Authors -- Chapter 1 Synthesis and Characterization of Photocatalytic Materials -- Chapter 2 Photocatalytic Reactors Design for Water Applications -- Chapter 3 Fundamentals of Photocatalytic Hydrogen Production -- Chapter 4 Visible Light/Sunlight-Induced Photocatalytic Degradation of Antibiotics by Semiconductor Heterostructures -- Chapter 5 Self-Cleaning Surfaces: Experimental Advances and Surface Model Controversies -- Chapter 6 Photodegradation of Air Pollutants -- Chapter 7 Artificial Photosynthesis over Heterogeneous Photocatalysts -- Chapter 8 Degradation of Endocrine Disruptors, Pesticides, and Pharmaceuticals Using Photocatalysis -- Chapter 9 Commercial Applications and Future Trends of Photocatalytic Materials -- Index
Sommario/riassunto	This book is a concise and up-to-date introduction to the topic of photocatalysis. It covers the fundamentals of photocatalysis, design of photoreactors and modelling and simulations for photoreaction. Also, industrial applications such as hydrogen production, water disinfection, degradation of air pollutants, pesticides and pharmaceuticals are described.