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Titolo	Biohydrogen Production from Organic Wastes / / by Jianlong Wang, Yanan Yin
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ISBN	981-10-4675-1
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIII, 433 p. 149 illus.)
Collana	Green Energy and Technology, , 1865-3529
Disciplina	665.81
Soggetti	Renewable energy resources Environmental engineering Biotechnology Waste management Environmental sciences Renewable and Green Energy Environmental Engineering/Biotechnology Waste Management/Waste Technology Environmental Science and Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Characterization of organic wastes used for biohydrogen production -- Pretreatment of organic wastes for biohydrogen production -- Hydrogen-producing microorganisms -- Influencing factors for biohydrogen production -- Kinetics of biohydrogen production -- Optimization of process for biohydrogen production -- Bioreactors for biohydrogen production -- Microbial community analysis during biohydrogen production.
Sommario/riassunto	This book comprehensively introduces fundamentals and applications of fermentative hydrogen production from organic wastes, consisting of eight chapters, covering the microbiology, biochemistry and enzymology of hydrogen production, the enrichment of hydrogen-producing microorganisms, the pretreatment of various organic wastes for hydrogen production, the influence of different physicochemical factors on hydrogen production, the kinetic models and simulation of

biological process of fermentative hydrogen production, the optimization of biological hydrogen production process and the fermentative hydrogen production from sewage sludge. The book summarizes the most recent advances that have been made in this field and discusses bottlenecks of further development. This book gives a holistic picture of this technology and details the knowledge through illustrative diagrams, flow charts, and comprehensive tables. It is intended for undergraduate and graduate students who are interested in bioenergy and wastes management, researchers exploring microbial fermentation process, and engineers working on system optimization or other bioenergy applications.
