1. Record Nr. UNINA9910299601803321

Titolo	Green Nanotechnology for Biofuel Production / / edited by Neha Srivastava, Manish Srivastava, Himanshu Pandey, P. K. Mishra, Pramod W. Ramteke
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-75052-6
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (161 pages)
Collana	Biofuel and Biorefinery Technologies, , 2363-7609 ; ; 5
Disciplina	620.5
Soggetti	Renewable energy resources Nanotechnology Microbiology Renewable and Green Energy Nanotechnology and Microengineering Applied Microbiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter-1: Introduction to biofuels -- Chapter-2: Biofuels economics and policy -- Chapter-3: Biofuels production processes: an overview -- Chapter-4: Existing production technologies of various biofuels; Advancement and limitations -- Chapter-5: Nanotechnology and its energy applications -- Chapter-6: Nanotechnology in biohydrogen production -- Chapter-7: Nanotechnology for cellulases -- Chapter-8: Nanotechnology in algal fuel production -- Chapter-9: Nanotechnology in bioethanol/biobutanol production -- Chapter-10: Nanotechnology for biodiesel production.
Sommario/riassunto	This book focuses on the use of nanotechnology and nanomaterials in the production of biofuels. It describes the current production technologies for different biofuels and their limitations for commercialization, and discusses in detail how nanomaterials could reduce biofuel production costs. After an introduction to biofuels, the book examines biofuels economics and policy; biofuel production processes – advances and limitations; nanotechnology and its energy

applications; nanotechnology in biohydrogen production – for cellulases, in algal fuel, and in bioethanol/biobutanol and biodiesel production. It is a valuable resource for researchers and engineers.