1. Record Nr. UNINA9910677721503321

Titolo	Biomolecular engineering solutions for renewable specialty chemicals : microorganisms, products, and processes / / edited by R. Navanietha Krishnaraj, Rajesh K. Sani
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , [2022] ©2022
ISBN	1-119-77193-5 1-119-77195-1 1-119-77194-3
Descrizione fisica	1 online resource (482 pages)
Disciplina	660.62
Soggetti	Microbial biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	"This book focuses on advanced technologies in synthesis and purifications of value-added compounds. The intention of this book is to provide potential technologies that can help in commercializing the processes for the production of value-added products while also exposing the reader to cutting edge technologies. It presents strategies for overcoming current limitations in the biochemical synthesis processes including purification. Topics include: Rewiring Anaerobic microbial processes for methane and hythane production, Extremophilic bioprocessing of wastes to biofuels, Reverse methanogenesis of methane to biopolymers and value-added products, Gas to liquid biofuels, Cyanobacterial Biotechnology: Production of biopharmaceuticals, Extremozymes for increased rates of degradation of wastes and synthesis of value-added products, Protein engineering approaches to improve the enzymatic catalysis, Synthetic biology approaches for improved biomanufacturing, Photobioelectrochemical synthesis of biochemical compounds from sunlight, Bioelectrochemical systems for wastes to bioenergy and chemicals, Bioelectrosynthesis for synthesis of value-added compounds with improved electrodes and

electrode functionalization strategies, Membrane separation technologies for purification of enzymes, value added compounds, and organic acids/amino acids, Electrochemical methods for downstream processing."--