1. Record Nr. UNINA9910804399303321

Autore	Freud, Sigmund <1856-1939>
Titolo	L' uomo Mosè e la religione monoteistica : tre saggi / Sigmund Freud ; traduzione di Pier Cesare Bori, Giacomo Contri ed Ermanno Sagittario
Pubbl/distr/stampa	Torino, : Bollati Boringhieri, 2013
ISBN	978-88-339-2441-0
Descrizione fisica	152 p. ; 20 cm
Collana	I grandi pensatori ; 64
Disciplina	150.1952
Locazione	FLFBC
Collocazione	150.1 FREU 48
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Sulla copertina: edizione integrale di riferimento

2. Record Nr. UNINA9910739463203321

Titolo	Lignocellulose conversion : enzymatic and microbial tools for bioethanol production / / Vincenza Faraco, editor
Pubbl/distr/stampa	Heidelberg, Germany, : Springer, c2013
ISBN	3-642-37861-7
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (206 p.)
Altri autori (Persone)	FaracoVincenza
Disciplina	570
Soggetti	Life sciences Cellulosic ethanol Lignocellulose - Biotechnology Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Introduction: Potential of Cellulosic Ethanol -- Sources for Lignocellulosic Raw Materials for the Production of Ethanol -- The Pretreatment Step in Lignocellulosic Biomass Conversion: Current Systems and New Biological Systems -- The Saccharification Step: Trichoderma Reesei Cellulase Hyper Producer Strains.- The Saccharification Step: the Main Enzymatic Components -- Extremophilic (Hemi)cellulolytic Microorganisms and Enzymes -- The Alcohol Fermentation Step: the Most Common Ethanologenic Microorganisms Among Yeasts, Bacteria and Filamentous Fungi -- Other Ethanologenic Microorganisms -- Consolidated Bioprocessing for Improving Cellulosic Ethanol Production.
Sommario/riassunto	Lignocellulose conversion stands out as a key process for the sustainable production of renewable fuels and chemicals. The use of lignocellulosic materials for second generation ethanol production makes it possible to minimize the conflict between land use for food (and feed) and energy production. The lignocellulosic raw materials are less expensive and they present a more even geographical distribution than does conventional agricultural feedstock. Residual biomass such as agro-industrial wastes, agricultural and forest crop residues and the organic and paper fractions of municipal solid waste make up a large

percentage of lignocelluloses. Moreover, second generation ethanol production and use show lower greenhouse gas emissions than the first generation fuels, reducing environmental impacts, particularly in terms of climate change. Lignocellulose conversion into ethanol commonly involves a pretreatment to remove the barrier of lignin and expose plant cell wall polysaccharides, enzymatic saccharification of sugars with a cocktail of cellulolytic and hemicellulolytic enzymes, and fermentation of the sugars with ethanologenic microorganisms. The commercialization of the process to produce cellulosic ethanol is still limited due to the high costs of current technologies, above all the (hemi)cellulolytic enzymes required to hydrolyze the polysaccharides. The enzymatic hydrolysis may take place in a separate step followed by fermentation called separate hydrolysis and fermentation, or it may take place together with the fermentation in a simultaneous saccharification and fermentation of hexoses process or simultaneous saccharification and co-fermentation of both hexoses and pentoses. The ultimate objective is one-step consolidated bioprocessing of lignocellulose into bioethanol, in which all the steps take place in a single reactor where a single micro-organism or microbial consortium converts pre-treated biomass into ethanol. This book presents the main tools, the current technological developments and future prospects in cellulosic ethanol production and research.