1. Record Nr. UNINA9910787571203321 Autore Wertz Jean-Luc Titolo Lignocellulosic biorefineries / / Jean-Luc Wertz and Olivier Bedue Pubbl/distr/stampa Boca Raton:,: CRC Press,, [2013] ©2013 **ISBN** 0-429-10133-3 1-4665-7306-6 Descrizione fisica 1 online resource (540 p.) Disciplina 540 Lignocellulose Soggetti 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. Front Cover; Foreword; Table of Contents; Preface; Chapter 1 Nota di contenuto Introduction; Chapter 2 Photosynthesis, the Ultimate Beginning for Biorefineries; Chapter 3 Features of First Generation Biorefineries; Chapter 4 the Predominant Constituent of Biomass: Chapter 5 Enzymatic and non- Biological Degradation of Cellulose; Chapter 6 Hemicelluloses and Lignin, Other Key Constituents of Biomass; Chapter 7 Pretreatments of Lignocellulosic Biomass; Chapter 8 Biochemical Conversion of Biomass; Chapter 9 Thermochemical Conversion of Lignocellulosic Biomass; Chapter 10 Perspectives; Glossary; Back Cover Sommario/riassunto Written with a diverse audience in mind, this book describes the current status, development, and future prospects for the critical technology of second-generation biorefineries, specifically with a focus on lignocellulosic materials as feedstock. It provides an overview of the issues behind this technological transition, and it provides, in depth, the science and technology related to cellulose for production of bioethanol and other biofuels. The book also highlights the main emerging routes that will serve as the source of important bio-

generated products in the future.