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| Edizione | [1st ed.] |
| Descrizione fisica | 1 online resource (364 p.) |
| Collana | Fundamental Sciences. Chemistry |
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| Soggetti | Cellulose - Chemistry Cellulose |
| 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. |
| Nota di contenuto | Front Cover; First Foreword; Second Foreword; Table of contents; Preface; Chapter 1: Introduction; Chapter 2: Biosynthesis of Cellulose; Chapter 3: Structure and Properties : of Cellulose; Chapter 4: Swelling and Dissolution of Cellulose; Chapter 5: Enzymatic Hydrolysis of Cellulose; Chapter 6: Non-Biological Degradation of Cellulose; Chapter 7: Cellulose Derivatives; Chapter 8: Fuels and Chemicals from Biomass; Chapter 9: Perspectives; Glossary; Back Cover |
| Sommario/riassunto | Cellulose is a major constituent of papers made from plant fibers and combustible component of non-food energy crops. An ideal reference for scientists in natural and synthetic polymer research, this book applies basic biology as well as polymer and sugar chemistry to the study of cellulose. It provides key requirements for understanding the complex structure and biosynthesis of cellulose and its dissolution into new solvents. Cellulose Science and Technology also clarifies the enzymatic hydrolysis of cellulose leading to simple sugars that can be fermented into bioethanol. It examines the bac |