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Soggetti	Polymers Ceramics Glass Composites (Materials) Composite materials Organic chemistry Environmental chemistry Green chemistry Analytical chemistry Polymer Sciences Ceramics, Glass, Composites, Natural Materials Organic Chemistry Environmental Chemistry Green Chemistry Analytical Chemistry
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Preface -- Introduction -- Production and characteristics of cellulose from different sources -- Structure and Properties of Cellulose and its Derivatives -- Cellulose Activation and Dissolution -- Principles of cellulose derivatization -- Cellulose esters -- Etherification of cellulose -- Ionic cellulose ethers. .
Sommario/riassunto	This book summarizes recent progress in cellulose chemistry. The last 10 years have witnessed important developments, because

sustainability is a major concern. Biodegradable cellulose derivatives, in particular esters and ethers, are employed on a large scale. The recent developments in cellulose chemistry include unconventional methods for the synthesis of derivatives, introduction of novel solvents, e.g. ionic liquids, novel approaches to regioselective derivatization of cellulose, preparation of nano-particles and nano-composites for specific applications. These new developments are discussed comprehensively. This book is aimed at researchers and professionals working on cellulose and its derivatives. It fills an important gap in teaching, because most organic chemistry textbooks concentrate on the relatively simple chemistry of mono- and disaccharides. The chemistry and, more importantly, the applications of cellulose are only concisely mentioned.

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