1. Record Nr. UNISALENTO991003234259707536 Chung, T. C. Autore Titolo Functionalization of polyolefins [e-book] / T.C. (Mike) Chung Pubbl/distr/stampa San Diego: Academic Press, c2002 **ISBN** 9780121746513 0121746518 Descrizione fisica xii, 274 p. : ill. ; 24 cm Disciplina 661.814 Soggetti Polyolefins Electronic books. Lingua di pubblicazione Inglese **Formato** Risorsa elettronica Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references (p. [247]-256) and index Nota di contenuto Polyolefin Development and Prospects. -- General Approaches in Functionalization of Polyolefins. -- Direct Polymerization of B- and Sicontaining Monomers. -- Direct Polymerization of O-, N-, and Clcontaining Monomers. -- Functionalization by Post-polymerization Processes. -- Functionalization via Reactive Polyolefins. Containing Borane Groups. -- Functionalization via Reactive Polyolefins. Containing p-Methylstyrene Groups. -- Functionalization via Reactive Polyolefins Containing Unsaturated Groups. -- Synthesis of Polyolefins with a Terminal Functional Group. -- Synthesis of Functional Polyolefin Diblock Copolymers. -- Synthesis of Functional Polyolefin Graft Copolymers. -- New Maleic-anhydride-modified and Long-chainbranched Polyolefins Sommario/riassunto Polyolefins are the most widely used commercial polymers and their functionalization has been a long standing scientific challenge and an industrially important area. In recent decades significant progress has been made in the area, with exciting results reported in many journals.

Functionalization of Polyolefins is the first book to summarize the significant experimental results on the functionalization of polyolefins and classify them into several chemical methods (shown in each chapter of this book). The book also provides an update on the functional polyolefin materials available today. The two key subject categories covered are: \*Chemical approaches in the functionalization

of polyolefins \*New available polyolefin materials and their potential applications The book includes: \*The historic development and future prospects for polyolefins \*Functionalization chemistry, classified into four general approaches \*Chemical approaches with experimental results \*Functionalization approaches The book provides an invaluable reference for researchers in industry and academia interested in functionalization chemistry and polymers.€ It has been developed through Professor Chung's own teaching experience, both at Pennsylvania State University and on short courses. It is therefore ideally suited as a core text for advanced polymer chemistry and courses on polyolefins and polymers, as well as being a useful supplementary reference for introductory courses on polyolefin chemistry and materials. T.C. Mike Chung is Professor of Polymer Science in the Materials Science and Engineering Department, Pennsylvania State University, USA. He is one of the most experienced people in the field of polyolefin functionalization, with a wide-ranging knowledge gained through many years of experience both in academia and industry. Shows the available functionalisation approaches with a discussion of their scope and limitations Written by one of the most experienced people in this field