Record Nr. UNINA9910254044903321 Microwave-assisted Polymer Synthesis / / edited by Richard **Titolo** Hoogenboom, Ulrich S. Schubert, Frank Wiesbrock Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2016 **ISBN** 3-319-42241-3 Edizione [1st ed. 2016.] 1 online resource (VIII, 351 p.) Descrizione fisica Advances in Polymer Science, , 0065-3195 ; ; 274 Collana Disciplina 541.2254 Soggetti Polymers **Polymer Sciences** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographic references and index. Nota di contenuto Microwave-Assisted Synthesis: General Concepts -- Microwave-Assisted Step-Growth Polymerizations (From Polycondensation to C–C Coupling) -- Microwave-Assisted Free Radical Polymerizations --Microwave-Assisted Controlled Radical Polymerization -- Microwave-Assisted Synthesis of Polyesters and Polyamides by Ring-Opening Polymerization -- Microwave-Assisted Cationic Ring-Opening Polymerization of 2-Oxazolines -- Microwave-Assisted Polymer Modifications -- Microwave-Assisted Synthesis of Hybrid Polymer Materials and Composites -- Upscaling Microwave-Assisted Polymerizations -- Polymer Degradation under Microwave Irradiation. The series Advances in Polymer Science presents critical reviews of the Sommario/riassunto present and future trends in polymer and biopolymer science. It covers all areas of research in polymer and biopolymer science including chemistry, physical chemistry, physics, material science. The thematic volumes are addressed to scientists, whether at universities or in industry, who wish to keep abreast of the important advances in the covered topics. Advances in Polymer Science enjoys a longstanding tradition and good reputation in its community. Each volume is dedicated to a current topic, and each review critically surveys one aspect of that topic, to place it within the context of the volume. The volumes typically summarize the significant developments of the last 5

to 10 years and discuss them critically, presenting selected examples,

explaining and illustrating the important principles, and bringing together many important references of primary literature. On that basis, future research directions in the area can be discussed. Advances in Polymer Science volumes thus are important references for every polymer scientist, as well as for other scientists interested in polymer science - as an introduction to a neighboring field, or as a compilation of detailed information for the specialist. Review articles for the individual volumes are invited by the volume editors. Single contributions can be specially commissioned. Readership: Polymer scientists, or scientists in related fields interested in polymer and biopolymer science, at universities or in industry, graduate students.