Record Nr. UNINA9910787418803321 Handbook of metathesis . Volume 3 Polymer synthesis / / edited by **Titolo** Robert H. Grubbs and Ezat Khosravi Pubbl/distr/stampa Weinheim, Germany:,: Wiley-VCH,, 2015 ©2015 **ISBN** 3-527-69405-6 3-527-69407-2 Edizione [2nd ed.] Descrizione fisica 1 online resource (424 p.) Disciplina 547.412 Soggetti Polymerization Metathesis (Chemistry) Lingua di pubblicazione Tedesco **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto Cover; Contents; Preface; List of Contributors; Chapter 1 Synthesis of Homopolymers and Copolymers; 1.1 Introduction; 1.2 Initiators; 1.3 Monomers; 1.4 Synthesis of Polymers with Complex Architectures; 1.5 Stereochemistry and Sequence Control in ROMP; 1.6 Conclusion; References; Chapter 2 ROMP in Dispersed Media; 2.1 Introduction; 2.2 Emulsion ROMP; 2.2.1 Mini-emulsion ROMP; 2.2.2 Micro-emulsion ROMP; 2.2.3 Micellar ROMP; 2.2.4 ROMP in Nonaqueous Emulsions; 2.3 Dispersion ROMP; 2.3.1 Biomedical Applications of PNBE-PEO Core-Shell Nanoparticles: 2.4 Suspension ROMP 2.5 Formation of Nanoparticles 2.5.1 Photoactive ROMP Assemblies; 2.5.2 Miscellaneous; 2.6 Conclusion; References; Chapter 3 Telechelic Polymers; 3.1 Introduction; 3.2 Mono-telechelic Polymers; 3.2.1 Reaction with Substituted Vinyl Ethers; 3.2.2 Vinyl Lactone Quenching; 3.2.3 Terminal Cross Metathesis; 3.2.3.1 Using Symmetrical Olefins; 3.2.3.2 Using Asymmetrical Olefins; 3.2.4 Reaction with Oxygen; 3.2.5 Sacrificial Diblock Copolymer Synthesis; 3.2.6 Catalyst Prefunctionalization; 3.2.6.1 Functional Catalysts from Precursor Complexes; 3.2.6.2 Functional Catalysts via Cross Metathesis 3.2.7 Aldehyde Quenching3.3 Homo-telechelic Polymers; 3.3.1

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Sommario/riassunto

The second edition of this ultimate reference in this field is completely updated and features more than 80% new content, with emphasis on new developments in the field, especially in industrial applications. No other book covers the topic in such a comprehensive manner and in such high quality. Edited by the Nobel laureate R. H. Grubbs and E. Khosravi, this volume 3 of the 3-volume work focusses on polymer synthesis. With a list of contributors that reads like a ""Who's-Who"" of metathesis, this is an indispensable one-stop reference for chemists in academia and industry. Other available