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Nota di contenuto	Handbook of RAFT Polymerization; Contents; List of Contributors; 1 Introduction; 2 Quantum-Chemical Studies of RAFT Polymerization: Methodology, Structure-Reactivity Correlations and Kinetic Implications; 2.1 Introduction; 2.2 Methodology; 2.3 Computational Modeling of RAFT Kinetics; 2.4 Structure-Reactivity Studies; 2.5 Abbreviations; 3 The Mechanism and Kinetics of the RAFT Process: Overview, Rates, Stabilities, Side Reactions, Product Spectrum and Outstanding Challenges; 3.1 History; 3.2 Preequilibrium Kinetics and Mechanism; 3.3 Main Equilibrium Kinetics and Mechanism 3.4 Mechanisms for Rate Retardation/Inhibition - Outstanding Questions3.5 RAFT Copolymerization: Block and Statistical Copolymers; 3.6 The Kinetics and Mechanism of Star and Graft Polymer Formation Processes; 3.7 Mechanism and Kinetics as a Guide for the Synthetic Polymer Chemist; 4 The RAFT Process as a Kinetic Tool: Accessing Fundamental Parameters of Free Radical Polymerization; 4.1 Introduction; 4.2 Chain-Length-Dependent Termination: A Brief Overview; 4.3 RAFT Chemistry as a Tool for Elucidating the Chain Length Dependence of k(t); 4.4 Chain-Length-Dependent Propagation

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Sommario/riassunto

Spanning the entire field from fundamentals to applications in material science, this one-stop source is the first comprehensive reference for polymer, physical and surface chemists, materials scientists, chemical engineers, and those chemists working in industry. From the contents:
* Introduction: Living Free Radical Polymerization and the RAFT Process
* Fundamental Structure-Reactivity Correlations Governing the RAFT Process
* Mechanism and Kinetics
* The RAFT Process as a Kinetic Tool
* Theory and Practice in Technical Applications
* RAFT Polymerization in Bulk and Org
