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Nota di contenuto	Intro -- SILICON-BASED INORGANICPOLYMERS -- NOTICE TO THE READER -- CONTENTS -- PREFACE -- GENERAL REVIEW ON POLYSILOXANE SYNTHESIS -- ABBREVIATIONS -- INTRODUCTION -- THE ELECTRONIC STRUCTURE OF THE SILOXANE BOND -- REACTIVITY OF THE SILOXANE BOND -- PROPERTIES AND APPLICATIONS -- Thermal and Chemical Stability -- Elastomeric Properties -- Surface Properties -- Dielectric Properties -- Biocompatibility -- High Technology Applications -- Functional Silanes - Precursors to Polysiloxanes -- Industrial Synthesis of Polysiloxanes -- POLYSILOXANES BY POLYCONDENSATION ROUTES -- Hydrolytic Polycondensation of Chlorosilanes -- Hydrolytic Polycondensation of Alkoxysilanes -- Homofunctional Polycondensation of Silanols -- Heterofunctional Condensation Involving Silanol Groups -- Non-Hydrolytic Ways of Siloxane Synthesis -- Electrochemical Synthesis of Oligosiloxanes -- Ring-Opening Polymerization of Cyclosiloxanes -- Non-Equilibrium (Kinetically Controlled) ROP of Cyclosiloxanes -- Anionic Ring Opening Polymerization of Cyclosiloxanes -- Cationic Ring Opening Polymerization of Cyclosiloxanes -- Other Methods of Polymerization of Cyclosiloxanes -- Siloxane Functional Polymers and Copolymers -- Three-Dimensional Polysiloxane Architectures: Silsesquioxanes, Hyperbranched Polymers and Dendrimers -- CLOSING REMARKS -- REFERENCES -- SILICONES IN INDUSTRIAL APPLICATIONS -- ABSTRACT

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