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Nota di contenuto	Polymer chemistry and synthetic polymers by Puoci F et al -- Biodegradable Natural polymers by Domb A et al -- Chemical and Physical Properties of Polymers for Biomedical Use by Ambrosio L et al -- Overview on cell-biomaterial interactions by Rodrigues Um L et al -- Polymers in Orthopedic Surgery by Ambrose C et al -- Polymers in Ophthalmology by Calles JA. et al -- Polymers in Tissue Engineering by Heise RL et al -- Polymers for Surgery by Suzuki S and Ikada Y -- Polymers in dentistry by Thomé T et al -- Polymers in Oncology by Curcio M et al -- Polymers in Drug Delivery: Fundamentals by Díaz-Gómez L et al -- Drug Delivery Systems: Smart Polymeric Materials by Cassano R, Trombino S -- Polymers in Nephrology by Vienken J and Gottschalk O -- Polymers in wound repair by Francesko A et al -- Polymers in cardiology by Sternberg K et al -- Recent Advances in

Hemocompatible Polymers for Biomedical Applications by Brisbois EJ et al -- Polymer based biosensors for medical applications by Solène Cherré¹ S and Rozlosnik N.

Sommario/riassunto

The book provides an up-to-date overview of the diverse medical applications of advanced polymers. The book opens by presenting important background information on polymer chemistry and physicochemical characterization of polymers. This serves as essential scientific support for the subsequent chapters, each of which is devoted to the applications of polymers in a particular medical specialty. The coverage is broad, encompassing orthopedics, ophthalmology, tissue engineering, surgery, dentistry, oncology, drug delivery, nephrology, wound dressing and healing, and cardiology. The development of polymers that enhance the biocompatibility of blood-contacting medical devices and the incorporation of polymers within biosensors are also addressed. This book is an excellent guide to the recent advances in polymeric biomaterials and bridges the gap between the research literature and standard textbooks on the applications of polymers in medicine.
