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Hydrogels; 2.4 Defining Bio-Responsive Hydrogels
2.5 Bio-Responsive Chemical Hydrogels 2.5.1 Actuation Based on Changing the Cross-Linking Density; 2.5.2 Actuation Based on Changes in Electrostatic Interactions; 2.5.3 Actuation Based on Conformational Changes; 2.6 Bio-Responsive Physical Hydrogels; 2.6.1 Enzyme-Responsive Physical Hydrogels; 2.7 Electroactive Chemical Hydrogels; 2.8 Conclusion; References; 3 Stimuli-Responsive and 'Active' Polymers in Drug Delivery; 3.1 Introduction; 3.2 Drug Delivery: Examples, Challenges and Opportunities for Polymers; 3.2.1 Oral Drug Delivery Systems; 3.2.2 Parenteral Drug Delivery
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5.2 Fabrication

Sommario/riassunto

Giving fundamental information on one of the most promising families of smart materials, electroactive polymers (EAP) this exciting new titles focuses on the several biomedical applications made possible by these types of materials and their related actuation technologies. Each chapter provides a description of the specific EAP material and device configuration used, material processing, device assembling and testing, along with a description of the biomedical application. Edited by well-respected academics in the field of electroactive polymers with contributions from renowned international
