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Particles; 2.3.3 LbL Deposition; 2.3.4 Plasma Treatment
3.7 COMMERCIAL COATINGS3.8 CONCLUSIONS AND OUTLOOK; REFERENCES; Chapter 4 Self-Healing Polymeric Coatings; 4.1 INTRODUCTION; 4.1.1 Self-Healing Materials; 4.1.2 Self-Healing Polymeric Coatings; 4.2 SELF-HEALING APPROACHES FOR FUNCTIONAL POLYMERIC COATINGS; 4.2.1 Intrinsic Healing; 4.2.2 Extrinsic Healing; 4.3 FUNCTIONALITIES RECOVERY AND POSSIBLE APPLICATIONS; 4.3.1 Surface Properties: Wettability and Anti-(bio)adhesion; 4.3.2 Barrier and Corrosion Protection; 4.3.3 Interfacial Bonding Between Dissimilar Materials; 4.4 CONCLUDING REMARKS AND CHALLENGES; ACKNOWLEDGMENTS; REFERENCES
Chapter 5 Stimuli-Responsive Polymers as Active Layers for Sensors

Sommario/riassunto

Focusing on a variety of coatings, this book provides detailed discussion on preparation, novel techniques, recent developments, and design theories to present the advantages of each function and provide the tools for better product performance and properties. Presents advantages and benefits of properties and applications of the novel coating types Includes chapters on specific and novel coatings, like nanocomposite, surface wettability tunable, stimuli-responsive, anti-fouling, antibacterial, self-healing, and structural coloring Provides detailed discussion on recent developments in the field as well as current and future perspectives Acts as a guide for polymer and materials researchers in optimizing polymer coating properties and increasing product performance.

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