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Nota di contenuto	Front Cover; Contents; Preface; Editors; Contributors; Chapter 1 - Membranes in Nuclear Science and Technology: Membrane Modification as a Tool for Performance Improvement; Chapter 2 - Use of Impedance Spectroscopy for Characterization of Modified Membranes; Chapter 3 - Reduction of Membrane Fouling by Polymer Surface Modification; Chapter 4 - Modifications of Polymeric Membranes by Incorporating Metal/Metal Oxide Nanoparticles; Chapter 5 - Development of Antifouling Properties and Performance of Nanofiltration Membranes by Interfacial Polymerization and Photografting Techniques Chapter 6 - Integrating Hydrophobic Surface-Modifying Macromolecules into Hydrophilic Polymers to Produce Membranes for Membrane DistillationChapter 7 - Plasma Modification of Polymer Membranes; Chapter 8 - Surface Modification of Electrospun Nanofiber and Nanofibrous Membranes; Chapter 9 - Development of Membranes for Pervaporation by Membrane Surface Modification and Incorporation of Inorganic Particles; Chapter 10 - Tailor-Made Polymeric Membranes for Advanced Crystallization of Biomolecules Chapter 11 - Chemical Cross-Linking Modifications of Polymeric

Membranes for Gas Separation Applications Chapter 12 - Development of Fuel Cell Polymer Electrolyte Membranes by Radiation-Induced Grafting with Electron-Beam Irradiation; Chapter 13 - Modification of Sulfonated Poly(Ether Ether Ketone) for DMFC Application; Chapter 14 - Nanofiltration Membrane in Textile Effluent Treatment; Chapter 15 - Future Prospects; Back Cover

Sommario/riassunto

Membrane Modification: Technology and Applications is written for engineers, scientists, graduate students, and researchers in the field of membrane science and technology, materials science, applied physics, chemistry, and environmental science. The book presents the complete range of membrane modification techniques used to increase efficiency of membrane processes. The book starts with an examination of the use of membrane modification to optimize the performance of membranes used in industry. It concludes by demonstrating how membrane modification can improve separation
