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Polyelectrolyte Multilayers on Curved Surfaces; 1.5 Conclusions and Perspectives; References
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2.4.1 Integrating Specific Biofunctionality for Targeting2.4.2 Adsorption of Antibodies on the Surface of Biomimetic Microcapsules; 2.5 Conclusions and Perspectives; References; 3: FoF1-ATP Synthase-Based Active Biomimetic Systems; 3.1 Introduction; 3.2 FoF1-ATPase-A Rotary Molecular Motor; 3.2.1 Structure of H+FoF1-ATPase; 3.2.2 Direct Observation of the Rotation of Single ATPase Molecules; 3.3 Reconstitution of FoF1-ATPase in Cellular Mimic Structures; 3.3.1 FoF1-ATPase-incorporated Liposome-A Classical Biomembrane Mimic; 3.3.1.1 Bacteriorhodopsin uses Light to Pump Protons
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4.3 Active Biomimetic Systems Based on the Kinesin-Microtubule Complex

Sommario/riassunto

This handy reference details state-of-the-art preparation of molecular assemblies of biotechnologically relevant biomimetic systems (artificial proteins, peptides, molecular motors, photosensitive systems) with an emphasis on biomimetic membranes, capsules, and interfaces. Medical applications such as drug release, gene therapy, and tissue engineering as well as biosensing, biocatalysis, and energy storage are highlighted.