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5.5.1.2 Metal Complexes in Each Branching Center5.5.2 Dendrimers Based on Organic Chromophores; 5.5.3 Dendrimers Containing Porphyrins; 5.5.4 Host-Guest Systems; 5.5.5 Photoinduced Electron Transfer; 5.6 Other Systems; 5.6.1 Polyelectrolytes; 5.6.2 Polymers; 5.6.3 Rotaxanes; 5.6.4 Zeolites; References; 6 Photoinduced Charge Separation and Solar Energy Conversion; 6.1 Introduction; 6.2 Natural Reaction Centers; 6.2.1 Introduction; 6.2.2 Bacterial Photosynthesis; 6.2.3 Photosystem II; 6.3 Artificial Reaction Centers; 6.3.1 Introduction; 6.3.2 Dyads; 6.3.3 Triads; 6.3.4 Tetrads and Pentads
6.3.5 Antenna-Reaction Center Systems

Sommario/riassunto

The miniaturization of bulky devices and machines is a process that confronts us on a daily basis. However, nanoscale machines with varied and novel characteristics may also result from the enlargement of extremely small building blocks, namely individual molecules. This bottom-up approach to nanotechnology is already being pursued in information technology, with many other branches about to follow. Written by a team of experienced authors headed by Vincenzo Balzani, one of the pioneers in the development of molecular machinesCovers such diverse aspects as sensors, memory components