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Sommario/riassunto

"Functional Materials textbook is not simply a review of the vast body of literature of the recent years, as it holds the focus upon various aspects of application. Moreover, it selects only a few topics in favor of a solid and thorough treatment of the relevant aspects. This book comes in a good time, when a large body of academic literature has been accumulated and is waiting for a critical inspection in the light of the real demands of application." Professor Gerhard Wegner, Max-Planck Institute for Polymer Research, Mainz, Germany The chapters cover three important fields in the development of functional materials: energy, environment, and biomedical applications. These topics are explained and discussed from both an experimental and a theoretical perspective. Functional organic and inorganic materials are at the center of most technological breakthroughs. Therefore, the understanding of material properties is fundamental to the development of novel functionalities and applications.