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Sommario/riassunto	Numerous teams and laboratories around the world are working on the development of supercapacitors, while their constantly improving performance is enabling wider use. The major challenges are to improve the parameters of supercapacitors, primarily energy density and operating voltage, as well as miniaturization, optimization, energy efficiency, economy and environmental acceptance. This book provides an overview of new supercapacitor techniques and technologies that are changing the present and future of electricity storage, with a particular emphasis on self-powering sensor and transmitter systems. The latest achievements in the production, modeling, characterization and applications of supercapacitors are considered. Modern materials supercapacitor production, which points to unsuspected application possibilities, is especially considered. Examples of transition metal oxides (TMOs) and fundamental carbon allotropes, including fullerenes, carbon nanotubes, and graphene-based nanocomposites for supercapacitor electrodes, are presented.