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Sommario/riassunto	Preface In today's energy-dependent world, electrochemical devices for energy storage and conversion such as batteries, fuel cells and electrochemical supercapacitors (ES') have been recognized as the most important portion among all energy storage and conversion technologies. Electrochemical supercapacitor, also known as supercapacitor, ultracapacitor, or electrochemical double layer

capacitor, is a special capacitor that can store relatively high energy density compared to conventional capacitor. Possessing a number of high-impact characteristics, such as fast charging, long charge-discharge cycles and broad operating temperature ranges, ES' have wide spread applications in hybrid or electrical vehicles, electronics, aircrafts, and smart grids. Although there are still some challenges in ES systems such as relatively low energy density and high cost at current technology state, with further development, ES' can not only in tandem with batteries and fuel cells serve as power devices, but also work as a standalone high energy storage device. To facilitate the research and development, we believe a book containing both fundamentals and applications of ES technology is definitely needed. The best known book in the field is B. E. Conway's *Electrochemical Supercapacitor-Scientific Fundamentals and Technological Applications* published in 1999. This book gives the first comprehensive illustration and summary of the development of electrochemical supercapacitor in 20th century. Our book will focus on the introduction to the electrochemical supercapacitors from more technical and practical aspects and crystallization of the technology development in the past decade--

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