1. Record Nr. UNINA9910557771103321 Autore González Manuela Titolo Advanced Battery Technologies: New Applications and Management Systems Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021 Descrizione fisica 1 electronic resource (190 p.) Soggetti Information technology industries Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto In recent years, lithium-ion batteries (LIBs) have been increasingly contributing to the development of novel engineering systems with energy storage requirements. LIBs are playing an essential role in our society, as they are being used in a wide variety of applications, ranging from consumer electronics, electric mobility, renewable energy storage, biomedical applications, or aerospace systems. Despite the remarkable achievements and applicability of LIBs, there are several features within this technology that require further research and improvements. In this book, a collection of 10 original research papers addresses some of those key features, including: battery testing methodologies, state of charge and state of health monitoring, and system-level power electronics applications. One key aspect to emphasize when it comes to this book is the multidisciplinary nature of the selected papers. The presented research was developed at university departments, institutes and organizations of different disciplines, including Electrical Engineering, Control Engineering,

Computer Science or Material Science, to name a few examples. The

overall result is a book that represents a coherent collection of multidisciplinary works within the prominent field of LIBs.