1. Record Nr. UNINA9910792135103321

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Titolo	A systems approach to lithium-ion battery management / / Phillip Weicker
Pubbl/distr/stampa	Boston : , : Artech House, , [2014] [Piscataqay, New Jersey] : , : IEEE Xplore, , [2013]
ISBN	1-5231-1692-7 1-60807-660-1
Descrizione fisica	1 online resource (301 p.)
Collana	Power engineering
Disciplina	621.312424
Soggetti	Lithium ion batteries Power electronics Battery chargers
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Formerly CIP.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Introduction; 1.1 Battery Management Systems and Appli; 1.2 State of the Art; 1.3 Challenges; 2 Lithium-Ion Battery Fundamentals; 2.1 Battery Operation; 2.2 Battery Construction; 2.3 Battery Chemistry; 2.4 Safety; 2.5 Longevity; 2.6 Performance; 2.7 Integration; 3 Large-Format Systems; 3.1 Definition; 3.2 Balance of Plant; 3.3 Load Interface; 3.4 Variation and Divergence; 3.5 Application Parameters; 4 System Description; 4.1 Typical Inputs; 4.2 Typical Outputs; 4.3 Typical Functions; 4.4 Summary; 5 Architectures; 5.1 Monolithic; 5.2 Distributed; 5.3 Semi-Distributed 5.4 Connection Methods5.5 Additional Scalability; 5.6 Battery Pack Architectures; 5.7 Power Supply; 5.8 Control Power; 5.9 Computing Architecture; 6 Measurement; 6.1 Cell Voltage Measurement; 6.2 Current Measurement ; 6.2.1 Current Sensors; 6.2.2 Current Sense Measurement; 6.3 Synchronization of Current and Volta; 6.4 Temperature Measurement; 6.5 Measurement Uncertainty and Battery ; 6.6 Interlock Status; 7 Control; 7.1 Contactor Control; 7.2 Soft Start or Precharge Circuits; 7.3 Control Topologies; 7.4 Contactor Opening Transients; 7.5 Chatter Detection; 7.6 Economizers 7.7 Contactor Topologies7.8 Contactor Fault Detection; 8 Battery

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Sommario/riassunto

Previously limited to heavy and bulky lead-acid storage batteries, large format batteries were used only where absolutely necessary as a means of energy storage. The improved energy density, cycle life, power capability, and durability of lithium ion cells has given us electric and hybrid vehicles with meaningful driving range and performance, grid-tied energy storage systems for integration of renewable energy and load leveling, backup power systems and other applications. This book discusses battery management system (BMS) technology for large format lithium-ion battery packs from a systems perspective. It covers the future of BMS; provides new ways to generate, use, and store energy; free us from the perils of non-renewable energy sources; provides a full update on BMS technology, covering software, hardware, integration, testing, and safety. --