

The handbook focuses on a complete outline of lithium-ion batteries. Just before starting with an exposition of the fundamentals of this system, the book gives a short explanation of the newest cell generation. The most important elements are described as negative / positive electrode materials, electrolytes, seals and separators.

Lithium-ion batteries have been used in mobile consumer devices in great numbers since 1991. This is due to their low weight and high energy content. They are mainly used in cell phones, followed by notebooks. Almost all notebooks already were equipped with lithium-ion batteries in ...

This chapter presents an overview of the key concepts, a brief history of the advancement and factors governing the electrochemical performance metrics of battery technology. It also contains in-depth explanation of the electrochemistry and basic operation of lithium-ion batteries.

The recent book *Lithium-Ion Batter-ies: Fundamentals and Applications* offers a comprehensive and systematic coverage of the operating principles, underlying theory, design, production, and use of Li-ion batteries. The text starts with a brief historical background of ...

Lithium-ion batteries are ordinarily used for moveable physics and electrical vehicles and are growing in quality for military and part applications. Over the past many decades, the quantity of... Expand. Highly Influenced. PDF. 3 Excerpts.

Fundamentals and applications of lithium-ion batteries in electric drive vehicles / Jiuchun Jiang, Caiping Zhang. pages cm Includes bibliographical references and index. ISBN 978-1-118-41478-1 (cloth) 1. Electric vehicles-Batteries. 2. Lithium ion batteries. I 629.

*Lithium-Ion Batteries: Fundamentals and Applications* offers a comprehensive treatment of the principles, background, design, production, and use of lithium-ion batteries. Based on a solid foundation of long-term research work, this authoritative monograph

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