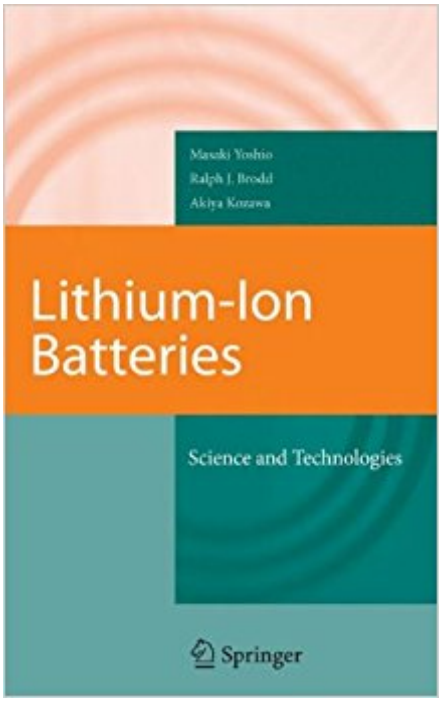
Lithium-Ion Batteries: Science And Technologies



Synopsis

Here in a single source is an up-to-date description of the technology associated with the Li-Ion battery industry. It will be useful as a text for researchers interested in energy conversion for the direct conversion of chemical energy into electrical energy.

Book Information

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Customer Reviews

In developing electrochemical cells, one must keep in mind that the real goal is to package and control all the materials and components (cathode and anode active materials, electrolytes, separators, current collectors etc.) in a limited volume to enable maximum energy storage without creating any safety problems. In this manner, Li-Ion batteries (LIB) were first introduced to practical use in 1991. This book contains an in-depth review of electrode materials, electrolytes and additives for LIB, as well as indicators of the future directions for continued maturation of the LIB.

Lithium-ion battery research and development continues at a fast pace now as it has throughout its twenty-nine year history. This means there is a need for an up to date text on the subject every few years and this book fills that role. With such books there is an urgency to get to print before the material becomes dated, and so the authors and publishers can be forgiven for the odd typographical error.This book is better than most in its quality and number of illustrations, both diagrams and photographs, which complement the well written narratives. The style of each chapter is reasonably consistent even though each chapter has different authors. This makes the book very

readable, particularly as it does not burden the reader with complex and unnecessary mathematical equations.This is the best and most up to date book on lithium-ion batteries available today. It should be considered a "must have" for researchers and students of the technology. Engineers might be disappointed that battery systems and applications are not as well covered as they were in Nazri and Pistoia's book (which had an almost identical title) but they too might be interested in learning about the technical advances since that particular book was published.

if you are looking a book that is specialized on li-ion batteries this is the book. it gives you all information about all materials used and how they are used.however if you are looking for comperable data this is not the book to buy.