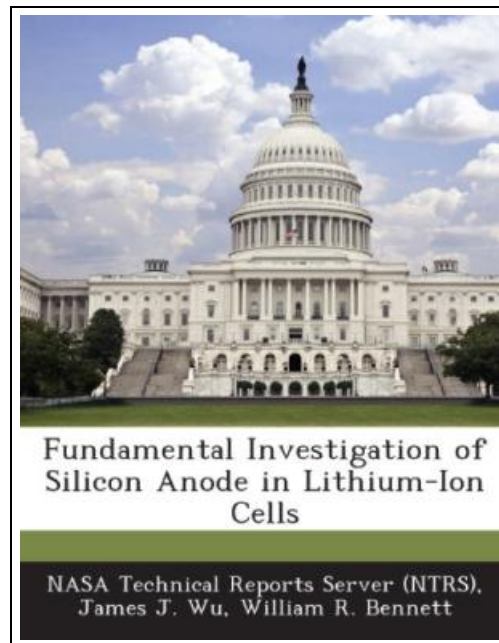


Fundamental Investigation of Silicon Anode in Lithium-Ion Cells



Filesize: 1.4 MB

Reviews

A fresh eBook with a brand new standpoint. It can be rally exciting throgh looking at period of time. I am delighted to inform you that this is the greatest book i have read through during my individual existence and may be he very best publication for ever.
(Era Thompson)

FUNDAMENTAL INVESTIGATION OF SILICON ANODE IN LITHIUM-ION CELLS



To get **Fundamental Investigation of Silicon Anode in Lithium-Ion Cells** eBook, make sure you refer to the hyperlink beneath and save the document or get access to additional information which might be in conjunction with FUNDAMENTAL INVESTIGATION OF SILICON ANODE IN LITHIUM-ION CELLS ebook.

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.Silicon is a promising and attractive anode material to replace graphite for high capacity lithium ion cells since its theoretical capacity is 10 times of graphite and it is an abundant element on Earth. However, there are challenges associated with using silicon as Li-ion anode due to the significant first cycle irreversible capacity loss and subsequent rapid capacity fade during cycling. Understanding solid electrolyte interphase (SEI) formation along with the lithium ion insertion/de-insertion kinetics in silicon anodes will provide greater insight into overcoming these issues, thereby lead to better cycle performance. In this paper, cyclic voltammetry and electrochemical impedance spectroscopy are used to build a fundamental understanding of silicon anodes. The results show that it is difficult to form the SEI film on the surface of a Si anode during the first cycle; the lithium ion insertion and de-insertion kinetics for Si are sluggish, and the cell internal resistance changes with the state of lithiation after electrochemical cycling. These results are compared with those for extensively studied graphite anodes. The understanding gained from this study will help to design better Si anodes, and the combination of cyclic voltammetry with impedance spectroscopy provides a useful tool to evaluate the effectiveness of the design modifications on the Si anode performance.



[Read Fundamental Investigation of Silicon Anode in Lithium-Ion Cells Online](#)



[Download PDF Fundamental Investigation of Silicon Anode in Lithium-Ion Cells](#)



[Download ePub Fundamental Investigation of Silicon Anode in Lithium-Ion Cells](#)

Related PDFs



[PDF] A Dog of Flanders: Unabridged; In Easy-to-Read Type (Dover Children's Thrift Classics)

Access the web link beneath to read "A Dog of Flanders: Unabridged; In Easy-to-Read Type (Dover Children's Thrift Classics)" document.

[Save ePub »](#)



[PDF] The Belated Baby Healing Yourself after the Long Journey of Infertility by Jill S Browning and Kelly James Enger 2008 Paperback

Access the web link beneath to read "The Belated Baby Healing Yourself after the Long Journey of Infertility by Jill S Browning and Kelly James Enger 2008 Paperback" document.

[Save ePub »](#)



[PDF] I Am Reading: Nurturing Young Children s Meaning Making and Joyful Engagement with Any Book

Access the web link beneath to read "I Am Reading: Nurturing Young Children s Meaning Making and Joyful Engagement with Any Book" document.

[Save ePub »](#)



[PDF] Dom's Dragon - Read it Yourself with Ladybird: Level 2

Access the web link beneath to read "Dom's Dragon - Read it Yourself with Ladybird: Level 2" document.

[Save ePub »](#)



[PDF] Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 6: Gran s New Blue Shoes (Hardback)

Access the web link beneath to read "Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 6: Gran s New Blue Shoes (Hardback)" document.

[Save ePub »](#)



[PDF] Noah's Ark: A Bible Story Book With Pop-Up Blocks (Bible Blox)

Access the web link beneath to read "Noah's Ark: A Bible Story Book With Pop-Up Blocks (Bible Blox)" document.

[Save ePub »](#)

**[PDF] Big Machines - Read it Yourself with Ladybird: Level 2**

Follow the hyperlink beneath to download and read "Big Machines - Read it Yourself with Ladybird: Level 2" PDF file.

[Save ePub »](#)

**[PDF] The Gingerbread Man - Read it Yourself with Ladybird**

Follow the hyperlink beneath to download and read "The Gingerbread Man - Read it Yourself with Ladybird" PDF file.

[Save ePub »](#)

**[PDF] Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package**

Follow the hyperlink beneath to download and read "Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package" PDF file.

[Save ePub »](#)

**[PDF] Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English]**

Follow the hyperlink beneath to download and read "Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English]" PDF file.

[Save ePub »](#)

**[PDF] Peter Rabbit: the Angry Owl - Read it Yourself with Ladybird: Level 2**

Follow the hyperlink beneath to download and read "Peter Rabbit: the Angry Owl - Read it Yourself with Ladybird: Level 2" PDF file.

[Save ePub »](#)

**[PDF] Klara the Cow Who Knows How to Bow (Fun Rhyming Picture Book/Bedtime Story with Farm Animals about Friendships, Being Special and Loved. Ages 2-8) (Friendship Series Book 1)**

Follow the hyperlink beneath to download and read "Klara the Cow Who Knows How to Bow (Fun Rhyming Picture Book/Bedtime Story with Farm Animals about Friendships, Being Special and Loved. Ages 2-8) (Friendship Series Book 1)" PDF file.

[Save ePub »](#)