



Electrochemistry of Silicon and Its Oxide

By Xiaoge Gregory Zhang

Download now

Read Online 

Electrochemistry of Silicon and Its Oxide By Xiaoge Gregory Zhang

It may be argued that silicon, carbon, hydrogen, oxygen, and iron are among the most important elements on our planet, because of their involvement in geological, biological, and technological processes and phenomena. All of these elements have been studied exhaustively, and voluminous material is available on their properties. Included in this material are numerous accounts of their electrochemical properties, ranging from reviews to extensive monographs to encyclopedic discourses. This is certainly true for C, H, O, and Fe, but it is true to a much lesser extent for Si, except for the specific topic of semiconductor electrochemistry. Indeed, given the importance of the electrochemical processing of silicon and the use of silicon in electrochemical devices (e. g. , sensors and photoelectrochemical cells), the lack of a comprehensive account of the electrochemistry of silicon in aqueous solution at the fundamental level is surprising and somewhat troubling. It is troubling in the sense that the non-photoelectrochemistry of silicon seems “to have fallen through the cracks,” with the result that some of the electrochemical properties of this element are not as well known as might be warranted by its importance in a modern technological society. Dr. Zhang’s book, *Electrochemical Properties of Silicon and Its Oxide*, will go a long way toward addressing this shortcoming. As with his earlier book on the electrochemistry of zinc, the present book provides a comprehensive account of the electrochemistry of silicon in aqueous solution.

 [Download Electrochemistry of Silicon and Its Oxide ...pdf](#)

 [Read Online Electrochemistry of Silicon and Its Oxide ...pdf](#)

Electrochemistry of Silicon and Its Oxide

By Xiaoge Gregory Zhang

Electrochemistry of Silicon and Its Oxide By Xiaoge Gregory Zhang

It may be argued that silicon, carbon, hydrogen, oxygen, and iron are among the most important elements on our planet, because of their involvement in geological, biological, and technological processes and phenomena. All of these elements have been studied exhaustively, and voluminous material is available on their properties. Included in this material are numerous accounts of their electrochemical properties, ranging from reviews to extensive monographs to encyclopedic discourses. This is certainly true for C, H, O, and Fe, but it is true to a much lesser extent for Si, except for the specific topic of semiconductor electrochemistry. Indeed, given the importance of the electrochemical processing of silicon and the use of silicon in electrochemical devices (e. g. , sensors and photoelectrochemical cells), the lack of a comprehensive account of the electrochemistry of silicon in aqueous solution at the fundamental level is surprising and somewhat troubling. It is troubling in the sense that the non-photoelectrochemistry of silicon seems “to have fallen through the cracks,” with the result that some of the electrochemical properties of this element are not as well known as might be warranted by its importance in a modern technological society. Dr. Zhang’s book, *Electrochemical Properties of Silicon and Its Oxide*, will go a long way toward addressing this shortcoming. As with his earlier book on the electrochemistry of zinc, the present book provides a comprehensive account of the electrochemistry of silicon in aqueous solution.

Electrochemistry of Silicon and Its Oxide By Xiaoge Gregory Zhang Bibliography

- Sales Rank: #5426098 in Books
- Published on: 2001-10-15
- Original language: English
- Number of items: 1
- Dimensions: 9.21" h x 1.19" w x 6.14" l, 1.97 pounds
- Binding: Hardcover
- 510 pages

 [Download Electrochemistry of Silicon and Its Oxide ...pdf](#)

 [Read Online Electrochemistry of Silicon and Its Oxide ...pdf](#)

Editorial Review

Review

'Dr. Zhang provides an encyclopedic compilation of the literature on the many electrochemical effects that impact the processing of silicon and its native oxide. This book will be an important reference for the silicon specialist and may have within its pages that key detail which will explain process anomalies to the MEMS practitioner.'

Steve Senturia, Weller Professor of Electrical Engineering, Massachusetts Institute of Technology

'This book is a must for every laboratory where semiconductor electrochemistry is actively pursued. It is a welcome and recommended addition to every library of an institution where electrochemistry is a subject of active research.'

Journal of Solid State Electrochemistry, 7:5

Users Review

From reader reviews:

Shirley Frazier:

Why don't make it to be your habit? Right now, try to ready your time to do the important take action, like looking for your favorite book and reading a reserve. Beside you can solve your problem; you can add your knowledge by the book entitled Electrochemistry of Silicon and Its Oxide. Try to the actual book Electrochemistry of Silicon and Its Oxide as your pal. It means that it can to get your friend when you feel alone and beside regarding course make you smarter than before. Yeah, it is very fortunated for you personally. The book makes you far more confidence because you can know everything by the book. So , let us make new experience and also knowledge with this book.

David Kane:

What do you ponder on book? It is just for students as they are still students or it for all people in the world, exactly what the best subject for that? Merely you can be answered for that question above. Every person has different personality and hobby for every other. Don't to be forced someone or something that they don't wish do that. You must know how great and important the book Electrochemistry of Silicon and Its Oxide. All type of book would you see on many options. You can look for the internet sources or other social media.

Patrick Richards:

Your reading sixth sense will not betray an individual, why because this Electrochemistry of Silicon and Its Oxide book written by well-known writer whose to say well how to make book which can be understand by anyone who all read the book. Written in good manner for you, dripping every ideas and producing skill only for eliminate your own personal hunger then you still skepticism Electrochemistry of Silicon and Its Oxide as good book but not only by the cover but also through the content. This is one publication that can break don't ascertain book by its cover, so do you still needing another sixth sense to pick this kind of!? Oh come on your reading through sixth sense already alerted you so why you have to listening to an additional sixth

sense.

Magdalena McKinney:

As we know that book is very important thing to add our information for everything. By a publication we can know everything we would like. A book is a range of written, printed, illustrated or maybe blank sheet. Every year has been exactly added. This book Electrochemistry of Silicon and Its Oxide was filled about science. Spend your free time to add your knowledge about your research competence. Some people has several feel when they reading a book. If you know how big advantage of a book, you can really feel enjoy to read a publication. In the modern era like at this point, many ways to get book which you wanted.

Download and Read Online Electrochemistry of Silicon and Its Oxide By Xiaoge Gregory Zhang #0C4QB3FV5NH

Read Electrochemistry of Silicon and Its Oxide By Xiaoge Gregory Zhang for online ebook

Electrochemistry of Silicon and Its Oxide By Xiaoge Gregory Zhang Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Electrochemistry of Silicon and Its Oxide By Xiaoge Gregory Zhang books to read online.

Online Electrochemistry of Silicon and Its Oxide By Xiaoge Gregory Zhang ebook PDF download

Electrochemistry of Silicon and Its Oxide By Xiaoge Gregory Zhang Doc

Electrochemistry of Silicon and Its Oxide By Xiaoge Gregory Zhang Mobipocket

Electrochemistry of Silicon and Its Oxide By Xiaoge Gregory Zhang EPub