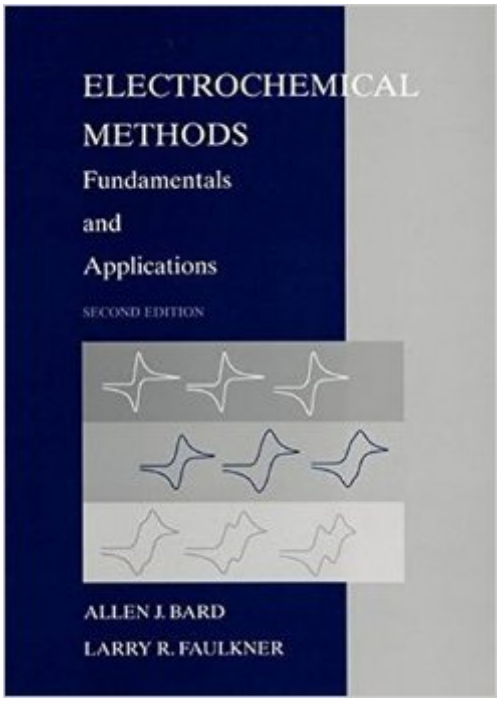
Electrochemical Methods: Fundamentals And Applications



Synopsis

This edition is fully revised to reflect the current state off the field. * Significant additions include ultramicroelectrodes, modified electrodes, and scanning probe methods. * Many chapters have been modified and improved, including electrode kinetics, voltammetric methods, and mechanisms of coupled chemical reactions.

Book Information

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Average Customer Review: 4.6 out of 5 starsÂ Â See all reviewsÂ (18 customer reviews)

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Customer Reviews

The 1st edition (the 1980 version) was the gold standard of electrochemistry books, and the authors have done an excellent job of revision for the 2001 2nd edition. In particular, the sections on impedance and modern pulse methods flow nicely. The spectroscopy section has been updated as well. I have not worked many problems, but they seem useful in elucidating concepts. The mathematics is of a higher order than one expects from electrochemistry, showing the impact of kinetics on electrode processes nicely. I recommend this text for electrochemistry courses highly.

Professor Bard is the world’s foremost authority in electrochemistry, and this is a very thorough documentation of the basic principles that are essential for understanding this vital field. The underlying mathematics are presented in fine detail, and the text also covers many important applications and analytical methods of electrochemistry.

I am studying Lithium Ion battery modeling. I found that this book serves as a excellent tool to bridge

the gap between the undergraduate book on electrochemistry and the one by Newman. To do modeling, you absolutely need the book by Newman. But Newman's book is hard to read. Bard's book gives you good ideas on how things work and Newman's tells you precisely how things work. Without having a good idea first, it is hard to understand the more precise and general language used by Newman.I am only interested in modeling. My review is more relevant to that aspect.

I am a graduate student in Chemistry that studies Electrochemistry. This text is a must! It describes all the fundamentals of electrochemistry but also goes in-depth on any topic you could imagine in electrochem. Awesome textbook from Bard.

The authors go out of their way to describe background information including mathematics and chemistry. As with all texts, it is best supplemented by a good professor's course, but it is readable even without such. It is also good as a resource for active research, and most any laboratory that does any electrochemistry will have at least one copy.

This is a must own for any chemist who does more than just dabbling in electrochemistry. It's a one-stop shop for classical techniques that you can adapt for modern research.

This book is a great one to brush up on your fundamentals of electrochemistry and a must-have-on-your-bookshelf item for electrochemists. The latest edition also covers sections on modern day applications of electrochemical methods and serves as a good reference to understand the techniques.

Classical textbook. Famous and is on the table of almost every electrochemists. Onlycomplaint is that the price is very high... But this goes true for almost every textbooks.

Molecular Biology, 190) Fundamentals of Nursing: Human Health and Function (Craven, Fundamentals of Nursing: Human Health and Functionraven, Fundamentals of Nurs) Electrochemical Power Sources: Batteries, Fuel Cells, and Supercapacitors (The ECS Series of Texts and Monographs) Electrochemical Techniques in Corrosion Science and Engineering (Corrosion Technology) Electrode Processes and Electrochemical Engineering Electrochemical Systems (Prentice-Hall International Series in the Physical and Chemical Engineering Sciences) Electrochemical Energy Storage for Renewable Sources and Grid Balancing Electrochemical Engineering Principles Electrochemical Systems, 3rd Edition Atlas of Electrochemical Equilibria in Aqueous Solutions Modern Batteries: An Introduction to Electrochemical Power Sources, 2nd Edition Lead Generation: Methods and Strategies, Volume 67 (Methods and Principles in Medicinal Chemistry) Counterfactuals and Causal Inference: Methods and Principles for Social Research (Analytical Methods for Social Research)