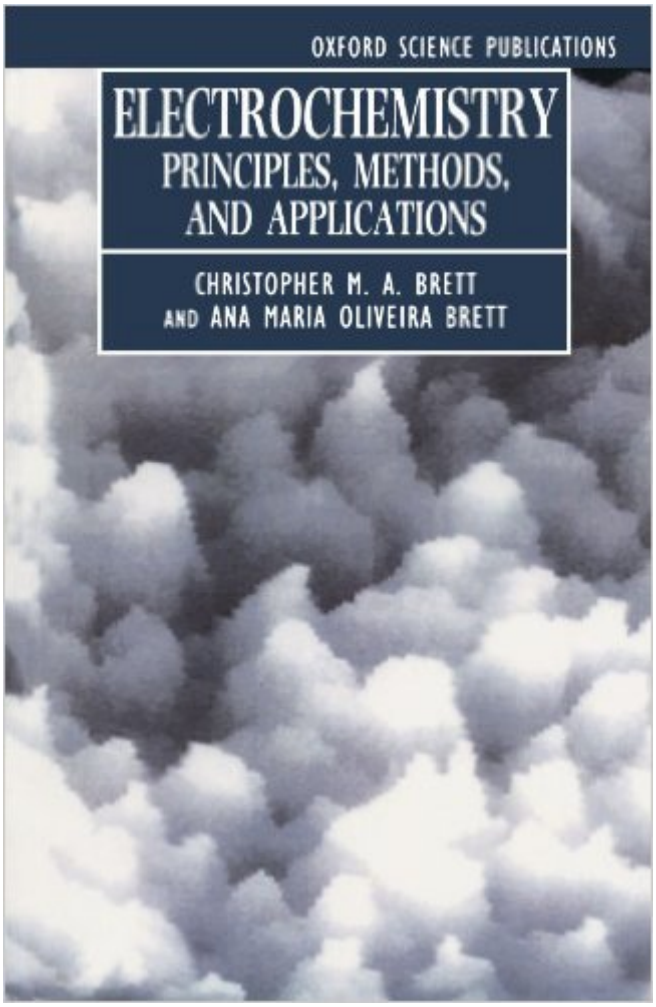
Electrochemistry: Principles, Methods, And Applications (Oxford Science Publications)



Synopsis

This much-needed, comprehensive text offers an introduction to electrochemistry. The book begins at an elementary level and progresses through to the most recent advances in this interdisciplinary subject. The first part introduces the fundamental principles of thermodynamics, kinetics, and mass transport associated with electrode reactions. The second part considers experimental methods that are available to study electrode and electrochemical processes, such as steady-state with forced convection, linear sweep, step/pulse voltametric techniques and impedance, modern surface analysis, and microscopic and spectroscopic procedures that complement the electrochemical information. The final part of the book discusses wide-ranging applications, including sensors, industrial electrolysis and batteries, corrosion studies, and the rapidly expanding field of bioelectrochemistry. Easily accessible appendices provide the necessary mathematics, principles of electrical circuits, and basics of digital simulation. The breadth of coverage insures that this volume will be valuable not only to students in chemistry, biochemistry, industrial chemistry, chemical engineering, and materials science, but to researchers needing proper introduction to electrochemistry.

Book Information

Series: Oxford Science Publications
Paperback: 464 pages
Publisher: Oxford University Press; 1 edition (July 22, 1993)
Language: English
ISBN-10: 0198553889
ISBN-13: 978-0198553885
Product Dimensions: 9.2 x 1.1 x 6.1 inches
Shipping Weight: 1.8 pounds (View shipping rates and policies)
Average Customer Review: 5.0 out of 5 starsÂ Â See all reviewsÂ (2 customer reviews)
Best Sellers Rank: #805,878 in Books (See Top 100 in Books) #25 inÂ Books > Science & Math > Chemistry > Physical & Theoretical > Electrochemistry #209 inÂ Books > Science & Math > Chemistry > Analytic #244 inÂ Books > Science & Math > Chemistry > Industrial & Technical

Customer Reviews

Exactly as described; quick delivery!

excellent book

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