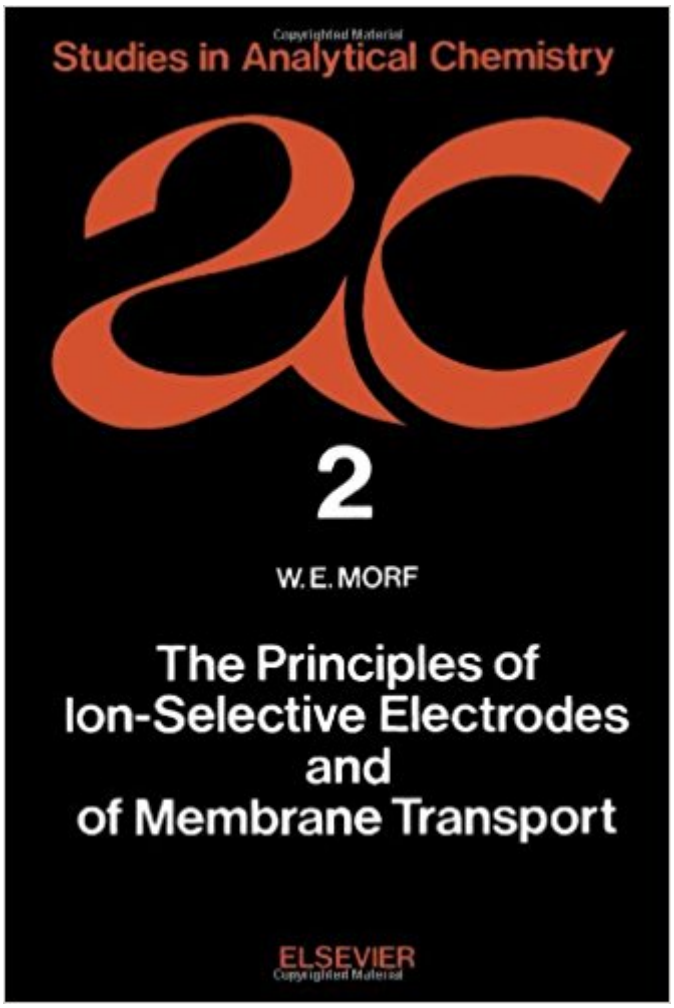
The Principles Of Ion-Selective Electrodes And Of Membrane Transport (Studies In Analytical Chemistry)



Synopsis

** Vol #2 ** ISBN # 0444997490 From the back cover: This book is designed to provide a comprehensive survey of the theory and the fundamentals of ion-selective electrodes and of passive membrane transport. The field is treated in depth and self-consistently, the entire discussion being based on a unified membrane model. The present work thus bridges the gap between earlier, more specific approaches. Nevertheless, emphasis is placed on simple derivations and explicit results. Many practical examples are given to illustrate the fundamental relationships. ** Part A is devoted to a general discussion of membrane phenomena. It includes an exhaustive treatment of diffusion potentials and membrane potentials, as well as detailed analysis of free and carrier mediated ion transport across artificial membranes. For convenience, the key results are summarized in Chapter 9. ** Part B covers ion-selective electrodes. It treats in great detail the principles of solid-state membrane electrodes, liquid ion-exchange membrane electrodes, neutral carrier membrane electrodes, glass electrodes, gas sensors, and enzyme electrodes....

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