



entropy



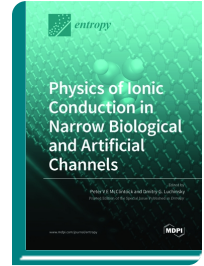
Special Issue Reprint

Physics of Ionic Conduction in Narrow Biological and Artificial Channels

www.mdpi.com/books/reprint/4357

Edited by
Peter V E McClintock
Dmitry G. Luchinsky

ISBN 978-3-0365-1646-2 (Hardback)
ISBN 978-3-0365-1645-5 (PDF)



The book reprints a set of important scientific papers applying physics and mathematics to address the problem of selective ionic conduction in narrow water-filled channels and pores. It is a long-standing problem, and an extremely important one. Life in all its forms depends on ion channels and, furthermore, the technological applications of artificial ion channels are already widespread and growing rapidly. They include desalination, DNA sequencing, energy harvesting, molecular sensors, fuel cells, batteries, personalised medicine, and drug design. Further applications are to be anticipated.

The book will be helpful to researchers and technologists already working in the area, or planning to enter it. It gives detailed descriptions of a diversity of modern approaches, and shows how they can be particularly effective and mutually reinforcing when used together. It not only provides a snapshot of current cutting-edge scientific activity in the area, but also offers indications of how the subject is likely to evolve in the future.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/4357

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.