



membranes



Special Issue Reprint

Electrical Properties of Model Lipid Membranes

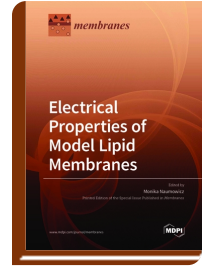
www.mdpi.com/books/reprint/5403

Edited by

Monika Naumowicz

ISBN 978-3-0365-4058-0 (Hardback)

ISBN 978-3-0365-4057-3 (PDF)



Biological membranes are essential components of the living systems and processes occurring with their participation are related mainly to electric phenomena, such as signal transduction, the existence of membrane potentials, and transport through the membrane. It is well known that the universal model of the cell membrane structure is the lipid bilayer, which constitutes the environment for integral and surface membrane proteins. Thus, much attention has been given to the study of the organization and properties of these structures concerning both experimental and theoretical aspects. As systematic examinations are impeded by the complexity of the natural membranes, the best approach to conducting detailed physical and chemical studies of biological membranes is to use simplified well-defined model lipid membranes. Among the most commonly used are liposomes, planar lipid membranes, membranes on solid substrates, and lipid monolayers on the free surface. Studies of the electrical properties of model lipid membranes have been carried out for many years. However, there are still many issues that have not been verified experimentally and for which the existing results are incomplete or inconsistent. Therefore, the main objective of this book was to collect recent scientific and review articles on the electrical properties of model lipid membranes. This objective has been successfully achieved, for which I express heartfelt appreciation to all authors and reviewers for their excellent contributions.



Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/5403

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.