



antibiotics



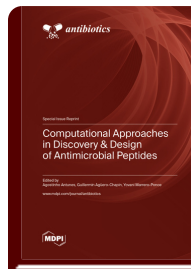
Special Issue Reprint

Computational Approaches in Discovery & Design of Antimicrobial Peptides

www.mdpi.com/books/reprint/7471

Edited by
Agostinho Antunes
Guillermin Agüero-Chapin
Yovani Marrero-Ponce

ISBN 978-3-0365-7961-0 (Hardback)
ISBN 978-3-0365-7960-3 (PDF)



Antimicrobial resistance remains a major concern in medicine, especially during the COVID-19 pandemic, where microbial infections were frequent complications. To combat drug-resistant pathogens, there has been a renewed interest in the use of antimicrobial peptides (AMPs). This reprint focuses on the in-silico approaches used for the rational discovery and design of AMPs. Such computational methodologies range from classical homology-based and machine-learning prediction algorithms to complex similarity networks and evolutionary algorithms that use models of sequence evolution. Furthermore, the reprint explores the improvement of high-throughput screening techniques in the discovery of AMPs from biological samples, which has also led to the evolution of computational approaches that aid in this biodiscovery process. The reprint contains original research and review papers, which serve as valuable references for researchers dedicated to peptide drug development.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/7471

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.