







Special Issue Reprint

# Recent Developments on Protein-Ligand Interactions

www.mdpi.com/books/reprint/5097

Edited by Alexandre G. de Brevern

ISBN 978-3-0365-3394-0 (Hardback) ISBN 978-3-0365-3393-3 (PDF)



Protein-ligand interactions play a fundamental role in most major biological functions. The number and diversity of small molecules that interact with proteins, whether naturally or not, can quickly become overwhelming. They are as essential as amino acids, nucleic acids or membrane lipids, enabling a large number of essential functions. One need only think of carbohydrates or even just ATP to be certain. They are also essential in drug discovery. With the increasing structural information of proteins and protein-ligand complexes, molecular modelling, molecular dynamics, and chemoinformatics approaches are often required for the efficient analysis of a large number of such complexes and to provide insights. Similarly, numerous computational approaches have been developed to characterize and use the knowledge of such interactions, which can lead to drug candidates. "Recent Developments on Protein-Ligand Interactions: From Structure, Function to Applications" was dedicated to the different aspect of protein-ligand analysis and/or prediction using computational approaches, as well as new developments dedicated to these tasks. It will interest both specialists and non-specialists, as the presented studies cover a very large spectra in terms of methodologies and applications. It underlined the variety of scientific area linked to these questions, i.e., chemistry, biology, physics, informatics, bioinformatics, structural bioinformatics and chemoinformatics





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.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

