



*biosensors*



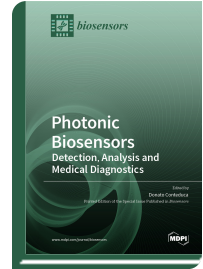
*Special Issue Reprint*

## **Photonic Biosensors: Detection, Analysis and Medical Diagnostics**

[www.mdpi.com/books/reprint/5507](http://www.mdpi.com/books/reprint/5507)

Edited by  
Donato Conteduca

ISBN 978-3-0365-3971-3 (Hardback)  
ISBN 978-3-0365-3972-0 (PDF)



The role of nanotechnologies in personalized medicine is rising remarkably in the last decade because of the ability of these new sensing systems to diagnose diseases from early stages and the availability of continuous screenings to characterize the efficiency of drugs and therapies for each single patient. Recent technological advancements are allowing the development of biosensors in low-cost and user-friendly platforms, thereby overcoming the last obstacle for these systems, represented by limiting costs and low yield, until now.

In this context, photonic biosensors represent one of the main emerging sensing modalities because of their ability to combine high sensitivity and selectivity together with real-time operation, integrability, and compatibility with microfluidics and electric circuitry for the readout, which is fundamental for the realization of lab-on-chip systems.

This book, “Photonic Biosensors: Detection, Analysis and Medical Diagnostics”, has been published thanks to the contributions of the authors and collects research articles, the content of which is expected to assume an important role in the outbreak of biosensors in the biomedical field, considering the variety of the topics that it covers, from the improvement of sensors’ performance to new, emerging applications and strategies for on-chip integrability, aiming at providing a general overview for readers on the current advancements in the biosensing field.



Order Your Print Copy  
You can order print copies at  
[www.mdpi.com/books/reprint/5507](http://www.mdpi.com/books/reprint/5507)

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.