







Special Issue Reprint

Wearable and Nearable Biosensors and Systems for Healthcare

www.mdpi.com/books/reprint/4030

Edited by Marco Di Rienzo Ramakrishna Mukkamala

ISBN 978-3-0365-0974-7 (Hardback) ISBN 978-3-0365-0975-4 (PDF)



Biosensors and systems in the form of wearables and "nearables" (i.e., everyday sensorized objects with transmitting capabilities such as smartphones) are rapidly evolving for use in healthcare. Unlike conventional approaches, these technologies can enable seamless or ondemand physiological monitoring, anytime and anywhere. Such monitoring can help transform healthcare from the current reactive, one-size-fits-all, hospital-centered approach into a future proactive, personalized, decentralized structure. Wearable and nearable biosensors and systems have been made possible through integrated innovations in sensor design, electronics, data transmission, power management, and signal processing. Although much progress has been made in this field, many open challenges for the scientific community remain, especially for those applications requiring high accuracy. This book contains the 12 papers that constituted a recent Special Issue of Sensors sharing the same title. The aim of the initiative was to provide a collection of state-of-the-art investigations on wearables and nearables, in order to stimulate technological advances and the use of the technology to benefit healthcare. The topics covered by the book offer both depth and breadth pertaining to wearable and nearable technology. They include new biosensors and data transmission techniques, studies on accelerometers, signal processing, and cardiovascular monitoring, clinical applications, and validation of commercial devices.





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

