



*sensors*

IMPACT  
FACTOR  
**3.9**

Indexed in:  
**PubMed**

CITESCORE  
**6.8**

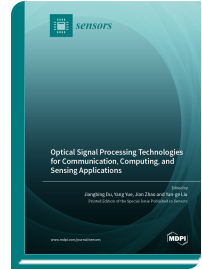
*Special Issue Reprint*

## **Optical Signal Processing Technologies for Communication, Computing, and Sensing Applications**

[www.mdpi.com/books/reprint/7078](http://www.mdpi.com/books/reprint/7078)

Edited by  
Jiangbing Du  
Yang Yue  
Jian Zhao  
Yan-ge Liu

ISBN 978-3-0365-7152-2 (Hardback)  
ISBN 978-3-0365-7153-9 (PDF)



Optical technology is one of the key technologies that have been widely used for communication, computing and sensing. By utilizing different degrees of freedom for photon, optical signals can be detected and processed in different dimensions including amplitude, phase, polarization, time, frequency, and spatial mode. Multidimensional signal processing technologies have thus been broadly studied for improving the performance of communication, sensing and even computing systems. Recently, innovative optical signal processing methods and devices have been emerged to serve those needs driven by applications including but not limited to optical fiber transmission, supercontinuum generation, phase conjugation, free space optical communication, optical beamforming, photonic integration, fiber amplification, pose estimation and so on. This Special Issue aims to explore those emerging and enabling technologies of signal processing methods and devices for optical communication, optical computing, and optical sensing. The Special Issue consists of two review papers, one communication and seven articles within the areas of optical fiber transmission, specialty fiber design, 3D pose estimation, free space communication, digital signal processing, as well as photonic integration. Optical signal processing powered next generation communication, computing and sensing can be highly

Order Your Print Copy

You can order print copies at

[www.mdpi.com/books/reprint/7078](http://www.mdpi.com/books/reprint/7078)



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.