



*electronics*



*Special Issue Reprint*

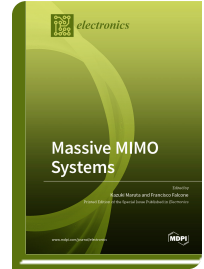
## Massive MIMO Systems

[www.mdpi.com/books/reprint/2483](http://www.mdpi.com/books/reprint/2483)

Edited by

Kazuki Maruta

Francisco Falcone



ISBN 978-3-03936-016-1 (Softback)

ISBN 978-3-03936-017-8 (PDF)

Multiple-input, multiple-output (MIMO), which transmits multiple data streams via multiple antenna elements, is one of the most attractive technologies in the wireless communication field. Its extension, called ‘massive MIMO’ or ‘large-scale MIMO’, in which base station has over one hundred of the antenna elements, is now seen as a promising candidate to realize 5G and beyond, as well as 6G mobile communications. It has been the first decade since its fundamental concept emerged. This Special Issue consists of 19 papers and each of them focuses on a popular topic related to massive MIMO systems, e.g. analog/digital hybrid signal processing, antenna fabrication, and machine learning incorporation. These achievements could boost its realization and deepen the academic and industrial knowledge of this field.



Order Your Print Copy

You can order print copies at

[www.mdpi.com/books/reprint/2483](http://www.mdpi.com/books/reprint/2483)

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.