Special Issue

Extremely Large-Scale MIMO for 6G Wireless Transmission

Message from the Guest Editors

Future 6G wireless networks are envisioned to provide a much higher spectral and energy efficiency, higher connection density, and lower latency. The unique channel propagation characteristics, such as the spherical wavefront and non-stationarity, brought in by XL-MIMO is likely to lead to challenges as well as potential opportunities in wireless transmission designs. Accordingly, this Special Issue calls for recent advances related to XL-MIMO. Topics of interest in this Special Issue include, but are not limited to: Channel model for XL-MIMO;
Electromagnetic information theory for XL-MIMO;
Hybrid far- and near-field transmission for XL-MIMO;
New array architectures for XL-MIMO, such as dynamic metasurface antennas (DMA) and holographic MIMO;
Low-complexity and distributed processing techniques for XL-MIMO;
Applications of XL-MIMO in novel scenarios, such as satellite communications, integrated sensing and communications (ISAC), and massive connectivity;
Artificial intelligence (AI) and machine learning (ML) for XL-MIMO transmission.

Guest Editors

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Deadline for manuscript submissions

closed (15 July 2023)

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Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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