



Next-Generation Indoor Wireless Communication

Guest Editors:

Prof. Dr. Jiliang Zhang

College of Information Science
and Engineering, Northeastern
University, Shenyang 110819,
China

Prof. Dr. Guanjun Xu

Space Information Research
Institute and Zhejiang Key
Laboratory of Space Information
Sensing and Transmission,
Hangzhou Dianzi University,
Hangzhou, China

Deadline for manuscript
submissions:

closed (15 May 2025)

Message from the Guest Editors

More than 80% of wireless traffic takes place indoors; however, substantial research is still needed in this area. First, indoor wireless channel must be investigated carefully as building structures have a significant impact on in-building wireless networks, e.g., blockage, reflection, diffraction, etc. Second, short-range communication techniques, such as ultra-dense small cell networks, mmwave/Terahertz communications, near-field MIMO system, etc., have great potential to further enhance indoor wireless networks. Third, building material with integrated wireless devices, e.g., reconfigurable intelligent surface, transparent antennas and concrete embedded antennas, is promising to eliminate negative consequences on weight, space, and visual impact of wireless infrastructure. Fourth, complex indoor radio propagation brings challenge to indoor wireless sensing in the emerging integrated sensing and communication system. Finally, building wireless performance, as a new concept that bridges the gap between wireless communications and building design communities, provides an efficient pathway to enhance indoor wireless in the building design stage.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and
Telecommunications,
Politecnico di Torino, 10129
Torino, Italy

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 guestedited by leading experts in selected topics of interest.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank: JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Contact Us

Electronics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/electronics
electronics@mdpi.com
[X@electronicsMDPI](https://x.com/electronicsMDPI)