

## Special Issue

# Advanced Technologies in Future Wireless Communication

### Message from the Guest Editors

With the rapid growth of global communication demands, wireless communication technology is undergoing a new wave of transformation. Compared to traditional methods, emerging technologies demand significantly enhanced capabilities in sensing, intelligence, and security. Key technologies expected to meet these demands include integrated sensing and communications (ISAC), AI-based wireless communication, and quantum-safe cryptography. ISAC enables both high-quality wireless communication and high-precision sensing, playing a crucial role in improving frequency efficiency. AI-based wireless networks offer on-demand capabilities and services tailored to the needs of diverse application scenarios. Quantum-safe cryptographic algorithms can withstand the threats posed by quantum computing, making them as a vital component in the future of wireless information security. This Special Issue will focus on introducing cutting-edge technologies in wireless communication and promoting in-depth research into key shared theories and technologies in fields such as sensing, intelligence, and security.

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### Guest Editors

Dr. Hongliang He  
Prof. Dr. QingHe Du  
Dr. Shanxiang Lyu

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### Deadline for manuscript submissions

closed (20 July 2025)



## Applied Sciences

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### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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