# Special Issue

# Integrated Sensing and Communication (ISAC) in 6G

### Message from the Guest Editors

Integrated sensing and communication (ISAC) is an emerging technology that integrates communication and sensing functions into a single system, offering new possibilities for future wireless networks. A key challenge in ISAC systems is optimizing the trade-offs between sensing and communication performance. Both functions often compete for limited resources, making it essential to balance their performance for maximum system efficiency. Equally important are channel models that account for the correlation between the sensed channel and the communication channel. This Special Issue will focus on trade-off analysis and advanced channel modeling in ISAC systems. Contributions will also explore applications in vehicular communications, where ISAC enables enhanced safety and low-latency communication, and in industrial environments, where it facilitates real-time monitoring, predictive maintenance, and efficient resource management. We invite researchers to submit works that address both the theoretical foundations and practical implementations of ISAC, providing insights into the future of integrated systems in these domains.

### Guest Editors

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### Deadline for manuscript submissions

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