

## Special Issue

# Millimeter Wave and Terahertz Antennas and Front-End Devices for Wireless Communications

### Message from the Guest Editors

Currently, higher frequency bands, especially millimeter-wave (mmWave) and terahertz (THz) frequency bands, are used for improving the transmission data rate for emerging wireless communication systems such as 5G, 6G, satellite, etc. Since the wavelength decreases, the design and associated technologies of antennas and front-end devices face difficulties, such as a lack of precise models, high loss, difficult fabrication, difficulty in obtaining measurements, etc. Thus, advanced antennas and front-end device designs and technologies require exploration. This Special Issue aims to highlight recent advances in the development, modeling and testing of mmWave and THz antennas and front-end devices, as well as their applications and novel challenges. Topics include, but are not limited to:

- Advanced mmWave and THz antenna and antenna array design;
- Transmission line technologies;
- mmWave and THz front-end passive devices, such as filters, multiplexers, OMT, etc.;
- mmWave and THz front-end active devices, such as amplifiers, mixers, source, etc.;
- Antenna measurements;
- MIMO technology;
- mmWave and THz communication systems.

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### Guest Editors

Prof. Dr. Yuan Yao

Prof. Dr. Shiwei Qu

Dr. Xiaohu Cheng

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### Deadline for manuscript submissions

closed (30 June 2023)



## Sensors

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### Editor-in-Chief

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