Special Issue

Recent Development of Millimeter-Wave Technologies

Message from the Guest Editor

This Special Issue thus aims to highlight recent developments in novel technologies in this broadband RF spectrum, with a particular focus on sub-THz coverage (100 GHz–300 GHz). Contributions may cover, but are not limited to, the following areas:

- Novel system architectures and front-ends for various applications, as presented above;
- Development of integrated fabrication technologies (MMIC, MHMIC, SIW, ...);
- Up- and down-conversion techniques: for example, the development of integrated mixers in terms of efficiency, size, conversion gain, broadband, local oscillator (LO) power reduction;
- Low-noise amplifiers: noise figure reduction, power consumption, gain, etc;
- Broadband power detectors, filters, multipliers, phase shifters, equalizers, and other ubiquitous modules;
- Integrated antennas in mm wave front-ends: reduced size, efficiency, gain, directivity;
- Mm wave signal generation techniques: low-cost, increased efficiency, frequency accuracy, low phase-noise, etc.;
- LO synchronization and carrier recovery techniques;
- Novel modulation and demodulation techniques;
- Measurement techniques and equipment.

Guest Editor

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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