Special Issue

Recent Advances of FMCW-Based Radar Sensors

Message from the Guest Editors

Recent years have witnessed rapid advancements in semiconductor devices, signal processing, and deployment of frequency-modulated continuous-wave radar sensors. By measuring the speed, distance, and angle or various objects. FMCW radar sensors have manifested their important roles in the automotive industry, internet-of-things applications, through-thewall surveillance, smart building, human-computer interface, as well as emerging biomedical and health care systems. With the help of antenna-on-chip and antenna-in-package technologies, FMCW radar sensors can be completely integrated in low-cost semiconductor products for mass production and deployment. In the current IoT era, millions of connected sensors are being deployed, which is raising different concerns among scientists, industry leaders, government officials, and final users. These concerns are especially focused in the areas of privacy and security, where FMCW radars have clear advantages over other types of sensors. This Special Issue highlights progress in the hardware, software, signal processing, security, and applications of FMCW radar sensors that will help to enable the massive deployment of these sensors.

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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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