Special Issue

Signal Detection and Processing of Sensor Arrays

Message from the Guest Editors

Signal detection and processing of sensor arrays involve the acquisition, analysis, and interpretation of signals from multiple sensors to extract useful information. The versatility of sensor arrays, which consist of multiple sensors placed in a specific geometric arrangement. allows for a wide range of applications where extracting useful information from multiple sensors is crucial. Beamforming is a key technique used in sensor arrays. It involves combining the signals received by different sensors with appropriate weights to form a composite signal. It is also essential to align the acquired signals in time to ensure accurate signal processing. Advanced signal processing methods, such as adaptive algorithms and machine learning, are often employed to improve detection performance and extract valuable information from the sensor array data. The design of optimal algorithms for signal detection, as well as the estimation of the parameters of signals obtained from sensor arrays, are also important. This Special Issue aims to collect high-quality research papers and review articles focusing on a broad range of topics related to sensor arrays and their applications.

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Message from the Editor-in-Chief

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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