Special Issue

Calibration and Traceability in Sensor Networks

Message from the Guest Editors

The growing attention towards human-related issues such as energy saving, safety monitoring, and pollution measurement, combined with the requirements of smart manufacturing, have driven the development of dataacquisition systems with a large number of embedded sensors. These data acquisition systems are often configured as sensor networks or more recently as networks composed of IoT sensor nodes, thus taking advantage of well-established digital architectures and optimized communication protocols. However, a problem still remains open related to the traceability assurance of the measurements provided by single nodes of a sensor network or by a set of nodes that cooperate to provide the quantities under measurement. The common calibration procedures that are implemented for stand-alone instruments are not suitable for sensor networks that can include hundreds or thousands of nodes and that can also be distributed over a wide area. This Special Issue is addressed to innovative calibration paradigms that can be effective in ensuring the traceability of systems that cannot be managed according to existing calibration procedures.

Guest Editors

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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.

Editor-in-Chief

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