Special Issue

Advanced Sensors in MEMS: 2nd Edition

Message from the Guest Editors

Microelectromechanical systems (MEMS) are microstructures able to couple the mechanical and electrical energy domains at micro- or nanoscales, often involving other energy domains in these interactions. Their micrometre-scale dimensions generate both specific advantages (e.g., electromechanical feedback control, fast time response and better efficiency for some specific sensing mechanisms) and challenges (e.g., lower energy generation yield for thermal micromachines), allowing researchers to rethink the design and analysis methods for customized macroengineering at microscale solutions. Technological advances in MEMS initially took advantage of the existing microelectronics industry, and they have gradually spurred specific microfabrication methods, moving beyond silicon. In this context, an increasing amount of research and number of applications have emerged for MEMS transducers. This Special Issue will encompass high-quality research contributions focusing on the advances in MEMS 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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