



MEMS/NEMS Sensors: Advances, Trends and Challenges

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Deadline for manuscript submissions:

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Message from the Guest Editors

MEMS/NEMS are micro-/nano-electromechanical systems that integrate specific electrical and mechanical components on a nanoscale and microscale, allowing various micro-/nano targets to be measured quickly and precisely. Using MEMS sensors (e.g., microfluidic biosensors), for example, micrometer-sized cells (from hundreds of micrometers to sub-micrometers) can be characterized at frequencies exceeding 1000 Hz. On a nanoscale, nanomechanical structures provide indispensable functions such as sample introduction, separation, and purification when handling continuous single-molecule and single-nanoparticle processing. Nanoscale sensitivity enables the monitoring of various environments for viruses, bacteria, and particulate materials.

We invite researchers to contribute either original research or review articles focusing on, but not limited to:

- (i) MEMS/NEMS sensor design and applications;
- (ii) novel fabrication techniques/protocols;
- (iii) stabilization of the detection of MEMS/NEMS sensors;
- (iv) signal analysis methods for MEMS/NEMS sensors;
- (v) development of intelligent MEMS/NEMS sensors.





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Message from the Editor-in-Chief

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