



## Development of CMOS-MEMS/NEMS Devices

Guest Editors:

**Dr. Jaume Verd**

Electronic Systems Group (GSE),  
University of the Balearic Islands,  
E-07122 Palma, Spain

**Prof. Dr. Jaume Segura**

Electronic Systems Group (GSE),  
University of the Balearic Islands,  
E-07122 Palma (Illes Balears),  
Spain

Deadline for manuscript  
submissions:

**closed (30 September 2018)**

### Message from the Guest Editors

Micro and nano-electro-mechanical system (M/NEMS) devices constitute key technological building blocks to enable increased additional functionalities within Integrated Circuits (ICs) in the More-Than-Moore era, as described in the International Technology Roadmap for Semiconductors. The CMOS ICs and M/NEMS dies can be combined in the same package (SiP), or integrated within a single chip (SoC). In the SoC approach the M/NEMS devices are monolithically integrated together with CMOS circuitry allowing the development of compact and low-cost CMOS-M/NEMS devices for multiple applications (physical sensors, chemical sensors, biosensors, actuators, energy actuators, filters, mechanical relays, and others). On-chip CMOS electronics integration can overcome limitations related to the extremely low-level signals in sub-micrometer and nanometer scale electromechanical transducers enabling novel breakthrough applications. This Special Issue aims to gather high quality research contributions dealing with MEMS and NEMS devices monolithically integrated with CMOS, independently of the final application and fabrication approach adopted (MEMS-first, interleaved MEMS, MEMS-last or others).





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Ai-Qun Liu

1. Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China  
2. School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798, Singapore

## Message from the Editor-in-Chief

You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, dblp, and other databases.

**Journal Rank:** JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Mechanical Engineering*)

## Contact Us

---

*Micromachines* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/micromachines](http://mdpi.com/journal/micromachines)  
[micromachines@mdpi.com](mailto:micromachines@mdpi.com)  
[X@micromach\\_mdpi](https://twitter.com/micromach_mdpi)