



micromachines



an Open Access Journal by MDPI

Carbon Based Materials for MEMS/NEMS

Guest Editor:

Dr. Anirudha V. Sumant

Center for Nanoscale Materials,
Argonne National Laboratory,
9700 S. Cass Ave., Argonne, IL
60439, USA

Deadline for manuscript
submissions:

closed (31 December 2017)

Message from the Guest Editor

Silicon-based micromachines have dominated the progress in MEMS from more than two decades and that is mostly attributed to excellent materials properties of silicon particularly in stress management, doping and ease of surface and bulk micromachining processes. However, new applications involve, not only sliding and rotational motions, but also operations in more adverse atmospheric conditions. It is, therefore, highly desirable to look for new materials with enhanced mechanical, tribological, and electrical properties with the ability to withstand in adverse environmental conditions. The new candidate materials, based on carbon, are promising, and many advances have been made to overcome challenges in terms of stress management, MEMS processing and integration. In this Special Issue, we discuss current state-of-the-art MEMS/NEMS, based on carbon materials, with emphasis of contacting/sliding/rotational interfaces, including electrical/optical applications. Original contributions from academia and industry highlighting these and related aspects, with new interesting applications and directions, are welcome, presenting the next generation of MEMS/NEMS, based on carbon materials.



mdpi.com/si/9804

Special Issue



Editor-in-Chief

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 (*Chemistry, Analytical*) / CiteScore - Q2 (*Mechanical Engineering*)

Contact Us

Micromachines Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/micromachines
micromachines@mdpi.com
[X@micromach_mdpi](https://x.com/micromach_mdpi)