



## Micro- and Nano-Fabrication by Metal Assisted Chemical Etching, Volume II

Guest Editor:

**Dr. Lucia Romano**

1. Institute for Biomedical Engineering, University and ETH Zürich, 8092 Zürich, Switzerland  
2. Paul Scherrer Institute, Forschungsstrasse 111, CH-5232 Villigen, Switzerland

Deadline for manuscript submissions:

**closed (28 February 2023)**

### Message from the Guest Editor

Metal assisted chemical etching (MacEtch) has recently emerged as a new etching technique capable of fabricating high aspect ratio nano- and micro-structures in a few semiconductor substrates—Si, Ge, poly-Si, GaAs, and SiC—and using different catalysts—Ag, Au, Pt, Pd, Cu, Ni, and Rh. Several shapes have been demonstrated with high anisotropy and feature size in the nanoscale—nanoporous films, nanowires, 3D objects, and trenches, which are useful components of photonic devices, microfluidic devices, bio-medical devices, batteries, Vias, MEMS, X-ray optics, and so on. With no limitations of large-areas and low-cost processing, MacEtch can open up new opportunities for several applications where high-precision nano- and micro-fabrication is required. This can make semiconductor manufacturing more accessible to researchers in various fields and accelerates innovation in electronics, bio-medical engineering, energy, and photonics. Accordingly, this Special Issue seeks to showcase research papers and review articles that focus on novel methodological developments in MacEtch, and its use for various applications.





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)