



*micromachines*



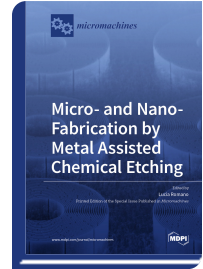
*Special Issue Reprint*

## **Micro- and Nano-Fabrication by Metal Assisted Chemical Etching**

[www.mdpi.com/books/reprint/3301](http://www.mdpi.com/books/reprint/3301)

Edited by  
Lucia Romano

ISBN 978-3-03943-845-7 (Hardback)  
ISBN 978-3-03943-846-4 (PDF)



Metal-assisted chemical etching (MacEtch) has recently emerged as a new etching technique capable of fabricating high aspect ratio nano- and microstructures 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 a 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, etc. With no limitations of large-areas and low-cost processing, MacEtch can open up new opportunities for several applications where high precision nano- and microfabrication is required. This can make semiconductor manufacturing more accessible to researchers in various fields, and accelerate innovation in electronics, bio-medical engineering, energy, and photonics. Accordingly, this Special Issue seeks to showcase research papers, short communications, and review articles that focus on novel methodological developments in MacEtch, and its use for various applications.



Order Your Print Copy  
You can order print copies at  
[www.mdpi.com/books/reprint/3301](http://www.mdpi.com/books/reprint/3301)

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



## Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



## Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



## High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



## High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



## Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.