



Fabrication and application of micro/nano-textured surfaces

Guest Editors:

Prof. Dr. Chang-Hwan Choi

Department of Mechanical Engineering, Stevens Institute of Technology, Hoboken, NJ 07030, USA

Prof. Qing Wang

Director of Institute of Nanoengineering, College of Civil Engineering and Architecture, Shandong University of Science and Technology, 579 Qianwangang Road, Qingdao 266590, China

Deadline for manuscript submissions:

closed (31 December 2020)

Message from the Guest Editors

A micro/nanotextured surface is a surface which is covered with micro/nanosized structures. Generally, the geometrical architectures (i.e., surface roughness, micro/nanosized structures) greatly determine the physical properties of solid surfaces. Especially for micro/nanotextured surfaces, these properties include hydrophobic/hydrophilic, antifouling, and anticorrosion. Micro/nanosized structures are currently gaining popularity because of their special applications due to their unique physical properties. In nature, we have found the micro/nanotexture of naturally occurring surfaces such as cicada and dragonfly wings, lotus leaves, shark skin, etc. For example, the micro and nanoscale hierarchical structure on lotus leaves is responsible for their unique superhydrophobic and self-cleaning properties. The discovery of these structures and their various resulting properties has led to a large research focus in mimicking the surface structure of these naturally occurring surfaces to reproduce their behaviors.

This Special Issue will cover but not be limited to micro/nanotextured surfaces fabrication (including novel approaches), characterization and 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

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