



## Microscopy Techniques in Advanced Materials

Guest Editors:

**Dr. Inga Morkvenaite-Vilkonciene**

Laboratory of Bioelectrochemical Technologies, State Research Institute Centre for Physical Sciences and Technology, Sauletekio av. 3, LT-10257 Vilnius, Lithuania

**Dr. Baltramiejus Jakštys**

Biophysical Research Group, Faculty of Natural Sciences, Vytautas Magnus University, Vileikos st. 8, LT-44404 Kaunas, Lithuania

Deadline for manuscript submissions:

**closed (20 December 2022)**

### Message from the Guest Editors

This Special Issue is dedicated to scanning probe microscopy (SPM) applications in the field of materials science. The SPM technique allows us to measure, visualize, and determine the properties of materials in the nanoscale. Research articles are welcomed that focus on any of the following topics: nanoparticles and nanocomposites used for signal increasing in SPMs, probe modification and the use of different kinds of probes, and the representation of data analysis obtained by such techniques. The characterization of polymers, biological samples, hard/soft surfaces, and new techniques can offer new possibilities for manipulating and detecting data in different ranges of speed and accuracy at the microscale. Therefore, research regarding the accurate positioning and manipulation of nano- and micro-sized objects by micro-robotics, micro-grippers, micro-electromechanical systems, etc., are also welcomed.

In addition, articles related to biological and nonbiological material analyses using various microscopy techniques, such as light, fluorescence, confocal, etc., together with any advanced tools, and algorithms for visual data analysis will be considered in this issue.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

## Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

## 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, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

## Contact Us

Materials Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)