micromachines

IMPACT FACTOR 3.0

Indexed in: PubMed

CITESCORE 6.0

an Open Access Journal by MDPI

Nanostructures in Energy and Sensing Applications

Guest Editor:

Dr. Pouya Partovi-Azar
Institute of Chemistry, Martin-Luther-University Halle-Wittenberg, Von-Danckelmann-Platz 4, 06120 Halle (Saale), Germany

Deadline for manuscript submissions:
closed (31 August 2021)

Message from the Guest Editor

Nanostructures are nowadays widely used in a vast variety of applications, thanks to their peculiar physical and chemical properties, which are mainly brought about by their low dimensionality. In the field of energy materials, it is now known that the nanostructured electrodes and nanocomposites can improve the energy density, safety, and cycling-life of lithium-based batteries. Moreover, it has been shown that the improved electrical conductivity can even be accompanied by cathode protection via utilisation of novel sulfur/carbon nanocomposite which results in higher battery performance. As another example, silicon-based nanostructures can be designed in such a way that their absorption range of the electromagnetic wavelengths is improved. Such nanostructures have been shown to considerably increase the efficiency of solar cells. Nanostructures have also been employed to design more efficient gas, humidity, pressure, and (bio)molecule sensors with shorter response time and improved sensitivity. The current Special Issue covers the most recent theoretical and experimental studies on nanostructure materials used in the fields of energy and sensing.

micromachines

IMPACT FACTOR 3.0 | Indexed in: PubMed | CITESCORE 6.0

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 (Instruments and Instrumentation) / CiteScore - Q1 (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