

## Special Issue

# On-Surface Synthesis of Low-Dimensional Organic Nanostructures

### Message from the Guest Editor

On-surface synthesis (OSS) has emerged as a novel approach to synthesize and characterize low-dimensional organic nanomaterials with atomic precision, otherwise unattainable by solution organic chemistry. The possibility to create low-dimensional materials “a la carte” starting from functionalized precursor monomers has opened a new field wherein materials with unprecedented tailored properties can be obtained. In this way, organic nanomaterials exhibiting intriguing semiconducting, magnetic, or even topological properties have been synthesized and characterized. Although most of the research carried out in the field has a clear fundamental scope, strong efforts are also being devoted to the introduction of these on-surface-synthesized low-dimensional organic materials into prototypical devices thanks to their usual air stability. This Special Issue of *Nanomaterials* aims to gather some of the most relevant recent advances in the field of On-surface Synthesis of Low-Dimensional Organic Nanostructures, covering not only their bottom-up synthesis and characterization, but also the rationalization of the fundamental reaction mechanisms involved in the processes.

### Guest Editor

Dr. Carlos Sanchez-Sanchez  
CSIC - Instituto de Ciencia de Materiales de Madrid (ICMM),  
Cantoblanco, Spain

### Deadline for manuscript submissions

closed (13 January 2023)



## Nanomaterials

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.3  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/si/54511](https://mdpi.com/si/54511)

*Nanomaterials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
nanomaterials@mdpi.com

[mdpi.com/journal/  
nanomaterials](https://mdpi.com/journal/nanomaterials)





# Nanomaterials

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.3  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/journal/  
nanomaterials](https://mdpi.com/journal/nanomaterials)



## About the Journal

### Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano–alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

---

### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

---

### 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, CAPIus / SciFinder, Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)