

## Special Issue

# Recent Advances in Functional Nanomaterials: Discovery, Characterization and Applications

### Message from the Guest Editors

Over the past fifteen years, the growing interest in novel functional nanomaterials and nanostructures in science and engineering has led to the prediction and discovery of countless number of nanostructures with unique topological, opto-electronic, magnetic, and mechanical properties. Recently, experimentally driven high-precision computational studies have become an effective tool in the prediction and characterization of unknown nanostructures. This symbiosis of computational and experimental approaches has led to the rapid development of unexplored nanostructures and their implementation into industrial projects. The goal of this Special Issue is to provide a platform for the exchange of recent advances in the theoretical and experimental design and application of novel functional nanomaterials and nanostructures. This Issue aims to collect high-quality and original research, review, and perspective articles reporting theoretical and experimental results related to the following topics:

- Nanomaterials and nanotechnology;
- Computational materials science;
- Functional nanomaterials;
- Materials engineering;
- Materials chemistry;
- Energy materials.

---

### Guest Editors

Dr. Andrey Kistanov

The Laboratory of Metals and Alloys Under Extreme Impacts, Ufa University of Science and Technology, 450076 Ufa, Russia

Prof. Dr. Alberto Jiménez Suárez

Materials Science and Engineering Area, Escuela Superior de Ciencias Experimentales y Tecnología, Universidad Rey Juan Carlos, Calle Tulipán s/n, Móstoles, 28933 Madrid, Spain

---

### Deadline for manuscript submissions

20 July 2026



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/241377](https://mdpi.com/si/241377)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

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





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



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



## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

---

### 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), Ei Compendex, Inspec, Embase, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )