

## Special Issue

# Nanostructured Materials and Interfaces: Energy and Environmental Applications

### Message from the Guest Editors

This Special Issue aims to give an overview of recent advances in metal and metal oxide nanostructures and nanostructured films that could contribute to water and air purification and energy production and saving, simultaneously maximizing the exploitation of our natural resources while protecting the environment. Original research article, review, and progress report submissions on theoretical and experimental results are also welcome. Submissions are welcome in the following areas with relation (but not limited) to the synthesis and characterization of nanomaterials, nanostructured films, and hybrid nanostructured materials, applications of nanomaterials for the degradation of various types of pollutants (dyes, heavy metals, etc.), H<sub>2</sub> generation, oxygen evolution reaction, CO<sub>2</sub> reduction, water splitting, etc. With the aim being energy and environmental applications, potential topics include, but are not limited to, the following:

- Synthesis and properties of nanostructures;
- Green synthesis of nanomaterials;
- Metal and metal oxide nanoparticles and nanostructured films;
- Photo and electro catalysis;
- CO<sub>2</sub> reduction;
- H<sub>2</sub> generation.

### Guest Editors

Dr. Ana Pimentel

CENIMAT|I3N, Department of Materials Science, School of Science and Technology, NOVA University Lisbon, 2829-516 Caparica, Portugal

Dr. Daniela Nunes

CENIMAT|I3N, Department of Materials Science, School of Science and Technology, NOVA University Lisbon, 2829-516 Caparica, Portugal

### Deadline for manuscript submissions

closed (31 December 2023)



## Coatings

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.4



[mdpi.com/si/158359](https://mdpi.com/si/158359)

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

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





# Coatings

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.4



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



## About the Journal

### Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

---

### Editors-in-Chief

Prof. Dr. Wei Pan

State Key Laboratory of New Ceramics and Fine Processing, School of Materials Science & Engineering, Tsinghua University, Beijing 100084, China

Dr. Emerson Coy

NanoBioMedical Centre, Adam Mickiewicz University in Poznań, ul. Wszechnicy Piastowskiej 3, 61-614 Poznań, Poland

---

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

#### Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Surfaces, Coatings and Films)