

## Special Issue

# Materials with and without Coating—New Perspectives

### Message from the Guest Editors

Corrosion, generally defined as a degradation of a material or its properties, by chemical reaction with the environment, currently affects all areas of the economy, from the integrated circuits to the reinforced concrete bridges, concerning a wide spectrum of industries. Today, the concept of corrosion has evolved in the broad sense of the word, being not limited to metals, but affecting polymers and ceramics as well. The corrosion resistance can be considered a vital property for biomaterial components and it is associated with the problem of metallic ion release, potentially harmful for the organism. Therefore, reconsidering the toxicology assessment of devices in all types of environments (body, home) has become necessary. In this Special Issue, we welcome original research papers and reviews focused on the complex relationships between the material, its environment, and corrosion behavior of metallic/nonmetallic materials as well as possibilities for increasing the corrosion resistance by means of surface modification and application of protective coatings.

---

### Guest Editors

Prof. Dr. Lucien Reclaru

Scientific Independent Consultant Biomaterials and Medical Devices,  
103 Paul-Vouga, 2074 Marin-Epargnier, Switzerland

Prof. Dr. Lavinia Cosmina Ardelean

Department of Technology of Materials and Devices in Dental Medicine,  
“Victor Babes” University of Medicine and Pharmacy, Timisoara,  
Romania

---

### Deadline for manuscript submissions

closed (31 December 2021)



## Coatings

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.4



[mdpi.com/si/57257](https://mdpi.com/si/57257)

*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), Ei Compendex, CAPlus / SciFinder, and other databases.

#### Journal Rank:

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