

# Special Issue

## Advances in Films and Coatings for Biomedical Application

### Message from the Guest Editors

The development of materials for biomedicine is one of the most important trends in modern material science. The application of films and coatings here presents an attractive way to modify the surface of biomedical products to improve their characteristics, such as biocompatibility, osseo- and tissue integration, corrosion resistance, electrochemical properties, and others. Moreover, such an approach makes it possible to impart new additional properties to a traditional bulk biomaterial; for example, the antibacterial or antifungal ones. Permanent and biodegradable materials are in demand in the relevant fields of biomedicine. Advances in nanotechnology make it possible to obtain a variety of films and coatings, including metal, oxide, ceramic, glass, polymer, organic layers, and nano-objects (nanoparticles, nanotubes, etc.). Specially designed composite and hybrid materials are of particular interest here. Understanding the mechanisms behind the desired enhanced functional response of surface materials is the key to the development of this substantial field.

### Guest Editors

Dr. Evgeniia S. Vikulova

Nikolaev Institute of Inorganic Chemistry, Siberian Branch of Russian Academy of Sciences, Novosibirsk 630090, Russia

Dr. David Sergeevichev

"E. Meshalkin National Medical Research Center" of the Ministry of Health of the Russian Federation, 15, Rechkunovskaya st., Novosibirsk 630055, Russia

### Deadline for manuscript submissions

closed (30 September 2023)



## Coatings

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.4



[mdpi.com/si/114265](https://mdpi.com/si/114265)

*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)