Special Issue

Advances in Corrosion-Resistant Coatings, 2nd Edition

Message from the Guest Editor

Corrosion-resistant coatings have important characteristics, such as high chemical inertness, large heat resistance, good mechanical strength, and enhanced toughness. Recently, considerable progress has been made in developing various coatings to protect materials' exposure to aggressive corrosive media, such as seawater, biofluids, and high-temperature gases. This scope of this Special Issue will include, but is not limited to, the following fundamental and applied research topics:

- Corrosion-resistant coatings for implants;
- Seawater-corrosion-resistant coatings for petroleum engineering applications;
- Research developments in new organic, inorganic, and composite coatings;
- Coating technology and processes;
- High-performance Ni–P coatings, high-temperature-resistant coatings, protective coatings in ionic fluids;
- Corrosion mechanisms in actual or simulated biofluids;
- Test methods for determining the corrosion of coatings in various electrolytes;
- The modeling and simulation of coating processing and corrosion;
- Nanostructured composite coatings and corrosion characterization.

Guest Editor

Prof. Dr. Yong X. Gan

Department of Mechanical Engineering, California State Polytechnic University, Pomona, CA 91768, USA

Deadline for manuscript submissions

10 April 2026

Coatings

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.4

mdpi.com/si/197197

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

mdpi.com/journal/coatings

Coatings

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.4

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)

MDPI