

Special Issue

AI-Driven Surface Engineering and Coating

Message from the Guest Editor

Recent developments in artificial intelligence (AI) have changed many industries and will eventually change research on surface engineering and coating as well. The scope of this Special Issue will serve as a forum for papers on the following concepts:

- Theoretical and experimental research, knowledge and new ideas in AI-driven surface engineering and coating;
- Recent developments in AI technologies relevant to design and manufacturing for surface engineering and coating;
- AI technologies used to predict properties, performance, durability and reliability for surface engineering and coating under various external conditions, such as friction, wear, under different pressures/temperatures;
- AI technologies used for different surface engineering and coating processes, including but not limit to polishing, plating, additive manufacturing, laser and plasma processing, etc.;
- AI technologies used to help understand degradation mechanisms for surface engineering and coatings under various external conditions such as corrosion.

I look forward to receiving your contributions.

Guest Editor

Dr. Yilei Zhang

Department of Mechanical Engineering, University of Canterbury,
Kirkwood Ave., Christchurch 8140, New Zealand

Deadline for manuscript submissions

closed (28 March 2025)



Coatings

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.4



mdpi.com/si/178737

Coatings
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)