

Special Issue

Thermal Plasma Processing for Coating: Structural, Functional Properties of Thick Films

Message from the Guest Editors

This Special Issue will serve as a forum for papers includes but not limited to the following concepts:

- Theoretical and experimental research, new ideas in thermal plasma processing of functional coatings using powder metallurgy route.
- Recent approaches toward single and multi-layer functional coatings made of pure metals or alloys.
- Thick coatings fabricated by a different process of thermal plasma technology including, among others, plasma spraying, spark-plasma sintering, and laser melting processing methods.
- Experiments and processing of high-performance coatings with mechanical, functional, tribological, and other extreme environmental applications.
- Understanding the functional mechanism of coatings through mechanical performance, self-healing, and description of their degradation mechanisms through the scratch test, indent point, wear test, and other dynamic loading conditions.
- A new methodology for considering the interplay relationship between mechanical, chemical, and electromechanical interactions of coating/substrate/environment and the ability to predict coating performance and/or reliability.

Guest Editors

Dr. Sneha Samal

FZU—Institute of Physics of Czech Academy of Sciences, Na Slovance 1999/2, 182 21 Prague, Czech Republic

Dr. Filip Průša

Department of Metals and Corrosion Engineering, University of Chemistry and Technology, Prague, Czech Republic

Deadline for manuscript submissions

closed (20 October 2023)



Coatings

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.4



mdpi.com/si/79361

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

Journal Rank:

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