Special Issue

Microstructure, Wear Resistance and Corrosion Resistance of High-Entropy Alloy Coatings

Message from the Guest Editors

Due to the superiority of the excellent comprehensive properties compared to their bulk siblings and traditional metallic coatings, high-entropy alloy coatings have exhibited great application potential in extreme service environments such as in aerospace and nuclear reactors. The coupling of low-dimensional-morphology-induced size effect and unique high-entropy alloy multi-principal effect endows the high-entropy alloy coatings with homogeneous composition, a dense and stable microstructure, and exceptional performances. The topics of interest for this Special Issue, in particular, include (but are not restricted to):

- high-entropy alloy coating microstructure characterization;
- surface coating technology of high-entropy alloys;
- friction and wear properties of high-entropy alloy coatings;
- corrosion resistance of high-entropy alloy coatings;
- computational modeling and simulation of high-entropy alloy coatings;
- relationship between microstructure property and wear performance;
- any other aspects of high-entropy alloy coatings.

We look forward to receiving your contributions.

Guest Editors

Prof. Dr. Zhaofeng Wang

Dr. Fubin Liu

Dr. Xingguo Wang

Deadline for manuscript submissions

closed (15 September 2024)

Coatings

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.4

mdpi.com/si/178690

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