Special Issue

Tribological Properties and Wear Protection of Coatings and Alloys

Message from the Guest Editor

Surface-initiated damage (SID) is becoming the dominant failure mode in the mechanical engineering field due to the requirement of increasing mechanical system efficiency. Over 80 percent of engineering part failures are due to SID. It is thus of increasing importance to study SID and prevent the catastrophic consequences caused by it. Coating is a critical and widely used approach to fight against SID. The understanding of tribological properties and wear protection of coatings and alloys are crucial to minimize the cost due to SID. This kind of research covers the design and modification of tribology properties. This Special Issue focuses on "Tribological Properties and Wear Protection of Coatings and Alloys". The topics of interest for this Special Issue, in particular, include (but are not restricted to):

- Experimental testing of the tribology properties of coating and alloy.
- Evaluation of SID resistance due to coating and surface alloying, either through experimental or numerical/modeling approaches;
- New technology for coatings and surface treatment technologies

Guest Editor

Dr. Chi Ma

Thayer School of Engineering, Dartmouth College, Hanover, NH, USA

Deadline for manuscript submissions

closed (15 November 2024)



Coatings

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.4



mdpi.com/si/97128

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





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)