Special Issue

Advances in Thin Films for Energy Storage and Conversion

Message from the Guest Editors

To meet the growing demands of energy supply and overcome worldwide energy shortages, thin films for energy storage and conversion technologies have recently attracted increasing attention due to their capability of providing specific physical and chemical properties to the surface of bulk materials with the versatility and ease. Material development, characterization, and simulation, as well as performance evaluation of thin films, have been conducted in energy storage and conversion devices. This Special Issue aims to provide a platform for researchers to demonstrate and exchange the latest research findings on thin films for energy storage and conversion applications. Research areas may include (but are not limited to) the following:

- Novel thin films or coatings for electrochemical applications;
- Fuel cells;
- Water electrolyzers;
- Lithium/sodium-ion batteries;
- Solar energy conversion and storage;
- Capacitors and supercapacitors;
- Materials for cathodes, anodes, and electrolytes;
- Electrochemical characterization;
- Nano/microstructured materials:
- Flexible electronics energy storage devices.

We look forward to receiving your contributions.

Guest Editors

Prof. Dr. Gaoqiang Yang

College of Mechanical and Vehicle Engineering, Hunan University, Changsha 410082, China

Dr. Kui Li

MPA-11, Los Alamos National Laboratory, Los Alamos, NM 87545, USA

Deadline for manuscript submissions

closed (20 May 2024)



Coatings

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.4



mdpi.com/si/127403

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)