

Special Issue

Smart & Self-Healing Coatings in Electrochemical Systems

Message from the Guest Editor

In particular, the topics and areas of interest include, but is not limited to self-healing or smart properties in the applications outlined below. This includes synthesis approaches, characterisation and testing methodologies: **Energy storage:**

- *Electrode coatings for electrochemical energy storage systems (Li-ion, Na-ion batteries, Supercapacitors)*
- *Redox-responsive systems / shuttles*
- *Flexible, wearable energy storage systems*

Corrosion control:

- *Coatings for corrosion inhibition, barrier function, smart-release*
- *Ion-exchange membranes for flow batteries*
- *Conducting polymers & smart composite coatings*
- *Sustainable materials for smart corrosion control*

Medical applications:

- *Electroactive polymers for anti-bacterial / self-healing dressings*
- *Smart composite hydrogels*
- *Sensors*

Guest Editor

Prof. Dr. Melanie Loveridge

Electrochemical Materials Group at WMG, University of Warwick, Coventry, UK

Deadline for manuscript submissions

closed (1 November 2021)



Coatings

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.4



mdpi.com/si/62549

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)