



## Perovskite Photovoltaics: From Materials to Device Applications

Guest Editors:

**Prof. Dr. Meng Li**

School of Materials, Henan  
University, Kaifeng 475004, China

**Dr. Feng Yang**

Henan Key Laboratory of  
Photovoltaic Material, School of  
Physics, Henan Normal  
University, Xinxiang 453007,  
China

Deadline for manuscript  
submissions:

**closed (31 August 2024)**

### Message from the Guest Editors

Dear Colleagues,

Hybrid organic–inorganic perovskite solar cells have sparked significant research interest and have developed rapidly. The focus of this Special Issue will be on the technology of perovskite thin films and perovskite devices. Excellent perovskite film and crystal properties can effectively improve the device’s stability and energy conversion efficiency. This has been extensively used to improve device efficiency, particularly in interface passivation, crystal optimization, etc. The aim of this Special Issue is to present the most recent experimental and theoretical advances in the field through a combination of original research papers and review articles from leading groups worldwide.

In particular, the topics of interest include, but are not limited to, the following:

- Interface passivation and crystal optimization of perovskite films;
- Preparation of indoor perovskite photovoltaic devices;
- Optimization process of lead-free perovskite devices;
- Preparation of novel two-dimensional perovskite devices.





## 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

## 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.

## 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, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Surfaces, Coatings and Films*)

## Contact Us

---

Coatings Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/coatings  
coatings@mdpi.com  
X@Coatings\_MDPI