

## Advances in Thin Films for Energy Conversion

Guest Editor:

**Prof. Dr. Chih-Hao Lee**

Department of Engineering and  
System Science, National Tsing  
Hua University, Hsinchu 30013,  
Taiwan

Deadline for manuscript  
submissions:

**closed (28 February 2022)**

### Message from the Guest Editor

Dear Colleagues,

Thin films for energy conversion are of great important in renewable and carbon-free energy to overcome the problem of global warming. In this Special Issue, we would like to solicit manuscripts reporting recent progress in this area. There are many thin film coating techniques for thin film to convert natural energy into electricity—for example, photovoltaic cells which convert solar energy into light, thermoelectric thin film that converts the thermal gradient into electric power, thin film fuel cells which convert hydrogen or methane directly into electricity energy with high efficiency, and thin film ion batteries and supercapacitors that convert electrochemical energy for energy storage. Photocatalysts and electrocatalysts are also important thin films for CO<sub>2</sub> reduction and hydrogen evolution reaction, and light-emitting diodes convert electricity into light efficiently. The subtopics to be covered within the issue include but are not limited to:

- thin film
- energy conversion
- photovoltaic
- photo(electro)catalyst
- thermoelectric
- batteries and supercapacitors
- light-emitting diodes



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### 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 called for to produce technologies and improve knowledge 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 at the center of most contemporary research. Surface science and engineering play a key role in this regard. Refining surfaces and their modifications provides new materials, architectures and processes with a huge potential to aid most societal challenges. *Coatings* is a well-established, peer-reviewed, online journal that focuses on the dissemination of publications in the field of surface science and engineering. *Coatings* publishes original research articles that report cutting-edge results and review papers on the hottest topics.

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*Coatings* Editorial Office  
MDPI, St. Alban-Anlage 66  
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