

## Special Issue

# Energy and Environmental Applications of Thin Films and Coatings

### Message from the Guest Editor

The aim of this Special Issue is to present the latest experimental and theoretical developments in thin film coatings prepared by physical and chemical deposition methods for application in the energy and environmental sectors. The topics include, but are not limited to, the following:

- Overview of the fundamentals and new concepts in design and use of thin film coatings for energy and environmental applications;
- Design of thin film materials and structures for particular surfaces to provide required properties;
- Recent advances in thin film deposition techniques;
- Novel catalytic and photocatalytic thin film coatings for CO<sub>2</sub> reduction;
- Electrochemical active, conductive or corrosion protective thin films and coatings for energy storage devices including, but not limited to, batteries and supercapacitors;
- Electro-catalytic thin films and coatings for hydrogen energy technologies including hydrogen production, storage, and fuel cells;
- Transparent, antireflection, and absorbing thin film coatings for solar cells and solar thermal collectors;
- Thin film coatings for improved hardness, abrasion resistance, and permeation for energy devices.

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### Guest Editor

Prof. Dr. Dongfang Yang

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### Deadline for manuscript submissions

closed (20 June 2022)



## Applied Sciences

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### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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