

Special Issue

Surface Modification/Engineering for Electrochemical Applications

Message from the Guest Editor

Dear Colleagues, Surface modification/engineering can usually give a surface new or improved properties, such as hydrophilic/hydrophobic, biocompatibility, corrosion resistance, and reaction activity, etc., while maintaining the unique advantages of the original material. For the application of surface modification in electrochemistry, it normally consists of surface coating, thereby avoiding electrochemical corrosion or harmful side reactions, and the surface modification of materials, which could regulate the microstructure of the surface and composition of the materials, thus increasing the specific surface area, homogenizing the surface morphology, and stabilizing the surface structure. The concerns of this topic include, but are not limited to, the following:

- Surface modification of various catalysts
- Surface modification of battery electrode materials
- Corrosion protection in electrochemical processes
- Prevention of harmful side reactions in electrochemical processes
- The latest development of surface modification in electrochemistry

Guest Editor

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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.

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