

Advances in Amorphous and High-Entropy Alloy Coatings

Guest Editor:

Dr. Cheng Zhang

School of Materials Science and
Technology, Huazhong University
of Science and Technology,
Wuhan, China

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Message from the Guest Editor

Dear Colleagues,

Recent developments in multicomponent alloy coatings, including amorphous coating and high-entropy alloy coatings, have become one of the most highly-exploited research topic. In recent years, many new emerging techniques for fabricating amorphous alloy/high-entropy alloy coatings have been rapidly developed, which makes this kind of coating highly attractive for use in industry applications. This scope of this Special Issue will serve as a forum for papers discussing the following concepts:

- Recent developments in the creation of new fabrication techniques for these coatings;
- New functional properties of amorphous coatings;
- Theoretical and experimental research, knowledge, and ideas regarding corrosion, wear, and damage mechanisms;
- Experimental and processing high-performance coatings with exposure to high temperatures, high stress, and other extreme environment applications;
- New test methods considering the interplay between mechanical, chemical, and electrochemical interactions and the ability to predict performance and/or reliability;
- Use of computer modeling to predict coating properties and performance in service environments.



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Special Issue

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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.

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Coatings Editorial Office
MDPI, St. Alban-Anlage 66
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