

Special Issue

Advanced High-Entropy Materials and Coatings

Message from the Guest Editor

The “high-entropy” design concept originating from multi-principal-element solid solutions has attracted intense interest from academia and industries worldwide. The various high-entropy materials (HEMs) that act as coatings have shown great potential for structural and functional applications based on their stability, corrosion resistance, and excellent mechanical properties. Different technologies have been adopted to fabricate HEM coatings, including sputtering, electrodeposition, spraying, laser cladding, plasma-transferred arc cladding, etc. We are pleased to invite you to submit your work to this Special Issue on “Advanced High-Entropy Materials and Coatings”. This Special Issue aims to present theoretical and experimental articles addressing the current understandings, new development, and challenges on the synthesis of HEM coatings, studies of properties, as well as potential applications. In this Special Issue, research areas may include (but not limited to) the following:

- Coating technologies;
- Composition design;
- Surface characterization;
- Corrosion;
- Thermal stability;
- Hardening and strengthening;
- Applications.

Guest Editor

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closed (20 May 2024)



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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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