



an Open Access Journal by MDPI

# Amorphous and High-Entropy Coatings Synthesized by Magnetron Sputtering

Guest Editor:

#### Dr. Ki Buem Kim

Department of Advanced Materials Engineering, Sejong University, Seoul 143-747, Republic of Korea

Deadline for manuscript submissions: closed (31 October 2021)



Dear Colleagues,

This Special Issue focuses on contributions to improve our understanding of the characterization and efficiency of amorphous and high-entropy alloy coatings based on the relationships between processing and structure with performance, coating design, and size effects. Amorphous and high-entropy coating has acquired important characteristics, including high strength, plasticity, and excellent wear resistance. Several coating techniques, such as magnetron sputtering, plasma transfer, thermal spraying, laser cladding, vacuum evaporation, and electrospark deposition, have also been successfully used to produce a wide range of amorphous and high-entropy alloy coatings on various substrates. Such innovations are expected to enter the coating industry and face the demands of various stress-bearing applications, including those in the mechanical and medical equipment industries. The topic of interest in the Special Issue includes but is not limited to:

- Microstructure and features;
- Mechanical properties;
- Technologies of coatings;
- Modeling of microstructure;
- Industrial applications.

Dr. Ki Buem Kim

Guest Editor



mdpi.com/si/53052







an Open Access Journal by MDPI

### **Editors-in-Chief**

#### Prof. Dr. Wei Pan

State Key Laboratory of New Ceramics and Fine Processing, School of Materials Science & Engineering, Tsinghua University, Beijing 100084, China

#### 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.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec,

CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Materials Science, Coatings & Films*) / CiteScore - Q2 (*Surfaces and Interfaces*)

### **Contact Us**

*Coatings* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/coatings coatings@mdpi.com X@Coatings\_MDPI