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Coatings Deposited by Cathodic Arc and Magnetron Sputtering Process

Guest Editor:

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Deadline for manuscript submissions:

closed (20 March 2023)

Message from the Guest Editor

Dear Colleagues,

Modern PVD techniques can obtain coatings with the required structure and properties. In these methods, the material from which the coatings are formed is most often thermally evaporated or sputtered by ion bombardment. Cathodic arc (CA) and magnetron sputtering (MS) are the most commonly used PVD coating deposition techniques.

This Special Issue will serve as a forum for papers on arc evaporation and magnetron sputtering technique, in the following concepts:

- Explanation and modeling of plasma physics in CA and MS methods;
- New solutions and constructions of devices with magnetron and arc sources;
- Comparison of techniques using pulse arcs with the HiPIMS method;
- Methods and techniques for testing the chemical and phase composition, structure and properties of coatings produced by CA or MS;
- New, innovative applications of coatings deposited by CA or MS techniques in various fields.

We look forward to receiving your contribution.









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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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