

## Special Issue

# Electron-Ion-Plasma Technology Applied to Surface Engineering

### Message from the Guest Editor

Electron-ion-plasma technology provides a very important direction for the surface engineering of materials and products. Due to its application, it is possible to significantly improve the functional properties of the material surface layer with thicknesses from hundreds of nanometers to hundreds of micrometers. It includes methods such as PVD (magnetron sputtering, vacuum arc deposition, etc.), and the treatment of surface materials via plasma, electron or ion beams. Nowadays, the trend of modern technologies is the use of a hybrid method, combining a few methods in different sequences, e.g., the coatings deposition and electron-beam treatment, nitriding and PVD, etc., in a single vacuum cycle. In particular, the topics of interest include, but are not limited to:

- PVD methods;
- Functional coatings;
- Electron-beam treatment of material surface;
- Ion-beam treatment of material surface;
- Hybrid electron-ion-plasma treatment of material surface;
- Properties, structure and composition of treated materials;
- Equipment for surface engineering;
- Application of electron-ion-plasma technologies.

### Guest Editor

Dr. Olga Krysinina

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### Deadline for manuscript submissions

closed (31 March 2024)



## Coatings

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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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### Editors-in-Chief

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