

## Special Issue

# Structural, Mechanical and Tribological Properties of Hard Coatings

### Message from the Guest Editors

Hard coatings have always attracted a great deal of attention due to their high hardness and well anti-wear properties. They have been widely applied in different fields. This Special Issue aims to present the latest findings and to promote further research in the structural, mechanical and tribological behaviors of hard coatings, including hard materials synthesis, hard coatings deposition, structural analysis, mechanical characterization, and frictional behavior investigations.

Potential topics include but are not limited to the following:

- Advanced hard materials synthesis and preparation;
- Hard coatings preparation through electrochemical or electroless methods, spray technologies, thermochemical, CVD and PVD;
- Structural analysis;
- Mechanical properties characterization;
- Friction and wear behavior of hard coatings in different environments;
- Advanced hard coatings for applications;
- Numerical simulations and computational modeling for hard coatings, including FEM/XFEM, MD, MC, DFT

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### Guest Editors

Prof. Dr. Peihu Gao

Prof. Dr. Qiaoqin Guo

Prof. Dr. Yazhe Xing

Prof. Dr. Yongchun Guo

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### Deadline for manuscript submissions

closed (31 July 2025)



## 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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