

# Special Issue

## Research Progress and Prospect of Functional Thin Films & Hard Protective Coatings

### Message from the Guest Editor

Functional thin films and hard protective coatings are indispensable in advancing material performance across various industrial and technological domains. This Special Issue will address (but is not limited to) the following topics: - Advanced deposition techniques for thin films and coatings, including Physical Vapor Deposition (PVD), Chemical Vapor Deposition (CVD), plasma electrolytic oxidation (PEO), and additive manufacturing methods like laser and 3D printing. - Thin films for photoelectric detection, including those for UV, infrared detection, and other electromagnetic signals. - Conducting oxide thin films transparent across infrared, visible, or UV spectra. - High-entropy alloy coatings and their nitride or oxide derivatives. - Hard coatings for enhanced wear, corrosion, and oxidation resistance. - Diamond- and carbon-based thin films and coatings. - Optical thin film materials: their design, preparation, and applications. - Functional thin films and coatings for aerospace applications, including thermal control and protection, wear resistance, and anti-corrosion properties.

### Guest Editor

Prof. Dr. Min Zhang

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### Deadline for manuscript submissions

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## 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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