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Surface Topography Effects on Functional Properties of PVD Coatings

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Message from the Guest Editors

Dear Colleagues,

The topography of PVD coatings plays an important role in their use in tribology, optics, microelectronics, and protection against corrosion, oxidation, and erosion. It also affects the wettability of the coatings and their permeability for gases. The topography of biocompatible coating is also very important for integration of the coated implant into living tissue. We invite all researchers engaged in the research of surface topography effects on functional properties of PVD coatings to publish their most recent results in this Special Issue of *Coatings*.

The main topics of this Special Issue are:

- The influence of substrate pretreatment on coating topography;
- The influence of growth defects on the functional properties of optical coatings;
- The effect of surface topography of PVD hard coatings on their mechanical and tribological properties (wear, friction);
- The influence of growth defects on the corrosion and oxidation resistance of PVD coatings;
- The role of growth defects in semiconductor devices;
- The influence of surface topography on the integration of biocompatible coatings (e.g., on the artificial joints) into living tissues..







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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.

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