

Plasma Electrolytic Oxidation (PEO) Coatings, 2nd Edition

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Message from the Guest Editors

Dear Colleagues,

We would like to invite you to submit your work to a Special Issue on "Plasma Electrolytic Oxidation (PEO) Coatings (Second Volume)". Plasma electrolytic oxidation (PEO), also known as micro-arc oxidation (MAO), functionalizes surfaces, improving the mechanical, thermal, and corrosion performance of metallic substrates, along with other tailored properties (e.g., biocompatibility, catalysis, antibacterial response, self-lubrication, etc.). The extensive field of applications of this technique ranges from structural components, in particular, in the transport sector, to more advanced fields, such as bioengineering. The aim of this Special Issue is to present the state of the art of PEO for Al, Mg, Ti, and Zr alloys and steels, through a combination of original research papers, short communications, and review articles from leading research groups around the world.

In particular, the topics of interest include, but are not limited to:

- Fundamental understanding of the PEO process;
- Hybrid PEO coatings;
- Functionalization of PEO coatings;
- Active protection based on PEO;
- Bio-applications of PEO coatings;
- Advanced PEO processes.



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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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