



Corrosion of Metallic and Ceramic Coatings in Biomedicine and Cultural Heritage and Coatings for Its Prevention

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Deadline for manuscript
submissions:

closed (30 April 2022)

Message from the Guest Editors

Dear Colleagues,

Corrosion of metals is a significant and cross-sector issue, affecting several research fields, from medical implants to buildings, mechanical components, and even cultural heritage. To address this issue, coatings have been largely applied, constituting of different classes of materials, from polymers to calcium phosphates. The aim of this Special Issue is to document current advances in the field of coatings to prevent corrosion, with special reference to calcium phosphates-based coatings and their applications in biomedicine and cultural heritage field.

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

- Anti-corrosion coatings in cultural heritage;
- Coatings to prevent corrosion of metallic biomedical implants;
- Corrosion of metallic biomedical implants;
- Calcium phosphates coatings against corrosion;
- Novel techniques for coatings manufacturing;
- Advanced characterization techniques to investigate the properties of the coatings (composition, morphology, mechanical properties, solubility, etc...).





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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.

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