

## Biointerface Coatings for Biomaterials and Biomedical Applications

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### Message from the Guest Editors

Dear Colleagues,

In addition to meeting the minimal requirement of biocompatibility, advanced biomaterials have acquired functions, allowing them to directly or indirectly influence specific biological environments. These modifications of biomaterials are generally achieved by establishing an interface layer, i.e., a biointerface coating, to deliver the desired functions. Many promising approaches have been realized by existing surface modification technologies based on both physical and chemical methods of rendering fabricated coatings on biomaterials, from basic self-assembly of molecules to top-down construction of bulk materials.

This Research Topic including but not limited to the following:

- (1) Molecularly self-assembled coatings;
- (2) Surface modifications of coatings;
- (3) Layer-by-layer coatings;
- (4) Grafted coatings;
- (5) Physically adsorbed coatings;
- (6) Vapor-deposited coatings
- (7) Coatings with chemical activity and/or physical properties;
- (8) Innovations of novel coatings for biotechnological applications.

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*Guest Editors*



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# Special Issue

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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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