

Hybrid Polyelectrolyte Multilayer Films: Fabrication, Properties and Applications

Guest Editor:

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Message from the Guest Editor

Coatings based on polyelectrolyte multilayer films are frequently used to functionalize substrate today. The layer-by-layer deposition technique allowing preparation of specific architecture is a technique which often qualifies as easy, inexpensive, robust, and versatile. Multilayer film can be easily assembled on flat surfaces or complex geometries using different methods such as dip-coating, spin-coating, or spray-coating. Using polyelectrolytes of opposite charges, electrostatic interactions allow the assembly of macromolecules. By controlling physicochemical parameters, properties of coating are adjustable as functions of targeted applications and small chemical species embedded into the film enhance coating functionalities.

This Special Issue is thus focused on original studies on fabrication, properties, and applications of hybrid polyelectrolyte multilayer film. Fundamental and applied research topics will be accepted.



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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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