

Biomimetic Approaches in Coatings Synthesis

Guest Editors:

Dr. Anita Ioana Visan

“Laser-Surface-Plasma Interactions” Laboratory, Lasers Department, National Institute for Lasers, Plasma and Radiation Physics (INFLPR), 409A Atomistilor Street, 077125 Magurele, Romania

Dr. Gianina Popescu-Pelin

National Institute for Lasers, Plasma and Radiation Physics (INFLPR), “Laser-Surface-Plasma Interactions” Laboratory, Lasers Department, 409A Atomistilor street, 077125 Magurele, Ilfov, Romania

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Message from the Guest Editors

Dear Colleagues,

In order to respond to the increasing demands of medical-targeted applications, the development of new products is required and implies the attainment of new functionalized materials and permanent optimization of coating systems. This Special Issue aims to cover the recent experimental and theoretical developments in the field of biomimetic coatings and films, with focus on their preparation, characterization, applications, and industrialization.

Potential topics include, but are not limited to:

Medical thin film morphology, structure, and other properties induced by the applied deposition method.

Deposition/growth and characterization of nanocomposite or multicomponent thin films for medical coatings.

Nanoengineering on films to form nanotextured/nanofunctionalized surfaces, with the aim of bringing novel properties or functionalities over their bulk counterparts.

Biodegradable coatings and interfaces

Improved implant surfaces for enhanced bioactivity, and advantageous cell–surface interactions to assist in regenerating tissue.



Editors-in-Chief

Prof. Dr. Wei Pan

State Key Laboratory of New
Ceramics and Fine Processing,
School of Materials Science &
Engineering, Tsinghua University,
Beijing 100084, China

Dr. Emerson Coy

NanoBioMedical Centre, Adam
Mickiewicz University in Poznań,
ul. Wszechnicy Piastowskiej 3, 61-
614 Poznań, Poland

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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Coatings Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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