

Special Issue

Electrochemically and Electrophoretically Deposited Thin Films and Their Applications

Message from the Guest Editors

A thin film is a layer of material with thickness ranging from fractions of a nanometer to several micrometers. Thin films play an important role in the development and study of materials with new and unique properties. Advances in thin-film deposition techniques have enabled a wide range of technological breakthroughs in many industrial areas. Among the known methods, the electrochemical and electrophoretic deposition (EPD and ELD) are distinguished by their flexibility of application, the possibility of applying various materials on a complex surface, the low cost of equipment, the ability to obtain films of a given thickness by controlling the deposition parameters and the short timeframe required. The scope of these deposition methods differs significantly – from electrochemical devices, such as fuel cells, batteries, various sensors and MEMS devices, to thermal protective, hardening and decorative coatings, and even biomolecules, such as enzymes and proteins. We invite you to present original papers or reviews on the latest experimental and theoretical developments in the field of electrochemical and electrophoretic deposition of thin-film coatings.

Guest Editors

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Deadline for manuscript submissions

closed (30 September 2022)



Coatings

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.4



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About the Journal

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.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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