Special Issue

Design and Electrochemical Synthesis of Multifunctional Surfaces

Message from the Guest Editors

This Special Issue will provide readers with the recent progress in the electrochemical techniques for the production of different advanced materials, such as metal and alloy coatings as well as metal matrix and alloy matrix composite coatings, metal oxide thin films, semiconductive thin films, etc., and their nanocrystalline counterparts. According to the type of the electrodeposited material, the final product can exhibit high hardness, wear and corrosion resistance, electrocatalytic, photocatalytic, antimicrobial, magnetic, hydrophobic or hydrophilic, electrical, semiconductive and photoelectrochemical properties, among many others. Included (but not limited) the following topics:

- Investigation of the microstructural and morphological characteristics of electrodeposited materials as a function of the electrolytic deposition process parameters.
- Correlation of the investigated properties to the microstructural and morphological characteristics of the electrodeposited materials.
- Optimization of the electrodeposition/ electromachining process in relation to the investigated properties of the produced materials.
- Theoretical approaches of electrolytic processes.

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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