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Metallic Films: From Nanofabrication and Nanostructuration to Characterizations and Applications

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Metallic films are key components in many of modern technologies. In particular, nanostructured metal (Au, Ag, Pd, Pt, Ni, Co, Fe, etc.) films find applications in the production of innovative devices and coatings. These technologies, however, require exploitation of the electronic, magnetic, optical, mechanical, and thermal properties unique to metallic materials. Thus, it is of paramount importance to control the films of nanoscale structures, as a result of the fabrication or post-fabrication processes, to tailor their properties.

This Special Issue of *Metals* aims at collecting a compilation of review articles and original research papers illustrating: a) the latest developments in nanofabrication and nano-patterning of thin metallic films; b) the development of new 1D, 2D, and 3D metallic nano-architectures for specific applications; c) the use of advanced state-of-art characterization methods for the understanding of full metallic films and nano-architectures properties; d) exploitation of the physico-chemical properties of nanostructured metallic films in the fabrication of devices (from electronics to sensors).









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Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure - disciplines in metallurgical field the ranging from processing. and mechanical behavior. phase transitions microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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