



Machine Learning Methods and Sustainable Development: Metal Oxides and Multilayer Metal-Oxides

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Message from the Guest Editors

Dear Colleagues,

The development of nanotechnologies and new methods of machine learning are responsible for the significant attention and demand for metal oxides and multilayer metal-oxide nanostructures. The physicochemical properties of metal oxides are governed by their growth process mechanisms, both chemical and physical. The control of film properties, film nanostructuring, and use of different oxides in composites and multilayer systems are key parameters for tailoring materials' properties to the selected application. Metal oxides can become strategic critical resources because they are implemented in many high-tech products. The secured supply of metal oxides is crucial to the continuing production and exporting of their technologies. Moreover, the specific properties of some metal oxides make them essential.

This Special Issue aims to gather recent advances in the field of machine learning methods, process synthesis, and sustainable development of metal oxides, multilayer metal oxides, and metal oxide nanostructures for the global industry.





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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 the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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