



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

Guest Editors:

Dr. Alexey Mikhaylov

Financial University under the
Government of the Russian
Federation, Moscow, Russian

Dr. Maria Luisa Grilli

ENEA-Italian National Agency for
New Technologies, Energy and
Sustainable Economic
Development, Rome, Italy

Deadline for manuscript
submissions:

closed (31 January 2022)

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.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Yong Zhang

Beijing Advanced Innovation
Center of Materials Genome
Engineering, State Key
Laboratory for Advanced Metals
and Materials, University of
Science and Technology Beijing,
30 Xueyuan Road, Beijing 100083,
China

Message from the Editor-in-Chief

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compindex, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Metals and Alloys)

Contact Us

Metals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/metals
metals@mdpi.com
[X@Metals_MDPI](#)