



Nanostructured Metal Oxides: From Growth to Application

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Message from the Guest Editors

Metal oxides and hydroxides exhibit exceptional stability and possess a wide range of physicochemical properties, making them valuable for energy storage and conversion, optoelectronics, catalysis, sensing, and various other applications. When reduced to the nanoscale, these materials undergo significant changes in their physical and chemical characteristics, such as dielectric, thermal, magnetic, and mechanical properties.

Nanostructured metal oxides and hydroxides have demonstrated substantial advancements in fields like medicine, information technology, catalysis, energy storage, and sensors. To highlight these developments, this Special Issue seeks comprehensive research on the synthesis, characterization, and applications of nanostructured metal oxides and hydroxides. Leading scientists and engineers engaged in growth, synthesis, analysis, property characterization, theoretical investigations, and applications of these materials are encouraged to submit original research and review articles.





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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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