Special Issue

Synthesis, Structure and Properties of Metal Oxides

Message from the Guest Editor

Among the wide variety of Metal oxides (MOs) systems, specific families, such as transition metal oxides, can be distinguished. Metal oxides can also be classified by structural type. For example, extensive research is devoted to compounds with a perovskite-type structure. This issue aims to bring together papers on specific metal oxide compounds and reviews of various MOs families and structural types.

A great challenge in solid state physics is to obtain novel MOs and investigate their structure and properties. Papers related to the synthesis and study of novel MOs are very welcome and strongly encouraged.

MO single crystal growth is of particular interest. A specific feature of the multicomponent MO single crystals grown by different techniques is that many of them demonstrate a strong deviation from stoichiometry due to cationic or oxygen vacancies and compositional inhomogeneity along the growth direction. The study of defects in MOs and their influence on the properties of the studied compounds is one of the topics of this issue.

Both reviews and original research articles on MOs are also welcome. We are looking forward to your contributions to this Special Issue!

Guest Editor

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Deadline for manuscript submissions

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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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