Special Issue

Catalysts for Energy and Environmental Applications

Message from the Guest Editor

This Special Issue aims to update the findings related to oxide-containing materials employed as catalysts for the production of ecological fuels and in the environmental protection, respectively. Special attention is directed at the development of such catalysts by waste valorization, since this sustainable approach would enable both an economy of natural resources and a diminution of energy consumption in the synthesis of these materials. The design of modified layered double hydroxides and perovskite structures, including thin-film heterostructures, also leads to a wide range of new materials which can act as catalysts for the production of hydrogen and other ecological fuels, as well as for the degradation of organic pollutants from liquid and gaseous effluents. I cordially invite you to contribute your recent work (review articles, original papers, and communications) to this Special Issue, but not limited to, the following materials-oriented categories:

- LDH-derived mixed oxides and/or LDHs-composites;
- Perovskites and/or perovskite composites;
- Oxide catalysts from waste materials;
- Oxometallate based materials;
- Supported metal catalysts

Guest Editor

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Deadline for manuscript submissions

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About the Journal

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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