Special Issue

Advances in Transition Metal Compounds and Their Applications

Message from the Guest Editor

Recent studies demonstrate that transition metal compounds exhibit promising visible-light photocatalytic reactivity in the decomposition of pollutants and water splitting. On the other hand, these materials have high specific capacity and good electrochemical and safety characteristics, which makes them promising for energy storage applications. Moreover, nanostructured transition metal compounds with high surface-to-volume ratios are of particular scientific interest in this field.

The topics of this Special Issue include but are not limited to the advanced application of transition metal compounds, (photo)catalysis, photocatalytic water splitting, photovoltaics, photoelectrochemistry, electrochemical energy storage, electrode materials, and supercapacitors. **Keywords:**

- photocatalysts
- water and air pollutant degradation
- water splitting
- photoelectrochemistry
- cathode materials
- rechargeable batteries

Guest Editor

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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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