Special Issue

Nanocatalysts for CO₂ Utilization

Message from the Guest Editors

CO2 emission has been increasing due to the increasing global demand for energy consumption by the growing global population. Consequently, global warming has worsened over the years, inspiring researchers to explore possible methods for CO2 utilization to minimize net CO2 emissions. Over the years, many catalysts have been developed for CO2 utilization, and have been reported in increasing numbers of publications in this field. This Special Issue aims to include recent and emerging strategies to develop new and enhanced materials for CO2 activation and adsorption, and the catalytic reactions involving CO2 (including electrochemical, photochemical, and biological conversion of CO2), together with the integrated processes for CO2 conversion and reduction. The scope of this Special Issue will focus on recent advancements in the synthesis of catalyst materials for CO2 conversion into synthetic fuels, polymers, organic carbonates, and intermediate products.

Full papers, communications and reviews are all welcome.

Guest Editors

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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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