

Special Issue

Materials for High Performance Electrocatalytic Hydrogen and Oxygen Evolution

Message from the Guest Editor

Hydrogen has the potential to be the key in the overall approach to tackle the issues of energy supply and climate change. Hydrogen is a clean energy carrier that can be used directly as a fuel in transportation means and other applications. Electrochemical and solar-driven photoelectrochemical (PEC) water splitting are the most promising energy vectors for large-scale storage of intermittent electricity from solar or wind energy, providing affordable clean energy with rapid response and wide operation range. Articles and reviews dealing with catalyst design, synthesis and advanced characterization, membrane electrode assemblies (MEAs) and Solid Oxide Cells (SOCs) fabrication, experimental/theoretical studies on electrochemical interfaces of water splitting, fundamental studies of hydrogen and oxygen evolution reaction mechanisms, novel photoelectrochemical cell and system designs are very welcome.

Guest Editor

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Message from the Editorial Board

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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