Special Issue

Materials and Components for Solid Oxide Based Electrochemical Cells

Message from the Guest Editor

This Special Issue aims to rapidly disseminate the most recent results concerning materials and components for solid oxide electrochemical cells. These electrochemical cells may potentially solve several issues in various sectors, such as monitoring of gases (i.e., industries, automobiles, etc.), production of energy (a combination of thermal and electrical energy), storage (batteries and supercapacitors), and production of fuels from wastes and treatment of pollutants in gas (persistent organic pollutant). Therefore, this Special Issue addresses topics related to high-temperature electrochemical cells with the aim to explore the potentiality of smart materials and components for future applications able to reduce or eliminate the environmental impact and the existing hurdles of conventional technologies. Topics considered include research in and development and application of materials and components for solid oxide electrochemical cells.

Guest Editor

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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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