Special Issue

Novel Materials and Catalytic Processes for Zero Carbon Policy

Message from the Guest Editors

This Special Issue serves as a platform for the exchange and dissemination of cutting-edge ideas, research findings, and promising developments in the dynamic field of Zero Carbon Policy. The primary focus is on original research, encompassing both theoretical and experimental approaches in addressing various facets of the Zero Carbon Policy landscape. This includes, but is not limited to, solid oxide fuel and electrolysis cells; hydrogen production; CO2 reduction, production, storage, and transmission; environmental impact assessment; and the application of novel materials and technologies. We invite contributions of high-quality research that delve into the latest advances in critical areas such as material development, preparation methods, and electrochemical techniques dedicated to unraveling the intricacies of electrode and electrolyte reaction mechanisms. Submissions exploring sources of energy losses are also encouraged. Furthermore, we welcome manuscripts covering a wide spectrum, including single-cell, stack, and hybrid systems, as well as those delving into modeling, numerical analysis, and detailed descriptions of degradation mechanisms.

Guest Editors

Dr. Muhammad Bilal Hanif

Department of Inorganic Chemistry, Faculty of Natural Sciences, Comenius University in Bratislava, Ilkovicova 6, 842 15 Bratislava, Slovakia

Dr. Michał Mosiałek

Institute of Catalysis and Surface Chemistry of the Polish Academy of Sciences, Krakow, Poland

Deadline for manuscript submissions

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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