materials

IMPACT FACTOR 3.4

Indexed in: PubMed

CITESCORE 5.2

an Open Access Journal by MDPI

Nano-based Catalysts for Renewable Energy

Guest Editors:

Dr. Michal Bajdich
SUNCAT Center for Interface Science and Catalysis, Chemical Engineering, Stanford University, Stanford, California 94305, and SLAC National Accelerator Laboratory, 2575 Sand Hill Road, Menlo Park, California 94025, USA

Dr. Max Garcia-Melchor
School of Chemistry, Trinity College Dublin, College Green, Dublin 2, Ireland

Deadline for manuscript submissions:
closed (28 February 2019)

Message from the Guest Editors

Meeting the global energy demand in a clean, reliable and economically affordable way is one of biggest challenges of this century. Particularly challenging is to find sustainable alternatives to fossil fuels by utilizing solar energy, water and CO2, where active, selective, stable and yet economic catalysts are needed. Although significant advances have been made in this field, there is still room for improvement by engineering nanomaterials with enhanced catalytic performance.

This Special Issue aims at covering research on promising nano-based catalysts with potential applications to renewable energy and the fundamental understanding of chemical processes related to renewable energy. This includes (but is not limited to) the most interesting aspects of nanostructuring of catalysts such as reaction confinement, creation of uncoordinated edge sites in nano-objects, and single site catalysts. We are especially interested in original research that shows: i) the electro-catalytic performance of nano-based catalysts, ii) the availability of active sites with potential to break existing scaling relations, or iii) examples where the structure and activity have been well resol

materials

IMPACT FACTOR 3.4 | Indexed in: PubMed | CITESCORE 5.2

an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.
Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
𝕏@Materials_Mdpi