



an Open Access Journal by MDPI

Metallic Nanoparticles in Heterogeneous Catalysis

Guest Editor:

Assist. Prof. András Sápi

Department of Applied and Environmental Chemistry, University of Szeged, Szeged, Hungary

Deadline for manuscript submissions: closed (31 December 2020)

Message from the Guest Editor

Heterogeneous catalysis is the prime mover of the majority of the chemical processes in the chemical industrial world. Environmental concerns also have a need for catalysts with high activity and selectivity. Besides bulk metallic catalysts, supported metallic nanoparticles are the basis of these catalytic systems. Nanoparticles have great advantages that originate from the high surface-to-volume ratio, the special surface concentrations of the different Miller indices planes, the different surface rearrangement and the cell parameters compared to the bulk counterparts. Nanoparticles that are anchored onto the surface of different metallic-oxide surfaces can open up an extra way of tuning catalytic activity and selectivity.

In this Special Issue, we are focusing of the synthesis, characterization and application of selfstanding or supported mono- or multi-metallic nanoparticles in gas or liquid phase heterogeneous catalysis.

It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
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 iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

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