Special Issue

Nanocatalysis for Environmental Protection, Energy, and Green Chemistry

Message from the Guest Editors

Currently, the rational design of nanostructured catalysts provides materials characterized by well-tailored activity/selectivity/stability in applications related to environmental protection and remediation, sustainability, and green energy technologies, as well as green chemical production. This Special Issue aims to host significant advances in the aforementioned areas including, but not limited to:

- Greenhouse gases abatement: CO2 capture, sequestration, and utilization (CO2 recycling to methane and renewable fuels, power-to-gas technology); N2O abatement; CH4
- Clean energy topics: H2 production and cleaning of the produced gas stream (CH4, biogas and hydrocarbons reforming, water–gas shift reaction, preferential CO oxidation reaction, etc.); fuel cells.
- Photo-electro-chemical wastewater and water treatment; photo-electro-chemical CO2 reduction; electrochemical water splitting.
- Emission control catalysis: De-(NOx, CH4, VOCs, H2S, CO, soot).
- Green chemical production.

This Special Issue also welcomes the submission of papers that will be presented in the "**16th Panhellenic Symposium of Catalysis**" (https://www.16psc.tuc.gr).

Guest Editors

Prof. Dr. Ioannis V. Yentekakis

Physical Chemistry and Chemical Processes Laboratory, School of Environmental Engineering, Technical University of Crete (TUC), 73100 Chania, Greece

Dr. Paraskevi Panagiotopoulou

School of Chemical and Environmental Engineering, Technical University of Crete, 73100 Chania, Greece

Deadline for manuscript submissions

closed (31 March 2023)

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/131096

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

mdpi.com/journal/nanomaterials

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/journal/nanomaterials

MDPI

About the Journal

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)