Special Issue

Eco-Nanotechnology in Materials

Message from the Guest Editors

Steps in human evolution are encompassed by technological advances starting with the development of the so-called lithic industry, following by the iron age, water and steam power use, continuing with machine tools, the atomic age, the digital revolution and the production of smart materials by means of nanotechnologies in the frame of the Fourth Industrial Revolution. Sustainable development is accompanied by the translation of high-yield selective natural processes to bio- and eco-nanotechnologies for the production of functional advanced materials. Green processes are mostly found among physical methods of material functionalization. Green chemistry is also reaching new development peaks in view of using more ecological steps of active principles synthesis. Materials manipulation at the smallest scales encompasses more and more eco-nanotechnologies to preserve the natural resources and the environment. This Special Issue welcomes papers in all fields of ecological nanotechnologies from active principles synthesis to smart materials production and greener technologies development.

Guest Editors

Dr. Ioana Stanculescu

Department of Physical Chemistry, Faculty of Chemistry, University of Bucharest, 4-12 Bd. Regina Elisabeta, 030018 Bucharest, Romania

Dr. Marcela Rosu

National Institute for Research and Development of Isotopic and Molecular Technologies INCDTIM, Cluj Napoca, Romania

Deadline for manuscript submissions

closed (20 April 2025)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/98682

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

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

MDPI

About the Journal

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

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 and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)