

## Special Issue

# Electrochemical Synthesis and Characterization of Nanostructures, Alloys and Conductive Polymers

### Message from the Guest Editor

Given current global issues such as climate change, global warming or the energy crisis, academic and industrial researchers around the world are focusing their efforts on designing and developing new nanomaterials, alloys and conductive polymers. Biomaterials, electrocatalysts, semiconductors, supercapacitors, energy conversion into solar cells, electrochromic devices and energy storage/release are just a few applications that can benefit from the multifunctional capabilities of these versatile materials. Many synthetic approaches to the manufacture of nanostructures, alloys and conductive polymers are currently available, but among them, electrochemical methods (e.g., simple electrochemical oxidation, anodizing, of metals or electropolymerization) are particularly attractive due to their simplicity, cost-effectiveness and versatility. Therefore, in this Special Issue of *Materials*, both regular research papers and reviews on all aspects of the electrochemical synthesis and characterization of nanostructures, alloys, thin films and conductive polymers with a wide range of applicability are expected.

### Guest Editor

Dr. Mihaela Vasilica Mindroiu

Department of General Chemistry, University Politehnica of Bucharest, Bucuresti, Romania

### Deadline for manuscript submissions

closed (10 October 2023)



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/125678](https://mdpi.com/si/125678)

*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto:materials@mdpi.com)

[mdpi.com/journal/  
materials](https://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](https://mdpi.com/journal/materials)



## 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)