

Special Issue

Advances in Porous Anodic Oxides from Biomaterials to Sensing and Energy

Message from the Guest Editors

This Special Issue would like to collect contributions from all these diverse areas, especially pointing to use of new metals to be oxidized, in order to provide a picture of the current state-of-the-art in the field. Manuscripts on the fabrication, characterization, and applications of the structured materials surfaces—in the form of both coatings and membranes—will be welcome. The relevant topics include but are not limited to those listed under the Keywords section below.

- functional metal coatings
- self-organization
- valve metals
- intermetallic alloys
- nanopatterning
- natural lithography
- templates and moulding
- hierarchical material structuring
- biocompatibility
- bioactivity
- pore loading and elution
- orthopaedic implants
- dental implants
- optical properties after nanostructuring
- photocatalytic properties of anodic oxides
- energy storage
- diffusion in porous solids
- modelling of growth
- modelling of diffusion through pores
- modelling of mechanical properties

Guest Editors

Dr. Ornella Cavalleri

Department of Physics, University of Genoa, Genoa, Italy

Dr. Marco Salerno

1. Institute of Materials Science and Engineering, Military University of Technology, Warsaw, Poland

2. Institute for Globally Distributed Open Research and Education (IGDORE), Göteborg, Sweden

Deadline for manuscript submissions

closed (10 June 2022)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 5.8
Indexed in PubMed



mdpi.com/si/94907

Materials

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

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





Materials

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 5.8
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 - Q1 (Metallurgy and Metallurgical Engineering) /
CiteScore - Q2 (Condensed Matter Physics)