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

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Deadline for manuscript submissions

closed (10 June 2022)

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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.

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