







an Open Access Journal by MDPI

Microstructures and Electrical Conductivity of Thin Films

Guest Editors:

Prof. Dr. Paola Manini

Department of Chemical Sciences, University of Napoli Federico II, Complesso Universitario Monte S. Angelo, Via Cintia 4, I-80126 Napoli, Italy

Dr. Marianna Ambrico

CNR- Institute for the Science and Technology of Plasmas, Branch Office in Bari, Bari, Italy

Deadline for manuscript submissions:

closed (21 October 2021)

Message from the Guest Editors

During the last few decades, particular attention has been paid to the research on the surface microstructuring of thin films involving both the adoption of physical and chemical techniques and the subsequent testing of their electrical response. These efforts are aimed toward developing more efficient devices or to increase sensor performance. It has been also recognized that microstructures offer the possibility for a broad range of applications from bioelectronics to sensing and renewable energy. This Special Issue aims at providing an interdisciplinary overview on the most intriguing and original results and recent progress in surface roughening methods (including chemical or plasma/laser surface texturing) with a special emphasis the correlation on modification/improvement of the electrical properties. Reports of potential foreseeable applications are also welcomed.













an Open Access Journal by MDPI

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, OC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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.

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*)

Contact Us

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