Special Issue

Synthesis and Advanced Characterization of Low-Dimensional and Quantum Materials

Message from the Guest Editors

Reducing dimensionality in matter to an atomic-scale opens the door to physical and chemical properties inaccessible in its bulk counterpart. From 2-dimensional to 0-dimensional materials, novel and unexpected behaviors are observed in the electronic band structures, thermal and electronic transport, light–matter interaction, chemical reactivity, and mechanical stiffness, as well as quantum mechanical effects related to spatial confinement and nontrivial topological state of the matter. In this Special Issue, the experimental and theoretical state-of-the-art approaches for the synthesis and advanced characterization of low-dimensional and quantum materials are highlighted and discussed aiming to improve the knowledge of the most important topics about condensed matter. It is our pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editors

Dr. Carlo Grazianetti
IMM-CNR Agrate Unit, 95121 Catania, Italy
Dr. Christian Martella
IMM-CNR Agrate Unit, 95121 Catania, Italy

Deadline for manuscript submissions

closed (20 February 2022)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/36223

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

About the Journal

Message from the Editorial Board

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.

Editors-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

Prof. Dr. Yuguang Ma
State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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)

MDPI