Special Issue

Optical Properties of Two Dimensional Materials

Message from the Guest Editor

Two-dimensional (2D) materials with thicknesses down to a single atom have been extensively investigated since the exfoliation of graphene. Due to their reduced dimensionality, 2D materials exhibit an extraordinary optical response in comparison with bulk counterparts. In addition, spatial confinement and reduced dielectric screening of 2D materials causes strong Coulomb interactions, resulting in a room-temperature exciton formation with large excitonic binding energies. 2D semiconducting materials have exceptional optical absorption/photoluminescence in the visible and NIR range, which has opened up prospects for 2D materials exploration for use as absorbers, reflectors, light modulators in optical nanodevices, as well as in optoelectronics, energy applications, and sensors. This Special Issue aims to bring together detailed studies in the field of the optical properties of 2D materials and related heterostructures and to identify the crucial areas where progress can be made.

Guest Editor

Dr. Nataša Vujičić
Institute of Physics, Zagreb, Croatia

Deadline for manuscript submissions

closed (31 December 2021)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/68990

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 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)