Special Issue

Recent Advancement in Functional Polymers and Composites for Health and Environment Monitoring

Message from the Guest Editor

Conductive polymers, as polythiophenes, and polymer composites, as graphene-loaded polymers, have recently attracted researchers and encouraged the development and investigation of specific functionalities that are to be exploited in a new generation of sensors. This offer concerns the growing demand for low-cost, ultra-sensitive, easy-to-integrate sensors for health (physical, chemical, and biological parameters) and environment (aqueous medium, gases, and vapors) monitoring. Polymers provide enormous advantages in terms of cost and processability, since they are produced in high volume at a reasonable, low cost and, historically, have been employed easily in large-scale productions. The nature of polymers confers to these materials a wide range of capability, since molecules can be tailored for a specific interaction and function in order to achieve selectivity, wettability, high response, and proper transduction characteristics. In this Special Issue, the recent advancement in functional polymer and related composites with a special focus on the application for health and environment monitoring is considered.

Guest Editor

Dr. Simone Luigi Marasso

1. Institute of Materials for Electronics and Magnetism, IMEM-CNR, Parco Area delle Scienze 37/A, 43124 Parma, Italy
2. Department of Applied Science and Technology, Politecnico di Torino, C.so Duca degli Abruzzi 24, 10129 Turin, Italy

Deadline for manuscript submissions

closed (31 October 2020)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/15858

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)