# **Special Issue**

## Graphene-Based Materials, Their Composites and Potential Applications

### Message from the Guest Editors

Monolayer graphene was first isolated 15 years ago, attracting the attention of scientific community, because of its exceptional electrical, optical, thermal, and mechanical properties. However, it is evident that a full understanding of its fundamental physics and properties has been gained, as well as a significant advancement in scaling-up the production methods. In parallel, new routes for the preparation of bulk porous graphene materials and foams that envisage fascinating applications in areas such as environmental science, bio-medicine, or energy, have grown without stopping. This Special Issue is focused on presenting the current research on graphene-based polymer and ceramic composites, with tentative applications in diverse fields, such as energy production and storage, environment protection, catalysis, biomedicine, and wearable electronic and sensing devices. Concurrently, recent advancements in the preparation routes, the functionalization and consolidation methods for thin films, and bulk porous and 3D-printed graphene-type structures are the chief aims of the present Special Issue.

#### **Guest Editors**

Dr. Maria Cristina Ramirez Instituto de Cerámica y Vidrio, Consejo Superior de Investigaciones Científicas (CSIC), Madrid, Spain

Prof. Maria Isabel Osendi Instituto de Cerámica y Vidrio, Consejo Superior de Investigaciones Científicas (CSIC), Madrid, Spain

#### Deadline for manuscript submissions

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# 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

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