# **Special Issue**

# Graphene Oxide: Synthesis, Reduction, and Frontier Applications

# Message from the Guest Editor

In recent years, graphene oxide has received much attention as a precursor for the highly acclaimed graphene nanomaterial. The degree of oxidation in graphene oxide is one of the parameters employed in order to tailor its applications. Other aspects regard the properties of the starting graphite, the exfoliation of graphene oxide, and the subsequent reduction of graphene oxide that can be carried out via chemical, thermal, or electrochemical routes. In particular, the properties of graphene oxide open up new fields of application as high-performance electrodes in energy storage devices, sensing devices, gas adsorption, optoelectronics, or biomedical applications. However, it is challenging to make more efficient devices with required efficiencies by optimizing the availability, environmentally friendliness, and cost of raw materials, synthesis costs, and selecting the size-induced properties of graphene oxide nanomaterials. It is my pleasure to invite you to submit reviews, regular research papers, and communications to this Special Issue on Graphene Oxide: Synthesis, Reduction, and Frontier Applications.

# **Guest Editor**

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# Deadline for manuscript submissions

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# 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.

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