Special Issue

Emerging Materials for Attaining Carbon Neutrality in Water Treatment

Message from the Guest Editor

For this Special Issue, we are seeking relevant articles presenting new advances in the use of novel materials to achieve sustainable, green and carbon-neutral water treatment. We aim to address the following questions: Can wastewater treatment applications be expanded to recovering resources such as nutrients or energy? Can unused materials be used for this purpose? By thinking globally and acting locally to support a circular economy (CE), resource recovery by using industrial/agricultural byproducts to remove another form of waste through an engineering approach can protect the environment and conserve resources. Topics of interest for this Special Issue include, but are not limited to: Carbon neutrality and aquatic ecosystem remediation; Waste valorization and its reuse; Reduction in carbon intensity and operational cost of wastewater treatment; Advanced wastewater treatment process; Energy recovery from wastewater treatment; Nutrient recovery from municipal wastewater; Greenhouse gas emission reduction during wastewater treatment; Global water sustainability; Water-enabled electricity generation.

Guest Editor

Dr. Tonni Agustiono Kurniawan
College of Ecology and Environment, Xiamen University, Xiamen 361102, China

Deadline for manuscript submissions

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials

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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.

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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