Special Issue

Development and Application of Novel Membranes (2nd Edition)

Message from the Guest Editors

The development and application of membranes is not a novel topic, but is still a field of interest full of new opportunities, as they present certain advantages.

In industrial processes, different types of membranes have been used, including microfiltration, ultrafiltration, nanofiltration, reverse osmosis, electrodialysis, and pervaporation, among others. The most common membranes in wastewater treatment are made of polysulphone and poly(ether)sulfone. However, due to their hydrophobicity, they are highly susceptible to fouling. Different physical and chemical membrane modification processes have been carried out, including modification of membrane materials before membrane formation, graph polymerization, plasma treatment, physical preadsorption, and others.

This Special Issue aims to cover the recent developments and advances in all aspects of novel membranes and their applications, including membrane processes, combined processes (including one membrane step), modified membranes, novel materials, the possibility of recycling and reusing membranes, and new technologies to reduce fouling and improve the efficiency of enhanced processes.

Guest Editors

Prof. Dr. Asuncion Maria Hidalgo

Dr. Maria Dolores Murcia

Dr. María Gómez

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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

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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