Special Issue

Fundamentals of Adsorbents-Synthesis, Characterisation, Properties, and Application

Message from the Guest Editor

The increased use of rare resources has led to excessive mining and, simultaneously, an environmental impact. Aiming for overall resource sustainability, materials for the adsorptive separation, recovery, decontamination, and recycling are being developed. Both synthetic- and biomass-based adsorbents have been found to be highly efficient for recovery and decontamination applications. The adsorption method is used in both air and solution systems. For issues like rare element recovery/recycling, fresh water scarcity, and heavy metal and radioisotope decontamination. biomass adsorbents, porous coordination polymers, organic resins, inorganic complexes, and so on are being extensively studied. In addition, from the fresh water system to the seawater or the organic-aqueous mixtures, the need for an adequate adsorbent is immense. Therefore, using this platform, I would like to compile all of the unique knowledge and ideas we have on the synthesis, characterization, and application of the adsorbents.

Guest Editor

Dr. Durga Parajuli

Nanomaterials Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), 1-1-1 Higashi, Tsukuba 305-8565, Japan

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

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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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