Special Issue

Green Nanoparticles and Nanocomposites for Water Remediation: Synthesis and Current Applications

Message from the Guest Editor

The expansion of the global population and industrial development have greatly contributed to water pollution, which has significantly harmed the environment and human health. In this context, it is necessary to conduct studies and develop effective solutions for water remediation. In recent years, remarkable advances in nanotechnology have been observed, potentially enabling its application in water treatment and quality monitoring. Green nanoparticles (NPs) and nanocomposites prepared using green synthesis methods, and these are ideal for water remediation. For example, microorganisms, algae, plants and their extracts, agricultural wastes, enzymes, and biomolecules can be used to fabricate green nanoparticles for application in environmental remediation. This Special Issue of *Nanomaterials* aims to present research related to the synthesis, surface modification and properties of nanomaterials, including their selectivity and propensity to absorb contaminants, when used for the removal of contaminants from wastewater via adsorption, oxidation, disinfection, photocatalytic

Guest Editor

Dr. Gianluca Viscusi

Department of Industrial Engineering, University of Salerno, Via Giovanni Paolo II, 132, 84084 Fisciano, Italy

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

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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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