Special Issue

Nanomaterials-Based Biosensor Platforms for Environmental and Biomedical Applications

Message from the Guest Editors

Recent developments in the field of biosensors using nanomaterials as sensing transducing materials have gained immense importance in recent years because of their physical and chemical properties. Various emerging nanomaterials (eg. MXenes, graphene. graphitic carbon nitride, carbon nanotubes, fullerene, quantum dots and rare earth nanoparticles) as well as hybrid materials, have been used to develop advanced sensitivity, selectivity and representability. Utilizing these materials as central core sensing components, different biosensors platforms have been developed, including nanomaterials-based sensors for aptamer, protein, antibodies, SARS-CoV-2, MARS, electrochemiluminescence, peptide-based sensing, pesticides, biomarkers and SARS (Surface-enhanced Raman Scattering). This Special Issue highlights the recent advancements in nanomaterial-based biosensors and their potential application in the environmental and biomedical fields. Original research articles and peer review papers (full-length or shorter) are welcome.

Guest Editors

Dr. Raghuraj Singh Chouhan

Dr. Sonu Gandhi

Dr. Veera Bhadraiah Sadhu

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

 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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