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New Emerging Materials and Their Applications in the Development of Electrochemical Sensors

Guest Editor:

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Deadline for manuscript submissions:
closed (20 July 2022)

Message from the Guest Editor

Dear Colleagues,

This Special Issue will address recent advances made in the fabrication of sensitive and selective sensors that can be employed in the quantification of biomolecules, biomarkers, drugs and environmental contaminants, with a focus on emerging new materials. Therefore, our aim is to provide readers from different disciplines and sectors with the latest information on new materials emerging in the creation of high-performing sensors. With a focus on (but not limited to) the following topics:

- 2D and layered materials in the fabrication of sensors, including materials such as MXenes, graphene, carbon nanotubes/nanohorns, metal nitrides, hexagonal boron nitride, and layered dichalcogenides;
- Recent developments in nanoparticles, magnetic nanoparticles, nanoinks, and single atom electrocatalysts as sensors;
- Molecular recognition agents employed to give enhanced selectivity;
- Sensor arrays for the simultaneous detection of multiple analytes;
- New methods to immobilize and anchor nanoscale materials at the sensor surface, limiting leaching and associated environmental concerns.

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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.

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