Special Issue

Advanced Applications of Electrochemical Materials for Sensors and Catalysts

Message from the Guest Editors

Nowadays, sensors are applied everywhere in society, from industry process control to environmental monitoring to smart home infrastructure. Catalysts are also hot topics. They are found in the petroleum industry, waste deep treatment facilities, and car exhaust treatment devices. Electrochemical materials such as TiO2, ZnO, and 2D materials can be employed in both areas. For example, TiO2 has excellent photoelectrochemical properties, which provide it with superior performance in photocatalysts and toxic gas removal applications. ZnO nanowires can be employed as sensing materials for room-temperature NO2 gas sensors. Graphene or MoS2 composites have been reported to be excellent room-temperature gas sensors or electrochemical catalysts. Many interesting and significant results are emerging in applications of electrochemical materials for sensors and catalysts. This Special Issue aims to report on some exciting work being conducted in this field. Topics of interest include, but are not limited to, the following:

Guest Editors

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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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