Special Issue

Electrochemical and Luminescent Sensor Materials for Biological and Biomedical Applications

Message from the Guest Editors

The landscape of biomedical and biological sensors is rapidly evolving, driven by the need for more precise clinical diagnostics and continuous monitoring systems. Recent advancements in sensor technology have been particularly transformative in the field of personalized diagnostics. Wearable patches, implants, and other portable analytical devices are now capable of measuring a wide array of analytes, including glucose, electrolytes, and hormones, in various biomatrices such as blood, sweat, and saliva. These innovations have spurred a vigorous search for new materials, including novel molecules, nanomaterials, biomaterials, and nanohybrid materials, which are essential for the development of the next generation of electrochemical and luminescent sensors. This Special Issue focusing on the latest advancements in electrochemical and luminescent sensor materials will feature a curated selection of communications, full papers, and mini reviews, providing a comprehensive overview of current research and development efforts in this field.

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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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