Special Issue

Advances in Functional Materials and Nanodevices

Message from the Guest Editor

Electrochromism is the phenomenon of certain materials reversibly changing their colors or optical properties (absorbance/transmittance/reflectance) via redox reactions under an applied electric field, which has found applications in smart windows, rear-view mirrors, displays, and so on. The past four decades have witnessed the rapid development of electrochromic technology. However, it remains severely developmentally challenged due to its limited practical applications. Predictably, as a color control technology that gives visual information readable by the naked eye, electrochromism should have much wider applications by applying the visualization technique to various functional devices. The integration modes, design principles, and performance optimization for different types of interdisciplinary electrochromic devices can result in state-of-the-art advances in the fusing of electrochromic technology with other advanced technologies, including wearable technology, thermal control technology, energy storage technology, energy harvesting technology, and sensing technology.

Guest Editor

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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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