Special Issue

Photoresponsive Nanomaterials for Advanced Application

Message from the Guest Editor

This Special Issue of *Materials* covers the state-of-the-art in the synthesis and application of photolight-sensitive nanomaterials for advanced applications such as solar cells, photodetectors, photocatalysts, sensors, and displays. The rapid development of photoresponsive nanomaterials makes it possible to design better and unique devices with outstanding properties, which emit, modulate, transmit or detect light. In this area of research, there are high hopes for the intensive development of nanomaterials. This topic covers, among others, the design and manufacture of the materials which, due to the size of the particles, are often characterized with properties unachievable by macromaterials. The articles to be presented in this Special Issue will deal with the following issues: the aspects of the synthesis and characterization of high-quality nanomaterials with controlled morphology (0D, 1D, 2D), surface functionalization, production of devices based on nanomaterials, generation of carriers, and the relation between the properties of the nanomaterials and the performance of the devices.

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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