



Phototransistors Based on Nanofilms: Fabrication, Characterization and Application

Guest Editor:

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Deadline for manuscript submissions:

closed (31 July 2021)

Message from the Guest Editor

In current electronics systems, a phototransistor, a kind of device that realizes the functionality of light detection and signal magnification in a single device, is an essential optoelectronic integration component. Since William Shockley first proposed the concept of phototransistors in 1951, results with numerous types of materials and operating mechanisms have been reported. Furthermore, as vision-based machine learning technology becomes more important, interest in nanomaterials and devices that can sense images more accurately and efficiently is skyrocketing. In the flow of this science and these technologies, the aim of this Special Issue, entitled “Phototransistors Based on Nanofilms: Fabrication, Characterization, and Application” is to offer the latest cutting-edge research and development in the field. Research papers related to the synthesis, characterization of novel nanofilms, or nanocomposites and their practical applications are welcome in this Special Issue.





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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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