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Stimuli-Responsive Nanosystems Based on Polymers and Hybrid Nanoparticles

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Message from the Guest Editor

Stimuli-responsive materials attracted attention due to its enormous potential since their physical properties can be tuned as well as controlled by external stimulus. However, such materials have several drawbacks originating from its size and therefore the capability of its final response upon external stimulus possess relatively low performance.

This special issue is mainly focused on the nanosystems based on the polymer and hybrid nanoparticles those physical properties such as viscosity, stiffness, wettability, shape or dimensions can be tuned by presence of external stimuli. Such external stimuli can be electric or magnetic field, temperature, pH or light. This special issue also covers scope of nanosystems including polymers and hybrid nanoparticles those generate certain electrical output from the dynamic mechanical stimulation (vibrations). Introduction of the nano-sized systems those promoting the significant improvement of the stimuliresponsive capabilities in systems would be beneficial.









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Editor-in-Chief

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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, metalorganic 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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