

Editorial

Chemical Design and Environmental/Energic Applications of Self-Assembled Nanocomposites and Nanostructures

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Nowadays, the design and synthesis of self-assembled nanostructured composites have drawn much attention due to variable nanostructures and changeable properties. In view of various compositions in nanostructured composites, the application areas change from nano-biosensors, chemical reactions, and photocatalysts to organic semiconductors, etc. However, with wide and further investigation, more works seem to be explored for relative research and applications.

Herein, the aim of this special issue was to publish research/review papers targeting updated advances on the self-assembled nanomaterials with novel chemical reactions or important application properties. After the careful and rigorous review process of manuscripts, we have accepted 39 papers for publication in the present special issue. For example, Li and coworkers investigated the synthesis of SrTiO₃@MoS₂ nanofibers by the electrospinning method, and the prepared composites showed good photoelectric properties with stable electrical conductivity and sensitivity for photodetectors. Nguyen studied the synthesis of silver nanoparticles with good antibacterial activities for potential food packaging applications. Han and coworkers built the WO₃/TiO₂ composite nanofibers by the electrospinning strategy for enhanced model dye photocatalytic performance. Cai and coworkers considered the calculation of surface energy in the Li-N-B system using the density functional theory strategy. Gao and coworkers studied the catalytic activity toward ethanol electrooxidation of PdAg

NPs with synergistic effect. Specially, Su and coworkers presented the updated review on the preparation methods and applications of fluorescent gels, focused on utilizations in drug delivery and sensor fields. In summary, the present special issue demonstrates new insights to the readers into the updated information relative to Chemical Design and Environmental/Energic Applications of Self-Assembled Nanocomposites and Nanostructures.

Conflicts of Interest

The editors declare that they have no conflicts of interest regarding the publication of this special issue.

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