Special Issue

Emerging Organic Synthesis Approaches for Functional Nanomaterials and Organic Compounds in Supercapacitor Applications

Message from the Guest Editors

Organic compounds and their functionalized nanomaterials have attracted significant attention as advanced electrode materials for supercapacitor applications. Their highly tunable molecular structures and physicochemical properties offer excellent potential for enhancing electrochemical performance, making them strong candidates for next-generation energy storage devices. This Special Issue invites original research articles and reviews focusing on the design, synthesis, and functionalization of nanomaterials and organic compounds for supercapacitor electrodes. Particular interest will be given to studies involving functionalization through organic linkers, heteroatom doping, extended π -conjugation, and other molecular engineering strategies that improve conductivity, stability, and charge storage capacity. The goal of this Special Issue is to highlight recent developments and innovative approaches in the fabrication of highperformance electrode materials tailored for advanced supercapacitor technologies.

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