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Advanced Electrode Materials and Novel Device Designs for Supercapacitors

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Deadline for manuscript
submissions:

closed (10 July 2024)

Message from the Guest Editors

In this Special Issue, I would like to invite submissions of papers on advanced electrode materials and novel device designs for the latest supercapacitors. With the increasing importance of electrochemical energy storage, the development of supercapacitors is accelerating. Many advanced materials have been used as supercapacitor electrodes like carbon-based nanomaterials, metal oxides/sulfides/selenides/phosphides, conducting polymers and hybrid nanocomposites along with some novel materials like MXenes, metal-organic frameworks, metal nitrides, and covalent organic frameworks. Various novel supercapacitor device designs such as flexible supercapacitors, micro-supercapacitors, battery-supercapacitor hybrid devices, electrochromic supercapacitors, photo-supercapacitors, thermally chargeable supercapacitors, high-frequency supercapacitors and self-healing supercapacitors have also been developed for high performance or special applications. It is expected that these advanced electrode materials and emerging device designs will propel supercapacitors to get a limitless foreground in the future.



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Special Issue



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Message from the Editor-in-Chief

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