Special Issue

Advances in Carbon Gels: From Synthesis to Electrochemical and (Bio)analytical Applications

Message from the Guest Editors

Carbon gels are attractive three-dimensional structures that can confine small molecules within the cavities of their porous framework, as well as exhibit remarkable electrical conductivity. However, the synthesis of carbon gels often involves complex, time-consuming, and energy-intensive processes, which can hinder their scalability and competitiveness within the industrial field. Advances in terms of fabrication performance, such as the combination with metallic or carbon-based additives, the doping of the micro- or nano-structure with heteroatoms, or the implementation of technologically sophisticated processes, have enabled the application of carbon gels in a wide scope of disciplines, such as energy conversion and storage, environmental remediation, and electroanalysis via piezoelectric, optical, and electrochemical sensors. This Special Issue, entitled “Advances in Carbon Gels: from synthesis to electrochemical and (bio)analytical applications”, aims to highlight recent developments in the synthesis, characterization, and applicability of carbon gels through the use of innovative approaches.

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About the Journal

Message from the Editor-in-Chief

Gels (ISSN 2310-2861) is recently established international, open access journal on physical and chemical gel-based materials. The journal aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. General topics include but not limited to synthesis, characterization and applications of new organogels, hydrogels and ionic gels made either from low molecular weight compounds or polymers, composite and hybrid materials where a metal is by some means incorporated into the gel network, and computational studies of these materials in order to provide a better understanding of gelation mechanism. We cordially invite you to consider publishing with us and contribute with your own grain of sand to the advance in this fascinating field.

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