Special Issue

2D Materials for Energy Storage and Conversion

Message from the Guest Editor

Whether it is due to their exceptional mechanical properties, optoelectronic structure, large surface area, catalytic activity, or to the possibility to tailor all those traits to particular needs, 2D materials seem to be predestined to revolutionize many fields, with energy storage and conversion belonging to the most prominent ones. From batteries and supercapacitors, via fuel cells to solar cells, thermoelectric or triboelectric generators, from standalone monolayers to bulk composites, organic or inorganic, there have been many promising concepts of 2D materials-based energy applications over the past few years. However, recent massive progress calls for a critical evaluation in order to identify the most auspicious directions and to focus on—without burrowing into areas where bulk materials are not significantly outperformed by their 2D off-springs. At the same time, we must not stop looking into the fundamentals of all the processes, since 2D materials bring physics not accessible to many laboratories until recently and many of them still unexplored. It is my pleasure to invite you to submit a manuscript to this Special Issue.

Guest Editor

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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