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2D Materials for Energy Storage and Conversion

Guest Editor:

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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.













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Message from the Editor-in-Chief

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