

## Editorial

# Nanostructure Materials as a Promising Route for Efficient Renewable Energy Production, Storage, and Conversion

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The rapid growth of worldwide population in conjunction with expansion in industry sectors in the world attributed to huge consumption of limited stock fossil fuels. Hence, this expected energy crisis forced the world to find a clean renewable source of energy instead of consumable fossil fuel one. Therefore, there are intensive efforts to use solar energy, wind energy, and hydrogen energy. However, the production, storage, and conversion of these kinds of energy sources require development of smart materials to facilitate their rapid commercialization. On the other hand, the nanomaterials have received intensive scientists' interest for various applications due to their outstanding chemical, physical, mechanical, electrical, and electronic properties. Hence, the harness of unique properties of materials and their hybrid nanocomposites will be much appreciated and demanded to be used in energy-related applications such as production, storage, and conversion. Therefore, in this special issue, we invited the scientists and researchers all over the world to submit their original novel work based on nanomaterials for solar cells, fuel cells, hydrogen storage and production, hybrid nanocomposites, and supercapacitors. In conclusion, we are happy to announce the publication of four original research papers and one review in the field of nanostructure materials as a promising route for efficient renewable energy applications.

## Conflicts of Interest

There is no conflict of interest to declare.

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