



## Materials, Coatings and Devices for Energy Storage/Generation and for Decontamination of Water

Guest Editor:

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Deadline for manuscript  
submissions:  
**closed (1 March 2024)**

### Message from the Guest Editor

Dear Colleagues,

Air contamination and global warming due to the high consumption of fossil fuels are serious issues. In addition, current batteries contain compounds that are corrosive/toxic to the environment, and microplastics, dyes, herbicides, and pharmaceuticals contaminate water sources. Thus, it is necessary to develop new materials/processes/coatings to reduce contamination.

Thus, this Special Issue focuses on but is not limited to the following topics:

1. Energy storage devices (batteries, supercapacitors, thermogenerators, etc.).
2. Materials/electrodes for the storage/generation of energy.
3. Theoretical works and simulations concerning materials for energy storage applications or for the decontamination of water.
4. Synthesis and characterization of materials for energy storage applications or for the decontamination of water.
5. Surface modification of materials for energy storage applications or for the decontamination of water.
6. Coatings for energy storage applications or for the decontamination of water.
7. Any design, material, or concept that contributes to the decontamination of the environment.





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## Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

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