



Nanostructured Materials and Interfaces: Energy and Environmental Applications

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submissions:

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Message from the Guest Editors

Dear Colleagues,

This Special Issue aims to give an overview of recent advances in metal and metal oxide nanostructures and nanostructured films that could contribute to water and air purification and energy production and saving, simultaneously maximizing the exploitation of our natural resources while protecting the environment. Original research article, review, and progress report submissions on theoretical and experimental results are also welcome.

Submissions are welcome in the following areas with relation (but not limited) to the synthesis and characterization of nanomaterials, nanostructured films, and hybrid nanostructured materials, applications of nanomaterials for the degradation of various types of pollutants (dyes, heavy metals, etc.), H₂ generation, oxygen evolution reaction, CO₂ reduction, water splitting, etc.

With the aim being energy and environmental applications, potential topics include, but are not limited to, the following:

- Synthesis and properties of nanostructures;
- Green synthesis of nanomaterials;
- Metal and metal oxide nanoparticles and nanostructured films;
- Photo and electro catalysis;
- CO₂ reduction;
- H₂ generation





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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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