

Special Issue

Nanostructured Photo/Electrocatalysts for CO₂ Valorisation

Message from the Guest Editors

The increasing concerns caused by the impressive negative effects of greenhouse gases over the planet's climate have pushed the scientific community to find new pathways to promote a progressive transition from a global energy scenario, based on fossil fuels, to one based on renewable energy sources. In this scenario, one of the most interesting and challenging strategies to mitigate the carbon dioxide effect is to consider CO₂ as valuable raw material to obtain added-value products (i.e., fuels and chemicals) through its photo/electrochemical reduction (CO₂RR), also exploiting renewable energy sources. The key challenge for this application is to develop highly selective, stable, efficient, environmentally-friendly, and inexpensive nanostructured photo/electrocatalysts. We invite scientists to submit original research articles, letters, as well as review articles on photo/electrocatalysis for CO₂ reduction and conversion into valuable products.

Guest Editors

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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano–alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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