

Special Issue

Sustainable CO₂ Capture and Catalytic Conversion

Message from the Guest Editors

The seriousness of the threat posed by the increase in carbon dioxide (CO₂) emissions is significant and alarming in the present environment. Addressing the challenge of achieving carbon neutrality by closing the carbon cycle is a significant global endeavor. To achieve this objective, interdisciplinary research initiatives integrating cutting-edge materials and chemical processes are imperative for advancing carbon capture, storage, and utilization (CCUS) technologies. This Special Issue on nanomaterials will showcase the latest advances in CO₂ capture and conversion technology to promote the transition to a sustainable society. We welcome high-quality submissions in the form of articles, reviews, or perspectives that push boundaries in the field of CCUS.

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.

Editor-in-Chief

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