Special Issue

Advanced Materials for CO_2 Reduction

Message from the Guest Editor

Advanced materials for CO2 reduction possess extraordinary capabilities, enabling the efficient conversion of CO2 into valuable chemical products. Their unique structures and chemical properties make it possible to precisely control the reaction pathways, thus achieving high selectivity and high activity in the CO2 reduction process. The wide-ranging applications of these advanced materials cover multiple industries. In the energy sector, they are expected to drive the development of renewable energy storage systems integrated with CO2 conversion technologies, contributing to the construction of a more sustainable energy structure. In the chemical industry, they can be used to produce basic chemical feedstocks from CO2, reducing the dependence on fossil-based raw materials.

Articles covering aspects such as the design and synthesis of novel materials, the study of reaction mechanisms, the optimization of reaction conditions for enhanced efficiency, and the exploration of new application scenarios are welcome. Additionally, contributions focusing on the economic and environmental sustainability of the CO2 reduction process using advanced materials are also warmly welcomed.

Guest Editor

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Deadline for manuscript submissions

20 October 2025

Crystals

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 5.0

mdpi.com/si/231771

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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

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