Special Issue

Design, Synthesis and Application of Advanced Catalytic Materials for Efficient Chemical Conversion of Carbon Dioxide

Message from the Guest Editor

Industrial development has led to an increased production of carbon dioxide (CO2), causing environmental issues. The catalytic conversion of CO2 into value-added products has therefore emerged as a highly promising strategy via which to tackle the sustainable energy crisis and mitigate CO2 emissions. In recent years, research advancements in novel materials, including ionic liquids, covalent organic frameworks (COFs), and metal–organic frameworks (MOFs), have significantly advanced progress in the field of Carbon Capture, Utilization, and Storage (CCUS). In this Special Issue, we seek to gather high-quality research that addresses the many open questions in this dynamic field. We welcome contributions that provide both experimental and theoretical perspectives, including computational modeling studies. We aim to present comprehensive analyses of the subjects studied and encourage the expression of individual viewpoints.

Guest Editor

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