



Advances in Catalytic Process for CO₂ Gasification

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Message from the Guest Editors

Since excessive carbon dioxide emissions are considered one of the causes of the greenhouse effect, it seems very reasonable to use this gas as a gasifying agent. In addition to lowering the relative CO₂ emissions, this solution allows for the reduction of the amount of coal and oxidant used in the process, making it more economical. However, CO₂ gasification is a highly endothermic process that may require improvement by using catalysts. Plenty of innovative research into catalytic CO₂ gasification to transform carbonaceous materials into valuable CO-rich gas is being conducted. Given the complex nature of this process, affordable and active catalysts need to be identified, enabling efficient conversion of various carbonaceous materials into valuable gaseous products. This has been the drive for intense research on advanced catalytic gasification in the CO₂ atmosphere.

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