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Application of Nanoporous Carbon in Energy

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Nanoporous carbon materials have been applied as catalysts in many fields, especially for producing energy by using thermal chemistry, electrochemistry, and photolytic chemistry. With functionalized porous carbon, a specific catalytic reaction can be achieved through certain mechanisms. Different strategies to create porous carbon with an enlarged surface area have been explored through physical and chemical methods. Accompanied by an adjusted pore volume and surface functional groups, the carbon framework needs to retain its mechanical properties to maintain stability and re-utilization. The ongoing exploration of the best activity and stability available are still underway.

This Special Issue in 'Nanomaterials' focuses on the application of nanoporous carbon in energy, such as biomass based carbon, coal char, polymer carbon, and fossil carbon for energy production. The hydrogen from hydrogen-containing precursors, such as water, ammonia, methane, etc., catalyzed by porous carbon are preferable.

See more information in: https://www.mdpi.com/si/202968

Prof. Dr. Tie-Zhen Ren Guest Editor









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Editor-in-Chief

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Message from the Editor-in-Chief

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