



Advances in Electrocatalysts: Synthesis and Applications

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

As climate change continues to challenge our lives, reducing carbon emissions to net-zero by the middle of this century became a global agreement for the sustainable development of human society. Unfortunately, present-day energy and industries heavily rely on fossil fuels and feedstocks, averaging about 60% of the world's annual carbon emissions per year. Carbon-neutral energy and industries are therefore paramount for limiting the global temperature rise to well below 2° Celcius.

Electrocatalysis features great potential in terms of carbon-neutral fuel and chemical syntheses and high-energy-density storage of intermittent renewables. The design of electrocatalysts typically plays a key role in determining reaction activity and product selectivity.

As a guest editor of *Materials*, I am pleased to announce that a new Special Issue is kicked off. The Special Issue welcomes original submissions in the form of reviews and articles. The topics include but are not limited to: computational electrocatalysis; electrocatalyst synthesis; water electrolysis; CO₂ electroreduction; NH₃ electrosynthesis; fuel cell catalysts; design of electrocatalytic reactors.





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Message from the Editor-in-Chief

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