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Developments and Applications of Nanotechnologies in Surface/Interface, Catalysis and Fuel Cells

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Message from the Guest Editor

Nanotechnologies have significantly impacted surface/interface science, catalysis, and fuel cell technology. In surface/interface science, nanotechnologies allow for the precise control and manipulation of surface properties at the nanoscale, leading to the development of materials with enhanced surface area, reactivity, and properties. This has implications for coatings, sensors, and biocompatible materials.

In catalysis, nanotechnologies enable the design and synthesis of catalysts with high surface area, controlled morphology, and improved catalytic activity. In fuel cell technology, nanotechnologies are being used to develop new materials for fuel cell electrodes and electrolytes and improve fuel cells' performance and efficiency. Nanomaterials, such as platinum nanoparticles for catalysts and graphene-based materials for electrodes, have shown promise in enhancing fuel cells' power output and durability.

Overall, nanotechnologies play a critical role in lots of fields. The Special Issues aims to collect the latest research, offering new opportunities for innovative solutions in energy conversion and environmental sustainability.



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Special Issue



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Message from the Editor-in-Chief

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