

Special Issue

Recent Advances of Electrocatalysis in Fuel Cells

Message from the Guest Editors

Fuel cells are widely considered as efficient and clean energy systems. The slow kinetics of ORR at PEMFC cathodes, thereby lowering the efficiency of energy conversion in the system. As a result, high Pt loading is required. Durability is also critical for fuel-cell cathodes. On the other hand, liquid fuels, especially methanol and ethanol, are considered as potential alternatives to hydrogen fuel in PEMFCs. However, CO poisoning also takes place during the MOR. Ethanol is a non-toxic renewable energy source; however, the commercialization of DEFCs is considered more difficult than that of DMFCs, because the kinetics of EOR are slower than those of MOR. Further development of more-efficient electrocatalysts for both cathodes and anodes is therefore necessary. This Special Issue aims to cover the most recent advances in fuel cell electrocatalysts to alleviate the current situations/drawbacks and to provide a better understanding in the development of high-performing fuel cells.

http://www.mdpi.com/journal/catalysts/special_issues/electrocata_fuel_cells

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