Special Issue

Dynamic Structure, Surface Properties and Reactivity of Catalytic Systems for Energy Conversion and Storage

Message from the Guest Editor

This Special Issue aims at covering recent advances in the field of catalyst characterization and optimization under reaction-relevant environmental conditions, particularly for applications in the energy science field, including but not limited to carbon dioxide conversion, photocatalytic water splitting, hydrogen evolution reaction, fuel cell and battery research etc. Spectroscopic, microscopic and scattering-based characterization methods that allow *in situ* and *operando* probing of the dynamic nature of the catalysts' properties during the reaction, such as ambient pressure X-ray photoelectron spectroscopy, *in situ* X-ray absorption spectroscopy, *in situ* optical spectroscopy, environmental X-ray diffraction, high pressure and liquid phase scanning probe and electron microscopy, along with computational approaches that complement such studies, are particularly in focus.

Guest Editor

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