



Research on Polyoxometalate Materials

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Polyoxometalates (POMs) are a large and rapidly growing class of early transition metal oxide clusters. All of the molecular properties of these POMs can be altered by fine-tuning the structure and chemical composition of the POMs at the atomic level. POMs can not only be used widely in different disciplines, but can also be combined with polymers, oxides, ionic liquids or carbonaceous supports to construct new and advanced composite (hybrid) materials, which have important, extensive applications in catalysis, electrode materials, electrocatalysis, photocatalysis and so on. This Special Issue focuses on the fundamentals of POMs and POM-based materials, including synthetic methods, reactivity, spectroscopic or spectrometric studies, structures, mechanistic insights and DFT calculations, and potential applications, such as redox- and acid-base catalysis, photo- and electrochemistry, magnetism, electronics, optics, bio-medicine, energy conversion and storage, sorption and separation, environmental remediation and medicine. Full papers, communications, and reviews on these topics are welcome.

Dr. Xiaobing Cui

Guest Editor





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Message from the Editor-in-Chief

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