Special Issue

Advances in Transition Metal Oxides

Message from the Guest Editor

Transition-metal oxides (TMOs) show diverse characteristics, including Mott insulators, normal metals, magnetic metals, half-metals, semi-metals, multiferroics, thermoelectrics, topological materials, and superconductors. The underlying mechanisms for the wide spectrum of TMOs include strong correlation, spin–orbit interaction, metal–insulator transition, charge–orbital ordering, magnetism, and interplays among charge, orbital, spin, and lattice structure degree of freedom. Low-dimensional TMOs such as 2D oxides, thin films, heterostructures, and surface systems show even wider novel behaviors with high potential applications in future industry. This Special Issue is dedicated to achieving a better understanding of the novel properties of transition metal oxides in all dimensions.

Guest Editor

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