Special Issue

Research on the Synthesis and Electrical Properties of Low-Dimensional Materials

Message from the Guest Editors

This Special Issue aims to understand and harness the unique characteristics of materials at the nanoscale. Low-dimensional materials possess extraordinary properties due to their high surface area-to-volume ratio, quantum confinement, and size-dependent behavior. This field involves developing innovative methods to synthesize these materials with precise control over their symmetry, size, shape, composition, and structure. By manipulating these parameters, researchers can tailor the new phases of matter, including topological phases, superconductivity, ferromagnetism, and correlated phases. We invite researchers and scientists from around the world to contribute their valuable input to this exciting field of study. It aims to showcase the latest advancements in the synthesis techniques of low-dimensional materials and their electrical properties. We encourage submissions that explore innovative synthesis methods, characterization techniques, theoretical modeling, and experimental investigations.

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Editor-in-Chief

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