



Molecular (Super) Conductors

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Message from the Guest Editor

Dear Colleagues,

Fifty years after their discovery, the field of molecular conductors stills remains very rich thanks to the ability to create new materials by fine-tuning of the interactions between molecules with delocalized pi-electrons. These crystalline materials exhibit various ground states: superconductivity, Mott insulator, charge order insulator, spin liquids, chiral states, multiferroicity, and Dirac cones for instance. These various properties interplay very often as a function of pressure, gate doping, light or magnetic field. They may lead to inhomogeneous states at the border of metal-insulator phase transition or near quantum critical points. The purity of the available single crystals makes the molecular conductors, model systems in condensed matter physics for experimentalists and theoreticians as well. They offer a rich playground for studying the role and the competition of lattice, charge and orbital degrees of freedom thanks to the softness of the underlying structure and the ability of the chemists to introduce specific functions on the molecules.

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Guest Editor





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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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