

Special Issue

Superconductivity and Magnetism in Two-Dimensional and Layered Materials

Message from the Guest Editor

Two-dimensional and layered materials are an emerging class of compounds that have attracted unprecedented attention from the scientific community in the last twenty years. Most of the research efforts have so far been devoted to the exploration of their unique electronic, optical, and optoelectronic properties, also in light of potential technological applications. However, more exotic quantum phases have also been discovered in this class of materials, including superconductivity and various types of magnetic order. Given that several of these fascinating phenomena still elude a comprehensive understanding and that new two-dimensional and layered superconducting and/or magnetic compounds are continuously being discovered, the field is in need of novel experimental and theoretical investigations on a fundamental level. Additionally, a subset of these materials is close to attaining technological maturity, which will in turn pave the way for their usage in industry-grade applications with a foreseen impact in different fields ranging from energy storage, quantum computing and sensing, spintronics, and more.

Guest Editor

Dr. Erik Piatti

Department of Applied Science and Technology, Politecnico di Torino,
Turin, Italy

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Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano–alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of
Birmingham, Birmingham B15 2TT, UK

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