



## Low-Dimensional Magnetic Systems: Physical Principles and Technological Applications

Guest Editor:

### Prof. Dr. Roberto Zivieri

1. Department of Mathematical and Computer Sciences, Physical Sciences and Earth Sciences, University of Messina, Messina, Italy

2. Istituto Nazionale di Alta, Matematica (INdAM), Unit of Messina, Messina, Italy

3. Department of Physics and Earth Sciences, University of Ferrara, 44122 Ferrara, Italy

Deadline for manuscript submissions:

**closed (30 June 2022)**

### Message from the Guest Editor

Dear Colleagues,

In the last few years, magnetic materials have attracted the attention of both experimentalists and theorists working in the field of magnetism for their intriguing properties exhibited at the nanoscale level. The underlying physics of complex magnetization dynamics in spintronics, magnonics, and spinorbitronics has been widely studied to implement several technological and industrial applications like magnetic memories, microwave oscillators, modulators, sensors, logic gates, diodes, and transistors.

The aim of this Special Issue is to attract world-leading scientists to present the latest exciting theoretical and experimental results in the field of low-dimensional magnetic systems with special regard to magnonics, spintronics, and spinorbitronics discussing their underlying physics in different magnetic configurations and suggesting concrete applications. The accepted contributions will include theoretical developments, experimental observations and measurements, and potential applications.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

## Contact Us

---

*Applied Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
[X@Applsci](#)