

## Special Issue

# Quantum Magnetic Sensors and Magnetochemistry

### Message from the Guest Editors

Many sophisticated research experiments and applications rely on the measurement of extremely weak magnetic fields (biomagnetism, nanomagnetism, molecular magnetism, magnetic microscopy, etc.). Hence, in recent decades, many efforts have been devoted toward the development of different ultrasensitive magnetic sensors, such as the atomic magnetometer based on the detection of the Larmor spin precession of optically pumped atoms, hybrid magnetometers based on giant magnetoresistance spin valves, diamond magnetometers based on nitrogen-vacancy centers in room-temperature diamond, and micro and nano superconducting quantum interference devices (SQUIDs). In addition, in the last years, molecular magnetism with the re-introduction of lanthanide ions as spin carriers in magnetic molecules is very promising in view of the applications to spintronic devices, qubit, and multifunctional materials. The aim of this Special Issue is to present an overview of the development of magnetic quantum sensor and their applications. Both original research articles and reviews are encouraged.

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### Guest Editors

Prof. Dr. Paolo Silvestrini

Department of Mathematics and Physics, University of Campania "L. Vanvitelli", 81100 Caserta, Italy

Dr. Carmine Granata

Institute of Applied Sciences and Intelligent Systems "E. Caianiello", National Research Council, Via Campi Flegrei, 34, 80078 Pozzuoli (Napoli), Italy

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### Deadline for manuscript submissions

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## Magnetochemistry

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*Magnetochemistry*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[magnetochemistry@mdpi.com](mailto:magnetochemistry@mdpi.com)

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### Editor-in-Chief

Prof. Dr. Carlos J. Gómez García  
Department of Inorganic Chemistry, Faculty of Chemistry, University of  
Valencia, C/Dr. Moliner 50, 46100 Burjassot, Valencia, Spain

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