

# Special Issue

## Quantum Crystals

### Message from the Guest Editors

We invite investigators to submit research papers discussing the experimental and theoretical understanding of quantum crystals. Quantum crystals include, but are not limited to, rare-gases (e.g., He and Ne), light-weight molecular crystals (e.g., H<sub>2</sub> and CH<sub>4</sub>), light-weight covalent, ionic and metallic solids (e.g., graphite, LiH, and Li), quantum paraelectrics (e.g., SrTiO<sub>3</sub> and KTaO<sub>3</sub>), Wigner crystals, vortex lattices, and dipole systems. The potential topics for this Special Issue include, but are not restricted to: - Experimental synthesis and characterization of quantum crystals

- Theory and simulation
- Crystalline defects in quantum crystals
- Elastic and mechanical properties
- Quantum low-dimensional systems (i.e., thin films, one-dimensional systems, and clusters)
- Quantum solids at high-pressure conditions
- Gas-storage and structural properties of quantum materials
- H-bonded ferroelectrics and quantum paraelectrics

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### Guest Editors

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### Deadline for manuscript submissions

closed (31 March 2018)



## Crystals

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## About the Journal

### 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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### Editor-in-Chief

Prof. Dr. Alessandra Toncelli  
Department of Physics, University of Pisa, 56126 Pisa, PI, Italy

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