# **Special Issue**

# Nonlinear Photonic Crystals: Advances in Fabrication and Applications

## Message from the Guest Editors

Nonlinear photonic crystals are transparent materials having a space-dependent second-order nonlinear optical response. The nonlinear photonic crystals have been extremely used for nonlinear optics study and in applications that require new light sources, including the nonlinear generation quantum-entangled photons and their control. The importance of nonlinear photonic crystals has also inspired extensive research in ferroelectrics. We invite researchers to contribute to this Special Issue which is intended to serve as a multidisciplinary forum covering broad aspects of science and technology related to the fabrication, characterization, fundamental study, and applications of nonlinear photonic crystals. The potential topics include, but are not limited to:

- Ferroelectric domain engineering;
- Ferroelectric domain wall motion, control, and domainwall-based effects and devices;
- Characterization of ferroelectric domain structures:
- Advanced structure design of nonlinear photonic crystal;
- Nonlinear wavefront shaping;
- Entangled photons generation and control.

#### **Guest Editors**

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## Deadline for manuscript submissions

closed (10 December 2021)



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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.

### Editor-in-Chief

Prof. Dr. Alessandra Toncelli
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