



crystals



an Open Access Journal by MDPI

Micro and Nano Optics for Advanced Sensing Technology

Guest Editors:

Prof. Dr. Daquan Yang

School of Information and
Communication Engineering,
Beijing University of Posts and
Telecommunications, Beijing
100876, China

Prof. Dr. Fei Xu

College of Engineering and
Applied Sciences, Nanjing
University, Nanjing 210093, China

Dr. Jinhui Chen

Institute of Electromagnetics and
Acoustics, Xiamen University,
Xiamen 361005, China

Deadline for manuscript
submissions:

closed (10 September 2021)

Message from the Guest Editors

Dear Colleagues,

Detection of nanoscale objects with ultrahigh sensitivity is of critical importance in various fields including early-stage disease diagnosis, environmental monitoring, and process control of manufacturing. The state-of-the art optical sensors realize a detection limit down to single nanoparticle/molecule employing diversified schemes such as scattering interferometry, plasmonic structures, microcavity, and nanofiber sensors. In particular, microcavity sensors attract much attention for their high-quality factors and small mode volumes enabling significant enhancement of light-matter interactions in confined space. Micro and nanofibers (MNFs) with subwavelength diameters offer engineerable waveguiding properties including optical confinement, fractional evanescent fields, and surface intensity, which is appealing for optical sensing on the micro and nano scales.

This Special Issue aims to attract original contributions in topics related to both experiment and theory regarding the measurement principles, detection techniques, and applications for micro and nano optical sensors and related technologies.



mdpi.com/si/78147

Special Issue



crystals



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University
of Pisa, 56126 Pisa, PI, Italy

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.

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](#), [CAPus](#) / [SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Crystallography*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Crystals Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/crystals
crystals@mdpi.com
[X@Crystals_MDPI](https://twitter.com/Crystals_MDPI)