

## Special Issue

# TiO<sub>2</sub> and Its Nanocomposites

### Message from the Guest Editors

TiO<sub>2</sub> is a non-toxic, low-cost, and chemically stable material that has remarkable catalytic and distinctive semiconducting properties. TiO<sub>2</sub> crystals exist in three main crystal structures: anatase, rutile and brookite, and many other minor phases, including monoclinic TiO<sub>2</sub>-B, columbite TiO<sub>2</sub>, and ramsdellite TiO<sub>2</sub>-R. In the last few decades, TiO<sub>2</sub> and its nanocomposite materials have been attracting tremendous interest in a wide range of research and application areas, including photocatalysis, sensors, and environmental and energy applications. We invite researchers to contribute to the Special Issue on TiO<sub>2</sub> and its nanocomposite materials, which is intended to serve as a unique multidisciplinary platform covering broad aspects of science, technology and the application of TiO<sub>2</sub> and its nanocomposite materials. The potential topics include, but are not limited to:

- Synthesis and preparation of TiO<sub>2</sub> nanomaterials;
- Properties of TiO<sub>2</sub> nanomaterials;
- TiO<sub>2</sub>-based composite materials;
- TiO<sub>2</sub>-enhanced coatings;
- Black TiO<sub>2</sub> nanomaterials;
- TiO<sub>2</sub>-based photocatalysis;
- TiO<sub>2</sub>-based sensors;
- Environmental and energy storage applications;
- Other applications of TiO<sub>2</sub> nanomaterials.

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### Guest Editors

Dr. Shanghai Wei

Dr. Dumitriu Cristina

Dr. Yangsi Liu

Prof. Dr. Yuxin Wang

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### Deadline for manuscript submissions

closed (31 December 2021)



## 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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