



Transparent Glass Ceramics

Guest Editors:

Dr. Atul D. Sontakke

Condensed Matter & Interfaces,
Debye Institute for
Nanomaterials Science, Utrecht
University, Princetonplein 1, 3584
CC Utrecht, The Netherlands

Dr. Shiv Prakash Singh

Center for Ceramic Processing,
International Advanced Research
Center for Powder Metallurgy
and New Materials (ARCI),
Hyderabad, India

Deadline for manuscript
submissions:

closed (27 October 2020)

Message from the Guest Editors

Dear Colleagues,

Glass ceramics are a very interesting class of engineered materials capable of incorporating extreme optical, mechanical, and thermal properties. For this Special Issue, we aim to present a collection of papers encompassing a wide range of topics on transparent glass ceramics, including their developmental aspects, properties, and applications in different technological frontiers. The collection of contributed articles will also summarize recent developments in transparent glass ceramics.

This Special Issue will focus on the following topics:

- Crystallization kinetics, controlled crystallization, total crystallization, laser crystallization, photo-thermo-crystallization, and microstructures;
- Transparent glass ceramics for infrared windows, low thermal expansion substrates/monoliths, solid-state lighting, waveguides, laser cavities, non-linear effects, and luminescent hosts;
- Improved mechanical strength, hardness, structural glass ceramics, transparency, and birefringence;
- Nano-glass ceramics and transparent ceramics.

Contributions on all relevant topics are welcome.

Dr. Atul D. Sontakke

Dr. Shiv Prakash Singh

Guest Editors





crystals



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University of Pisa, 56126 Pisa, 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, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/crystals
crystals@mdpi.com
[X@Crystals_MDPI](#)