



crystals



an Open Access Journal by MDPI

Advances in Perovskite Ceramics, Crystals and Thin Films

Guest Editors:

Prof. Dr. Paul Muralt

Institute of Materials Science,
Swiss Federal Institute of
Technology EPFL, Lausanne,
Switzerland

Prof. Dr. Vasiliki Tileli

Laboratory for in situ
nanomaterials characterisation
with electrons, Swiss Federal
Institute of Technology EPFL,
Lausanne, Switzerland

Dr. Lauren Garten

Material Science and Technology
Division, U.S. Naval Research
Laboratory, Washington D.C.,
USA

Deadline for manuscript
submissions:

closed (15 October 2021)

Message from the Guest Editors

The perovskite crystalline system is one of the most fascinating crystalline systems considering the wealth of functional properties that can be achieved with corner-connected anion octahedra. The synthesis and study of perovskite thin films has been a major field of research for about 30 years. We invite you to contribute to a Special Issue of Crystals dedicated to perovskite thin films. The aim is to combine papers on basic issues for readers starting in the field, and reviews on advanced topics providing an entry point to such specializations. The introductory section will cover rules governing perovskite crystal structure as well as its chemistry and structural phase transitions in relation to basic properties. It will also cover inorganic–organic hybrid perovskites and layered perovskites. The introductory section will also serve as a primer on the synthesis of perovskite thin films, treating specific issues related to the complexity of their thermodynamics and chemistry. Introductory review papers will help to prepare the ground for papers on advanced topics.



mdpi.com/si/48299

Special Issue



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](#)