## **Special Issue**

# Research in Thermal Energy Storage Materials

#### Message from the Guest Editors

Thermal storage technologies play an emerging role in various fields of applications for energy production from renewables. For all thermal storage materials, charging is associated with heating, followed by a phase transition in the case of latent storage materials or a chemical reaction in the case of thermochemical storage materials.

The Special Issue "Research in Thermal Energy Storage Materials" therefore aims to focus on relevant material properties and material modification strategies.

As thermal storage materials to a large extent comprise crystalline inorganic or organic systems, a focus is set on respective compounds in order to identify new, potential reaction systems, study the structure-related properties during charging and discharging, and research thermophysical and chemical properties as well as modification strategies using defect generation or doping and (re-) crystallization mechanisms.

Respective contributions can have a focus on fundamental material properties investigated at lab scale or can be application oriented, regarding the respective materials systems in bulk scale.

#### **Guest Editors**

Prof. Dr. S. Afflerbach

Thermal and Thermochemical Energy Storage, Technische Universität Berlin, Marchstr. 18 KT2, 10587 Berlin, Germany

Prof. Dr. Reinhard Trettin

Institute for Building and Materials Chemistry, University of Siegen, Paul-Bonatz-Str. 9-11, 57076 Siegen, Germany

#### Deadline for manuscript submissions

closed (15 August 2024)



an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.0



mdpi.com/si/167470

Crystals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
crystals@mdpi.com

mdpi.com/journal/crystals





an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.0



### **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
Department of Physics, University of Pisa, 56126 Pisa, Pl, Italy

#### **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, Ei Compendex, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Crystallography) / CiteScore - Q2 (Condensed Matter Physics)

