



an Open Access Journal by MDPI

Compounds with Polar Metallic Bonding Volume II

Guest Editor:

Dr. Constantin Hoch

LMU Munich, Department for Chemistry, Butenandtstraße 5-13(D), D-81377 München, Germany

Deadline for manuscript submissions: closed (20 February 2023)

Message from the Guest Editor

The second volume of this Special Issue of Crystals is meant to collect contributions on polar intermetallics from solid-state chemistry, solid-state physics, crystallography, material sciences, and all related disciplines. The different manifestations of polarity within metallic systems lead to special behavior and unusual combinations of properties. Polarity can indicate the interplay of conduction electrons with magnetic dipoles in the lattice. It can also describe the presence of long-range, ordered electric dipole moments within a ferroelectric metal.

We would like to publish reports on synthetic approaches toward new polar intermetallics with crystallographic or metallurgic phase characterization and studies on reactivity, physical behavior, and property optimization in applied systems, as well as theoretical studies and method development, with the aim of shedding light on the nature of chemical bonding in polar intermetallic phases. The named topics may be considered only as examples; any advanced topic in the field of polar metallic bonding is welcome.









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, CAPlus / 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