Special Issue

State of the Art of Advanced Ceramic Materials

Message from the Guest Editors

Advanced ceramic materials have emerged as cornerstone technologies in addressing global challenges across energy, healthcare, aerospace, and environmental sustainability. The evolution of materials science demands innovation in ceramic design, synthesis, and processing to overcome limitations in toughness, scalability, and multifunctionality. This Special Issue highlights groundbreaking research in advanced ceramics, connecting fundamental discoveries to real-world applications. We welcome original contributions addressing, including but not limited to:

- Material Design: High-entropy ceramics, bioinspired composites, nanoscale hybrids.
- Processing Techniques: Additive manufacturing, flash sintering, atomic-scale deposition.
- Functional Applications: Energy storage dielectrics, ultrahigh-temperature components, medical bioceramics.
- Sustainable Solutions: Low-energy synthesis, waste recycling, carbon capture materials.

Interdisciplinary studies integrating computational tools, advanced diagnostics, and extreme-condition testing are encouraged.

Guest Editors

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Deadline for manuscript submissions

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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.

Editor-in-Chief

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