



Crystal Engineering: From Molecules to Crystals to Functional Materials

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Message from the Guest Editors

Why do molecules crystalize in a specific structure? How does the crystal structure ultimately determine the properties of a material? Can the properties of a desired material be drawn *a priori*?

These questions have fed the curiosity of solid-state scientists involved in the field of Crystal Engineering since the dawn of the discipline. Intermolecular interactions and molecular arrangement within the crystal lattice are the weight-bearing columns supporting the realm of nanotechnology and molecular materials nowadays. Although, in recent times, Crystal Engineering has massively progressed, and molecular materials have found many applications in different fields, there is a long road ahead to finally predict the structure-properties correlation.

This Special Issue aims at sharing the latest Crystal Engineering breakthroughs from different viewpoints—from crystal genesis to structure prediction, from molecular architecture to functional materials, from theoretical to practical applications—with an eye on future perspectives in the field.

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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.

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