Special Issue

Research on Biological Characteristics of Macromolecular Crystals

Message from the Guest Editors

With increasing demands for faster and more effective drug development, structure-based drug design (SBDD) has gained increasing attention. By investigating macromolecular crystals, particularly protein and nucleic acid crystals, researchers can uncover the precise three-dimensional arrangements of these macromolecules, which allows for the identification of potential binding sites that are critical for their biological function and the design of molecules that can specifically interact with these sites to modulate their activity. This Special Issue aims to present an update on the advancements and emerging trends in the biological characteristics of macromolecular crystals, including drug target identification, post-translational modifications, synthetic biology and artificial macromolecules, computational structural biology, etc.

Keywords:

- protein/peptide crystals
- DNA/RNA crystals
- biological functions of macromolecules
- drug target identification
- computational structural biology
- high-resolution microscopy
- synthetic macromolecules

Guest Editors

Dr. Jingxiang Yang
State Key Laboratory of Elemento-Organic Chemistry, College of Chemistry, Nankai University, Tianjin 300071, China
Dr. Wenchao Yang
College of Chemistry, Nankai University, Tianjin 300071, China

Deadline for manuscript submissions

30 May 2026

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/226697

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

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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