

Special Issue

Structure and Energy Transfer of Algae Photosynthetic Antenna Organism Crystals

Message from the Guest Editors

Algal light-harvesting antenna complexes (LHCs) are vital apparatus for energy capture and transfer in algal photosynthesis. Within the past years, structures of the antenna complexes have been elucidated with the help of technological development in structural biology, and the structural analysis of algal LHC tends to "low resolution in situ / single particle structure - high resolution single particle / in situ structure".

Furthermore, the antennas transfer the absorbed energy at almost 100% efficiency to the reaction centers that perform the photochemical electron transfer reactions required for the conversion of the light energy into useful and storable chemical energy. The antenna complex has a broad cross-section of absorption and mainly transfers the absorbed energy to photosystem II. They can, however, function as an antenna of photosystem I, and their composition can be altered as a result of changes in the environmental light quality. We invite researchers to contribute to this Special Issue to collect broad aspects of structural and functional characteristics of the photosynthetic antenna complex and the energy transfer mechanism in the complex.

Guest Editors

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Deadline for manuscript submissions

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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.

Editor-in-Chief

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