Special Issue

Mathematical and Computational Methods in Systems Biology

Message from the Guest Editor

Biological systems are complex hierarchical systems functioning at different levels of biological organization, from molecular–genetic to ecological. Mathematical modeling is one of the main approaches to the comprehensive study of biological systems. In light of the recent advances in experimental biology, in particular, the development of omics technologies that have led to a massive accumulation of data on the functioning of molecular genetic systems, mathematical modeling in a number of cases remains the only means of integrating them at the system level. The purpose of this Special Issue is to present recent advances in mathematical modeling in systems biology with a particular focus on methods of the building and analysis of hierarchically organized complex models of biological systems. We welcome you to submit original research articles and reviews on the variety of aspects of modeling in systems biology, which include, but are not limited to, ordinary differential equations, partial differential equations, graph and network models, machine learning, and deep learning.

Guest Editor

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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