Special Issue

Modeling, Identification and Control of Biological Systems

Message from the Guest Editors

Applied mathematics enables the transformation of available real-world data and observations into mathematical structures and theoretical concepts. The obtained mathematical models are powerful investigation instruments for exploring the underlying principles of real systems and for tackling open problems in natural sciences, particularly in physics, biology, and medicine. These models are valuable descriptive tools that shed light on the inner mechanisms of intricate biological systems. They also offer reliable predictions about the future behavior of the real systems and their responses to various external stimuli. Additionally, the control theory equips researchers with the essential tools to design effective, sometimes optimal, inputs for managing the behavior of these models. This aspect allows scientists to support decision-makers in devising intervention strategies for the management of emergencies in public health and for the treatment of pathological conditions in medicine.

Guest Editors

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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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