



Mathematical Modeling, Analysis, and Applications of Complex Dynamics in Electrical Engineering

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Message from the Guest Editor

During the last few decades of intensive research, many building blocks dedicated to signal generation and processing have exhibit a complex behavior whose character is different from that of conventional, i.e., expected function. New numerical methods along with high-performance computers allow us to analyze mathematical models with increased complexity, considering many degrees of freedom, having elements working in different time scales or mathematical models with strongly nonlinear components, etc.

This Special Issue welcomes all contributions focused on the complex dynamical behavior of electronic circuits, introducing novel nonlinear systems having some unique properties, including the design of chaotic or hyperchaotic systems and its application in communication techniques. It also includes papers describing applications of new numerical algorithms on various electronic networks, research and review works on the mathematical methods developed for specific engineering problems, or the successful use of known mathematical approaches to answer important questions from the area of general electronics.





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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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