

# Special Issue

## Nonlinear and Evolutionary Optimization in Materials and Engineering

### Message from the Guest Editor

This Special Issue "Nonlinear and Evolutionary Optimization in Materials and Engineering" delves into the intricate fusion of evolutionary algorithms in the realm of materials science and engineering. This Special Issue aims to provide an in-depth examination of the symbiotic relationship between evolutionary optimization techniques and the optimization challenges inherent in material properties, processing methodologies, and engineering structures. Artificial evolutionary methods such as genetic algorithms and other population-based nonlinear optimization techniques can be applied to the identification and optimization of novel materials. This Special Issue welcomes novel research and applications where evolutionary algorithms, nonlinear optimization, artificial intelligence, and machine learning are employed to optimize material properties, manufacturing processes, and engineering designs. All the works involved in the application of evolutionary algorithms, artificial intelligence, and machine learning to material science and engineering are welcome.

### Guest Editor

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### Deadline for manuscript submissions

closed (30 August 2024)



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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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### Editor-in-Chief

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