



Functional Materials, Machine Learning, and Optimization

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Message from the Guest Editors

In the last decade, optimization in the materials field has been accelerated because the enormous efficiency gain can be achieved through the optimization of topology at the conception stage. The ability to control the geometry, structures, cost, and properties of materials established for them can be solved by single and multi-objective optimization.

This Special Issue will bring these emerging fields of science and technology to one platform to address the importance of functional materials for various applications, including the application of machine learning in modeling, data analysis of material properties, and the use of optimization techniques to obtain the established properties of these materials. The Special Issue covers a large number of topics, including the preparation of functional materials, their characterization, and the study of mechanical and tribological properties. Modeling of this data using available regression algorithms of supervised learning and optimization of properties of materials applying various soft computing algorithms and the design of experiments.





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Message from the Editor-in-Chief

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