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Advances in Machine-Learning-Assisted Nanomaterials: Applications in Simulation, Detection, Classification, and Imaging

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Message from the Guest Editors

Dear Colleagues,

Nanomaterials have recently brought substantial scientific, technological, and social development, driving science through intriguing and challenging routes. The most remarkable impacts are in medicine, electronics, sensors, energy production, and storage, besides environmental applications.

New technologies have allowed the synthesis of unique nanomaterials with increasingly varied and versatile properties. However, optimizing the preparation and characterization of these nanomaterials and their composites demands new tooling. In particular, machine learning (ML) models can bring unprecedented advantages to the classification process and even quantification of nanomaterials, even allowing the fine-tuning of their properties. Thus, this Special Issue of *Materials* is focused on nanomaterials, nanocomposites, their applications, and ML tools developed to assist in obtaining, classifying, quantifying, and understanding the properties of these materials.

We hope that new ideas will promote the fast development of the exciting area of nanomaterials. We invite you to contribute to this Special Issue by submitting papers on your best research activities.













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Message from the Editor-in-Chief

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