Special Issue

Artificial Intelligence in Material Science and Failure Analysis

Message from the Guest Editors

We invite contributions ranging from experimental techniques to data analysis to drive applied material science and modern failure analysis. The aim of this Special Issue is to incorporate and combine topics such as the development and application of (1) experimental methods and methodological workflows for modern material research and reliability testing, (2) computational modelling and simulations, and (3) artificial intelligence-based concepts for advanced data analysis and embedded computing systems. This Special Issue will address, but is not limited to, material-related topics in the field of energy storage and conversion, microelectronics, powers semiconductors, additive manufacturing, lightweight materials, etc.

Keywords

- machine learning
- artificial intelligence
- imaging
- image analysis
- material characterization
- failure analysis
- energy storage and conversion
- microelectronics
- additive manufacturing
- lightweight materials
- modeling and simulation
- embedded computing

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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