Special Issue

Artificial Intelligence in Materials Science and Engineering

Message from the Guest Editors

The combination of Artificial Intelligence (AI) and Materials Science and Engineering gives rise to innovative approaches that accelerate the discovery, development and optimization of materials and technologies with improved properties. This constructive interaction holds immense promise for revolutionizing industries ranging from civil engineering to metal forming, ushering in a new era of material innovation.

AI plays a crucial role in predictive modeling, machine learning algorithms analyze complex datasets to predict material responses to different external factors, such as temperature, pressure, or chemical exposure. This capability enhances our ability to design materials with tailored properties for specific applications. As we delve deeper into this interdisciplinary collaboration, the synergies between AI and Materials Science are expected to yield breakthroughs with far-reaching implications for diverse industries and technological advancements.

This Special Issue invites the submission of manuscripts that explore the utilization of AI in Materials Science and Engineering, particularly concerning through classical and state-of-the-art manufacturing techniques.

Guest Editors

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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