Special Issue

Mesoscale Modelling of Materials Processing and Performance

Message from the Guest Editor

Mesoscale interactions govern phenomena on a scale from 10 nanometers to 100 micrometers. This is the scale where microstructures form and properties and functionalities develop. Examples include the formation of dendrites, porous and anisotropic domains, and the development of hardness, ductility, and conductivity of materials. Mesoscale interactions enable computer simulations of these phenomena, allowing people to design optimal experimental setups and material processing conditions. We are editing a Special Issue on this topic and seek papers on mesoscale modeling. This includes, but is not limited to, phase field models, cellular automata, smoothed particle hydrodynamics, and the lattice Boltzmann equation.

Guest Editor

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Deadline for manuscript submissions

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Message from the Editorial Board

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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