Special Issue

Discrete Element Modeling of Materials

Message from the Guest Editors

This Special Issue is aimed at gathering and presenting the latest developments in materials modeling with the discrete element method (DEM). Applications of the DEM to modelling various materials—natural and man-made—such as soils, rocks, powders, concrete, ceramics, and others, particulate and non-particulate, cohesive and cohesionless, are expected. Contributions showing simulations of real problems of geomechanics, materials science, chemical engineering, metallurgy, mechanical and civil engineering, agriculture, or biomechanics, as well as developments of new models, theoretical formulations, and numerical algorithms in the discrete element method are welcome. Different approaches within the DEM can be presented. The coupling of the DEM with other methods (e.g., molecular dynamics, FEM and CFD), as well as the use of the DEM in the framework of multiscale modelling is within the scope of interest. This Special Issue provides an excellent opportunity for those who use and develop the discrete element method to present their achievements. Research articles, review articles, and communications related to the above-mentioned topics are invited for this Special Issue.

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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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