

## Special Issue

# Development of Numerical Methods for Structural and Mechanical Analysis of Materials and Their Applications

### Message from the Guest Editors

This Special Issue aims to promote research into big data science on materials and material genome engineering, and to accelerate the crossover integration of computational science and advanced materials research. It is our pleasure to invite you to publish your brilliant work in this Special Issue. The topics of interest include, but are not limited to: -Numerical methods for multi-scale structural and mechanical analysis of materials;

- Numerical methods for large deformation analysis of materials;
- Numerical methods for studying the physical properties of materials;
- Numerical methods for material fracture and failure simulations;
- Numerical algorithms for extracting material structure information based on experimental data;
- Numerical methods for the high-throughput search and optimization of material structures;
- Research into and applications of AI algorithms based on materials databases;
- The parallel calculation of materials' mechanical properties.

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### Guest Editors

Prof. Dr. Junzhi Cui

Prof. Dr. Shaoqing Wang

Prof. Dr. Liqun Cao

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### Deadline for manuscript submissions

closed (30 December 2021)



## Materials

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## About the Journal

### 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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### Editor-in-Chief

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