

Special Issue

Modeling and Analysis of Damage and Failure of Concrete-Like, Brittle and Quasi-brittle Materials

Message from the Guest Editors

Modeling and analysis of damage and failure of materials and structures is an active and persistent challenge in computational mechanics, materials, and various scientific and industrial fields. This Special Issue provides an informative and stimulating forum to enhance academic communications on this challenging topic, focusing on the development and applications of computational theories, numerical and experimental methods, models, and algorithms for modeling and analyzing damage and failure of concrete-like, brittle, and quasi-brittle materials and structures. Potential topics include—but are not limited to—failure mechanisms and experimental and numerical analyses of concrete-like, brittle, and quasi-brittle materials and structures; multi-scale models and methods for deformation and failure analysis; fluid–structure interaction; concrete corrosion; durability of concrete-like materials and structures; thermomechanical coupling and other multi-physics fracture modeling; dynamic fracture studies; numerical methods and approaches for damage and failure modeling; and data-driven computational mechanics and modeling.

Guest Editors

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Prof. Dr. Zhanqi Cheng

Dr. Liwei Wu

Deadline for manuscript submissions

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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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