# Special Issue

# Dynamic Behavior of Ceramic Composites and Composite Structures (Second Volume)

## Message from the Guest Editors

Dynamic phenomena are highly diverse. During high-velocity impact, complex phenomena such as cracks, fragmentation, and phase transformation appear in ceramic–metal composites. The behavior of CMM and the composites of all brittle phases is qualitatively different. Special attention is given to the influence of voids within polycrystalline materials on their performance. In recent decades, advancements in numerical methods, including theory development alongside the application of high-performance computing, have allowed for the analysis of impact phenomena. Numerical analysis allows insights into rapid processes that are practically impossible to follow during experiments.

- Impact of samples, fragmentation;
- Variable dynamic loads;
- Imperfections, voids, inclusions in grains, imperfections in grain boundaries;
- Imperfections in interfaces;
- Numerical methods (finite element method, meshless methods);
- Nonlocal methods;
- Thermal effects, phase transformation.

We warmly invite submissions of full papers, communications, or a review.

## Guest Editors

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## Deadline for manuscript submissions

closed (20 January 2025)

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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.

## Editor-in-Chief

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