

# Special Issue

## Dynamic Behavior of Advanced Materials and Structures (Second Edition)

### Message from the Guest Editors

The dynamic behavior of materials and structures is a vibrant branch of mechanics and materials science that has an important application background in aerospace, traffic engineering, and many other industry fields. With the rapid development of manufacturing technology in recent years, a series of advanced materials and structures with excellent properties have emerged, and their nonlinear mechanical behavior and multiscale failure mechanism under impact loads have attracted extensive attention. The scope of this Special Issue includes theoretical, numerical, and experimental research on the dynamic mechanical behavior of additively manufactured metamaterials, high-entropy alloys, amorphous alloys, and some other advanced engineering materials and structures within a wide range of strain rates. The issue's scope also includes investigations on multiscale design for protective properties of materials and structures under intense loading.

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### Guest Editors

Prof. Dr. Weidong Song

Dr. Lijun Xiao

Dr. Xianfeng Yang

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### Deadline for manuscript submissions

closed (20 December 2025)



# 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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