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Dynamic Behavior of Advanced Materials and Structures

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Message from the Guest Editors

The dynamic behavior of materials and structures is a vibrant branch of mechanics and materials science that has 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 as well as multi-scale 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 as well as some other advanced engineering materials and structures within a wide range of strain rates. The Issue's scope also includes investigations on the multiscale design for protective properties of materials and structures under intense loading.



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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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