Special Issue

Impact Behaviour of Materials and Structures

Message from the Guest Editors

Under extreme conditions such as explosion and impact, materials and structures will experience severe impact loads, which are characterized by high temperature, high strain rate, and high pressure. In this Special Issue, theoretical analysis, numerical simulations, and experiments will be used to study the impact response and protection designs of materials and structures. In these studies, the influences of boundary conditions, load characteristics, size effects, material properties, geometric properties, and other factors on the impact characteristics of materials and structures are considered. Understanding potential dynamic deformation and failure mechanisms can help to design advanced materials or structures for energy absorption or impact resistance. The main topics of interest are:

- Dynamic behavior of materials;
- Dynamic response of structures;
- Energy absorption of materials and structures;
- Damage mechanism of materials and structures;
- Optimal designs of protective materials and structures;
- Blast loading; low-velocity impact; ballistic impact.

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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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