Special Issue

Dynamic Mechanical Analysis of Energetic Materials

Message from the Guest Editors

Recent studies have proved that materials' properties have a significant effect on their deformation mechanism, which directly impacts their application in engineering. In the civilian field and beyond, a variety of materials are widely used as kinetic energy projectiles and shaped charge liners. These materials include conventional metal materials, such as copper and tungsten, as well as non-metallic materials, such as ceramics, PTFE and glass. Moreover, the explosive effect of reactive materials has been proved to significantly improve their damage efficiency. The strength, plasticity and chemical properties of materials used for projectiles and jets affect their penetration performance. In addition, the ductility and cohesiveness of the jet, which also affect its penetration ability, have been proved to be related to the mechanical properties of the shaped charge liner material under impact. For this Special Issue, we are inviting articles focused on the explosion effect and deformation mechanisms of materials, including experimental and theoretical studies of mechanical properties of materials at high temperatures, pressures and strain rates.

Guest Editors

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Deadline for manuscript submissions

closed (20 February 2024)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/122397

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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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