

Special Issue

Shock-Wave Loading of Metallic Materials

Message from the Guest Editor

This issue is devoted to experimental and theoretical investigations of shock-wave processes in metals, metallic alloys, and metal-containing composite materials. Of interest are topics such as equations of state for materials at high dynamic pressures, phase transitions at high pressures and temperatures, metal–dielectric and dielectric–metal transformations in shock-wave processes, elastic–plastic behavior of materials under loading and unloading, spall and fragmentation phenomena, as well as various fundamental problems and applications of single and multiple waves of shock compression and isentropic release in metallic materials. Works on various methods of generating shock waves using explosives, laser pulses, particle beams, magnetic fields, etc., as well as on various methods of diagnostics and modeling of shock-wave processes in metallic materials are welcome.

Guest Editor

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About the Journal

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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