Special Issue

Fabrication, Characterization and Application of High-Energy Material (Volume II)

Message from the Guest Editor

High-energy materials are very compact stores and carriers, primarily used in the space rocket industry and weaponry. The Special Issue's coverage of high-energy materials will include their synthesis, preparation and characterization, investigation analysis, testing and evaluation.

The applications of high-energy materials make it possible to use them not only as fuel for the generation of new space rockets, but also in blasting works for the construction and mining industry, in geophysical surveying, as gas generators for enhanced oil recovery, in solid-propellant magnetohydrodynamic (MHD) systems, and EM generators for the conversion of chemical energy into electromagnetic energy, producing the most powerful sources of light energy in a wide range of frequencies (wavelengths) via pulsed laser and X-ray emitters and high-frequency emitters (SHF). They can also be used in gas generators for emergency systems, pressurized fire-extinguishing systems, pressurization systems, pressurized lifting bags for lifting heavy objects underwater, car safety airbags, shock-wave compaction, and in material science (e.g., the production of super-hard materials and composites).

Guest Editor

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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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