Special Issue

Laser Assisted Synthesis of Nanomaterials: Processing, Characterization and Applications

Message from the Guest Editors

Laser assisted synthesis of nanomaterials is achieved by laser ablation in air as well as liquid environments on a wide range of materials, resulting in nanoparticles of very unique phases triggered at very high temperature/pressure in the laser ablated location. The complex morphologies (particles, cubes, rods, composites) of different compositions (oxides, carbides, metals, alloys) are another scientifically interesting aspect apparent with laser ablation. Coupling of laser ablation with laser texturing and laser shock processing is another new approach recently.

Topics of interest for this Special Issue include but are not limited to:

- Laser ablation for nanomaterials synthesis
- Laser assisted chemical vapor deposition
- Pulsed laser deposition
- Laser shock processing and texturing
- Laser based polymer nanocomposites prototyping
- Phase transformation during nanomaterials synthesis
- Fabrication of complex nanostructures using laser
- Physico-chemical properties of laser ablated nanomaterials
- Characterizations of nanomaterials synthesized using laser assisted methods
- Applications of nanomaterials obtained via laser based synthesis methods

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Deadline for manuscript submissions

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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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