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Laser Assisted Synthesis of Nanomaterials: Processing, Characterization and Applications

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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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Message from the Editor-in-Chief

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