



Advanced Nanomaterials: Synthesis, Characterization and Applications

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Message from the Guest Editor

Advanced nanomaterials represent one of the most promising classes of new materials having exceptional properties, very different from bulk material. These materials own good electrical, optic, mechanic, magnetic properties due to their unique structural architecture.

This special issue will discuss the fundamental properties of nanomaterials and demonstrate their diversified applications, ranging from biomedical application to semiconductors or solar cells. The methods of preparation like "top-down" and "bottom-up", fabrication process and characterization methods (SEM&EDS, AFM, STEM, FTIR, Raman, electrochemical, etc.) will be discussed to demonstrate the future application of these materials. Nanocomposites, multifunctional materials, drug delivery systems, hybrid nano-surface coatings, polymers or battery materials, but not only, are some examples of advanced nanomaterials that will be the subject of this special issue.

Topics of interest include, but are not limited to, the following:

- carbon and metallic nanostructures;
- polymers;
- biomaterials;
- hybrid materials and coatings;
- medical applications;
- semiconductors;
- energy storage;
- fuel cells.





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Message from the Editor-in-Chief

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