



Physical Synthesis, Properties and Applications of Nanoparticles

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Message from the Guest Editor

Dear Colleagues,

This is an invitation to contribute to this Special Issue of Materials focused on nanoparticles (NPs) realized with physical synthesis, in particular, with gas phase synthesis, physical vapor deposition, pulsed laser ablation, supersonic cluster beam methods, mechanical grinding and others. NPs can now be considered an essential aspect of contemporary technology. Their application spans from drug delivery, medical imaging, plasmonics and photocatalysis to the realization of wide-screen TV sets. Most NP production methods are based on chemical synthesis. However, the physical methods can present some important advantages in fundamental studies on the properties of nanosized objects. Physical synthesis can be single-step and ligand-free, which results in a more accurate analysis of the NPs' structure and of their electronic, optical and magnetic behavior.

In this Special Issue, contributions regarding the physical synthesis of NPs and their properties are welcome. Theoretical papers on this vast subject will also be taken into consideration.





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Message from the Editor-in-Chief

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