Special Issue

Optical, Magnetic and Photo-Thermal Properties of Laser-Synthesized Nano-Objects

Message from the Guest Editor

Nowadays, laser-based synthesis of nanoscopic objects and nano-structures has found its place in many areas, such as plasmonic sensors, solar cells, catalysis, nanobio-photonics, the automobile industry, medicine, etc. Modern progress in these applications is based on a combination of both experimental and numerical studies focused not only on the fabrication, but also on the optical, magnetic and photo-thermal properties of the obtained nano-objects. This Special Issue of Nanomaterials aims to collect papers covering all types of measurements and calculations related to the exciting properties of laser-synthesized nano-objects. The involved nano-objects can include metallic and hydride nanoparticles, core-shells, Janus particles, fractal aggregates, as well as colloids and/or nanocomposites. The articles should not only describe laserbased fabrication techniques, but, importantly, should bring more light on the resulting unique optical, magnetic, magneto-optical, thermal and/or photothermal properties with a strong application potential.

Guest Editor

Prof. Dr. Tatiana E. Itina

Institute of Engineering and Systems Sciences (INSIS), French National Center for Scientific Research (CNRS), 75016 Paris, France

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closed (15 December 2020)



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Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometerscale dimensions, which we call "nanomaterials". These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, Nanomaterials, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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