Special Issue

Green Synthesis of Nanomaterials and Their Biological Applications

Message from the Guest Editor

Developing new and effective products to fight pests and parasites is a major challenge for modern entomology and parasitology. Despite the huge amount of research on the so-called "green" insecticides and antiparasitics, mainly covering products of microbial and botanical origin, their practical use in real-world conditions remains limited. This is often due to lack of prolonged efficacy and challenging regulations. Nanotechnologies are currently considered a major option to improve the efficacy and stability of both classic and green insecticides, repellents and antiparasitic drugs, relying to various nanocarriers, including nanoencapsulation and nanoemulsions. Therefore, the present Special Issue is focused on the development of new and eco-friendly nano-insecticides, acaricides, repellents and antiparasitic drugs, offering insights on their efficacy (with special emphasis to field studies), modes of action and non-target effects. Both Original researches and Reviews will be considered for publication.

Guest Editor

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Deadline for manuscript submissions

closed (30 June 2021)



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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

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