



Recent Advances in Optical Spectroscopy of Layered Materials

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Message from the Guest Editors

After almost two decades since the first pioneering works on single-layer graphene, layered materials remain at the forefront of scientific research. While our understanding of these ideal two-dimensional systems has improved enormously, new findings maintain the interest in this field at the highest level. The new emerging topics on layered materials rely on our capability to control light-matter interactions at the nanoscale, a detail that has always defined optical spectroscopy as one of the most powerful tools in our hands: Raman, photoluminescence, ultrafast spectroscopy and nonlinear optics.

Currently, only a few dozen of layered materials have been successfully synthesized or exfoliated, however thousands are predicted to be exfoliable with unique vibrational, electronic, magnetic and topological properties. With this Special Issue, we aim to gather some of the most recent and exciting results from experts in the field of optical spectroscopy of layered materials and to present new ideas for future research directions.





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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 nanometer-scale 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.

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