



Advances in Resonant Nanostructures and Their Applications in Molecular Spectroscopy and Sensing

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Deadline for manuscript
submissions:

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Message from the Guest Editors

Dear Colleagues,

Metallic nanoparticles or nanostructures support localized surface plasmon resonances (LSPRs), which can significantly enhance light-matter interactions. A wide variety of nanoparticles or nanostructures can be fabricated by top-down, bottom-up, or other lithographic tools, enabling different functions for a broad range of applications, including molecular spectroscopy and sensing. This Special Issue is organized to invite original research and review articles covering but not limited to the following topics:

- Physical mechanism and rational design of resonant nanostructures;
- Emerging materials for resonant nanostructures including noble metals, dielectrics, graphene, metal oxides, etc.;
- Surface-enhanced Raman scattering and surface-enhanced infrared absorption spectroscopy;
- Strong coupling between plasmon resonances and molecular vibrations, lattice phonons, Fano resonance etc.;
- Coupled plasmonic systems in biosensing, biomedical applications, as well as in modification of chemical reactions.





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Message from the Editor-in-Chief

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