

## Special Issue

# Recent Progress of Surface-Enhanced Raman Spectroscopy for Materials

### Message from the Guest Editors

Surface-enhanced Raman spectroscopy (SERS) can realize an ultrahigh sensitivity down to the single-molecule level by means of metal nanostructures (for example, Au, Ag, Cu, etc.).

Carbon materials have been suggested as potential surface plasmon enhancers. The SERS effect of graphene was first discovered and reported in 2009, and the enhancement mechanism was identified as a chemical enhancement which had been induced by the strong interaction between molecules and graphene. Besides, graphene has exceptional properties, including a fluorescence quenching effect and chemical stability, and can be used as a protective layer of metal nanomaterials to enhance the stability of SERS substrates. Meanwhile, carbon nanotubes (for example, single-carbon nanotube, carbon nanotube forests, carbon nanotube arrays, etc.) can be used as plasmonic component to meet the requirements of intensive light scattering properties. Especially, hybrids of carbon materials and metal nanostructures show great SERS properties, high enhancement factors, high stability, high stability, and uniformity.

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### Deadline for manuscript submissions

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## Materials

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