Microspectroscopy Study on Atomically Thin Materials

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Atomically thin materials have been studied because of their unique physical properties and possible applications in electronic and optical devices. Light scattering techniques, such as Raman and photoluminescence spectroscopy, have been used widely to characterize atomically thin materials with microscale resolution. Microspectroscopy has become one of the essential tools to study them. By careful investigation of such spectra, we can further elucidate the intrinsic physical properties of crystals. In this presentation, I will discuss the development of optical spectroscopic methods to extract the physical properties of few-atom-thick materials, which are difficult to measure via other techniques.