

# TRR Guest Scientist Lecture / Seminar

Date/Time: 18.02.2020 / 13 Uhr  
 Location: Paderborn, P8.4.09



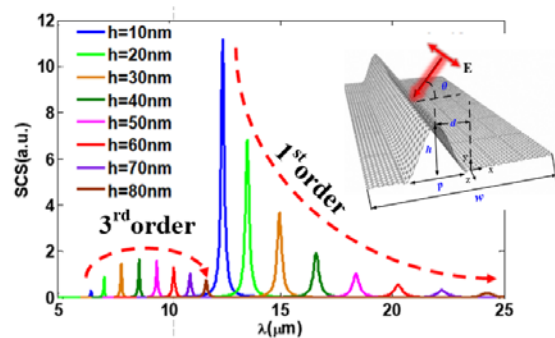
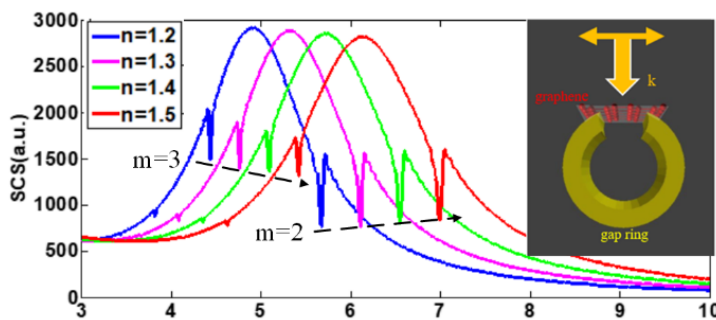
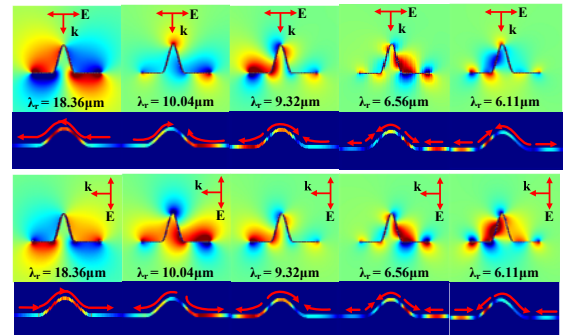
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## Enhanced Localized Surface Plasmonic Resonance of Graphene Nano-ribbons

### Abstract:

Supporting tunable plasmonics, graphene is considered as a highly promising 2-dimensional material. However, its application is limited by the weak interaction with light due to the single-atom-layer thickness. Besides, systematic study on plasmonic of distorted graphene with wrinkles which are easily produced in practical fabrication has not been carried out yet. Here, by calculation we studied the coupling between graphene ribbons and gold split rings, as well as plasmonic resonance of distorted graphene ribbons, during which process the strong Fano resonance between graphene ribbons and metallic microstructure, and totally different tunability enabled by ridges of the distorted ribbons were found and systematically explored, respectively. The results are anticipated to extend the application range of graphene.



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