

Seminar On

THz transmission and radiation research based on SPPs

By

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Date : 25 November 2016 (Friday)
Time : 11:00 am – 12:00 noon
Venue : Room 15-202, meeting room of State Key Laboratory of Millimeter Waves, 15/F, Lau Ming Wai Academic Building, City University of Hong Kong

Abstract

Recently, surface plasmon polaritons (SPPs) have attracted much attention for its unique surface local features and diverse excitation method. it enables subwavelength optics in microscopy beyond the diffraction limit also photonic data storage, light generation, waveguide, surface sensor, and bio-photonics etc. here, some work of THz waveguide and THz radiation source will be brief introduced, by using the Sommerfeld theory base on the theory of Fermi-Dirac distribution to characterize the dielectric properties of metal and semiconductor(modified Drude model), study on the transmission characteristics and mechanism of single wire SPPs THz waveguide and hybrid SPPs THz waveguide are presented. Furthermore, a kind of radiation source combine electronics and photonics based on SPPs will also be introduced.

Biography

Renbin Zhong received her master degree in Southwest Jiaotong University, Chengdu, China, 2003, and then joined School of Physics and Electronic of University of Electronic Science and Technology of China (UESTC), Chengdu, China, June, 2003. She received Ph.D. degree from UESTC in 2012 and was promoted to an Associate Professor in 2013. Her current research interests involve THz radiation source, THz waveguide and related functiong component.

***** ALL ARE WELCOME *****

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