

北京大学量子材料科学中心

International Center for Quantum Materials, PKU

Weekly Seminar

Engineering the Meta-Resonances toward Functioning Terahertz Devices

Weili Zhang

School of Electrical and Computer Engineering, Oklahoma State University

Center for Terahertz Waves, Tianjin University



Time: 4:00pm, Dec. 16, 2015 (Wednesday)

时间: 2015年12月16日 (周三)下午4:00

Venue: w563, Physics building, Peking University

地点:北京大学物理楼,西563会议室

Abstract

Composite media made from subwavelength-sized metallic resonators arranged in a periodic array may be designed to interact with the electric or magnetic field, or both, of a propagating wave in ways not observed in natural materials. By use of the state-of-the-art terahertz spectroscopy and microelectronic fabrication technology, we study metasurfaces and proof-of-concept terahertz components with an ultimate goal of developing next-generation integrated terahertz photonic devices.

About the Speaker

Weili Zhang received the B.S. degree in laser science, and the Ph.D. degree in optics engineering from Tianjin University (TJU), China, in 1987 and 1993, respectively. From 1993 to 1995, he was a Postdoctoral Research Associate in the Department of Physics, The Hong Kong University of Science and Technology. Dr. Zhang has been on the faculty of TJU since 1995 and Oklahoma State University (OSU) since 2002. Currently, he is professor of Electrical Engineering at OSU and Changjiang distinguished professor and Director of the Center for Terahertz Waves at TJU. His research interests include terahertz optoelectronics, nano- and micro-structured materials optics, and ultrafast lasers and phenomena. Dr. Zhang has authored and co-authored over 200 invited or contributed articles in peerreviewed journals and presented many plenary, keynote and invited talks at international conferences. He is Editorial Board Member of *Scientific Reports*, Primary Guest Editor of *IEEE JSTQE special issue on "Terahertz Photonics"*, and Associate Editor or Topical Editor for a number of other journals. Dr. Zhang is a Fellow of The Optical Society (OSA).

Host: 孙栋 sundong@pku.edu.cn