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首页 学院概况 师资力量 人才培养 教学研究 科学研究 交流合作 党群工作 党风廉政 综合服务



◎ 首页 > 师资力量



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商广义，教授、博导，物理学院光学学科责任教授，学院学术委员会常委副主任，中国工程院中国信息与电子工程科技发展战略研究中心专家委员会特聘专家，北京光学学会理事，中国科学院纳米标准与检测重点实验室学术委员会委员等。承担“专业物理实验方法”、“现代光学导论”等本科生课程，主讲校级“高新技术中的物理学基础”、“现代光学基础”、以及“博士生综合课”等研究生课程。长期从事纳米光学和扫描探针显微学及其应用研究，先后主持国家自然科学基金重点项目、科技部“973”课题、863课题，以及中科院等多项国家和省部级项目，获国家科技进步二等奖1项，省部级科技进步奖3项，申请和获得国家发明专利10余项；与他人合作出版专著1本；在国内外学术期刊上发表论文120多篇。

研究方向：

- 1、纳米光学，主要包括近场光学显微成像与光谱、表面等离激元光子学；
- 2、扫描探针显微学及其对锂离子电池电极材料结构/性质的研究。

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近年主持的科研项目：

- 1.科技部973课题，纳米结构电极的原位表征与储能电池失效机理研究，410万元，主持。
- 2.国家自然科学基金科学仪器基础研究专款，10827403，纳米显微光学检测方法和成像系统的研究，100万元，主持。
- 3.科技部973课题，纳米复合储锂材料、纳米集流体及纳米结构电极的表征与性能研究，368万元，主持。

获奖情况：

1. 国家科技进步二等奖 (1990)
2. 中国科学院科技进步三等奖 (1995)
3. 国家教委科技进步三等奖 (1995)

代表论著：

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2. Zhuanfang Bi, Mu Yang, Yang Shang, Xiaoxia Meng, Hao Zhang, **Guangyi Shang***, Polarization-dependent hotspots formed in crossed silver nanowires for surface-enhanced Raman spectroscopy, *Opt. Commun.*, 2018, 429: 35–40.
3. Zhuanfang Bi, Wei Cai, Yingjie Wang, **Guangyi Shang***, Direct manipulation of metallic nanosheets by shear force microscopy, *Journal of Microscopy*, 2018, 271(2): 222–229.
4. Zhuan-Fang Bi, Mu Yang, and **Guang-Yi Shang***, Optical polarization response at gold nanosheet edges probed by scanning near-field optical microscopy, *Chin. Phys. B*, 2018, 27(8): 087801.
5. Jiaxiong Wu, Shan Yang, Wei Cai, Zhuanfang Bi*, **Guangyi Shang***, Junen Yao, Multi-characterization of LiCoO_2 cathode films using advanced AFM-based techniques with high resolution, *Scientific Reports*, 2017, 7: 11164.
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