



硕导个人简介



崔旭东



◆ 个人简介

崔旭东，研究员/教授，硕士生导师。2006年博士毕业于瑞士苏黎世联邦理工，光学工程博士学位。曾先后在摩托罗拉、松下、瑞士苏黎世联邦理工、德国杜伊斯堡-埃森大学等单位工作，历任研究工程师，部门经理，讲师，高级研究科学家，教授等职。从事纳米光学，电磁场及材料物理与化学的研究工作。曾获国家优秀自费留学生奖，IEEE，OSA最佳论文奖，军队科技进步奖等奖项。2011年加入中国工程物理研究院，任材料交叉科学实验室主任，研究员，博士生导师。四川省“百人计划”。发表论文150余篇，著作五部。他同时十余所高校的特聘教授，2013年获批江苏省双创计划人才，2017年获福建省闽江学者讲座教授，国家特聘专家，四川省特聘专家，国家太赫兹专家组专家，四川省专家评议组成员，四川省军民融合智库专家委员会成员等。

◆ 研究领域

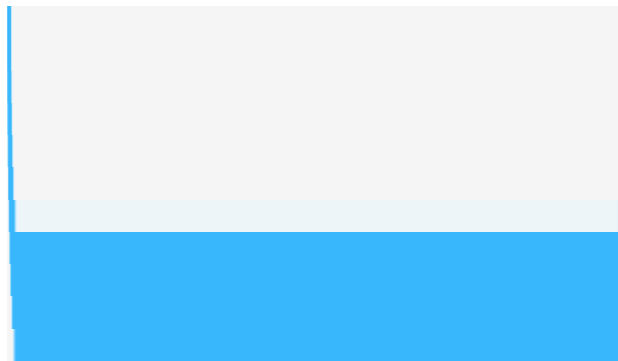
激光光谱学；纳米光学及光学芯片；激光传感；光学功能材料；

◆ 承担的主要项目（范例）

- [1] XXX合金材料研制，惯约重大专项，2012-2015，600万，主持；
- [2] XXX靶材料研制，惯约重大专项，2014-2016，600万，主持；
- [3] 四川省百人计划自选项目资助经费，2011-2014，100万，主持；
- [5] 电磁超构材料前沿研究，中物院基础研究重大项目，2014-2017，100万元，主持；
- [6] 激光聚变研究中心所长基金，2013-2015，600万元，主持；
- [7] 化材所第六批重点项目，2018-2020，550万元，主持；

◆ 代表性成果

- [1] RuiLi, Yousong Liu, Zhaoqian Li, Jinpeng Shen, Yuntao Yang **Xudong Cui***,Guangcheng Yang*, "Bottom - UpFabrication of Single - LayeredNitrogen - DopedGraphene Quantum Dots through Intermolecular Carbonization Arrayed in a 2DPlane", *Chem.Eur. J.*, vol.22, Is.1, 272-278, 2016.
- [2] JunWang, Zhiqiang Qiao, Yuntao Yang, Jinpeng Shen, Zhang Long, Zhaoqian Li, **XudongCui*** and Guangcheng Yang*, "Core-shell Al-PTFE



- configurations to enhance reaction kinetics and energy performance for nanoenergetic materials," *Chem. Eur. J.*, vol.22, Is. 1, 279-284, 2016.
- [3] Weitang Yao, Yujuan Zhang, Tao Duan, Wenkun Zhu, Zao Yi, **Xudong Cui**, "3D hierarchical walnut-like CuO nanostructures: Preparation, characterization and their efficient catalytic activity for CO oxidation", *Physica B: Condensed Matter*, 493, 7-13, 2016.
- [4] Kan Wang, Xinqiang Wang, **Xudong Cui***, "Comparative studies of adsorption capacities for graphene based sorbents with different potential functions in molecular simulations", *International Journal of Hydrogen Energy*, 41, 18, 7419-7424, 2016.
- [5] Yongjun Ma, Zhenquan Yin, Chonghua Pei, **Xudong Cui**, Yong Zhou, "Synthesis of hierarchical ordered porous functional materials using willow wickers as templates for recyclable photo-catalytic applications", *Journal of Porous Materials*, 23, 1, pp 225-230, 2016.
- [6] Qi Sun, Kaidi Diao, Tulai Sun, Maozhong Li, **Xudong Cui***, He Tian and Bin Xiang, "Enhanced gas-sensing performance of SnO₂/Nb₂O₅ hybrid nanowires", *RSC Adv.*, 6, 105317-105321, 2016.
- [7] Kaidi Diao, Yunpeng Huang, Minjie Zhou, Jicheng Zhang, Yongjian Tang, Shuxia Wang, Tianxi Liu and **Xudong Cui***, "Selectively enhanced sensing performance for oxidizing gases based on ZnO nanoparticle-loaded electrospun SnO₂ nanotube heterostructures", *RSC Adv.*, 2016, 6, 28419-28427.
- [8] Qing Zhang, Lihua Bai, Xiao Liu, Chengpu Liu, and **Xudong Cui***, "Simplified Transparent Conductive Oxides-Based Ultra-Broadband Absorber Design", *Journal of Lightwave Technology*, Vol. 34, Issue 4, pp. 1354-1359 (2016).
- [9] Xiao Liu, Qing Zhang, **Xudong Cui***, "Ultra-broadband Polarization-Independent Wide-Angle THz Absorber Based on Plasmonic Resonances in Semiconductor Square-Nut-Shaped Metamaterials", *Plasmonics*, doi:10.1007/s11468-016-0368-1 (2016).
- [10] Wenhui Wang, Zhongti Sun, Wenshuai Zhang, Quanping Fan, Qi Sun, **Xudong Cui*** and Bin Xiang, "First-principles investigations of vanadium disulfide for lithium and sodium ion battery applications", *RSC Adv.*, 2016, 6, 54874-54879.
- [11] Min Li; Xiaomin Zhang, Mingzhong Li, **Xudong Cui**, Zhenguo Wang, Xiongwei Yan, Xinying Jiang, Jianguang Zheng, "Edge-pumped multi-slab amplifier for inertial fusion energy (IFE)", *Proc. SPIE 10016*, High-Power Lasers and Applications VIII, 100160F (November 9, 2016); doi:10.1117/12.2246128
- [12] Gufeng Qiu, **Xudong Cui***, "A contact inspection system for aspheric optical components", *Optik - International Journal for Light and Electron Optics*, 127, 19, 7572-7577, 2016.
- [13] K. Diao, M. Zhou, J. Zhang, Y. Tang, S. Wang, **X. Cui***, "High response to H₂S gas with facile synthesized hierarchical ZnO microstructures", *Sensors and Actuators B: Chemical*, 219, 30-37, 2015.



- [14] Y.Zhang, W. Zhu, **X. Cui**, W. Yao, T. Duan, "One-step hydrothermalsynthesis of iron and nitrogen co-doped TiO₂ nanotubes with enhanced visible-light photocatalytic activity, " *CrystEngComm*, 17, 8368-8376, 2015.
- [15] W.Wang, **X. Cui***, E. Yang, Q. Fan, B. Xiang, "Negative refraction in molybdenum disulfide, " *Optics Express*, 17, 22024-22033, 2015.
- [16] K.Wang, Z. Liang, X. Wang, **X. Cui***, "Lead replacement in CH₃NH₃PbI₃," *Advanced Electronic Materials*, 10, 1500089-8, 2015.
- [17] L.Yang, H. Hong, Q. Fu, Y. Huang, J. Zhang, **X. Cui**, Z. Fan, K. Liu, B.Xiang, "Single-crystal atomic-layered molybdenum disulfide nanobelts with high surface activity, " *ACS Nano*, 9, 6478-6483, 2015.
- [18] G.Qiu, **X. Cui***, "Hyperbolic tangential function based progressive addition lens design," *Applied Optics*, Accepted, 2015.
- [19] G.Qiu, **X. Cui***, "Null testing of non-rotational symmetry transmission optical freeform: design, modeling and inspection on the basis of Fermat principles, " *Optical Engineering*, 54(11), 115112, 2015.
- [20] B.Zhang, K. Wang, D. Li, **X. Cui***, "Doping effects on the thermoelectric properties of pristine PEDOT, ", *RSC Advances*, 5, 33885-33891, 2015.
- [21] H.Ren, Z. Qiao, X. Liu and **X. Cui***, "Hydrophobicity control by a supercritical drying technique in a sol-gel process with hybrid materials," *Materials Research Bulletin*, 70, 87-92, 2015.
- [22] K.Wang, Z.Liu, X.Wang, **X.Cui***, "Enhancement of hydrogen binding affinity with low ionization energy Li₂F coating on C₆₀ to improve hydrogen storage capacity," *Int. J. Hydrogen Energy*, 39, 15639-15645, 2014.
- [23] L.Yang, **X. Cui**, J. Zhang, K. Wang, M.Shen, S. Zeng, S. Dayeh, L. Feng, and B. Xiang, "Lattice strain effects on the optical properties of MoS₂ nanosheets, ", *Scientific Reports*, 4, 5649, 2014.
- [24] K.Diao, J. Zhang, M. Zhou, Y. Tang, S. Wang, **X. Cui***, "Highly controllable and reproducible ZnO nanowire arrays growth with focused ion beam and low-temperature hydrothermal method," *Appl. Surf. Sci.*, 317, 220-225, 2014.



- [25] K.Du, J.Liu, **X.Cui**, Y.Zhang, M.Yan, "Highly porous titanium network: fabrication, characterization and photocatalytic activity, ", *J Sol-Gel Sci Technol.*, vol.65, Is.3, pp.287-295, 2013.
- [26] K.Du, **X. Cui***, B.Tang, "Template-directed synthesis of hollow silica beads by an interfacial sol-gel route, " *Chem. Eng. Sci.*, vol.98, is. 212-217, 2013.
- [27] G.Qiu, **X.Cui***, "Fermat principle based reflector design for fast and contactless freeform optical components inspections," *Optics Letters*, 2013, 38, 3510-3513. (封面)
- [28] Zheng Fan, Xinyong Tao, **Xudong Cui**, Xiaobin Zhang and Lixin Dong, "Metal-filled carbon nanotube based optical nanoantennas: bubbling, reshaping and in situ characterization", *Nanoscale*, Vol.4, No.18, 5673-5679, 2012.
- [29] **Xudong Cui***, Weihua Zhang, Daniel Erni, Lixin Dong, "Optical properties of an anisotropic-like plasmonic structure, " *J. Opt. Soc. Am. A*, 27, 1783-1790, 2010. (封面)
- [30] **Xudong Cui***, Lixin Dong, Weihua Zhang, et al, "Numerical investigations of a multi-walled carbon nanotube-based multi-segmented optical antenna," *Appl. Phys. B*, vol.101, 601-609, 2010.
- [31] **X.Cui***, D.Erni, "The influence of particle shapes on the optical response of nearly touching plasmonic nanoparticle dimers," *J. Comp. Theor. Nanosci.*, vol.7, no.8, 1610-1615, 2010.
- [32] **Xudong Cui***, Daniel Erni, "The influence of particle shapes on the optical response of nearly touching plasmonic nanoparticle dimers, ", *J. Comp. and Theor. Nanoscience*, Vol.7, No.8, 1610-1615, 2010.
- [33] Weihua Zhang, **Xudong Cui**, Olivier J. F. Martin, "Local field enhancement of an infinite conical metal tip illuminated by a focused beam, " *J.Raman Spectroscopy*, Vol. 40, No.10, 1338-1342, 2009.
- [34] **Xudong Cui***, Daniel Erni, "Ultra-compact surface plasmon polariton beam focusing with metal-coated nanoshell structures, " *J. Comp. and Theor. Nanoscience*, Vol. 6, No.3, 744-748, 2009.
- [35] **Xudong Cui***, Daniel Erni, "Enhanced propagation in a plasmonic chain waveguide with nanoshell structures based on low and high order



- mode coupling, " *J. Opt. Soc. Am A*, 24, 1783-1789, 2008. (封面)
- [36] **XudongCui***, Daniel Erni, Christian Hafner, "Optical forces on metallic nanoparticles induced by a photonic nanojet," *Optics Express*, Vol. 16, No. 18, 13560-13568, 2008. (封面)
- [37] **XudongCui***, Daniel Erni, Weihua Zhang, Renato Zenobi, "Highly efficient nano-tips with metal-dielectric coating for tip-enhanced spectroscopy applications," *Chem. Phys. Lett.*, 453, 262-265, 2008.
- [38] **XudongCui***, Weihua Zhang, Boon-Siang Yeo, Renato Zenobi, Christian Hafner, and Daniel Erni, "Tuning the resonance frequency of Ag-Coated dielectric tips," *Optics Express*, vol. 15, No. 13, 8309-8316, 2007. (封面)
- [39] Weihua Zhang, **Xudong Cui**, Boon-Siang Yeo, Thomas Schmid, Christian Hafner, and Renato Zenobi, "Nanoscale Roughness on Metal Surface Can Increase Tip-Enhanced Raman Scattering by an Order of Magnitude," *Nano Letters*, Vol. 7, No. 5, 1401-1405, 2007. (封面)
- [40] **XudongCui***, Christian Hafner, Kakhaber Tavzarashvili, and Ruediger Vahldieck, "Metallic and dielectric photonic crystal filter design using multiple multipole program and model-based parameter estimation methods," *J. Opt. Soc. Am. A*, 24, 1761-1766, 2007.
- [41] **XudongCui***, Christian Hafner, Ruediger Vahldieck, Franck Robin, "Sharp trench waveguide bends in dual mode operation with ultra-small photonic crystals for suppressing radiation," *Optics Express*, vol. 14, No. 10, 4351-4356, 2006. (封面)
- [42] Christian Hafner, **Xudong Cui**, and Ruediger Vahldieck, "Resolution of Negative Index Slabs," *J. Opt. Soc. Am. A*, Vol. 23, No. 7, 1768-1778, 2006.
- [43] **XudongCui***, Christian Hafner, Ruediger Vahldieck, "Design of ultra-compact metallo-dielectric photonic crystal filters," *Optics Express*, vol. 13, No. 16, 6175-6180, 2005. (封面)
- [44] 《惯性约束聚变导论》，图书，原子能出版社，2011年。
- [45] 《光学材料的激光诱导损伤》，图书，西南交通大学出版社，2011年。
- [46] 《气凝胶手册》，图书，原子能出版社，2015年。
- [47] 《二维过渡金属化合物》，图书，原子能出版社，2017。

联系方式 (范例)

电话: 028-65726202; E-mail: xudcui@caep.cn



友情链接: [▶ 重庆理工大学](#) [▶ 中华人民共和国教育部](#) [▶ 中国研究生招生信息网](#) [▶ 重庆市教育委员会](#) [▶ 重庆市教育考试院](#)

—相关链接— ▼

联系地址: 重庆市巴南区红光大道69号研究生院 邮政编码: 400054 联系电话: 023-68667302 传真: 023-68667302

联系人: 李老师、肖老师 E-mail: yjs@vip.cqut.edu.cn

您是第 **00789146** 位浏览本网站