何晶

教师介绍

何晶

何晶，博士，副教授，博士生导师。

研究方向：光载无线通信，先进调制格式，超宽带光无线通信，高速光通信，实时光通信，可见

主持国家自然科学基金项目2项、教育部留学回国人员科研启动基金项目1项、湖南省科技计划项

发计划项目1项、湖南省自然科学基金项目1项、湖南大学青年教师科技创新扶持项目1项和光通

术教育部重点实验室(北京邮电大学)项目1项、主持并完成横向科研项目3项。作为主要成员参与

划项目、国家自然科学基金项目、湖南省自然科学基金项目等。2012年至2013年，获国家留学

在英国布里斯托大学进行访问研究。以第一作者和通讯作者在光通信领域的国内外重要学术期刊

IEEE/OSAJLT,IEEEPJ,IEEEPTL,OpEx,IEEE/OSAJOCN,OC,OFT,COL和顶级国际学术会议发表高水

余篇，其中JCR一区论文3篇，JCR二区论文14篇。申请国家发明专利9项，授权国家发明专利1

以项目第一完成人获得湖南省自然科学奖二等奖，2016年入选湖南省普通高校青年骨干教师培

前是IEEEPJ,IEEE/OSAJLT,IEEEPTL,IEEEJQE,IEEETOB,IEEEAccess等期刊的审稿人。

E-mail:jhe@hnu.edu.cn

中文名：	何晶	**学历：**	
英文名：		**职称：**	
所属机构：	通信工程系		

个人简历

学术论文

2015年

[1]. Ming Chen, ***Jing He**, Qirui Fan, Ze Dong andLin Chen.Experimental Demonstration of Real-Time High-LevelQAM-Encoded Direct-Detection Optical OFDM Systems,IEEE/OSA Journal of Lightwave Technology, 2015, 33(22):4632-4639.(SCI二区, IF=2.965)

[2]. Rui Deng, ***Jing He**, Ming Chen, Yi Liu, andLin Chen.Real-TimeLR-DDO-OFDM Transmission System Using EML with 1024-Point FFT. IEEE Photonics Technology Letters, 2015, 27(17):1841-1844. (SCI二区, IF=2.191)

[3]. Jin Tang, ***Jing He**, Danyu Li, Ming Chen andLin Chen. 64/128-QAM Half-Cycle Sub-Carrier Modulation for Short Reach OpticalCommunications. IEEE Photonics Technology Letters, 2015,27(3):284-287. (SCI二区, IF=2.191)

[4]. Ming Chen, ***Jing He**, Lin Chen. Real-TimeDemonstration of an FPGA-Based 1024-QAM OFDM Transmitter in Short-Reach IMDDSystems. IEEE Photonics Technology Letters, 2015,27(8):824-827. (SCI二区, IF=2.191)

[5]. Rui Deng, ***Jing He**, Ming Chen and Lin Chen.SFO compensation by pilot-aided channel estimation for real-time DDO-OFDMsystem. Optics Communications,2015,355:172-176. (SCI三区,IF=1.542)

[6]. Jin Tang, ***Jing He**, Ming Chen, Danyu Li, Lin Chen. Demonstrationof 48 Gb/s 16 QAM signal transmission using half cycle sub-carrier modulationin intensity modulation/direct detection system, Optics Communications,2015,334:228-234. (SCI三区,IF=1.542)

[7]. ***Jing He**, Xuejie Wen, Ming Chen, Lin Chen. A Golay complementary TS-based symbolsynchronization scheme in variable rate LDPC-coded MB-OFDM UWBoF system. Optics Communications, 2015, 350: 189-195. (SCI三区,IF=1.542)

[8]. ***Jing He**, Xuejie Wen, Ming Chen, Lin Chen and Jinshu Su. Experimentaldemonstration of the transmission performance for LDPC-coded multiband OFDMultra-wideband over fiber system. Optical Fiber Technology, 2015, 21:122-127. (SCI三区, IF=1.188)

[9]. ***Jing He**, Xuejie Wen, Ming Chen, Lin Chen and Jinshu Su. Full-Duplex MultibandOrthogonal Frequency Division Multiplexing Ultra-Wideband over Fiber System. OpticalEngineering, 2015, 54(1): 016101-1-6.(SCI四区, IF=0.959)

[10]. ***Jing He**, Xuejie Wen, Lin Chen. MB-OFDM UWB overfiber system with direct detection. Chinese Optics Letters (Suppl.), 2015, 13:S10604-1-4. (EI收录)

[11]. ***Jing He**, Teng Li, Xuejie Wen, Ming Chen, Lin Chen. An ISFA-combined Pilot-AidedChannel Estimation Scheme in Multiband Orthogonal Frequency DivisionMultiplexing Ultra-Wideband Over Fiber System. In: Proc of IEEE-ISCC 2015.Larnaca, Cyprus, 2015.7.6-9. (EI收录)

[12]. Lap Maivan, ***Jing He**,Lin Chen. A low complexity of PAPRreduction scheme in the IM-DD opticalOFDM system based on fast Hartley transform. In:Proc of ACP 2015. Hong Kong, China, 2015.11.18-23. (EI收录)

2014年

[13]. Ming Chen, ***Jing He**, Jin Tang, Xian Wu and LinChen. Real-Time 10.4Gb/s Single-Band Optical 256/64/16 QAM Receiver for OFDM-PON,IEEE Photonics Technology Letters, 2014,26(20):2012-2015. (SCI二区, IF=2.191)

[14]. Ming Chen, ***Jing He**, Jin Tang, Xian Wu, LinChen. Experimentaldemonstration of real-time adaptively modulated DDO-OFDM systems with a highspectral efficiency up to 5.76bit/s/Hz transmission over SMF links. Optics Express, 2014,22(15):17691-17699. (SCI二区, IF=3.587)

[15]. Ming Chen, ***Jing He**, Lin Chen. Real-timeOptical OFDM Long-reach PON System over 100-km SSMF Using a Directly ModulatedDFB Laser. IEEE/OSA Journal of Optical Communications and Networking, 2014,6(1):18-25. (SCI三区,000330477700003, IF=1.872)

[16]. Hongxian Chen, ***Jing He**, Jin Tang, Fan Li,Ming Chen, Lin Chen. Performance of 16QAM-OFDM with new null subcarriershifting in an intensity-modulated direct detection system. IEEE/OSA Journal ofOptical Communications and Networking, 2014,6(2):159-164. (SCI三区,000330475500007, IF=1.872)

[17]. Ming Chen, ***Jing He**, Zizheng Cao, JinTang, Lin Chen, Xian Wu. Symbol synchronization and samplingfrequency synchronization techniques in real-time DDO-OFDM systems. OpticsCommunications, 2014,326:80-87. (SCI三区, 000336969600015,IF=1.542)

[18]. Hongxian Chen, ***Jing He**, Jin Tang, Fan Li,Ming Chen, JiangnanXiao, Lin Chen. Nonlinear Distortion Evaluation of MZM withEquivalent Mathematical Model Calculation in IM/DD OOFDM Transmission System.Optics Communications, 2014,316:31-36. (SCI三区,000331672700007, IF=1.542)

[19]. Qi Tang, ***Jing He**, Zizheng Cao, Fan Li,Jiangnan Xiao, Lin Chen. Polarization-Time-Block-Code in IM/DD PolMux-OFDM transmissionsystem. Optics Communications, 2014,315:295-302. (SCI三区,000331596400051, IF=1.542)

[20]. Hui Zhou, ***Jing He**, Ze Dong, Yun Cheng, LinChen. Theoretical and Experimental Study on Wavelength Conversion Based on FWMfor PDM-QPSK Signals with Digital Coherent Detection in HNLF. OpticsCommunications, 2014,316:161-167. (SCI三区,000331672700028, IF=1.542)

[21]. Ming Chen, ***Jing He**, Jin Tang, Lin Chen.Pilot-aided sampling frequency offset estimation and compensation using DSPtechnique in DD-OOFDM systems. Optical Fiber Technology, 2014,20: 268-273. (SCI二区,IF=1.188)

[22]. Dingxin Xie, ***Jing He**, Lin Chen, Jin Tang, Ming Chen. Data-aided channel estimation andfrequency domain equalization based on minimum-shift keying in opticaltransmission systems. Chinese Optics Letters, 2014,12(4):040604-1-5. (SCI四区,IF=1.073)

[23]. Huanjun Wang, ***Jing He**, Lin Chen, Jin Tang. Blindequalization for minimum-shift keying coherent optical communication system.Optical Engineering, 2014,53(4): 046107-1-5. (SCI四区, IF=0.959)

[24]. LiuLiu, ***JingHe**, Jin Tang, Yun Cheng, Lin Chen. ChannelEstimation Method using Orthogonal Sequences in Frequency Domain for 100-Gb/sPDM-SCFDE Coherent Optical Transmission Systems. Optical Engineering, 2014,53(5):056116-1-5. (SCI四区,IF=0.959)

[25]. Long Chen, ***Jing He**, Yi Liu,Lin Chen, Zizheng Cao. Comparison of interpolation algorithms for pilot-aidedestimation of orthogonal frequency division multiplexing transmission inreversely modulated optical single sideband system. Optical Engineering,2014,53(5):056108-1-6. (SCI四区, IF=0.959)

[26]. Jin Tang, ***Jing He**, Jiangnan Xiao, Lin Chen.Blind polarization demultiplexing for quadrature amplitude modulation coherentoptical communication systems using low-complexity and fast-convergingindependent component analysis. Optical Engineering, 2014,53(5):056118-1-9. (SCI四区, IF=0.959)

[27]. Ming Chen, ***Jing He**, Jin Tang, and Lin Chen. Experimentalinvestigations in transmission performance of real time long-reach adaptivelymodulated direct detection optical-orthogonal frequency division multiplexingsystems, Optical Engineering, 2014,53(9):096106(1)-(6) (SCI四区, IF=0.959)

[28]. FALL Mangone, ***Jing He**, Jin Tang,Jiangnan Xiao, Ming Chen, Fan Li, Lin Chen. A PAPR reduction technique usingHadamard transform combined with clipping and filtering based on DCT/IDCT forIM/DD optical OFDM systems. Optical Fiber Technology, 2014,20:384-390.(SCI四区, IF=1.188)

[29]. Lap Maivan, ***Jing He**, Ming Chen, FallMangone, Lin Chen. New hybrid peak-to-average power ratio reduction techniquebased on carrier interferometry codes and companding technique for opticaldirect detection orthogonal frequency division multiplexing system. Optical Engineering, 2014, 53(8): 086104-1-8. (SCI四区, IF=0.959)

[30]. DanyuLi, ***Jing He**, Jin Tang, Ming Chen, Lin Chen. Experimentaldemonstration of half cycle 64-QAM Nyquist-SCM direct-detection opticalcommunication system with data-aided estimation and overlap frequency-domainequalization. Optical Engineering, 2014, 53(12): 126101-1-7. (SCI四区,IF=0.959)

[31]. ***Jing He**, Chong Li, Lin Chen, Ming Chen. Enhanced16 Spiral quadratureamplitude modulation scheme for coherent optical orthogonal frequency divisionmultiplexing systems, Optical Engineering, 2014, 53(9):096105(1)-(5). (SCI四区, IF=0.959)

[32]. Fouad Kharroubi, ***Jing He**, Lin Chen.Performance analysis of GA, ROA and TSA for solving the Max-RWA problem inoptical networks. In: Optical Fiber Communication Conference and the NationalFiber Optic Engineers Conference (OFC/NFOEC) 2014. San Francisco,California,USA,2014.3.9-13. (EI收录, 20141717611451)

[33]. Ming Chen, ***Jing He**, Xian Wu, Jin Tang, Lin Chen. ExperimentalDemonstration of a Real-Time OFDM System over 100km SMF Employing DirectlyModulated Laser without Optical Amplification. In: Proc of ACP 2014. Shanghai,China, 2014.11.11-14, Oral Report. (EI收录)

[34]. Li Danyu, ***Jing He**, Jin Tang, Ming Chen, Lin Chen.Experimental Demonstration of Half Cycle 64-QAM Nyquist-SCM Direct-DetectionOptical Communication System with Data-aided Estimation and OverlapFrequency-domain Equalization. In: Proc of ACP 2014. Shanghai, China, 2014.11.11-14,Oral Report. (EI收录)

[35]. Ming Chen, ***Jing He**, Jin Tang, Xian Wu, ZizhengCao, Lin Chen. 256/64/16QAM-encoded Real-Time Optical OFDM Signal Generationand Transmission over 50km SSMF Using Adaptive Modulation Technique. In: Procof SPP com 2014. SM3E.4.pdf, San Diego, California, USA, 2014.7.13-20. (EI收录)

[36]. ***Jing He**, Wen Xuejie, Ming Chen, Lin Chen. FullDuplex 60-GHz MB-OFDM Ultra-Wideband over Fiber System Based on RemoteHeterodyning. In: Proc of SPP com 2014. SM4E.3.pdf,San Diego, California, USA, 2014.7.13-20. (EI收录)

2013年以前

[37]. Fouad Kharroubi, ***Jing He**, Jin Tang, MingChen, Lin Chen. Evaluation performance of genetic algorithm and tabu searchalgorithm for solving the Max-

RWA problem in all-optical networks. J CombOptim, 2013-11-9. (SCI三区, IF=1.043)

[38]. Hui Zhou, ***Jing He**, Zizheng Cao, Lin Chen. All-opticalwavelength conversion scheme to reduce the crosstalk among the two multiplexedchannels for polarization multiplexing system. Optical Fiber Technology,2013,19: 549-555. (SCI三区,000327428000007, IF=1.188)

[39]. Hongxian Chen, ***Jing He**, Jin Tang, Ming Chen,Jiangnan Xiao, Lin Chen. Overcoming MZM nonlinearity with null shiftingtechnique in direct detection optical OFDM system. In: Proc of ACP/IPOC 2013.AF1E.3, Beijing, China, 2013.11.13-16, Oral Report. (EI收录)

[40]. ***Jing He**, Yuan Huang, Lin Chen, Jinshu Su.Photonic generation of UWB doublet pulse with semiconductor amplifier andoptical delay line. In: Proc of ACP/IPOC 2013. AF2F.35, Beijing, China,2013.11.13-16. (EI收录,20142017710798)

[41]. ***Jing He**, Yuan Huang, Lin Chen, Jinshu Su. Thesimulation of Optical IR-UWB doublet pulse generation and fiber transmission.In: Proc of Eurosim2013, Cardiff, UK, 2013. 09.8-12. (EI收录)

[42]. ***Jing He**, Jinshu Su, Yuan Huang, Hao Liu. Anovel system with WiMax LDPC-coded OFDM for optical communication. In: Proc ofSPIE Security + Defence 2012. 85400W, Edinburgh, UK, 2012.09.24-27. (EI收录, 20134516950349)

[43]. ***Jing He**, Jinshu Su, Yuan Huang, Hao Liu.Direct-detection WiMax orthogonal frequency division multiplexing over FiberAccess Networks. In: Proc of SPIE 2012. 8555-72, Beijing, China, 2012.11.4-7.(EI收录)

[44]. ***Jing He**, Zizheng Cao, Lin Chen, Shuangchun Wen.A full-duplex radio-over-fiber system with quadrature amplitude modulationphotonically generated orthogonal frequency division multiplexing signals.Optical Engineering, 49(6): 065003-065008, 2010. (SCI收录, 000280746600025)

[45]. ***Jing He**, Dong Yang, Lin Chen. A full-duplex radio-over-fibersystem with differential phase-shift keying signals. In: Proc of POEM 2010. OEDI0475,Wuhan, China, 2010.11.3-5. (EI收录,20111513911190)

[46]. ***Jing He**, Hao Liu, Jie Li, Lin Chen. ARadio-over-Fiber system with 64QAM photonically generated orthogonal frequencydivision multiplexing signals. In: Proc of SPIE 2010. 78543P, Beijing, China,2010.10.16-19. (EI收录,20110213560616)

[47]. ***Jing He**, Lin Chen, Ze Dong, Shuangchun Wen,Jianjun Yu. Full-duplex radio-over-fiber system with photonics frequency quadruplesfor optical millimeter-wave generation. Optical Fiber Technology, 15(3):290-295, 2009. (SCI三区, 000274478600014)

[48]. ***Jing He**, Lin Chen, Shuangchun Wen. Generationof DQPSK Format and its Performance Research against Polarization-ModeDispersion. Chinese Optics Letters, 7(1):15-18, 2009.(SCI收录,000266970500005; EI收录, 20090811917764)

[49]. ***何晶**,陈林,文双春,文鸿,余建军. 一种新的全双工光纤无线通信系统.高技术通讯, 19(3): 242-246, 2009. (EI收录, 20091712051359)

[50]. ***何晶**,陈林,文双春. 40Gb/sDPSK格式抗偏振模色散的性能研究.光子学报, 38(3): 660-664, 2009.

[51]. ***何晶**,刘丽敏,陈林,文双春. 基于马赫-曾德尔调制器的先进调制格式的产生研究.中国激光, 35(8): 1185-1190, 2008. (EI收录, 20083711541369)

[52]. ***Jing He**, Lin Chen, Shuangchun Wen. A NovelFull-Duplex Radio-over-Fiber System with Photonics Frequency Quadruple foroptical millimeter wave generation. In: Proc of ICAIT 2008. Shengzhen, China,2008, 98-100. (EI收录,20102012943133)

[53]. ***Jing He**, Lin Chen, Yufeng Shao, Shuangchun Wen.A Novel Scheme to Generate Orthogonal Modulation Label Based on DPSK Payloadand Duobinary RZ Label. In: Proc of CLEO/Pacific Rim 2007. Seoul, Korea, 2007,1086-1087 (IEEE Catalog Number: 07TH8953C, ISBN: 1-4244-1174-2, library ofCongress: 2007923395). (EI收录,20083711544467; ISTP收录,000256956600166)

[54]. ***Jing He**, Zhiwei Zheng, Lin Chen, ShuangchunWen. A Novel Scheme for Generation of 40Gb/s RZ/CSRZ-DPSK Signals. In: Proc ofAPOC 2007. Wuhan, China, 2007, 6781-169(7pages). (EI收录, 20081811235321; ISTP收录, 000252739700134)

专利：

1. 基于差分相移键控格式的光纤无线通信系统，申请号：201010587433.3，专利号：ZL201010587433.3

2. 基于低密度奇偶校验码的多带超宽带光纤无线通信方法，申请号：201410626505.9

3. 基于可见光通信技术的捕影装置，申请号：201410746531.5

4. 基于光频梳的室内毫米波和可见光通信混合多接入方法，申请号：201611092526.2

5. 基于边缘检测的动漫素材采集装置，申请号：201611091640.3

6. 基于激光可见光通信的SDI视频传输系统，申请号：201611214601.8

7. 基于激光可见光通信的无线路由器，申请号：201710311498.1

科研状况

1. 主持国家自然科学基金项目“面向室内吉比特通信的实时RGB-LDs可见光通信的关键问题研究”，项目编号(61775054)

2. 主持国家自然科学基金项目“低成本光载多带正交频分复用超宽带信号的产生和传输研究”，项目编号(61307087)

3. 主持湖南省科技计划项目省重点研发计划项目“基于物联网的光纤无线异构网络传输平台”，项目编号(2016GK2011)

4. 主持教育部留学回国人员科研启动基金项目“实时高速光OFDM信号在光纤长距离接入系统中高效数字信号处理算法研究”(教外司留(2015)311号)

5. 主持湖南省自然科学基金项目“超宽带光载无线通信关键技术研究”，项目编号(12JJ3070)

6. 主持湖南大学青年教师科技创新扶持项目“UWB-ROF光信号传输理论及关键技术研究”

7. 主持光通信与光波技术教育部重点实验室(北京邮电大学)项目“基于高速正交频分复用调制码在光传输中的理论与实验研究”

8. 主持企业合作项目“面向智能家居的可见光通信系统”“在线考试、学习系统”

9. 参与国家自然科学基金项目“数字信号处理辅助相干检测的高频谱效率光纤传输技术”，项目编号(61377079)

10. 参与国家自然科学基金项目“高速光通信系统中高频谱效率的物理层加密理论与算法研究”，项目编号(61571188)

11. 参与国家自然科学基金项目“OFDM光信号传输及信号处理的基础理论与关键技术研究”，项目编号(60977049)

12. 参与国家863计划资助项目“基于正交频分复用的Radio-over-Fiber系统的关键技术研究”，项目编号(2007AA01Z263)

13. 参与湖南省自然科学基金项目“高速光纤通信系统偏振模色散补偿的前馈方法研究”，项目编号(06JJ5108)

14. 参与湖南省科技厅项目“光纤接入网中实时正交频分复用系统设计及关键技术研究”

15. 参与光通信与光波技术教育部重点实验室(北京邮电大学)项目“高性价比的光毫米波产生方法的理论与实验研究”

16. 参与湖南省自然科学基金项目“网络自相似流量模型及其队列管理策略的研究”，项目编号(20043142108)

17. 参与湖南省科技厅项目“新一代网络流量模型研究”，项目编号(20033342395)

获奖情况：

2017年湖南省优秀硕士学位论文的指导老师

2016年获得湖南省自然科学奖二等奖（第一完成人）

2016年入选湖南省普通高校骨干教师培养对象

2017年、2016年湖南大学优秀硕士学位论文的指导老师

2016年湖南大学本科毕业设计（论文）优秀指导老师

2015年指导学生参加“全国高校互联网应用创新大赛”，获得“2015全国高校软件定义网络（SDN）应用创新开发大赛”优胜奖

指导的硕士研究生温学杰、李腾、董欢和龙凤婷分别获得2014年、2015年和2016年“湖南大学研究生国家奖学金”

2007年、2008年、2015年湖南大学毕业实习优秀指导老师

2004年获得湖南省第10届自然科学优秀学术论文二等奖

2001年获得湖南大学优秀共产党员称号

SERVICE N


湖大官网


湖大微