



师资队伍

 优秀人才 教授名单 兼职教授 教师名单

赵华，四川富顺人，博士，副教授。主持省部级项目一项，厅局级项目三项，横向项目一项，发表论文六十余篇，获得专利数项，出版教材两门。

近期期刊论文：

[1] H. Zhao[#], M. Zhang, and H. Li, Modal dispersion effects on the spectra of helical long-period fibre grating-based components, **Optic Comm.**, 2020, 447: 124708.

[2] P. Wang[#], H. Zhao[#], T. Detani, Y. Tsuyuki, and H. Li, Demonstration of the mode-selection rules obeyed in a single-helix helical long-period fiber grating, **Opt. Lett.**, 2020, 1846-1849.

[3] 刘灵[#], 孙晨晨, 徐寅林, 唐万春, 赵华^{*}, 基于图像预处理分类分割的盲道分割算法, 南京师范大学工程技术版, 2020, 20卷1期, 42-48.

[4] H. Zhao[#], S. Wang, L. Li, A directly seeking spectrum holes algorithm by compressive sampling, **INTERNATIONAL JOURNAL OF COMMUNICATION SYSTEMS**, 2019, 32(15):e4107.

[5] H. Zhao[#], P. Wang, T. Yamakawa, and H. Li^{*}, All-fiber second-order orbital angular momentum generator based on a single-helix helical fiber grating, **Opt. Lett.**, 2019, 44(21): 5370–5373.

[6] H. Zhao[#], M. Zhang, C. Zhu, and H. Li, Multichannel fiber Bragg grating based on DC-sampling method, **Optic Comm.**, 2019, 445: 142-146.

[7] 孙晨晨[#], 张强, 徐玮巍, 高颂, 赵华^{*}, 高精度、宽输出高压直流电源控制模块的设计, 南京师范大学工程技术版, 2018, 18卷3期, 69-73.

[8] H. Zhao[#], C. Zhu, and H. Li^{*}, Design of an Edge Filter Based on a Phase-only Modulated Long-period Fiber Grating, **IEEE Photonics Journal.**, 2018, 10(3): 7102409.

[9] H. Zhao[#], and H. Li^{*}, Enhancing the Azimuthal Mode Couplings in a Helical Fiber Grating by Using Phase Sampling, **IEEE Photonics Technol. Lett.**, 2018, 30(7), 630-633.

[10] H. Zhao[#], P. Wang, C. Zhu, S. Ramanathan, and H. Li^{*}, Comprehensive Analysis for the Consecutively Cascaded Single-Helix Long-Period Fiber Gratings With Opposite Helicities, **IEEE J. Quantum Elect.**, 2018, 54(1): 1–6.

[11] H. Zhao[#], P. Wang, C. Zhu, S. Ramanathan, and H. Li^{*}, Analysis for the phase-diffusion effect in a phase-shifted helical long-period fiber grating and its pre-compensation, **Opt. Express**, 2017, 25(16): 19085–19093.

[12] P. Wang[#], H. Zhao, T. Detani, and H. Li^{*}, Simultaneous Generation of the First- and Second- Order OAM Using the Cascaded HLPs, **IEEE Photonics Technol. Lett.**, 2020, 32(12), 685-688.

[13] P. Wang[#], H. Zhao, T. Yamakawa, and H. Li^{*}, Polarization-Independent Flat-Top Band-Rejection Filter Based on the Phase-Modulated HLP, **IEEE Photonics Technol. Lett.**, 2020, 32(3): 170-173.

[14] C. Zhu[#], P. Wang, H. Zhao, R. Mizushima, S. Ishikami, and H. Li^{*}, DC-Sampled Helical Fiber Grating and Its Application to Multi-Channel OAM Generator, **IEEE Photonics Technol. Lett.**, 2019, 31(17): 1445–1448.

[15] C. Zhu[#], S. Ishikami, H. Zhao, and H. Li^{*}, Multichannel long-period fiber grating realized by using the helical sampling approach, **IEEE Journal of Lightwave**, 2019, 37(9): 2008–2013.

[16] C. Zhu[#], S. Ishikami, P. Wang, H. Zhao, and H. Li^{*}, Optimal design and fabrication of multichannel helical long-period fiber gratings based on phase-only sampling method, **Opt. Express**, 2019, 27(3): 2281–2291.

[17] C. Zhu[#], H. Zhao, and H. Li, Mode-couplings in two cascaded helical long-period fibre gratings and their application to polarization-insensitive band-rejection filter, **Optic Comm.**, 2018, 423: 81-85.

[18] C. Zhu[#], T. Yamakawa, H. Zhao, and H. Li^{*}, All-fiber circular polarization filter realized by using helical long-period fiber gratings, **IEEE Photonics Technol. Lett.**, 2018, 30(22): 1905–1908.

[19] S. Ramanathan[#], C. Zhu, H. Zhao, and H. Li^{*}, Torsion, Strain, and Temperature Sensor Based on Helical Long-Period Fiber Gratings, **IEEE Photonics Technol. Lett.**, 2018, 30(4): 964–966.

[20] C. Zhu#, **H. Zhao**, P. Wang, R. Subramanian, and H. Li*, Enhanced Flat-top Band-Rejection Filter based on Reflective Helical Long-Period Fiber Gratings, **IEEE Photonics Technol. Lett.**, 2017, 29(12): 964–966.

[21] P. Wang#, R. Subramanian, C. Zhu, **H. Zhao**, and H. Li*, Phase-shifted helical long-period fiber grating and its characterization by using the microscopic imaging method, **Opt. Express**, 2017, 25(7): 7402–7407.

[22] Y. Li#, Z. Wei, Z. Zhu*, X. Wang, **H. Zhao**, Propagation properties of partially coherent high-order cylindrical vector beams through a turbulent atmosphere, **Optik**, 2017, 132: 356-363.

[23] L. Gong#, L. Wang, Z. Zhu*, X. Wang, **H. Zhao**, B. Gu, Generation and manipulation of super-resolution spherical magnetization chains, **Appl. Opt.**, 2016, 55: 5783-5789.

近期专利:

[1] 赵华, 李洪谱, 王鹏, 郝媛媛, 一种基于螺旋结构的光纤轨道角动量模式分离方法, 发明专利, 2020100960618, 公开。

[2] 赵华, 张苗苗, 朱程亮, 李洪谱, 基于直流调制的多通道光纤光栅滤波器及其制作方法, 发明专利, 201811530746.8, 公开。

[3] 赵华, 孙晨晨, 张强, 徐霞, 便携式多功能电子实验虚拟仪器, 实用新型专利, 201720553284.6, 授权。

[4] 赵华, 殷奎喜, 吴游, 闫国年, 张羽, 一种多维类正交伪随机矩阵的构成方法, 发明专利, CN200810235442.9, 授权。

近期参加会议:

[1] L. Liu#, Y. Wang, **H. Zhao***, An Image Segmentation Method for the blind sidewalks recognition by using the convolutional neural network U-net, IEEE International Conference on Signal, Information and Data Processing 2019 (ICSIDP 2019), Chongqing, 2019.

[2] **H. Zhao#**, Y. Hao, P. Wang, T. Yamakawa, H. Li*, Multichannel OAM generator based on a phase-only modulated helical long-period fiber grating, Asia Communications and Photonics Conference 2019 (ACP 2019), Chengdu, 2019.

[3] **H. Zhao#**, M. Zhang, H. Li, Optimal design of a multichannel fiber Bragg grating by using the DC sampling method, 19th International Conference on Numerical Simulation of Optoelectronic Devices (NUSOD 2019), Ottawa, 2019.

[4] **H. Zhao#** and H. Li*, Enhancement of high-order azimuthal mode couplings in a single-helix helical long-period fiber grating by using the phase-sampling method, SOPO 2018, Kunming, China, 2018 (Invited).

[5] C. Zhu#, **H. Zhao**, and H. Li*, Wideband and polarization-insensitive bandrejection filter realized by using two cascaded helical long-period fibre gratings, Asia Communications and Photonics Conference 2018 (ACP 2018), Hangzhou, 2018.

[6] **H. Zhao#** and H. Li*, Comprehensive analyses for the consecutively-cascaded helical long-period fiber gratings and its applications, ICOCN 2017, WuZheng, China, 2017 (Invited).

[7] P. Wang#, R. Subramanian, C. Zhu, **H. Zhao**, and H. Li*, Real-time characterization of the phase-shift formed in a helical long-period fiber grating, PIERS 2017, St Petersburg, Russia, 2017.

近期指导学生获奖:

[1]2020年指导王国伟、张苗苗和郝媛媛或校研电赛一等奖;

[2]2018年指导刘东杰等获全国大学生电子设计竞赛国家二等奖;

[3] 2018年指导刘灵等获全国研究生电子设计竞赛华东赛区二等奖;

[4] 2017年指导刘东杰等获全国大学生FPGA创新设计邀请赛本科组国家三等奖;

[5] 2017年指导刘灵等获全国大学生FPGA创新设计邀请赛研究生组国家三等奖;

[6] 2014年指导丁然等获全国大学生电子设计竞赛国家三等奖;

[7] 2012年指导姚克奇等全国大学生电子设计竞赛省一等奖;

[8] 2009年获全国大学生电子设计竞赛“江苏省优秀指导教师”。

近期指导学生项目:

[1] 2020-2021年，指导梁皓辰等获得省重点（国家级）大学生创新项目“基于深度学习的图像识别技术的智能出行帽”。

[2] 2019-2020年，指导张苗苗获得江苏省研究生实践创新计划“基于直流调制的多通道光纤光栅滤波器的设计制作”。

2018-2019年，指导刘灵获得江苏省研究生实践创新计划“视障人士智能出行帽”。

[3] 2017-2018年，指导刘东杰等获得2017年度“互联网+”创新创业竞赛培育项目“我是你的智能眼-基于互联网的智能视觉辅助系统”。

[4] 2016-2017年，指导姜瑞杰等完成省重点（国家级）大学生创新项目“基于白光LED的可见光与WIFI混合通信系统的设计与研究”。

[5] 2015-2016年，合作指导张倩等完成省重点（国家级）大学生创新项目“基于涡旋位相矢量光大气传输特性研究”。

主讲课程	《电子线路》、《通信原理》、《移动通信技术》、《实践创新训练》、《电子系统设计》、《现代通信网》、《现代电路理论与技术》
研究领域	智能信号处理、光纤光栅和智能仪器等方面的研究。
联系方式	☎ 13851794780 ✉ zhaohua@njnu.edu.cn