

个人情况

邱选兵，男，生于1980年。四川内江人，山西省“三晋英才”，山西省青年科技协会理事，山西省物理学会会员，教授，博士生导师。主要研究方向：材料无损检测技术（超声和电磁）、光纤智能传感技术及光电测量仪器。

学习经历

2009.09—2013.06，太原科技大学，材料科学与工程学院材料加工工程专业学习，获工学博士学位；

2003.09—2006.06，太原理工大学，机械工程学院机械电子工程专业学习，获工学硕士学位；

1999.09—2003.06，重庆大学，机械学院机械电子工程专业学习，获工学学士学位；

主要科研成果及荣誉

1、科研项目

（1）主持国家自然科学基金面上项目，直接经费 58万；

（2）主持国家自然科学基金联合基金，直接经费 47万；

（3）主持山西省重点研发计划项目，经费 15万；

（4）主持企业委托横向课题4项，共计经费 93万；

（5）主持重点实验室开放课题项目2项，共计经费 9万；

（6）主持山西省教育厅高校科技创新项目，经费 2万。

2、获得国家发明专利授权4项，《一种多FBG光纤光栅比色瞬态温度测量装置及测量方法》、《一种基于白光通信的身份识别方法》

和《一种基于激光遥感测量的火灾早期预警系统》、《一种基于方波激励的近红外LED中药水分传感器》。

3、获得奖项

- (1) 获山西省“三晋英才”奖项，排名第一；
- (2) 获山西省高等学校优秀成果奖（科学技术）二等奖，排名第三。
- (3) 2018年第十九届山西省优秀学术论文一等奖，排名第二；
- (4) 2016年第十八届山西省优秀学术论文二等奖，排名第一。

4、专著

邱选兵，嵌入式光电检测系统设计及应用（专著），电子工业出版社，400千字，2018.12

5、发表 SCI 收录论文

- (18) 张恩华,邱选兵,魏永卜,李宁,李杰,和小虎,郭古青,李传亮,魏计林,臧振中,杨明.基于方波激励的近红外 LED 中药水分传感器[J].光谱学与光谱分析,2020,40(05):1656-1660. SCI 四区
- (17) Zhenzhong Zang, **Xuanbing Qiu***, Yongmei Guan, Enhua Zhang, Qi Liu, Xiaohu He, Guqing Guo, Chuanliang Li, Ming Yang. A novel low-cost turbidity sensor for in-situ extraction in TCM using spectral components of transmitted and scattered light. Measurement 160 (2020) 107838, SCI三区
- (16) **Xuanbing Qiu**, Yongbo Wei, Jie Li, Enhua Zhang, Ning Li, Chuanliang Li*, JilinWei. Early detection system for coal spontaneous combustion by laser dual-species sensor of CO and CH₄. Optics and Laser Technology 121 (2020) 105832. SCI 三区
- (15) **Xuanbing Qiu**, JieLi, YongboWei, EnhuaZhang, NingLi, ChuanliangLi*, Haichun Yuan, Zhenzhong Zang. Study on the oxidation and release of gases in spontaneous coal combustion using a dual-species sensor employing laser absorption spectroscopy. Infrared Physics and Technology 102 (2019) 103042. SCI 三区
- (14) Ligang Shao, Bo Fang, Fei Zheng, **Xuanbing Qiu**, Qiusheng He, Jilin Wei, Chuanliang Li*, Weixiong Zhao, Simultaneous detection of atmospheric CO and CH₄ based on TDLAS using a single 2.3 μm DFB laser, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 222, 2019, 117118-117124. SCI 二区
- (13) Xinqian Guo, Fei Zheng, Chuanliang Li, Xiaofei Yang, Ning Li, Shuping Liu, Jilin Wei,

Xuanbing Qiu, Qiusheng He, A portable sensor for in-situ measurement of ammonia based on near-infrared laser absorption spectroscopy, Optics and Lasers in Engineering, 115, 2019, 243-248, SCI 二区

(12) **Xuanbing Qiu**, Dongyuan Sun, Chuanliang Li. Wavelet Denoising Research for the Tunable Laser Diode Absorption Spectroscopy of the CO at 1.578 μm . Spectroscopy and Spectral Analysis, 2019, 39(02):302-307. SCI 四区

(11) Zhenzhong Zang, **Xuanbing Qiu***, Yongmei Guan, Enhua Zhang, Xiaohu He, Guqing Guo, Chuanliang Li, Jilin Wei, and Ming Yang. Determining moisture content of Traditional Chinese Medicines using a near-infrared LED-based moisture content sensor with spectrum analysis. Optical and Quantum Electronics 51, 133-149 (2019). SCI 四区

(10) **Xuanbing Qiu***, Dongyuan Sun, Xinqian Guo, Ning Li, Chuanliang Li, Jilin Wei, and Zhenzhong Zang. Investigation of in situ high temperature sensor based on the direct absorption spectroscopy signal of ammonia gas for coal-fired power plant. Optical and Quantum Electronics 51, 79-90 (2019). SCI 四区

(9) **Xuanbing Qiu***, Yongbo Wei, Ning Li, Anbang Guo, Enhua Zhang, Chuanliang Li*, Ying Peng, Jilin Wei, Zhenzhong Zang. Development of an early warning fire detection system based on a laser spectroscopic carbon monoxide sensor using a 32-bit system-on-chip. Infrared Physics and Technology 96 (2019) 44-51. SCI 三区

(8) Ning Li, **Xuanbing Qiu***, Yongbo Wei, Enhua Zhang, Jianshuai Wang, Chuanliang Li, Ying Peng, Jilin Wei, Huiyan Meng, Gao Wang, and Zhenzhong Zang. A portable low-power integrated current and temperature laser controller for high-sensitivity gas sensor applications, REVIEW OF SCIENTIFIC INSTRUMENTS 89, 103103 (2018). SCI 四区

(7) **Xuanbing Qiu***, Tingyu Xi, Dongyuan Sun, Enhua Zhang, Chuanliang Li*, Ying Peng, and Jilin Wei, Gao Wang*, Fire Detection Algorithm Combined with Image Processing and Flame Emission Spectroscopy, Fire Technology, 54, 1249-263, 2018. SCI 四区

(6) Chuanliang Li, Ligang Shao, Huiyan Meng, Jilin Wei, **Xuanbing Qiu***, Qiusheng He, Weiguang Ma, Lunhua Deng, and Yangqin Chen. High-speed multi-pass tunable diode laser absorption spectrometer based on frequency-modulation spectroscopy [J]. Optics express, 2018, 26(22): 29330-29339. SCI 二区 Top

(5) Chuanliang Li, Yachao Li, Zhonghua Ji, **Xuanbing Qiu**, Yunzhong Lai, Jilin Wei, Yanting Zhao, Lunhua Deng, Yangqin Chen, and Jinjun Liu. Candidates for direct laser cooling of diatomic molecules with the simplest $\Sigma_1 - \Sigma_1$ electronic system [J]. Physical Review A, 2018, 97(6): 062501. SCI 二区 Top

(4) Ying Peng, **Xuanbing Qiu***, Jilin Wei, Xiaochao Cui. Defect classification using PEC responses based on power spectral density analysis combined with EMD and EEMD[J]. NDT & E International, 2015, 78: 37-51. SCI 三区

(3) **Xuanbing Qiu**, Peng Zhang, Jilin Wei*, Cui Xiaochao, Chao Wei, Lulu Liu. Defect classification by pulsed eddy current technique in con-casting slabs based on spectrum analysis and wavelet decomposition [J]. Sensors and Actuators A: Physical, (203), pp: 272–281. 2013., SCI 三区, 引用 24 次

(2) **Xuan Bing Qiu**, Lu Lu Liu, Chuan Liang LI, Ji Lin Wei*, Ying Fa Wu, and Xiao Chao Cui. Defect Classification by Pulsed Eddy Current Technique Based-on Power Spectral Density Analysis Combined with Wavelet Transform [J]. IEEE Transactions on Magnetics, 2014, 50(9):1-8, SCI 四区

(1) [Xuanbing Qiu](#), Chao Wei, Xiaochao Cui*, Jilin Wei. Real-time Pre-processing of Pulsed Eddy Current Signal of Continuous Casting Slabs[J], INSIGHT-Non-Destructive Testing and Condition Monitoring, 55 (3), pp136-141, 2013. SCI 四区

注： *为通讯作者