

| Name                                    | YANG Jian  |  |
|---|--|--|
| Post                                    | Professor  |  |
| Academic career                         | 1979-1983  | Heilongjiang Institute of Science and Technology, B.<br>E., Major in Mechanical Design |
|   | 1985-1988  | China University of Mining and Technology, M. E.,<br>Major in Mechanical Engineering   |
|   | 2001-2005  | Zhejiang University, Ph.D.,<br>Major in Mechatronic Engineering                        |
| Employment                              | 1983-1985  | Heilongjiang Institute of Science and Technology,<br>Assistant                         |
|   | 1988-1996  | Heilongjiang Institute of Science and Technology,<br>Lecturer                          |
|   | 1996-2001  | Heilongjiang Institute of Science and Technology,<br>Associate Professor               |
|   | 2005-  | Shanghai University of Engineering Science,<br>Professor                               |
|   |  |  |
| Researchanddevelopmentprojects over the | • Harvesting and recovery method of track vibration energy based on the running of train, Funded by NSFC (No. 51575334). Period: 2016-2019.  |  |
| last 5 years                            | • Research on Braking Energy Control and Recovery Methods of Urban Rail Vehicles Based on Vehicle-mounted Devices, funded by NSFC (No. 51075255). Period: 2011-2013.   |  |
|   | • Mechanism of track vibration energy harvesting based on the running of urban railway train, funded by Shanghai Municipal Education Commission (No. 14ZZ158). Period: 2016-2019.                              |  |
|   | • Research on Braking Energy Recovery System of Urban Rail<br>Transit Vehicle Based on Vehicle-mounted Devices, funded by<br>Shanghai Science and Technology Commission (No.<br>061111033). Period: 2006-2013. |  |
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| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>Comprehensive performance test of pantograph for urban rail vehicles, funded by Chengdu Southwest Jiaotong University Science and technology management Park Co., Ltd. (No. (16)GP-005). Period: 2016/04~2017/07.</li> <li>Pantograph fault test of rail vehicles, funded by Southwest Jiaotong University (No.(17)GD-019). Period: 2017/09~2017/12.</li> </ul> |
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| Patents and<br>proprietary rights                      | <ul> <li>An Energy Harvesting Device for Track Vertical Vibration.<br/>Patent code: ZL201310287792.0</li> <li>Analog Device and Method for Vertical Coupling Forces<br/>Between Wheel sets and Rails. Patent code:<br/>ZL201310288014.3</li> </ul>   |
| Important<br>publications                              | • Jian Yang, Yue Hou, Ruigang Song, Tian-Chen Yuan,<br>Modeling and analysis of the electrical braking energy of urban<br>railway vehicles, Simulation: Transactions of the Society for<br>Modeling and Simulation International, 2015, 91(11): 989-997.   |
|  | • Song Ruigang, Tian-Chen Yuan, <b>Jian Yang</b> , Hao He, Simulation of braking energy recovery for the metro vehicles based on the traction experiment system, Simulation: Transactions of the Society for Modeling and Simulation International, 2017, 93(12): 1099-1112.   |
|  | • Tian-Chen Yuan, <b>Jian Yang</b> , Li-Qun Chen. Nonparametric Identification of Nonlinear Piezoelectric Mechanical Systems. ASME Journal of Applied Mechanics, 2018, 85: 111008(13p).  |
|  | • Tian-Chen Yuan, <b>Jian Yang</b> , Ruigang Song, Xiaowei Liu, Vibration energy harvesting system for railroad safety based on running Vehicles, Smart Materials and Structures, 2014, 23(12): 125046(14pp).  |
|  | • Tian-Chen Yuan, <b>Jian Yang</b> and Li-Qun Chen, Nonlinear characteristic of a circular composite plate energy harvester  |



|   | experiments and simulations, Nonlinear Dynamics, 2017, 90: 2495-2506.   |
|---|---|
|   | • Tian-Chen Yuan, <b>Jian Yang</b> and Li-Qun Chen, Experimental identification of hardening and softening nonlinearity in circular laminated plates, International Journal of Non-Linear Mechanics, 2017, 95 (2017): 296-306.  |
|   | • Tian-Chen Yuan, <b>Jian Yang</b> and Li-Qun Chen, Nonlinear dynamic of a circular piezoelectric plate for vibratory energy harvesting, Communications in Nonlinear Science and Numerical Simulation, 2018, 59: 651-656.   |
|   | • Tian-Chen Yuan, <b>Jian Yang</b> , Ruigang Song, Xiaowei Liu, A reduced-scale experiment system for vehicle-rail vertical vibration. Journal of Vibration and Shock, 2016, 35(6): 115-120.  |
|   | • Nannan Han, <b>Jian Yang</b> , Tian-Chen Yuan, Ruigang Song,<br>Transverse Wind Vibration of Catenary Based on Discrete<br>Wavelet Transform. Journal of the China Railway Society,<br>2016, 11: 43–49  |
|   |   |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>Jian Yang (1/6). Braking Energy Recovery Technology for<br/>Urban Rail Vehicles, Silver award of excellent invention in the<br/>25th Shanghai excellent invention competition, Shanghai<br/>Federation of Trade Unions, 2013</li> <li>Jian Yang (1/7). Research and application of braking energy<br/>recovery technology based on on-board for urban rail vehicles,<br/>Third prize of Shanghai Science and Technology Progress<br/>Award, The Shanghai Municipal People's Government, 2018.</li> </ul> |
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| Name                                   | ZHENG Shubin   |  |  |
|--|--|--|--|
| Post                                   | Professor  |  |  |
| Academic career                        | 1998-2002<br>2002-2007   | Southwest Jiaotong University, B.E.,<br>Major in Mechanical Engineering<br>Southwest Jiaotong University, Ph.D.,<br>Major in Vehicle Operation Engineering |  |
| Employment                             | 2008-2010  | Shanghai University of Engineering Science,<br>Lecturer  |  |
|  | 2011-2017  | Shanghai University of Engineering Science,<br>Associate Professor   |  |
|  | 2011-2012 S  | Shanghai Shentong Metro Group Co., Ltd., Temporary<br>Post for Personal Training and Development,<br>Engineer  |  |
|  | 2015-2016  | St. Cloud State University, MN, USA,<br>Visiting Scholar   |  |
|  | 2018-  | Shanghai University of Engineering Science,<br>Professor   |  |
| Researchanddevelopmentrojects over the | Dynam<br>Based of<br>519753  | Dynamic Diagnostic Method and Theory of Track Diseases<br>Based on Vibration and Vision Fusion. Funded by NSFC (No.<br>51975347), Period: 2020-2023. (PI)  |  |
| last 5 years                           | <ul> <li>Inversion</li> <li>Parame</li> </ul>                      | ters Based on Dynamic Dignosis Funded by NSEC  |  |
|  | (No. 51  | 478258). Period: 2015-2018. (CO-PI)  |  |
|  | <ul> <li>Continuous Moving Measurement Theory and Metho</li> </ul> |  |  |
|  | Railwa   | y Track Settlement. Funded by NSFC (No. 51405287),   |  |
|  | Period:  | 2015-2017. (PI)  |  |
|  | • Railway  | y Track Inspection Key Technologies Based on Multi-  |  |
|  | sensor l   | Data Fusion. Funded by Shanghai Committee of   |  |
|  | Science  | & Technology (No. 13510501300), Period:  |  |



|  | <ul> <li>2013-2016. (PI)</li> <li>Railway Track Alignment Measurement Method under<br/>Continuous Moving Condition. Funded by NSFS (No.<br/>12ZR1412300), Period: 2012-2015. (PI)</li> </ul>   |
|--|--|
| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>2019 Annual Assessment of Shanghai Rail Transit Facility &amp; Equipment – Part 1: Rail Vehicle. Funded by Shanghai Shentong Metro Group Co. Ltd, Period: 2019-2020, (CO-PI)</li> <li>Improvement Project of Rail Transit Operation Simulation System in Shanghai Metro Training Base. Funded by Shanghai Shentong Metro Group Co. Ltd., Period: 2017-2019. (PI)</li> <li>Testing and Assessment of Shanghai High-Speed Maglev Train's Key Structure Component. Funded by Tongji University, Period: 2014-2016. (PI)</li> <li>Online Calculation &amp; Evaluation Model of Vehicle Dynamic Parameters. Funded by Southwest Jiaotong University Technological Garden Management Co. Ltd., Period: 2013-2016. (PI)</li> </ul> |
| Patents and<br>proprietary rights                      | <ul> <li>Rail Alignment Measurement Method Based on Vision and<br/>Inertial Information Fusion, Patent code: ZL201610349090.4</li> <li>Rail Wear Measurement Method Based on Dynamic<br/>Template, Patent Code: ZL201210261886.6</li> <li>Solar Power Device and Control Method, Patent code:<br/>ZL201610530460.4</li> <li>Micro-Grid Solar Charging Pile and Charging Method, Patent<br/>code: ZL201610554009.6</li> <li>On-line Monitoring Device Powered By Solar Energy, Patent<br/>code: ZL201610496627.7</li> <li>Photovoltaic DC Charging Pile System, Patent code:<br/>ZL201610973550.0</li> <li>Piezoelectric Energy Self-powered Rail Vehicle Bearing<br/>Monitoring Device, Patent code: ZL201920576584.5</li> </ul>     |



| Important<br>publications | • | <b>Shubin Zheng</b> , Qianwen Zhong, Xiaodong Chai, Xingjie<br>Chen, Lele Peng. A Novel Prediction Model for Car Body<br>Vibration Acceleration Based on Correlation Analysis and<br>Neural Networks[J]. Journal of Advanced Transportation,<br>2018: 1-13.          |
|---------------------------|---|--|
|                           | • | <b>Shubin Zheng</b> , Qianwen Zhong, Lele Peng, Xiaodong Chai. A<br>Simple Method of Residential Electricity Load Forecasting by<br>Improved Bayesian Netural Networks[J]. Mathematical<br>Problems in Engineering, 2018 (9): 1-16.                                  |
|                           | • | <b>Shubin Zheng</b> , Lele Peng, Liming Li, Xiaodong Chai. Track<br>Alignment Inspection Based on Multi-sensors Fusion of<br>Machine Vision and Inertial Measurement[J]. Journal of<br>Vibration, Measurement & Diagnosis, 2018, 38(2): 394-400,<br>426 (in Chinese) |
|                           | • | <b>Shubin Zheng</b> , Xiaodong Chai, Lele Peng, Liming Li. Wheel vibration estimation of railway vehicle utilizing state observer[J]. Journal of Vibroengineering. 2017, 19(2): 988-999.   |
|                           | • | <b>Shubin Zheng</b> , Xiaodong Chai, Shengchao Su, Xingchang Liu.<br>Relative Pose Calibration Between Inertial Unit and Visual<br>Unit in Railway Track Inspection System[J]. Journal of the<br>Balkan Tribological Association. 2016, 22(2): 672–683               |
|                           | • | <b>Shubin Zheng</b> , Xiaodong Chai, Xinchang Liu, Huaiqing Lin.<br>Calibration of The Spatial Pose Between Inertial and Visual<br>Sensors With An Inclinometer[J]. The Open Cybernetics &<br>Systemics Journal. 2015, 9: 2637-2641                                  |
|                           | • | <b>Shubin Zheng</b> , Xiaodong Chai, Lele Peng. Rectification of<br>Railway Track Detecting Signal Utilizing Digital Variable<br>Filter[J]. International Journal of Simulation, Systems, Science<br>& Technology. 2015, 16(5B): 19.1-19.5                           |
|                           | • | <b>Shubin Zheng</b> , Xiaodong Chai, Xiaoxue An, Liming Li. Rail<br>Wear Measuring Method Based on Dynamic Template[J].<br>China Railway Science, 2013, 34(2):7-12. (in Chinese)   |
|                           | • | <b>Shubin Zheng</b> , Xiaodong Chai, Xiaoxue An, Liming Li.<br>Railway Track Gauge Inspection Method Based on Computer<br>Vision, Proceedings of 2012 IEEE International Conference on<br>Mechatronics and Automation. 1292-1296. ICMA, 2012                         |
|                           | • | Lele Peng, <b>Shubin Zheng</b> , Xiaodong Chai, Liming Li. A novel tangent error maximum power point tracking algorithm  |



|   | <ul> <li>for photovoltaic system under fast multi-changing solar<br/>irradiances[J]. Applied Energy, 2018(210): 303-316</li> <li>Lei Zhang, Shubin Zheng, Xiaodong Chai, Qingxia Xu, Anqi<br/>Zi. Optimization of Projection Matrix Between Cameras Based<br/>on Levenberg-Marquardt Algorithm[J]. Journal of Information<br/>and Computational Science. 2015, 12(4): 1607-1614</li> <li>Xiaodong Chai, Shubin Zheng, Song Geng, Lei Zhang.<br/>Vibration Prediction of Rail Vehicle Based on Neural<br/>Network[J]. Journal of Information and Computational<br/>Science. 2015, 12(16): 5889-5899</li> <li>Xiaodong Chai, Shubin Zheng, Wenfa Zhu, Qizhen Jiang.<br/>Detection for rail route state deformation based on trap-down<br/>inertial technology[J]. Applied Mechanics &amp; Materials.<br/>2014(49): 136-143.</li> </ul> |
|---|--|
| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>Shubin Zheng (2/7). Key Measuring Technology of Rail Track<br/>Geometry Based on Fusion Technique of Computer Vision and<br/>Inertial Measurement. Shanghai Science and Technology<br/>Progress Award, 2017</li> <li>Shubin Zheng (2/6). Control System for Simulation System of<br/>Rail Transit Operation Based on Wireless Communication.<br/>Silver award of excellent invention in the 24th Shanghai<br/>excellent invention competition, Shanghai Federation of Trade<br/>Unions, 2011</li> </ul>   |



| Name   | YU Chaogang  |  |
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| Post   | Associate Professor  |  |
| Academic career  | 1987-1989 Railway University of shanghai, B.S.,<br>Major in Physics  |  |
|  | 1985-1988 Northeast Agricultural University, M.E.,<br>Major in Agricultural Electric Automatization  |  |
|  | 2001-2005 Zhejiang University, Ph.D.,<br>Major in Agricultural Electric Automatization   |  |
| Employment   | 1984-1987 WoYuan Towns Middle School of PU AN county,<br>Teacher   |  |
|  | 1989-1999 Rail Middle School of Liupanshui,<br>Teacher   |  |
|  | 2005- Shanghai University of Engineering Science,<br>Associate Professor   |  |
| Researchanddevelopmentprojects over thelast 5 years    | • An automation machine for injection moulding machine.<br>Funded by Shanghai Education Commission. (No. 15cxy37)<br>Period: 2015-2016.              |  |
| Industry<br>collaborations<br>over the last 5<br>years | • An automation machine for injection moulding machine,<br>Funded by JiangSu JiaMeng Electrical Equipment CO.LTD<br>((17) GD-015) Period: 2017-2019. |  |
| Patents and proprietary rights                         | • An automation machine for injection moulding machine.<br>Patent code: CN106032047B   |  |



| Important<br>publications   | <ul> <li>Feng Chao, Yu Chaogang, Sun Lei, Qin Xin. Prediction of<br/>Track Irregularity Based on Improved, Railway Standard<br/>Design, 2019, 63(4):34-49</li> </ul>  |
|---|---|
|   | • Ji Heng, <b>Yu Chaogang</b> , Zhang Dong. Study on The Simulation<br>Model of High Frequency Signal Injection in PMSM Traction<br>System[J]. Journal of communication and networking, 2015,<br>5(3): 39-43.   |
|   | • Shi Yonggong, <b>Yu Chaogang</b> . The Design of MVB Communication Controller Based on an FPGA. International Journal of research in Engineering and science[J], 2017, 5(6):13-23.  |
|   | • Qin Wei, <b>Yu Chaogang</b> . Design Implementation of Image Acquisition System Based on STM32[J]. International Core Journal of Scientific Research & Engineering Index, 2017, 7(2): 64-67.  |
|   | • Yu Chaogang, Ying Yibing. Determining heating pipe<br>temperature in greenhouse using proportional integral plus<br>feedforward control and radial basic function neural-<br>networks[J]. Journal of Zhejiang University Science A(Science<br>in Engineering), 2015(04): 16-20. |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>Act as one of the judges on The 32nd China Adolescents<br/>Science &amp; Technology Innovation Contest, 2017, Hangzhou.</li> </ul>   |



| Name   | SHI Wei  |  |
|--|--|--|
| Post   | Associate Professor  |  |
| Academic career  | 1999-2003<br>2003-2006<br>2008-2013  | Tongji University, B.E.,<br>Major in Vehicle Engineering (Rail Transit Vehicle)<br>Tongji University, M.E.,<br>Major in Vehicle Engineering (Rail Transit Vehicle)<br>Shanghai University, Ph.D.,<br>Major in Power Electronics and Power Transmission |
| Employment   | 2006-2008<br>2008-2013<br>2012-2013  | Shanghai University of Engineering Science,<br>Assistant<br>Shanghai University of Engineering Science,<br>Lecturer<br>Shanghai Shentong Metro Group Co., Ltd., Temporary<br>Post for Personal Training and Development,<br>Engineer                   |
| Research and<br>development<br>projects over the<br>last 5 years | <ul> <li>Development and industrialization of product platform for high power density vehicle inverter, funded by Ministry of science and technology (No. 2016YFB01700). Period: 2016-2020.</li> </ul>   |  |
| Industry<br>collaborations<br>over the last 5<br>years           | <ul> <li>Research on general interface specification of vehicle and signal system. Partner: Shanghai Shentong Metro Group Co., Ltd Period: 2015-2016.</li> <li>Urban rail vehicle electrical control and power supply operation simulation system. Partner: Shanghai Shangyi Educational Equipment Co., Ltd. Period: 2015-2016.</li> </ul> |  |



| Patents and<br>proprietary rights   | <ul> <li>Teaching equipment for hardware in the loop simulation of urban rail vehicle control circuit and gas path, Patent code: ZL201610254744.5.</li> <li>Permanent magnet temperature and magnetic field real-time online detection device and its application, Patent code: ZL201810845629.4</li> </ul>   |
|---|---|
| Important<br>publications   | <ul> <li>Shi Wei; Zhou Xuan; Online Estimation Method for Permanent<br/>Magnet Temperature of High - Density Permanent Magnet<br/>Synchronous Motor, IEEJ Transactions on Electrical and<br/>Electronic Engineering, 2020, 15(5): 565-571.</li> <li>Shi Wei, Liu Xiao, Fault diagnosis of axle box bearing based<br/>on improved EEMD-Hilbert envelope demodulation,<br/>Measurement and control technology, 2017,36(2):44-49.</li> <li>Shi Wei, Zhang Zhouyun, Anti-demagnetization Modeling of<br/>Interior Permanent Magnet Motor by Bidirectional Magnetic<br/>Network, ITEC Asia-Pacific, 2016, 170:9-15.</li> <li>Shi Wei, Zhang Zhouyun, Multi-objective Optimum Design<br/>Method with Anti-demagnetization of High Density Permanent<br/>Magnet Synchronous Motor: IEEJ Transactions on electrocal<br/>and electronic engineering, 2014, 9(5): 555-562.</li> <li>Shi Wei, Huang Surong, Zhang Zhouyun, Mathematical model<br/>and Simulation of Inverter - permanent magnet brushless motor<br/>system, Transactions of China Electrotechnical Society,<br/>2009,24(10): 17-22</li> <li>Shi Wei, Gong Jun, Huang Surong, Review of permanent<br/>magnet motor permanent magnet anti demagnetization<br/>Technology. Microelectric motor, 2012(4):71-75.</li> </ul> |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • Shanghai Metro Education Award, 2019  |



| Name   | YAO Huiming  |  |  |
|--|--|--|--|
| Post   | Associate Professor  |  |  |
| Academic career  | 1997-2001  | Lanzhou Jiaotong University, B.E.,<br>Major in Locomotive Engineering            |  |
|  | 2002-2005  | Lanzhou Jiaotong University, M.E.,<br>Major in Safety Technique and Engineering  |  |
|  | 2012-2018  | Tongji University, Ph.D.,<br>Major in Vehicle Engineering (Rail Transit Vehicle) |  |
| Employment   | 2001-2006  | Lanzhou Jiaotong University,<br>Assistant  |  |
|  | 2006-2012  | Shanghai University of Engineering Science,<br>Lecturer                          |  |
|  | 2007-2008  | Shanghai Shentong Metro Group,<br>Engineer                                       |  |
|  | 2017-2018  | Newcastle university,<br>Academic Visitor  |  |
|  | 2012-  | Shanghai University of Engineering Science,<br>Associate Professor               |  |
| Research and<br>development<br>projects over the<br>last 5 years | <ul> <li>Key Technology Research on Real-Time Safety Monitoring<br/>and Early Warning for Railway Trains Based on Self-Learning<br/>and Big Data, funded by "Key Technology R&amp;D Program,<br/>Founded by the Shanghai Committee of Science and<br/>Technology (Grant No. 15590501400). Period: 2015-2018.</li> <li>Study on Wheel-Rail Impact Stability with Gap of Railway<br/>Vehicle and Safety Early-Warning Algorithm Based on Chaos,<br/>Funded by Shanghai Municipal Education Commission (Grant<br/>No. 14YZ136). Period: 2014-2016.</li> </ul> |  |  |



| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>Air-Conditioner Real-Time Monitoring System of Urban<br/>Railway Vehicle. Partner: Shanghai Shentong Metro Group<br/>(Grant No. JS-KY14R016). Period: 2015-2016.</li> <li>High-speed rail profile test and statistical analysis of Beijing to<br/>Shanghai ,Beijing to Guangzhou and Wuhan to Guangzhou.<br/>Partner: Changchun Railway Vehicles Co., Ltd., China<br/>northern locomotive rolling stock industry. Period: 2014-2014.</li> <li>Research on Corrugation Repair Method and System<br/>Development of Curve Rail in Urban Railway. Partner:<br/>Shanghai GuiPing Mechatronic Science Co., Ltd. Period: 2014-<br/>2016.</li> </ul> |
|--|--|
| Patents and<br>proprietary rights                      | <ul> <li>A Handy Type Corrugation Accurately Repairing Device of<br/>Urban Railway Curve Rail, Patent code: ZL201410328403.9</li> <li>An Automatic Corrugation Accurately Repairing Device of<br/>Urban Railway Curve Rail. Patent code: ZL201410350489.5</li> </ul>   |
| Important<br>publications                              | <ul> <li>Yao Huiming, Shen Gang. Study on Safety Early Warning<br/>Strategies of Runing Gear Mechanical Fault of the Railway<br/>Vehicle. IAVSD13. 2013.08</li> <li>Yao Huiming, Yang Jian, Fang Yu. Computing and Modeling<br/>of Urban Railway Traction Transmission System[J]. 3rd<br/>International Symposium on Electronic Commerce and</li> </ul>  |
|  | <ul> <li>Security. 2010, 07</li> <li>Yao Huiming. Stability Analysis Of A Class Of Three-Degree-Of-Freedom Vibro-Impact System[J], Journal Of Mechanical Strength. 2005, 27(1):6-11. (in Chinese)</li> <li>Chai Xiaodong, Yao Huiming, Chai Liang. Removal of</li> </ul>   |
|  | <ul> <li>Interference from FSK Signal Using the Method of Blind<br/>Signal Separation Based on ICA[J]. Journal of China Railway<br/>Science.2013.12. (in Chinese)</li> <li>Yao Huiming, Zhang Shuhua, Yu Shujun, Fang Yu, Yang Jian.<br/>Study on Lyapunov Exponential Spectrum Calculation Method<br/>of Nonlinear Characteristics of a Class of an Invest</li> </ul>   |
|  | of Nonlinear Characteristics of a Class of an Impact<br>Damper[C]. Proceeding of Second International Conference on<br>Information and Computing Science, IEEE Computer<br>Society. 2009,05  |



| • | Chai Xiaodong, <b>Yao Huiming</b> . Removal of Interference from FSK Signal Based on Independent Component Analysis[C]. IEEE Computer Society Press(ISCSCT2008).2008,12  |
|---|--|
| • | Zhang Shuhua, <b>Yao Huiming</b> . Study on Lyapunov Exponential<br>Spectrum Calculation Method of Nonlinear Characteristics of a<br>Class of an Impact Damper[J]. Engineering Mechanics.<br>2008(12):99-109(in Chinese)   |
| • | <b>Yao Huiming</b> . Study on Simulation of Real-Time Resistance<br>Force of Urban Railway Vehicle Based on LabVIEW[J]. Urban<br>Mass Transit,2011,(11):106-108. (in Chinese)  |
| • | <b>Yao Huiming</b> , Yang Jian, Fang Yu. Test and Research on<br>Resistance Brake of UrbanRail Transit Vehicle [J]. Urban Mass<br>Transit,2010,(10):35-37. (in Chinese)  |
| • | Luo Guanwei, Yu Jianning, <b>Yao Huiming</b> . Periodic Motions<br>And Bifurcations Of A Small Vibro-Impact Pile Driver[J].<br>Engineering Mechanics. 2006(07).(in Chinese)  |
| • | Yao Huiming. Controlling Chaotic Motions in Lorenz<br>System[J]. Journal of Lanzhou Railway Institute,2001,04. (in<br>Chinese)   |
| • | Ye Zhejun and <b>Yao Huiming</b> . Study On Standardization<br>Method Of Rail Vehicle Bogie Vibration Characteristics Based<br>On Clustering Analysis [J], Journal Of Communications And<br>Networking, 2015. 5(12):32-37. |
| • | Yuan Zhao, <b>Yao Huiming</b> . Parameter Estimation Of Suspension Test Bench For Urban Rail Vehicle Based On Extended Kalman Filter[J] ,Journal Of Communications And Networking, 2015. 5(12):38-43.                      |
| • | Jiang Yaxin, <b>Yao Huiming</b> . Numerical Analysis of the Effect<br>to Temperature Field Base on Stop Operation in Metro Vehicle<br>Carriage [J]. Computer Simulation. 2015.32(12):124-128,151.<br>(in Chinese)          |
| • | Chen Xinjie, <b>Yao Huiming</b> . Braking Distance and Critical Velocity Calculation of Rescue Coupled Trains in Urban Rail Transit[J]. Urban Mass Transit. 2014, 09:75-78. (in Chinese)                                   |
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| Activity in       | Shanghai Metro Education Award, 2019 |
|-------------------|--------------------------------------|
| professional      |                                      |
| associations      |                                      |
| within the last 5 |                                      |
| years             |                                      |
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| Name   | LIAO Aihua  |
|--|---|
| Post   | Associate Professor   |
| Academic career  | <ul> <li>1995-1999 Dalian Jiaotong University, B.E.,<br/>Major in Locomotive and Vehicle</li> <li>2000-2003 Dalian Jiaotong University, M.E.,<br/>Major in Vehicle Engineering<br/>(Rail Transit Vehicle)</li> <li>2003-2007 Dalian University of Technology, Ph.D.,<br/>Major in Mechanics</li> </ul>  |
| Employment   | <ul> <li>1999-2000 Dalian locomotive &amp; rolling stock co. LTD<br/>Assistant Engineer</li> <li>2007-2013 Shanghai University of Engineering Science,<br/>Lecturer</li> <li>2014- Shanghai University of Engineering Science,<br/>Associate Professor</li> </ul>   |
| Researchanddevelopmentprojects over thelast 5 years    | <ul> <li>Theoretical and experimental study on nonlinear vibration of a laminated circular plate harvester, Funded by NSFC (No. 11802170). Period: 2019-2021.</li> <li>Harvesting and recovery method of track vibration energy based on the running of train, Funded by NSFC (No. 51575334). Period: 2016-2019.</li> </ul>   |
| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>Research on Technology of Hanging Air Rail Vehicle<br/>Assembly and Key System. Funded by CRRC Qingdao Sifang<br/>Co., Ltd Period: 2013-2014.</li> <li>Professional system Development of National Training Base<br/>for High Skilled Talents. Funded by Shanghai Shentong Metro<br/>Group Co., Ltd Period: 2015-2016.</li> <li>Research on Fault Detection System and Reliability Evaluation<br/>of Vehicle Bogie Bearing. Funded by Shanghai Shentong<br/>Metro Group Co., Ltd Period: 2017-2018.</li> </ul> |

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| Patents and<br>proprietary rights   | <ul> <li>A Vibration Damping Camera Rack of Vehicle. Patent code:<br/>ZL201310058792.3</li> <li>An Evaluating Reliability System of Bogie Rolling Bearing.<br/>Patent code: 201620649841.X</li> <li>An LED Lighting System for Subway Car Based On Wireless<br/>Transmission. Patent code: ZL201620457842.4</li> <li>A Telescopic Hanging Basket of Bedside. Patent code:<br/>ZL201720448135.3</li> </ul>  |
|---|--|
| Important<br>publications   | <ul> <li>A H Liao, H xu, F Yu. Fatigue Analysis for Bogie Frame Based<br/>on Rigid-Flexible Coupling Simulation. Journal of Vibration,<br/>Measurement &amp; Diagnosis [J], 2017, 37(2):392-397.</li> <li>A H Liao, X D Chai, J Yang. A Numerical Simulation of<br/>Elastoplastic Contact Analysis of Compressor by<br/>Overspeeding. Advances in Mechanical Engineering, 2014.4.</li> <li>A H Liao. Frictional Contact Analysis of Turbocharger<br/>Compressor-Shaft Sleeve-Shaft [A]. in Zhangjiajie, 2009<br/>International Conference on Measuring Technology and<br/>Mechatronics Automation[C], IEEE Computer Society, 2009:<br/>869-871.</li> </ul> |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>2014 Outstanding Young Teacher in Shanghai Universities</li> <li>2016 Shanghai Metro Education Award</li> </ul>   |



| Name   | LI Xiaobo                       |  |
|--|---------------------------------|--|
| Post   | Associate Pr                    | rofessor   |
| Academic career  | 1993-1997                       | Shandong University of Science and Technology, B.E.,<br>Major in Electrical Technology   |
|  | 1999-2002                       | Shandong University of Science and Technology,<br>M.E., Major in Power Electronics and Power<br>Drives   |
|  | 2002-2005                       | Shandong University of Science and Technology,<br>Ph.D., Major in Machinery Electronics Engineering  |
| Employment   | 1997-2002                       | Shandong University of Science and Technology,<br>Assistant  |
|  | 2002-2008                       | Shandong University of Science and Technology,<br>Lecturer   |
|  | 2009-2012                       | Shanghai University of Engineering Science,<br>Lecturer  |
|  | 2014-2015                       | Shanghai Metro Maintenance Company (Vehicle<br>Branch),<br>Engineer  |
|  | 2013-                           | Shanghai University of Engineering Science,<br>Associate Professor   |
| Research and<br>development<br>projects over the<br>last 5 years | • None                          |  |
| Industry<br>collaborations<br>over the last 5<br>years           | Researce     Alstom     Metro C | ch on Power Frequency Characteristic Test Bench of<br>Auxiliary Inverter. Founded by: Shanghai Shentong<br>Group Co., Ltd. Maintenance Center. Period:2013-2015. |



| Patents and proprietary rights  | • Intelligent recognition method and device for abnormal state of locomotive engine and transmission mechanism. Patent code: ZL201010522633.0   |
|---|---|
| Important<br>publications   | <ul> <li>Li Xiaobo, Qin Wen, Wang Quan. Study of Fault Diagnosis of<br/>Metro Vehicle High-power Inverters, Computer Simulation,<br/>2016, pp: 229-233.</li> <li>Ji Ying; Li Xiaobo; Wu, Hao, Cai, Pengfei. Reliability study<br/>on control unit of metro train auxiliary inverter based on<br/>improved Monte Carlo algorithm[J]. Source: CICTP 2017, pp:<br/>5001-5014.</li> <li>Li Xiaobo, Wu Hao, Xu Jiechen. Transient Analysis of Metro<br/>Vehicle Auxiliary Inverter during Pantograph and Catenary<br/>Off-line[J]. Journal of System Simulation, 2015, 27, pp:<br/>2844-2851.</li> </ul> |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>2014 Outstanding Young Teacher in Shanghai Universities</li> <li>2016 Shanghai Metro Education Award</li> </ul>  |



| Name   | WEN Yong   | beng  |
|--|--|---|
| Post   | Associate Pr   | ofessor   |
| Academic career  | 1999-2003<br>2003-2006   | Northeast University, B.E.,<br>Major in Mechanical Engineering<br>Tongji University, M.E.,<br>Major in Mechanical Engineering |
|  | 2006-2009  | Tongji University, Ph.D.,<br>Major in Mechanical Engineering  |
| Employment   | 2009-2013  | Shanghai University of Engineering Science,<br>Lecturer   |
|  | 2014-2015  | Shanghai Metro Maintenance Company (Vehicle<br>Branch),<br>Engineer   |
|  | 2015-2016  | Central Michigan University, School of Engineering<br>and Technology<br>Visiting scholar                                      |
|  | 2014-  | Shanghai University of Engineering Science,<br>Associate Professor  |
| Researchanddevelopmentprojects over thelast 5 years    | <ul> <li>Research on Dynamic Instability Mechanism of Typical Micro<br/>Devices under Multi-Field Coupling (PI). Funded by NSFS<br/>(No. 15ZR1419200). Period: 2015-2017.</li> </ul> |   |
| Industry<br>collaborations<br>over the last 5<br>years | • Researc<br>turbine<br>Period:  | h on key technologies of high-speed energy-saving<br>air compressor (PI). Funded by SGTP (No. 2018-16)<br>2018-2020.          |



| Patents and<br>proprietary rights   | <ul> <li>A "3S" type spoke structure of urban rail transit vehicle wheels.<br/>Patent code: ZL201710585351.7.</li> <li>A magnetorheological elastomer semi-active dynamic vibration<br/>absorber and its selection and installation method. Patent code:<br/>ZL201711133363.2.</li> <li>A structure of dynamic vibration absorber with built-in metal<br/>vibrator for vibration and noise reduction of rail. Patent code:<br/>ZL201810549989.X.</li> </ul> |
|---|---|
| Important<br>publications   | <b>Yongpeng Wen</b> , Qian Sun, Yu Zou, et al. Study on the vibration suppression of a flexible carbody for urban railway vehicles with amagnetorheological elastomer-based dynamic vibration absorber [J]. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2020, 234(7): 749-764.   |
|   | <b>Yongpeng Wen</b> , Daniel M. Chen*, Aizhong Wu, et, al.<br>Vibration reduction and noise suppression for urban railways<br>with a wheelset dynamic vibration absorber. [M]//Resilience<br>and Sustainable Transportation Systems. Reston, VA:<br>American Society of Civil Engineers, 2020: 553-563.   |
|   | Qian Sun, <b>Yongpeng Wen</b> , Yu Zou. Study on the vibration suppression method of urban railway vehicles based on a composite dynamic vibration absorber[C]//MATEC Web of Conferences. EDP Sciences, 2019, 296: 01010.   |
|   | Yu Zou, Yongpeng Wen, Qian Sun. Study on the urban rail<br>transit sleeper spacing considering vehicle system[C]//MATEC<br>Web of Conferences. EDP Sciences, 2019, 296: 01008.  |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | Editorial Board of the 9th Editorial Committee of "Vibration and Shock"   |



| Name   | HU Dingyu   |  |
|--|---|--|
| Post   | Associate Pr  | ofessor  |
| Academic career  | 2005-2009<br>2006-2009  | Southwest Jiaotong University, B.E.,<br>Major in Vehicle Engineering (Rail<br>Transit Vehicle)<br>Hefei University of Technology, Ph.D.,<br>Major in Mechanical Manufacturing and Automation |
| Employment   | 2014-2018   | Shanghai University of Engineering Science,<br>Lecturer  |
|  | 2018-2019   | Shanghai Metro Maintenance Company (Vehicle<br>Branch),<br>Engineer  |
|  | 2019-   | Shanghai University of Engineering Science,<br>Associate Professor   |
| Researchanddevelopmentprojects over thelast 5 years    | <ul> <li>Noise s<br/>compre-<br/>by Nat<br/>516052</li> </ul>           | source identification in interior spaces based on the<br>ssive sensing and equivalent source method, Founded<br>ional Natural Science Foundation of China (No.<br>74). Period: 2017-2019.    |
| Industry<br>collaborations<br>over the last 5<br>years | Reliabil     Founder     Technol  | ity Analysis of air spring under operating conditions,<br>d by Chengdu Southwest Jiaotong University<br>Park Management Co., Ltd (J(16)GP-004), 2016-2017.                                   |
| Patents and<br>proprietary rights                      | <ul> <li>A rotati<br/>Patent c</li> <li>A real-t<br/>code: C</li> </ul> | ng test platform for acoustic signal measurement.<br>rode: CN201720554322.X<br>ime monitoring device for track circuit fault. Patent<br>N206892275.U   |

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| Important<br>publications   | • <b>Dingyu Hu</b> , Xinyue Liu, Yao Xiao, Yu Fang. Fast Sparse Reconstruction of Sound Field via Bayesian Compressive Sensing. Journal of Vibration and Acoustics - Transactions of the ASME, 2019, 141(4): 041017-9.                       |
|---|--|
|   | • <b>Dingyu Hu</b> , Hebing Li, Yu Hu, Yu Fang. Sound field reconstruction with sparse sampling and the equivalent source method, Mechanical Systems and Signal Processing, 2018, 108: 317-325.  |
|   | • Yu Hu, <b>Dingyu Hu</b> , Yu Fang, Yue Xiao. Super resolution patch near-field acoustic holography via sparse Bayesian learning. Journal of Vibration and shock, 2018, 37(16): 104-110.  |
|   | • <b>Dingyu Hu</b> , Zaiwei Li, Yu Fang. An equivalent source method for recovering and reconstructing the target sound field in a non-free field, Acta Acustica, 2017, 4: 465-475.  |
|   | • <b>Hu Dingyu</b> , Bi Chuanxing, Zhang Yongbin, Geng Lin.<br>Extension of planar nearfield acoustic holography for sound<br>source identification in a noisy environment [J]. Journal of<br>Sound and Vibration. 2014, 333(24): 6395-6404. |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • <b>Dingyu Hu</b> (4/5) "Research on fundamental theories of sound quality evaluation and vehicle interior noise control", Shanghai Natural Science Award, 2019   |





| Name  | PENG Lele  |
|---|--|
| Post  | Lecturer   |
| Academic career   | 2003-2007 Zhejiang sci-tech University, B.E.<br>Major in Measurement &control technology and<br>instruments  |
|   | 2008-2010 Donghua University, M. E.<br>Major in Mechatronic Engineering  |
|   | 2010-2015 Donghua University, Ph.D.,<br>Major in Doctor's degree of Mechanical<br>Engineering  |
| Employment  | 2015- Shanghai University of Engineering Science,<br>Lecturer  |
| Research and<br>development<br>projects over the<br>last 5years | <ul> <li>Inversion Theory and Method of Track Structure Performance<br/>Parameters Based on Dynamic Dignosis, Funded by NSFC (No.<br/>51478258). Period: 2015-2018. (CO-PI)</li> <li>A study of mechanical vibration mechanism and active control<br/>method for the floating photovoltaic power generation. Funded by<br/>NSFC (No. 51907117), Period: 2020-2022. (PI)</li> <li>Continuous Moving Measurement Theory and Method for Railway<br/>Track Settlement. Funded by NSFC (No. 51405287), Period: 2015-<br/>2017. (CO-PI)</li> </ul> |
| Industry<br>collaborations<br>over the last 5<br>years          | <ul> <li>2019 Annual Assessment of Shanghai Rail Transit Facility &amp;<br/>Equipment – Part 1: Rail Vehicle. Funded by Shanghai Shentong<br/>Metro Group Co. Ltd, Period: 2019-2020. (CO-PI)</li> </ul>   |
| Patents and<br>proprietary rights                               | <ul> <li>Rail alignment measurement method based on vision and inertial information fusion. Patent code: ZL201610349090.4</li> <li>Rail wear measurement method based on dynamic template. Patent: code ZL201210261886.6</li> <li>Solar power device and control method. Patent code: ZL201610530460.4</li> <li>Micro-grid solar charging pile and charging method. Patent code: ZL201610554009.6</li> <li>On-line monitoring device powered by solar energy. Patent code:</li> </ul>  |



| Important<br>publications   | • | Lele Peng, Shubin Zheng, Xiaodong Chai, Liming Li. A novel tangent error maximum power point tracking algorithm for photovoltaic system under fast multi-changing solar irradiances. Applied Energy. 2018, 210:303-316.  |  |  |
|---|---|--|--|--|
|   | • | • <b>Peng Lele</b> , Sun Yize, Meng Zhuo, An improved model an parameters extraction for photovoltaic cells using only three stat points at standard test condition, Journal of power sources, 2014 248 (2014): 621-631. |  |  |
|   | • | <b>Peng Lele</b> , Sun Yize, Meng Zhuo, Wang Yuling, Xu Yang, A new method for determining the characteristics of solar cells, Journal of power sources, 2013, 227 (2013): 131-136.                                      |  |  |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • | <b>Lele Peng</b> (7/7). Key Measuring Technology of Rail Track<br>Geometry Based on Fusion Technique of Computer Vision and<br>Inertial Measurement. Shanghai Science and Technology Progress<br>Award, 2017             |  |  |



| Name   | YUAN Tianchen  |  |  |
|--|--|--|--|
| Post   | Lecturer   |  |  |
| Academic career  | <ul> <li>2007-2011 Shanghai University of Engineering Science, B.E.,<br/>Major in Mechanical Engineering and Automation<br/>(Urban Rail Transit Vehicles)</li> <li>2011-2014 Shanghai University of Engineering Science, M.E.,<br/>Major in Vehicle Engineering (Rail Transit<br/>Vehicle)</li> <li>2014-2017 Shanghai University, Ph.D.,<br/>Major in General Mechanics and Mechanics<br/>Foundation</li> </ul>   |  |  |
| Employment   | <ul> <li>2017 - Shanghai University of Engineering Science,<br/>Lecturer</li> <li>2019- Nanjing University of Aeronautics and Astronautics,<br/>Postdoctoral Fellow</li> </ul>   |  |  |
| Research and<br>development<br>projects over the<br>last 5 years | <ul> <li>Theoretical and experimental study on nonlinear vibration of a laminated circular plate harvester. Funded by NSFC (No. 11802170). Period: 2019-2021.</li> <li>Harvesting and recovery method of track vibration energy based on the running of train. Funded by NSFC (No. 51575334). Period: 2016-2019.</li> <li>Mechanism of track vibration energy harvesting based on the running of urban railway train. Funded by Shanghai Municipal Education Commission (No. 14ZZ158). Period: 2016-2019.</li> </ul> |  |  |
| Industry<br>collaborations<br>over the last 5<br>years           | <ul> <li>Comprehensive performance test of pantograph for urban rail vehicles, funded by Chengdu Southwest Jiaotong University Science and technology management Park Co., Ltd. (No. (16)GP-005). Period: 2016/04~2017/07.</li> <li>Pantograph fault test of rail vehicles, funded by Southwest Jiaotong University (No. (17)GD-019). Period: 2017/09~2017/12.</li> </ul>  |  |  |



| Patents and<br>proprietary rights | <ul> <li>An Energy Harvesting Device for Track Vertical Vibration.<br/>Patent code: ZL201310287792.0</li> <li>Analog Device and Method for Vertical Coupling Forces<br/>Between Wheel sets and Rails. Patent code:<br/>ZL201310288014.3</li> </ul>                           |
|-----------------------------------|--|
| Important<br>publications         | • <b>Tian-Chen Yuan</b> , Jian Yang, Li-Qun Chen. Nonparametric Identification of Nonlinear Piezoelectric Mechanical Systems. ASME Journal of Applied Mechanics, 2018, 85: 111008.   |
|                                   | • <b>Tian-Chen Yuan</b> , Jian Yang and Li-Qun Chen, Nonlinear characteristic of a circular composite plate energy harvester experiments and simulations, Nonlinear Dynamics, 2017, 90: 2495-2506.   |
|                                   | • <b>Tian-Chen Yuan</b> , Jian Yang and Li-Qun Chen, Experimental identification of hardening and softening nonlinearity in circular laminated plates, International Journal of Non-Linear Mechanics, 2017, 95 (2017): 296-306.  |
|                                   | • <b>Tian-Chen Yuan</b> , Jian Yang and Li-Qun Chen, Nonlinear dynamic of a circular piezoelectric plate for vibratory energy harvesting, Communications in Nonlinear Science and Numerical Simulation, 2018, 59: 651-656.   |
|                                   | • <b>Tian-Chen Yuan</b> , Jian Yang, Ruigang Song, Xiaowei Liu, Vibration energy harvesting system for railroad safety based on running Vehicles, Smart Materials and Structures, 2014, 23(12): 125046.  |
|                                   | • Song Ruigang, <b>Tian-Chen Yuan</b> , Jian Yang, Hao He, Simulation of braking energy recovery for the metro vehicles based on the traction experiment system, Simulation: Transactions of the Society for Modeling and Simulation International, 2017, 93(12): 1099-1112. |
|                                   | • <b>Tian-Chen Yuan</b> , Jian Yang, Ruigang Song, Xiaowei Liu, A reduced-scale experiment system for vehicle-rail vertical vibration. Journal of Vibration and Shock, 2016, 35(6): 115-120.   |
|                                   |  |

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| Activity in                | • <b>Tian-Chen Yuan</b> (3/7). Research and application of braking |
|----------------------------|--|
| professional               | energy recovery technology based on on-board for urban rail        |
| associations               | vehicles, Third prize of Shanghai Science and Technology           |
| within the last 5<br>years | Progress Award, The Shanghai Municipal People's Government, 2018.  |



| Name   | SHU Yanjun   |   |  |
|--|--|---|--|
| Post   | Lecturer   |   |  |
| Academic career  | 2003-2007  | Beijing Institute of Technology, B.E.,<br>Major in Automation   |  |
|  | 2007-2009  | Beijing Institute of Technology, M. E.<br>Major in Control Science and Engineering  |  |
|  | 2009-2014  | Northwestern Polytechnical University, Ph.D.,<br>Major in Navigation Guidance and Control   |  |
| Employment   | 2014-2016  | Shanghai Aerospace Technology Research Institute,<br>Designer   |  |
|  | 2016-2017  | Shanghai JiaoTong University,<br>Postdoctoral Fellow  |  |
|  | 2018-  | Shanghai University of Engineering Science,<br>Lecturer   |  |
| Researchanddevelopmentprojects over thelast 5 years    | <ul> <li>Advance<br/>homing<br/>Shangha<br/>2020.3.</li> </ul>   | ed backstepping sliding mode methods for the IGC of<br>aircraft. Funded by Scientific Research Fund of<br>ai University of Engineering Science. Period: 2018.3-<br>(PI)                                       |  |
| Industry<br>collaborations<br>over the last 5<br>years | • Prototype of Intelligent autonomous robot. Funded by Liman Intelligent Technology Co., Ltd Period: 2018.06-2019.12. (PI) |   |  |
| Patents and proprietary rights                         | • None   |   |  |
| Important<br>publications                              | • Yanjun<br>Tracking<br>Systems<br>Backlasl  | <b>Shu</b> , Yanhui Tong, Chaogang Yu. Robust Neural<br>g Control for Switched Nonaffine Stochastic Nonlinear<br>with Unknown Control Directions and<br>h-like Hysteresis. Journal of the Franklin Institute, |  |



|  | 2020(357): 2791-2812 .  |  |
|--|---|--|
|  | • <b>Yanjun Shu</b> , Yanhui Tong, Zhaomin Lv. Adaptive neural tracking control of stochastic nonaffine nonlinear switched systems with unknown backlash-like hysteresis. International Journal of Control, 2020. In Press. |  |
|  | • Yanjun Shu, Tang Shuo. Integrated Guidance and Control Backstepping Design for Blended Control Missile Based on NDO, Journal of Astronautics, 2013(1): 79-85  |  |
|  | • <b>Yanjun Shu</b> , Tang Shuo. Discrete sliding-mode guidance laws design based on variable rate reaching law, Journal of Computer Applications, 2013(3): 878-881.  |  |
|  | • Yanjun Shu, Tang Shuo. Guidance law design based on adaptive backstepping sliding mode control, Flight Dynamics, 2012(2):163-166.   |  |
|  |   |  |
| Activity in<br>professional                | • None  |  |
| associations<br>within the last 5<br>years |   |  |



| Name   | ZHONG Qianwen  |  |  |
|--|--|--|--|
| Post   | Lecturer   |  |  |
| Academic career  | 2005-2009 Beijing Institute of Technology, B.E.,<br>Major in Vehicle Engineering (Rail<br>Transit Vehicle)   |  |  |
|  | 2010-2012 Donghua University,<br>Major in Mechatronic Engineering  |  |  |
|  | 2012-2018 Donghua University, Ph.D.,<br>Major in Mechanical Engineering  |  |  |
| Employment   | 2018- Shanghai University of Engineering Science<br>Lecturer   |  |  |
| Research and<br>development<br>projects over the<br>last 5 years | <ul> <li>Dynamic Diagnostic Method and Theory of Track Diseases<br/>Based on Vibration and Vision Fusion, supported by National<br/>Natural Science Foundation of China (Grant No. 51975347),<br/>funded by NSFC. Period: 2020-2023, Co-PI.</li> <li>Startup Foundation of Shanghai University of Engineering<br/>Science, Period:2019-2020, PI.</li> <li>2020.1-2020.12, Shanghai young teachers training program in<br/>2019. Period: 2020, PI.</li> </ul> |  |  |
| Industry<br>collaborations<br>over the last 5<br>years           | • Track state inspection system of pandero fast clip fastener, entrusted by enterprise. Period:2017-2019, Co-PI.   |  |  |
| Patents and<br>proprietary rights                                | <ul> <li>A self-powered bearing monitoring device for rail vehicles with piezoelectric energy, No. CN 210083230 U.</li> <li>A piezoelectric power generation structure, No. CN 210985966 U.</li> <li>A cooling device for deep learning computer vision analysis mainframe, No. CN 210983275 U.</li> </ul>   |  |  |

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| Important<br>publications   | • <b>Zhong, Q.W.</b> , S. Buckley, A. Vassallo, and Y.Z. Sun, Energy cost minimization through optimization of EV, home and workplace battery storage. Science China-Technological Sciences, 2018. 61(5): p. 761-773.            |
|---|--|
|   | • <b>Zhong, Q.W.</b> , Y.Z. Sun, and L.L. Peng, A Novel Control Strategy on Multiple-Mode Application of Electric Vehicle in Distributed Photovoltaic Systems. Complexity, 2018.   |
|   | • <b>Zhong, Q.W</b> , R. Khalilpour, A. Vassallo, and Y.Z. Sun, A logic-based geometrical model for the next day operation of PV-battery systems. Journal of Energy Storage, 2016. 7: p. 181-194.                                |
|   | • Zheng, S., <b>Zhong, Q.</b> , Chai, X., Chen, X., & Peng, L., A Novel Prediction Model for Car Body Vibration Acceleration Based on Correlation Analysis and Neural Networks. Journal of Advanced Transportation, 2018: p. 13. |
|   | • Zheng, S., <b>Zhong, Q.</b> , L. Peng, and X. Chai, A Simple Method of Residential Electricity Load Forecasting by Improved Bayesian Neural Networks. Mathematical Problems in Engineering, 2018. 2018: p. 16.                 |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>"Zhaoyi Innovation Cup" the 14th China graduate electronic design competition second prize, instructor.</li> <li>Shanghai University Students "Creation Cup" in 2019, Second prize, instructor.</li> </ul>              |



| Name   | WENG Lin  |   |
|--|---|---|
| Post   | Lecturer  |   |
| Academic career  | 1999-2003   | Beijing Institute of Technology, B.E.,<br>Major in Mechanical Engineering   |
|  | 2006-2009   | Zhejiang University of Technology, M.E.,<br>Major in Chemical Process Equipment   |
|  | 2009-2015   | Shanghai Jiao Tong University, Ph.D.,<br>Major in Solid Mechanics   |
| Employment   | 2015-2018   | Shanghai Jiaotong University,<br>Postdoctoral Fellow  |
|  | 2018-   | Shanghai University of Science and Technology,<br>Lecturer  |
|  |   |   |
| Researchanddevelopmentprojects over thelast 5 years    | • Numeri<br>inhomo<br>disconti<br>NSFC (  | cal and experimental investigation on the effects of geneous microstructure on strength and ductility of inuous reinforced metal matrix composites, Funded by No. 51701118). Period: 2018-2020. |
| Industry<br>collaborations<br>over the last 5<br>years | • Research on Fault Detection System and Reliability Evaluation<br>of Vehicle Bogie Bearing. Funded by Shanghai Shentong<br>Metro Group Co., Ltd Period: 2017-2018. Co-PI |   |
| Patents and proprietary rights                         | • None  |   |



| Important<br>publications   | • | Lin Weng, Tongxiang Fan, Mao Wen, Yao Shen. Three-<br>dimensional multi-particle FE model and effects of interface<br>damage, particle size and morphology on tensile behavior of<br>particle reinforced composites, Composite Structures, Volume<br>209, 2019, Pages 590-605. |
|---|---|--|
|   | • | Weng L, Shen Y, Fan T X, Xu J Q. A Study of Interface<br>Damage on Mechanical Properties of Particle-Reinforced<br>Composites[J]. Journal of the minerals, metals and<br>materials(JOM), 2015, 1-6.  |
|   | • | Sun Z, Tian Z, <b>Weng L</b> , et al. The effect of thermal mismatch<br>on the thermal conductance of Al/SiC and Cu/diamond<br>composites[J]. Journal of Applied Physics, 2020, 127(4).  |
|   | • | Yang M, <b>Weng L</b> , Zhu H, et al. Simultaneously enhancing the strength, ductility and conductivity of copper matrix composites with graphene nanoribbons[J]. Carbon, 2017, 118: 250-260.  |
|   | • | Yang M, <b>Weng L</b> , Zhu H, et al. Leaf-like carbon nanotube-<br>graphene nanoribbon hybrid reinforcements for enhanced load<br>transfer in copper matrix composites[J]. Scripta Materialia,<br>2017, 138: 17-21.   |
|   | • | ZHANG Zhenguo, HOU Xiao, GAO Jie, <b>WENG Lin</b> . A method of generating two-dimensional mesoscopic model for hydrox-yl-terminated polybutadiene propellant with high particle volume fraction. AMCS, 2019, 36(10): 2302-2307.   |
|   | • | WEN Yongpeng, ZONG Zhixiang, <b>WENG Lin</b> , ZOU Yu. Vibration reduction method of multiple passive vibration absorbers for vehicle body in full speed range [J]. Journal of Central South University, 2020, 51(03): 853-862.  |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • | None   |



| Name   | WEN Jing  |  |  |
|--|---|--|--|
| Post   | Lecturer  |  |  |
| Academic career  | 2001-2005   | Jilin University, B.E.,<br>Major in Mechanical Engineering   |  |
|  | 2005-2010   | Jilin University, Ph.D.,<br>Major in Materials Processing Engineering  |  |
| Employment   | 2016-2017   | Shanghai Rail Traffic Equipment Co.,Ltd,<br>Engineer   |  |
|  | 2011-2014   | Zoomlion Shanghai,<br>Engineer   |  |
|  | 2014-2018   | AECC Commercial Aircraft Engine Co.,ltd<br>Manager   |  |
|  | 2018-   | Shanghai University of Science and Technology,<br>Lecturer   |  |
| Researchanddevelopmentprojects over thelast 5 years    | • A study method by NSF   | y of mechanical vibration mechanism and active control<br>for the floating photovoltaic power generation. Funded<br>C (No. 51907117), Period: 2020-2022. (Co-PI) |  |
| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>2019 Annual Assessment of Shanghai Rail Transit Facility &amp;<br/>Equipment – Part 1: Rail Vehicle. Funded by Shanghai<br/>Shentong Metro Group Co. Ltd, Period: 2019-2020. (PI)</li> </ul> |  |  |
| Patents and<br>proprietary rights                      | • None  |  |  |



| Important<br>publications   | • Wen Jing, Jia Hongde, Wang Chunsheng, Quality Estimation System for Resistance Spot Welding of Stainless Steel, ISIJ International, 2019,59(11):2073-2076.  |  |  |  |
|---|---|--|--|--|
|   | <ul> <li>Wen Jing and Jia Hongde. Real-time monitoring of dynamic signals and quality prediction for resistance spot welding Electric welding machine, 2020, 50(5):102-106.</li> </ul>                            |  |  |  |
|   | Wen Jing, Wang Chunsheng, Xu Guocheng and Zhang Xiaoqi,<br>Real Time Monitoring Weld Quality of Resistance Spot<br>Welding for Stainless Steel, ISIJ International, 2009,49(4):<br>553-556.                       |  |  |  |
|   | Wen Jing, Wang chunsheng, Xu guocheng and Cheng Guoli,<br>Analysis on dynamic resistance in resistance spot welding of<br>stainless steel. Transactions of the China welding institution,<br>2008, 29(11): 69-72. |  |  |  |
|   | • Wen Jing, Zhang Xudong, Xu Guocheng, Zhang Xiaoqi,<br>Qiality estimation of resistance spot welding of stainless steel<br>based on BP neural network, 2009, 18(3):16-20   |  |  |  |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • None  |  |  |  |


| Name   | WU Aizhong  |  |  |
|--|---|--|--|
| Post   | Lecturer  |  |  |
| Academic career  | 1999-2003 Yangtze Normal University, B.S.,<br>Major in Physics  |  |  |
|  | 2006-2009 Liaoning University of Technology, M.E.,<br>Major in Mechatronic Engineering  |  |  |
|  | 2009-2015 Shanghai Jiao Tong University, Ph.D.,<br>Major in Mechanical Engineering  |  |  |
| Employment   | 2016-2017 Shanghai Institute of Special Equipment Inspection<br>and Technical Research,<br>R & D Engineer   |  |  |
|  | 2018- Shanghai University of Science and Technology,<br>Lecturer  |  |  |
| Researchanddevelopmentprojects over thelast 5 years    | <ul> <li>Investigation on the Coupled Thermo-Mechanical Behaviors in<br/>Friction Braking of High-speed Elevator Safety Gear, funded<br/>by NSFC (No. 11602144). Period: 2017-2019.</li> <li>Coupled Thermo-Mechanical Analysis and Inspection for the<br/>Friction Braking of High-speed Elevator Safety Gear, funded</li> </ul> |  |  |
|  | by GAQSIQ (No. 2015QK049). Period: 2015-2017.   |  |  |
| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>Million Times Accelerated Life Test for the Platform Screen<br/>Door Prototype of Shanghai Metro Line 13 (Phase II and Phase<br/>III Project). Period: 2016-2017.</li> <li>Structural Strength and System Function Test for the Platform<br/>Screen Door Prototype of Shanghai Metro Line 10 (Phase II)</li> </ul>       |  |  |
|  | project). Period: 2017-2018.  |  |  |



| Patents and proprietary rights  | • A Coupled Thermo-Mechanical Method for the Design and Simulation of Elevator Progressive Safety Gear Patent. Patent code: CN201610911386.0  |
|---|---|
| Important<br>publications   | • WU Aizhong, Shi Xi, and Polycarpou A., "An Elastic-plastic<br>Spherical Contact Model under Combined Normal and<br>Tangential Loading," ASME Journal of Applied Mechanics,<br>2012, 79, pp. 051001-1.                 |
|   | • WU Aizhong and Shi Xi, "Numerical Investigation of Adhesive Wear and Static Friction Based on the Ductile Fracture of Junction," ASME Journal of Applied Mechanics, 2013, 80, pp. 041032.                             |
|   | • WU Aizhong and Shi Xi, "An Atomic Interaction-based<br>Adhesive Contact Model for Shallow Nanoindentation and<br>Nanoscratch," Journal of adhesion science and Technology,<br>2013, 27, pp. 1840-1851.                |
|   | • Shi Xi and <b>WU Aizhong</b> , "Effects of Load Configuration on Partial Slip Contact between an Elastic-plastic Sphere and a Rigid Flat," Tribology International, 2013, 61, pp. 120-128.                            |
|   | • Shi Xi and <b>WU Aizhong</b> , "Thermomechanical modeling and transient analysis of sliding contacts between an elastic-plastic asperity and a rigid isothermal flat," Tribology International, 2015, 81, pp. 53-60.  |
|   | • WU Aizhong and Qian Hong, "Research on the Fretting<br>Contact between an Elastic-Plastic Hemisphere and a Rigid<br>Flat," Chinese Journal of Mechanical Engineering, 2015, 51(5)<br>pp. 105-113.                     |
|   | • WU Aizhong, WENG Lin, HU Dingyu and LIAO Aihua,<br>"Micromechanical modelling for the damage accumulation and<br>adhesive wear of metallic materials containing<br>inclusions," ASME Journal of Tribology, 2020 (10). |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • None  |



| Name   | MENG Xiaoliang  |  |  |
|--|---|--|--|
| Post   | Lecturer  |  |  |
| Academic career  | 2003-2007   | Tongji University, B.E.,<br>Major in Civil Engineering   |  |
|  | 2007-2009   | Tongji University, Post graduate student (Direct entry<br>for the doctorate course in 2009),<br>Major in Bridge and Tunnel Engineering   |  |
|  | 2009-2014   | Tongji University, Ph.D.,<br>Major in Bridge and Tunnel Engineering  |  |
| Employment   | 2013-2015   | The Hong Kong Polytechnic University,<br>Research Assistant  |  |
|  | 2015-2018   | Shanghai Tunnel Engineering Co., Ltd.,<br>Senior Engineer  |  |
|  | 2018-   | Shanghai University of Engineering Science,<br>Lecturer  |  |
| Researchanddevelopmentprojects over thelast 5 years    | <ul> <li>Vortex-<br/>continu<br/>general<br/>Fund of<br/>Resistan<br/>01), Per</li> </ul> | Finduced vibration analysis method of long span<br>ous bridge with span-wise varying geometry based on<br>ized self-excited force model, supported by the Open<br>of Key Laboratory of Transport Industry of Wind<br>nt Technology for Bridge Structures (KLWRTBMC19-<br>riod: 2019.06-2021.05. (PI) |  |
| Industry<br>collaborations<br>over the last 5<br>years | • Develoy 2020.01   | pment and test of air conditioner connector. Period:<br>1-2020.12. (Co-PI)   |  |
| Patents and proprietaryrights                          | MENG<br>elastic 1<br>No. 202  | <b>Xiaoliang</b> . The analysis system of full bridge aero-<br>model for long span bridges. Software registration<br>20SR0806158.  |  |



|   | •  | <b>MENG Xiaoliang</b> . Temperature measurement and analysis system for track slabs. Software registration No. 2020SR0701113.  |  |  |
|---|--|--|--|--|
| Important<br>publications   | •  | <b>MENG Xiaoliang</b> , ZHU Ledong. Effects of a cross diaphragm<br>on the wind-resistant performance of twin parallel deck bridges<br>[J]. Journal of Vibration and Shock, 2020, 39(16): 141-147. (in<br>Chinese)   |  |  |
|   | •  | Le-Dong Zhu, <b>Xiao-Liang Meng</b> , Lin-Qing Du, Ming-Chang<br>Ding. A Simplified Nonlinear Model of Vertical Vortex-<br>Induced Force on Box Decks for Predicting Stable Amplitudes<br>of Vortex-Induced Vibrations[J]. Engineering, 2017, 3: 854-<br>862.                  |  |  |
|   | •  | Xiao-Liang Meng, Le-Dong Zhu, You-Lin Xu, Zhen-Shan<br>Guo. Imperfect Correlation of Vortex-induced Fluctuating<br>Pressures and Vertical Forces on a Typical Flat Closed Box<br>Deck [J]. ADVANCES IN STRUCTURAL ENGINEERING,<br>2015, 10: 1597-1618.                         |  |  |
|   | • Le-Dong Zhu, <b>Xiao-Liang Meng</b> , Zhen-Shan Guo. Non-<br>mathematical model of vortex-induced lift force on<br>closed-box bridge deck[J]. Journal of Wind Engineerin<br>Industry Aerodynamics, 2013, 122: 69-82. |  |  |  |
|   | •  | <b>MENG Xiao-liang</b> , GUO Zhen-shan, DING Quan-shun, ZHU<br>Le-dong. Influence of wind fairing angle on vortex-induced<br>vibrations and flutter performances of closed and semi-closed<br>box decks [J]. ENGINEERING MECHANICS, 2011, 28(S1):<br>184-188+194. (in Chinese) |  |  |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | •  | General member of international society for intelligent construction (ISIC)  |  |  |



| Name   | HE Yu  |   |
|--|--|---|
| Post   | Lecturer   |   |
| Academic career  | 2007-2011  | Shannxi University of Science & Technology, B.E.,<br>Major in Mechanical Engineering  |
|  | 2011-2013  | Northeastern University, M. E.<br>Major in Mechanical Engineering   |
|  | 2014-2016  | Northwestern University (USA)<br>Ph.D. student Exchange   |
|  | 2013-2018  | Northeastern University, Ph.D.<br>Major in Mechanical Engineering   |
| Employment   | 2019-  | Shanghai University of Engineering Science,<br>Lecturer   |
|  | 2019-  | Luoyang Sunrui Ruber&Plastic Science and<br>Technology Co., Ltd,<br>Postdoctoral Fellow   |
| Researchanddevelopmentprojects over the                | <ul> <li>Theoretical and experimental study on ultrasonic vibration<br/>assisted laser polishing, Funded by NSFC (No. 51875097).<br/>Period: 2018-2021.</li> </ul> |   |
| last 5years  | • Develop  | pment and research of two parallel machine tools for  |
|  | ultrasor<br>0507-19  | nic vibration cutting, Funded by SUES (No. 0240-E3-<br>9-05134). Period: 2019-2021.   |
| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>Study of fasterne</li> <li>Science</li> <li>2019-20</li> </ul>  | on high frequency Vibration performance of rail transit<br>er clip, Funded by Luoyang Sunrui Ruber&Plastic<br>e and Technology Co., Ltd (No. 3219026008). Period:<br>021. |
| Patents and<br>proprietary<br>rights                   | • None   |   |



| Important<br>publications | • Yu He, Ping Zou, Zhiwei Zhu, Wule Zhu, Youqiang Xing,<br>Kornel Ehmann. Design and application of a flexure-based<br>oscillation mechanism for surface texturing, Journal of<br>Manufacturing Process, 2018, 32: 298-306.   |
|---------------------------|---|
|                           | • Yu He, Ping Zou, Wu-Le Zhu, Kornel Ehmann. Ultrasonic elliptical vibration cutting of hard materials: simulation and experimental study, The International Journal of Advanced Manufacturing Technology, 2017, 91: 363-374.   |
|                           | • Yu He, Zhongming Zhou, Ping Zou, Xiaogang Gao, Kornel F<br>Ehmann, Study of ultrasonic vibration–assisted thread turning<br>of Inconel 718 superalloy, Advances in Mechanical<br>Engineering, 2019, Vol. 11(10) 1–12.   |
|                           | • Yu He, Anbin Wang, Zhigang Liu, Xiaogang Gao, Damage<br>Analysis of PR Type Fastener Clip for Vibration Reduction and<br>Noise Suppression in Subway Circumstance, Resilience and<br>Sustainable Transportation Systems. 2020   |
|                           | • Wu-le Zhu, <b>Yu He</b> , Kornel Ehmann, Antonio Sanchez,<br>Theoretical and experimental investigation on inclined<br>ultrasonic elliptical vibration cutting of alumina ceramics,<br>Journal of Manufacturing Science and<br>Engineering-Transactions of the ASME, 2016, 138 (12),<br>121011. |
|                           | • Wu-le Zhu, <b>Yu He</b> , Kornel Ehmann, Bing-Feng Ju, Modeling of the effects of phase shift on cutting performance in elliptical vibration cutting, The international Journal of Advanced Manufacturing Technology, 2017 :1-13.   |
|                           | • Wule Zhu, Zhiwei Zhu, <b>Yu He</b> , 'Development of a Novel 2-D Vibration-Assisted Compliant Cutting System for Surface Texturing', IEEE-ASME Transactions on Mechatronics, 2017, PP (99) :1-1.  |
|                           | • Ping Zou, Yingshuai Xu, <b>Yu He</b> , Experimental investigation of ultrasonic vibration assisted turning of 304 austenitic stainless steel, Shock and Vibration, 2015, 1-19.  |
|                           | • Yingshuai Xu, Ping Zou, <b>Yu He</b> , Comparative experimental research in turning of 304 austenitic stainless steel with and without ultrasonic vibration, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2016.                   |



|                              | • | Xiaogang Gao, Anbin Wang, <b>Yu He</b> , Study on Rail Vibration<br>and Corrugation of New Rail Guard in Small Radius Curve,<br>Resilience and Sustainable Transportation Systems. 2020  |
|------------------------------|---|--|
|                              | • | Xiaogang Gao, Anbin Wang, <b>Yu He</b> , Xiaohan Gu. Structural<br>Improvement of the $\omega$ -Type High-Speed Rail Clip Based on a<br>Study of Its Failure Mechanism. Shock and Vibration, 2019(1):<br>1-14.   |
|                              | • | Yingshuai Xu, Ping Zou, Xulei Yang, <b>Yu He</b> , Study on Ultrasonic Generator for Ultrasonically Assisted Machining. Advanced Materials Research, 2013, 797:320-325.  |
|                              | • | Wule Zhu, Zhiwei Zhu, Yi Shi, Xiangfan Chen, <b>Yu He</b> , Kornel<br>Ehmann, A novel piezoelectrically actuated 2-DoF compliant<br>micro/nano-positioning stage with multi-level amplification,<br>Review of Scientific Instruments, 2016,<br>87(10):823-142. |
| Activity<br>in               | • | None   |
| professional<br>associations |   |  |
| within the<br>last 5 years   |   |  |



| Name                                   | HUANG Shujun  |  |
|--|---|--|
| Post                                   | Lecturer  |  |
| Academic career                        | <ul> <li>2006–2010 Hebei University of Technology, B.E.,<br/>Major in Measurement Control Technology and<br/>Instruments</li> <li>2010-2013 Hebei University of Technology, M.E.<br/>Major in Instruments Science and Technology</li> <li>2014-2018 Hebei University of Technology, Ph.D.</li> </ul>  |  |
|  | Major in Mechanical Engineering   |  |
| Employment                             | 2013-2014 Quality Control Department, Northern Altair<br>Nanotechnologies Co., Ltd<br>Manager   |  |
|  | 2014 Northern Altair Nano- technologies Co., Ltd<br>Manager   |  |
|  | 2019- Shanghai University of Engineering Science,<br>Lecturer   |  |
| Research       and         development | <ul> <li>National Natural Science Foundation of China (No. 51675160).<br/>Theory and Technique of 3D Shape Measurement of Specular<br/>Objects Based on Direct Phase and Depth Relationship. Period:<br/>2017.01-2020.12</li> <li>Research Project for Graduate Innovation in Hebei Province:<br/>Techniques for Fast and Multiple Channels 3D Shape<br/>Measurement Based on Colour Fringe Projection. Period:<br/>2015.06-2016.06.</li> <li>Research Project for High-level Talents in Hebei University<br/>(NO: GCC2014049): Key Techniques of Fast and High<br/>Accurate 3D Shape Measurement Based on Parallel Multiple<br/>Colour Channels. Period: 2015.01-2017.12.</li> </ul> |  |



| Industry<br>collaborations<br>over the last 5<br>years | • 2019 Annual Assessment of Shanghai Rail Transit Facility & Equipment – Part 1: Rail Vehicle. Funded by Shanghai Shentong Metro Group Co. Ltd, Period: 2019-2020, (CO-PI)   |
|--|--|
| Patents and<br>proprietary rights                      | <ul> <li>A 3D fingerprint sensing system. NO. ZL201210338362.2.</li> <li>Infrared and visible chipe alignment method of a 2CCD camera. Application NO. 201410478588.1.</li> <li>A non-contact acquisition method and device of 3D palmprint and hand shape. NO. ZL201210338363.7.</li> </ul> |
| Important<br>publications                              | • Shujun Huang, Yue Liu, Nan Gao, Zonghua Zhang, Feng Gao, Xiangqian Jiang. Distance calibration between reference plane and screen in direct phase measuring deflectometry. Sensors, 2018, 18(1): 144   |
|  | • Shujun Huang, Yue Liu, Xuefei Bai, Zhangying Wang,<br>Zonghua Zhang. Pixel-to-pixel correspondence alignment<br>method of a 2CCD camera by using absolute phase map.<br>Optical Engineering, 2015, 54 (6), 064101; doi:<br>10.1117/1.OE.54.6.064101  |
|  | • Shujun Huang, Lili Xie, Zhangying Wang, Zonghua Zhang,<br>Feng Gao, and Xiangqian Jiang Accurate projector calibration<br>method by using an optical coaxial camera. Applied Optics,<br>2015, 54(4): 789-795   |
|  | • Shujun Huang, Zonghua Zhang, Yan Zhao, Jie Dai, Chao<br>Chen, Yongjia Xu, E Zhang, and Lili Xie. 3D fingerprint<br>imaging system based on full-field fringe projection<br>profilometry. Optics and Lasers in Engineering, 2014, 52(1):<br>123-130   |
|  | • Zonghua Zhang, <b>Shujun Huang</b> , Yongjia Xu, Chao Chen, Yan Zhao, Nan Gao, and Yanjun Xiao. 3D palmprint and hand imaging system based on full-field composite color sinusoidal fringe projection technique. Applied Optics, 2013, 52(25): 6138-6145                                   |
|  | • Zonghua Zhang, <b>Shujun Huang</b> , Shasha Meng, Feng Gao, and Xiangqian Jiang. A simple, flexible and automatic 3D calibration method for a phase calculation-based fringe projection imaging system. Optics Express, 2013, 21(10): 12218-12227  |





| Activity in       | • Excellent PhD Thesis, 2018 |
|-------------------|------------------------------|
| professional      |                              |
| associations      |                              |
| within the last 5 |                              |
| years             |                              |
|                   |                              |
|                   |                              |



| Name   | ZHU Wenliang  |   |
|--|---|---|
| Post   | Lecturer  |   |
| Academic career  | 2001-2005   | Henan Normal University, B.A.E.,<br>Major in Computer Science Education   |
|  | 2005-2008   | Southwesth Jiaotong University, M.E.,<br>Major in Vehicle Operation Engineering                                       |
|  | 2013-2019   | Tongji University, Ph.D.,<br>Major in Vehicle Operation Engineering   |
| Employment   | 2008-2013   | Shanghai University of Engineering Science,<br>School Counselor   |
|  | 2019-   | Shanghai University of Engineering Science,<br>Lecturer   |
|  |   |   |
| Researchanddevelopmentprojects over thelast 5 years    | • Researce<br>speed F<br>2015.01  | ch on Anti-skid Braking Control Strategy of the High-<br>EUMs, supported by NSFC (No. U1534205), Period:<br>1-2019.12 |
| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>Research on Development of Brake Force Simulation Software,<br/>supported by CRRC QINGDAO SIFANG CO. LTD, Period:<br/>2014.12.15-2015.04.30</li> </ul> |   |
| Patents and proprietary rights                         | <ul> <li>An anti<br/>stock. N</li> </ul>  | -skid control method of braking system for rolling<br>Jo.: CN201810812158.7.  |



| Important<br>publications   | <ul> <li>ZHU Wenliang, WU Mengling. Research on Braking Calculation of Electric Multiple Unit. Journal of Tongji University(Natural Science), 2017, Vol. 45(01): 119-123+134</li> <li>ZHU Wenliang, WU Menling, TIAN Chun, et al. Integrated simulation platform analysis for braking System of Rolling Stock based on multi-discipline collaborative analysis[J].Journey of Traffic and Transportation Engineering, 2017, 17(03):99-110.</li> </ul> |
|---|--|
|   | • W.L.Zhu, X.Liao, C.Tian, M.L.Wu. Research on Anti-sliding<br>Control for Rolling Stock Based on the Optimal Slip Rate.<br>Proceedings of Third International Conference on Railway<br>Technology: Research Development and Maintenance, April 5-<br>8, 2016.   |
|   | • Wenliang ZHU, Mengling WU. Modeling and Anti-skid<br>Control of the Rail Vehicle Braking System. Proceedings of the<br>6th International Conference on Advanced Design and<br>Manufacturing Engineering, July 20-23, 2016.   |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • None   |



| Name   | SHI Xuan   |  |
|--|--|--|
| Post   | Experimentalist  |  |
| Academic career  | 1993-1997  | Dalian Railway University, B.E.,<br>Major in Mechanical Engineering and Automation               |
|  | 2010-2013  | Shanghai University, M.E.,<br>Major in Mechanical Engineering and Automation                     |
| Employment   | 1997-2001  | Taiyuan locomotive & rolling stock co. LTD<br>Engineer   |
|  | 2003-2008  | Shanghai Metro Operation co. LTD<br>Engineer   |
|  | 2008-  | Shanghai University of Engineering Science,<br>Experimentalist                                   |
| Researchanddevelopmentprojects over thelast 5 years    | • Fault To<br>Jiaoton  | est of Pantograph of Rail Vehicle. Partner: Southwest<br>g University. Period: 2017-2018 (Co-PI) |
| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>'silkworm' make Songjiang more smoothly - Songjiang Tram<br/>Popular science video production and promotion. Funded by<br/>Science and Technology Commission of Songjiang 2017.05-<br/>2017.10. (Co-PI)</li> <li>Interactive science popularization system for urban rail transit<br/>vehicles. Funded by Science and Technology Commission of<br/>Songjiang Period: 2019.01-2019.12 (Co-PI)</li> </ul> |  |
| Patents and proprietary rights                         | • An auto  | omatic induction fire extinguishing device, Patent code:   |





| Important<br>publications   | • LUO Haoxin, SONG Ruigang, SHI Xuan, WANG He,<br>CHEN Pei. An automatic induction fire extinguishing device.,<br>2013 |
|---|--|
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • None   |



| Name   | SONG Ruigang   |   |
|--|--|---|
| Post   | Experimentalist  |   |
| Academic career  | 2001-2005  | Zhengzhou University, B.E.,<br>Major in Process Equipment and Control   |
|  | 2011-2014  | Shanghai Jiao Tong University, M.E.,<br>Major in Vehicle Engineering (Rail<br>Transit Vehicle)  |
|  | 2016-  | Tongji University, Ph.D. candidate,<br>Major in Vehicle Operation Engineering   |
| Employment   | 2009 -   | Shanghai University of Engineering Science,<br>Experimentalist  |
| Researchanddevelopmentprojects over thelast 5 years    | <ul> <li>Product<br/>in Song<br/>Commi</li> </ul>                | tion and Promotion of Popular Science Video of Trams<br>gjiang, funded by Songjiang Science and Technology<br>ssion. Period: 2017-2018.   |
| Industry<br>collaborations<br>over the last 5<br>years | • Fault T<br>Jiaoton   | est of Pantograph of Rail Vehicle. Partner: Southwest<br>g University. Period: 2017-2018  |
| Patents and<br>proprietary rights                      | <ul> <li>A Com<br/>Train B</li> <li>An Air<br/>Subway</li> </ul> | fort Detection Device of Self Powered Urban Rail<br>ased on LabVIEW. Patent code: ZL201620045390.9<br>Monitoring and Air Conditioning Control Device for<br>Station. Patent code: ZL 201920530101.8 |



| Important<br>publications   | • Song Ruigang, Yuan Tianchen, Yang Jian and He Hao,<br>Simulation of braking energy recovery for the metro vehicles<br>based on the traction experiment system, Simulation:<br>Transactions of the Society for Modeling and Simulation<br>International, 2017, 93(12): 1099–1112 |
|---|---|
| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>2018 Third Prize of Shanghai Science and Technology<br/>Progress Award</li> <li>2019 Second Prize of Shanghai Science and Technology<br/>Progress Award</li> </ul>   |



| Name   | ZHU Lin  |
|--|--|
| Post   | Associate Professor  |
| Academic career  | 2003-2007 Beijing Jiaotong University, Bachelor's degree,<br>Traffic and Transportation.   |
|  | 2007-2013 Beijing Jiaotong University, Doctor's degree,<br>Traffic and Transportation Planning and<br>Management   |
| Employment   | 2014-2019 Shanghai University of Engineering Science, Lecturer   |
|  | 2020- Shanghai University of Engineering Science, Associate<br>Professor   |
| Researchanddevelopmentprojects over thelast 5years     | • Research on mental workload and human performance of train dispatcher based on task analysis and multiple resource theory, supported by National Natural Science Foundation of China (No. 71701124). Period: 2018-2020. Funding: RMB160,000  |
| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>Dynamic supervision of Shanghai rail transit operation safety,<br/>Shanghai Transportation Commission ((18)GP-004), 20180301-<br/>20181231.</li> <li>Comprehensive quality assessment of dispatcher, Shanghai<br/>Shentong Metro Group Co., LTD. ((20)GP-011), 20190701-<br/>20181231.</li> <li>Investigation of rail transit system, Shanghai Shentong Metro Group<br/>Co., LTD. ((17)GD-021), 20160701-20161231.</li> </ul> |
| Patents and<br>proprietary rights                      | <ul> <li>A system for accurately stopping a subway train platform. Patent code: ZL201910458951.6</li> <li>A decompression seat specially designed for subway dispatchers. Patent code: ZL201920783784.8</li> <li>A kind of subway automatic folding seat for specific people. Patent code: ZL201920784951.0</li> <li>A subway driver fatigue monitoring and early warning device. Patent code: ZL201820833293.5</li> </ul>             |



| Important<br>publications   | • | <ul> <li>Zhu Lin, Liu Zhigang. Building and Simulation of a Modified Cell<br/>Transmission Model for an Urban Expressway. Proceedings of the<br/>5th International Conference on Transportation Engineering, 2015.</li> <li>ZHU Lin, WU Qiang, LIU Zhigang, WANG Huasheng, ZHOU<br/>Ming. Simulation and Analysis System for the Impact of Metro<br/>Train Faults on Operations, Urban Rapid Rail Transit, 2017, 30(2):<br/>113-119.</li> <li>GUO Jing, ZHU Lin*, LIU Zhigang, WANG Chunjie. Evaluation<br/>and Analysis of the Unplanned "Skip-stop" Scheme for<br/>Conventional Routes of Urban Rail Transit, Urban Rapid Rail<br/>Transit, 2018, 31(4): 119-124+132.</li> </ul> |
|---|---|--|
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • | Shanghai Metro Award and Education Fund, 2018  |



| Name  | WANG Guo   | qiang  |
|---|--|--|
| Post  | Professor  |  |
| Academic career                                     | 2000-2002  | Shandong Normal University, B.S.<br>Major in Mathematics and Applied Mathematics   |
|   | 2002-2005  | Shanghai University, M.S.<br>Major in Operations Research and Cybernetics  |
|   | 2005-2009  | Shanghai University, Ph. D.<br>Major in Operations Research and Cybernetics  |
| Employment  | 2005-2008  | Shanghai University of Engineering Science,<br>Assistant Professor   |
|   | 2008-2013  | Shanghai University of Engineering Science,<br>Associate Professor   |
|   | 2010-2013  | ShangHai Normal University, postdoctoral fellow  |
|   | 2012-2013  | Curtin University, Australia,<br>Visiting scholar  |
|   | 2014-  | Shanghai University of Engineering Science,<br>Professor   |
| Researchanddevelopmentprojects over the last5years  | <ul> <li>Research on Optimization Models and Algorithms of Covariance<br/>Matrix Estimation in High Dimensional Data Statistical<br/>Inference, funded by NSFC (No. 11971302). Period: 2020-2023.</li> <li>Interior-Point Algorithms for Nonlinear Symmetric Cone</li> </ul> |  |
|   | Program<br>NSFC (1   | ming and Applications in Optimal Control, funded by No. 11471211). Period: 2015-2018.  |
| Industry<br>collaborations over<br>the last 5 years | <ul> <li>Big Dat<br/>Analysis<br/>LTD. Pe</li> </ul>   | a Real-Time Computing Management and Evaluation<br>s, funded by Shengke Jinshida Data System (China) Co.,<br>priod: 2018-2019. |
| Patents and<br>proprietary rights                   | • None   |  |



| Important<br>publications            | • <b>G.Q. Wang</b> , L.C. Kong, J.Y. Tao, and G. Lesaja, Improved complexity analysis of full Nesterov-Todd step feasible interior-point method for symmetric optimization, J. Optim. Theory Appl., 2015, 166(2): 588-604. |
|--------------------------------------|--|
|                                      | • G.Q. Wang, M.M. Li, X.J. Fan, and D.Z. Wang, New complexity analysis of a full-Newton step feasible interior-point algorithm for P*(k)-LCP, 2015, Optim. Lett., 9(6): 1105-1119.   |
|                                      | • <b>G.Q. Wang</b> , Y.Q. Bai, X.Y. Gao, and D.Z. Wang, Improved complexity analysis of full Nesterov-Todd step interior-point methods for semidefinite optimization, J. Optim. Theory Appl., 2015, 165(1): 242-262, 2015. |
|                                      | • <b>G.Q. Wang</b> , C.J. Yu, and K.L. Teo, A full-Newton step feasible interior-point algorithm for P*(k)-linear complementarity problem, J. Global Optim., 2014, 59(1): 81-99, 2014.                                     |
|                                      | • <b>G.Q. Wang</b> , C.J. Yu and K.L. Teo, A full Nesterov-Todd step feasible interior-point method for convex quadratic optimization over symmetric cone, Appl. Math. Comput., 2013, 221(15): 329-343, 2013.              |
| Activity in professional             | • Reviewer of Mathematical Reviews (No. 81435) since February 2012   |
| associations within the last 5 years | • Director of the Mathematical Programming Branch of OR Society of China   |
|                                      | • Director of the Mathematical Programming Branch of OR Society of China   |
|                                      | Director of Commerce Statistical Society of China  |
|                                      | • Standing director of Shanghai Operational Research Society   |
|                                      |  |



| Name  | ZHENG Zhongtuan   |   |
|---|---|---|
| Post  | Associate Professor   |   |
| Academic career   | 1998-2002   | Nanjing Normal University, B.S.<br>Major in Mathematics and Applied Mathematics   |
|   | 2004-2006   | Shanghai University, M.S.<br>Major in Systems Analysis and Integration  |
|   | 2006-2009   | Shanghai University, Ph.D.<br>Major in Operations Research and Control Theory   |
| Employment  | 2002-2004   | Nanjing University of Information Science and Technolog<br>Teaching Assistant   |
|   | 2009-2014   | Shanghai University of Engineering Science,<br>Lecturer   |
|   | 2013-2014   | Nanyang Technological University,<br>Visiting Research Fellow   |
|   | 2014-   | Shanghai University of Engineering Science,<br>Associate Professor  |
| Research and<br>development<br>projects over the<br>last 5years | <ul> <li>Researce<br/>Shangh<br/>funded<br/>(No. 20)</li> <li>Researce<br/>Constru<br/>Shangh<br/>(18SJR)</li> <li>Researce<br/>Develop<br/>Growth<br/>Comminication</li> </ul> | ch on Comprehensive Measurement and Optimization of<br>ai Ecological Civilization Construction Based on Panel Data,<br>by National Statistical Science Research Project of China<br>18LY16). Period: 2018-2020.<br>ch on Comprehensive Measurement and Optimization of the<br>action Level of Songjiang Ecological Civilization, funded by<br>ai Songjiang Science and Technology Commission<br>KT16). Period: 2018-2018.<br>ch on Evaluation and Optimization of New Urbanization<br>pment Level of Songjiang District Based on "Smart<br>"n, funded by Shanghai Songjiang Science and Technology<br>ssion (No. 17SJRKT40), Period: 2077-2017. |
| Industry<br>collaborations<br>over the last 5<br>years          | <ul> <li>Kingsta<br/>Evaluat<br/>Techno</li> </ul>  | r Big Data Real-time Calculation Management and<br>ion Analysis, funded by Shanghai Kingstar Software<br>logy Co., Ltd. (No. (19)SL-001), Period: 2018-2019.  |



| Patents and<br>proprietary rights   | • | None   |
|---|---|--|
| Important<br>publications   | • | <b>Zhongtuan Zheng</b> , Gaoxi Xiao, Guoqiang Wang, Guanglin Zhang,<br>Kaizhong Jiang, Mean first passage time of preferential random<br>walks on complex networks with applications, Mathematical<br>Problems in Engineering, 2017, No. 8217361, 14 pages<br>Kaizhong Jiang, <b>Zhongtuan Zheng</b> , Lu Li, Topological structure<br>matching measure between two graphs, Computer-Aided Civil and<br>Infrastructure Engineering, 2017, 32 (6):515-524<br>Guoqiang Wang, Zhongchen Wu, <b>Zhongtuan Zheng</b> , Xinzhong<br>Cai, Complexity analysis of primal-dual interior-point methods for<br>semidefinite optimization based on a parametric kernel function<br>with a trigonometric barrier term, Numerical Algebra, Control and<br>Optimization, 2015, 5(2):101-113 |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • | Member of Chinese Association for Applied Statistics<br>Member of Operations Research Society of Shanghai  |



| Name  | WU Suichao  |  |
|---|---|--|
| Post  | Associate Professor   |  |
| Academic career   | 2000-2004 Normal College of Qingdao University, B.S.<br>Major in Applied Mathematics  |  |
|   | 2004-2008 Tongji University, Ph.D.<br>Major in Pure Mathematics   |  |
| Employment  | 2008-2012 Shanghai University of Engineering Science,<br>Assistant Professor  |  |
|   | 2012- Shanghai University of Engineering Science,<br>Associate Professor  |  |
| Research and<br>development<br>projects over the<br>last 5years | <ul> <li>Research on Driving Analysis of Global Climate Change by<br/>Planetary System Movement, funded by NSFC (No.41807437).<br/>Period: 2019-2021.</li> <li>MOOC of Multivariable Calculus, funded by Shanghai University</li> </ul> |  |
|   | of Engineering Sicence (No.m201821001). Period: 2018-2020.  |  |
| Industry<br>collaborations<br>over the last 5<br>years          | • None  |  |
| Patents and<br>proprietary rights                               | • None  |  |



| • <b>Suichao WU</b> , Jiachen YE. The First Cartan Invariant of SL(3,3~n) and SU(3,3~n)[J]. Chinese Annals of Mathematics, 2015.   |
|--|
| • Suichao WU, Jun Shen, Weiqin Yu. Linear algebra [M]. Tsinghua University Press, 2014   |
| • Suichao WU, Jiachen YE. The first Cartan invariant of SP (4,3 ^ n) [J]. Acta Mathematical Physics: Series A, 2011, 31 (2): 466-477   |
| • Suichao WU, Jiachen YE. Cartan invariant matrix of finite symplectic group sp (4,3) [J]. Acta Mathematica Sinica, 2010 (06): 93-100  |
| • Suichao WU, Zhihong Jiang. Generalized restricted simple modules with trigonometric factorization Lie algebras [J]. Mathematical Yearbook a, 2008                                |
| • Suichao WU, Zhihong Jiang , Yanmin Pu. Irreducible representations of Cartan type lie algebras [J]. Journal of Tongji University: Natural Science Edition, 2009, 37 (2): 281-284 |
| • Suichao WU, Jiachen YE. Weyl module decomposition model of symplectic group sp (4,3) [J]. China Science and technology information, 2008   |
| • Shi W, Kang L, <b>Wu S</b> . Bounds on Laplacian eigenvalues related to total and signed domination of graphs[J]. Czechoslovak Mathematical Journal, 2010, 60(2):315-325.        |
|  |
| • The first prize of 2015 National Mathematics micro course teaching design competition in East China  |
| • The 11th excellent young teacher at Shanghai University of<br>Engineering Science  |
|  |
|  |



| Name   | XU Hongxia   |  |  |
|--|--|--|--|
| Post   | Associate Professor  |  |  |
| Academic career  | 1988-1992 Jiangsu Normal University, B.S.<br>Major in Physics<br>1994-1997 Southeast University, M.S.<br>Major in Physics  |  |  |
| Employment   | <ul> <li>1992-1994 Jiangsu Normal University,<br/>Teaching Assistant</li> <li>1997-2000 Shenyang Aerospace University,<br/>Assistant Professor</li> <li>2000-2003 Shenyang Aerospace University,<br/>Associate Professor</li> <li>2004- Shanghai University of Engineering Science,<br/>Associate Professor</li> </ul>   |  |  |
| Research and<br>development<br>projects over the<br>last 5years        | <ul> <li>Study on the processing of laser holographic interference fringes based<br/>on computer image technology, funded by Shanghai University of<br/>Engineering Science. Period: 2001.01~2002.12</li> <li>Numerical simulation of stress-strain response and shear failure<br/>characteristics of materials under high strain rate loading, funded by<br/>Shanghai Municipal Education Commission, Period:<br/>2005.12~2007.12</li> </ul>  |  |  |
| Industry<br>collaborations over<br>the last 5 years                    | Coupling interface design of optical wave-microwave waveform conversion. Funded by Shanghai Advanced Research Institute, Chinese Academy of Sciences (No. SL-006). Period: 2020-2020   |  |  |
| Patents and proprietary rights   | • XU Hongxia, JI Tao, et al. A low radiation electromagnetic induction lamp. ZL 20112231963.4  |  |  |
| Important<br>publications  | <ul> <li>XU Hong-xia, YAN Hai-qing. A Study on Computer-aided Experiment of Holography [J]. Journal of Jiangsu Normal University(Natural Science Edition), 2002, 20(2):31-33.</li> <li>XU Hong-xia, ZHANG Xiu-li. Green Enviroment-friendly Materials for 21 Century—Magnesium Alloys[J]. Journal of Shanghai University of Engineering Science, 2007, 21(004):322-325.</li> <li>ZHANG Xu-li, XU Hong-xia, LI De-hui. Effect of Aging on Microstructure and Property[J]. Hot Working Technology, 2007, 36(024):14-16.</li> </ul> |  |  |
| Activity in<br>professional<br>associations within<br>the last 5 years | <ul> <li>2003 Teaching Achievement Award of Shenyang Institute of<br/>Aeronautical Engineer</li> <li>2006 excellent young teacher at Shanghai University of Engineering<br/>Science</li> </ul>   |  |  |



| Name  | CHEN Guar  | nglong  |
|---|--|---|
| Post  | Associate Professor  |   |
| Academic career   | 1994-1996  | Anhui Institute of Education, B.S.<br>Major in Physics  |
|   | 2002-2005  | East China Normal University, M.S.<br>Major in Optics   |
|   | 2005-2008  | Chinese Academy of Sciences, Ph.D.<br>Major in Optics   |
| Employment  | 2008-2009  | Pohang University of Science and Technology, Korea<br>Postdoctoral Fellowship   |
|   | 2009-2012  | Shanghai University of Engineering Science,<br>Assistant Professor  |
|   | 2012-  | Shanghai University of Engineering Science,<br>Associate Professor  |
| Researchanddevelopmentprojects over thelast 5years                        | • Study of pressure (No. 11                                    | on cluster size in supersonic gas jet under a high backing<br>e, funded by Natural Science Foundation of Shanghai, China<br>ZR1414500). Period: 2011-2014   |
| Industry<br>collaborations<br>over the last 5<br>years                    | Couplin<br>convers<br>Chinese                                  | ng interface design of optical wave-microwave waveform<br>ion. Funded by Shanghai Advanced Research Institute,<br>e Academy of Sciences (No. SL-006). Period: 2020-2020   |
| Patents and proprietary rights  | • None   |   |
| Important<br>publications   | Guangl<br>Yunjiu<br>of a<br>ADVA                               | long Chen, A. S. Boldarev, Xiaotao Geng, Xingjia Li,<br>Cao, Lili Wang, and Dong Eon Kim, The radial dimension<br>supersonic jet expansion from conical nozzle, AIP<br>NCES 2016, 6:115015                        |
|   | • Guang<br>He, and<br>dioxide<br>2018, 1                       | <b>long Chen</b> , A. S. Boldarev, Xingjia Li, Yunjiu Cao, Jianping<br>d Dong Eon Kim, Simulations of a polar molecule (sulfur<br>) in a supersonic jet, JOURNAL OF APPLIED PHYSICS,<br>24:035902                 |
|   | <ul> <li>Xiaotac<br/>Xinkui<br/>order h<br/>gas, OF</li> </ul> | o Geng, Shiyang Zhong, <b>Guanglong Chen</b> , Weijun Ling,<br>He, Zhiyi Wei, and Dong eon Kim. Enhancement of high-<br>armonics in a plasma waveguide formed in clustered Ar<br>TICS EXPRESS, 2018, 26:3068-3074 |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • Famous 2012  | Teacher of Shanghai University of Engineering Science,  |



| Name<br>Name  | Zhang Xiuli  |  |
|---|--|--|
| Post<br>Title   | Professor  |  |
| Academic career   | 1996-2000  | Northeastern University, B.S.<br>Major in Applied Physics.   |
|   | 2001-2003  | Northeastern University, M.S.<br>Major in Material physics and chemistry   |
|   | 2009-2012  | East China University of Science and Technology, Ph.D.<br>Major in Polymer chemistry and Physics   |
| Employment  | 2004-2011  | Shanghai University of Engineering Science,  |
|   | 2012-2019  | Assistant Professor<br>Shanghai University of Engineering Science,<br>Associate Professor  |
|   | 2020-  | Shanghai University of Engineering Science,<br>Professor   |
|   |  |  |
| Research and<br>development<br>projects over the<br>last 5years | <ul> <li>Researc<br/>switchir<br/>molecul<br/>2018</li> <li>Study of<br/>flexible<br/>Technol</li> <li>Researc<br/>related I<br/>Shangha<br/>15ZZ09</li> </ul> | h on the ferroelectric domain switching evolution and<br>ng dynamics for organic ferroelectric ultrathin films at<br>ar scale, funded by NSFC (No. 51503121). Period: 2016-<br>on failure mechanism and performance improvement of<br>ferroelectric thin films, funded by Shanghai Science and<br>logy Commission (No. 13ZR1418200). Period: 2013-2016<br>h on flexible ferroelectric field effect transistor and its<br>logic circuit based on total solution method, funded by<br>ai Municipal Education Commission (No.<br>3) Period: 2015-2017 |
| Industry<br>collaborations<br>over the last 5<br>years          | <ul> <li>Researc<br/>kresoxin<br/>Period:</li> </ul>   | h on the new process transformation and development of<br>m and other products (No. D-6000-11-0079-(11) HG-004.<br>2011.09-2014.09. Funding: RMB 1800,000  |
| Patents and<br>proprietary rights                               | • Zhang 2<br>electrod<br>201910  | <b>Xiuli</b> . An organic ferroelectric thin film capacitor with wire le structure and its preparation method, Patent Code: 680720.X   |
|   | • Zhang 2 ferroele   | <b>Xiuli</b> . A method to improve the performance of ctric thin film capacitor, Patent Code: 201910680727.1   |



| Important<br>Publicatios | • <b>Zhang Xiuli</b> *; Liu Changli; Li Long; Yuan Haidong; Xu<br>Haisheng; Switching dynamics enhancement in P(VDF-TrFE)<br>copolymer ultrathin films with symmetric organic film<br>electrodes, Organic Electronics, 2019, 66: 81-85.   |
|--------------------------|---|
|                          | • Li Long; <b>Zhang Xiuli</b> *; Chen Hongzhen; Sun Xiaohui; Yuan<br>Haidong; Xu Haisheng; Modeling of structure effect for<br>ferroelectric capacitor based on poly(vinylidene fluoride-<br>trifluoroethylene) ultrathin films, Polymers, 2017, 10(6):<br>polym10010006.                 |
|                          | • <b>Zhang Xiuli</b> *, Du Xiao Li, Ji Xin, Liu Changli, Xu Haisheng,<br>High temperature-dependent imprint and switching mechanism of<br>poly(vinylidenefluoride-trifluoroethlene) copolymer ultrathin films<br>with electroactive interlayers. Appl. Phys. Lett., 2015, 106:<br>022906. |
|                          | • <b>Zhang Xiuli,</b> Du Xiaoli, Hou Ying, Lü Zhaoyue, Xu Haisheng*,<br>Temperature dependence of imprint mechanism in poly(vinylidene<br>fluoride-trifluoroethylene) copolymer ultrathin films. Appl. Phys.<br>Lett., 2014,104:103505.   |
|                          | • Du Xiaoli, <b>Zhang Xiuli</b> , Liu Hongbo, Ji Xin. Study of ferroelectric switching and fatigue behaviors in poly(vinylidene fluoride-trifluoroethylene) copolymer nano-films. Acta Physica Sinica, 2015, 64(16):167701-1-9.   |
|                          | • Du Xiaoli; Zhao Manping; Chen Guanglong; <b>Zhang Xiuli</b> *;<br>Thickness dependence of ferroelectric properties for ferroelectric<br>random access memory based on poly(vinylidene fluoride-<br>trifluoroethylene) ultrathin films, Ferroelectrics, 2015, 488: 147-<br>153.          |
|                          | • Du Xiaoli; Zhao Manping; Chen Guanglong; Ji Xin; <b>Zhang</b><br><b>Xiuli</b> *;The effect of imprint and disturb on switching process<br>based on poly(vinylidenefluoride-trifluoroethylene) copolymer thin<br>films, Ferroelectrics, 2016, 491: 1-7.                                  |
|                          | • <b>Zhang Xiuli</b> , Hou Ying, Zhang Yanni, Xu Haisheng*, The effect of electroactive interlayer on the ferroelectric properties in poly(vinylidene fluoride-trifluoroethylene) copolymer ultrathin films. J. Appl. Phys., 2012,112:074111.   |
|                          | • <b>Zhang Xiuli</b> *, Xu Haisheng*, Zhang Yanni , Temperature dependence of coercive field and fatigue in poly(vinylidene fluoride-trifluoroethylene) copolymerultra-thin films. J. Phys. D: Appl. Phys., 2011, 44: 155501.   |
|                          | <ul> <li>Zhang Xiuli, Dong Wenbin, Xu Haisheng*, Structural and ferroelectric behaviours in blends of vinylidene fluoride oligomer and poly(vinylidene fluoride-trifluoroethylene) copolymer thin film. J. Phys. D: Appl. Phys., 2011, 44:435304. (SCI 二区)</li> </ul>                     |
|                          | • Hou Ying, <b>Zhang Xiuli</b> , Zhang Yuan, Xu Guoqiang, Xu Haisheng*, Modeling of ferroelectric switching process in poly(vinylidene fluoride-trifluoroethylene) copolymer ultrathin films with electroactive interlayers. J. Appl. Phys., 2012, 111:024504.                            |
|                          | • Hou Ying, <b>Zhang Xiuli</b> , Zhang Yuan, Xu Guoqiang, Xu<br>Haisheng*, High-temperature ferroelectric behaviors of<br>poly(vinylidene fluoride-trifluoroethlene) copolymer ultrathin<br>films with electroactive interlayers. J. Appl. Phys., 2012, 111:<br>064506.                   |



|   | • | Xu Haisheng*, Zhang Yanni, <b>Zhang Xiuli</b> , Ma Yipei, The role of proton for the effectof interlayer on ferroelectric behavior of poly (vinylidene fluoridetrifluoroethylene)copolymer ultrathin films. Ferroelectrics, 2011, 413: 46–53.   |
|---|---|---|
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • | <ul> <li>2013 "Famous Teacher" of Shanghai University of Engineering<br/>Science</li> <li>Excellent instructor of "National Physics Competition for College<br/>Students" of Shanghai University of Engineering Science in 2012</li> <li>Excellent instructor of "National Physics Competition for College<br/>Students" of Shanghai University of Engineering Science in 2010</li> </ul> |
|   |   |   |



| Name<br>Name  | QIN Liguo   |  |
|---|---|--|
| Post  | Associate Pr  | rofessor   |
| Title   | Associate II  | 0103501  |
| Academic career                                     | 2002-2006   | Liaocheng University, B.S.<br>Major in Physics   |
|   | 2006-2012   | University of Shanghai, Ph.D.<br>Major in Radio Physics  |
| Employment  | 2012-2016   | Chinese Academy of Sciences<br>Assistant research fellow   |
|   | 2016-2017   | Qingdao University of Technology<br>Assistant Professor  |
|   | 2018  | Qingdao University of Technology<br>Associate Professor  |
|   | 2018-   | Shanghai University of Engineering Science,<br>Associate Professor   |
|   |   |  |
| Research and<br>development<br>projects over the    | • Applica<br>informa<br>(PI)                        | tion of opto-electromechanical system in quantum tion, funded by NSFC (No. 11347147). Period: 2014-2014  |
| last 5years   | • The stu<br>level ba<br>funded                     | dies of the nonlinear optical properties at the few-photon<br>ased on the electrically controlled quantum interference,<br>by NSFC (No. 61605225). Period: 2016-2019 (PI)  |
|   | <ul> <li>An arbiinterfere</li> <li>Commi</li> </ul> | trary waveform electro-optic modulator based on quantum ence, funded by Shanghai Science and Technology ssion (No. 16ZR1448400). Period: 2016-2019. (PI)                   |
|   |   |  |
| Industry<br>collaborations over<br>the last 5 years | Couplin<br>convers<br>Chinese<br>(PI)               | ng interface design of optical wave-microwave waveform<br>ion. Funded by Shanghai Advanced Research Institute,<br>e Academy of Sciences ((No. SL-006).). Period: 2020-2020 |
|   |   |  |



| Patents and<br>proprietary rights   | <ul> <li>An opto-electric hybrid system of realizing quantum coherence ,<br/>Patent code: ZL201410836038.2, Applicant: Shanghai Institute of<br/>advanced research, Chinese Academy of Sciences</li> <li>An arbitrary waveform electro-optic modulator based on quantum<br/>interference. Patent code: ZL201510477100.8, Applicant: Shanghai<br/>Institute of advanced research, Chinese Academy of Sciences</li> <li>The overall control system of furniture and intelligent single<br/>products after hardware implantation based on Arduino open source<br/>platform using AI + IOT Technology , Patent code:<br/>2020SR0444281 Applicant: Shanghai Institute of advanced<br/>research, Chinese Academy of Sciences</li> </ul>  |
|---|--|
| Important<br>Publicatios  | <ul> <li>Li-Guo Qin*, Zhong-Yang Wang, Hong-Yang Ma, Chao-Min Zhang, Li Ren, Li-Li Wang, and Shang-Qing Gong, Optomechanical entanglement switch in the hybrid opto-electromechanical device, Journal of the Optical Society of America B, 36(6),1544-1550 (2019).</li> <li>Li-Guo Qin*, Zhong-Yang Wang, Shi-Chao Wu, Shang-Qing Gong, Hong-Yang Ma, and Jun Jing, Vacuum-induced quantum memory in an opto-electromechanical system, Optics Communications 410,102–107 (2018).</li> <li>Li-Guo Qin*, Zhong-Yang Wang*, Hong-Yang Ma, and Shang-Qing Gong, Electro-optic waveform interconnect based on quantum interference, Photonics Research, 5(5), 481-487 (2017)</li> <li>Li-Guo Qin*, Zhong-Yang Wang, Gong-Wei Lin, Jing-Yun Zhao,and Shang-Qing Gong*, Electro-mechanical System, IEEE Journal of Quantum Electronics 53(3) 9300106 (2016).</li> </ul> |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>Member of Shanghai Education Evaluation Association</li> <li>Member of Shandong Optical Engineering Society</li> <li>Reviewer for Journal of Physics A: Mathematical and Theoretical,<br/>Scientific Reports, Optics Express and International Journal of<br/>Theoretical Physics, etc.</li> </ul>  |



| Name  | Zhao Dejun  |   |
|---|---|---|
| Post  | Professor   |   |
| Academic career   | 1988-1990   | Zhejiang Institute of Education, B.A.E.<br>Major in Mathematics Education   |
|   | 2001-2004   | Zhejiang University, M.S.<br>Major in Mathematics   |
| Employment  | 1983-1988   | Huishan middle school, Xinchang, Zhejiang Province,<br>Middle school mathematics teacher  |
|   | 1990-1997   | Chengtan senior high school, Xinchang, Zhejiang<br>Province, Middle school mathematics teacher  |
|   | 1997-2001   | Shaoxing University,<br>Assistant Professor   |
|   | 2001-2007   | Shaoxing University,<br>Associate Professor   |
|   | 2007-2012   | Shanghai University of Engineering Science,<br>Associate Professor  |
|   | 2012-   | Shanghai University of Engineering Science,<br>Professor  |
|   |   |   |
| Research and<br>development<br>projects over the<br>last 5years | <ul> <li>Researce of Bana 2020.12</li> <li>Key control Commining Education</li> </ul> | ch on the best approximation problems based on the geometry<br>ch space, funded by NSFC (No.11671252). Period: 2017.01-<br>2.<br>course construction project of Shanghai Education<br>ssion: Linear algebra, funded by Shanghai Municipal<br>on Commission (s201521001). Period: 2015.08-2017.06. |
| Industry<br>collaborations<br>over the last 5<br>years          | • None  |   |



| Patents and proprietary rights  | • None   |
|---|--|
| Important<br>publications   | <ul> <li>Dejun Zhao, Some sharp estimates of the constants of Landau and Lebesgue, Journal of Mathematical Analysis and Applications, 2009(349):68-73.</li> <li>Dejun Zhao, S. P. Zhou, Turan type inequality for the derivative of real algebraic polynomials which have complex zeros, Scientific Research Publishing(SRP), Inc.,USA, 2012(5): 76-80.</li> <li>Dejun Zhao, Songping Zhou, Dansheng Yu and Jianli Wang, Weighted Turan type inequality for rational functions with prescribed poles, J. Math. Ineq. 8(2) (2014), 251–265.</li> <li>Meiling Wang, Dansheng Yu, Dejun Zhao, On weighted Lp–approximation by weighted Bernstein-Durrmeyer operators, Analysis in Theory and Applications, 34(1) (2018): 1-16.</li> </ul> |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>The second prize of Shanghai teaching achievement award (participation), 2014</li> <li>One first prize of teaching achievement of Shanghai University of engineering and Technology (participation), 2014</li> <li>The third prize of teaching achievement of Shanghai University of engineering and Technology (participation), 2017</li> </ul>  |



| Name   | LI Mingming  |
|--|--|
| Post   | Associate Professor  |
| Academic career  | <ul> <li>1996-2000 Shanghai University, B.S.<br/>Major in Mathematics</li> <li>2001-2005 ShangHai University, M.S.<br/>Major in Mathematics</li> </ul>   |
| Employment   | <ul> <li>2006-2010 Shanghai University of Engineering Science,<br/>Assistant Professor</li> <li>2010- Shanghai University of Engineering Science,<br/>Associate Professor</li> </ul>   |
| Researchanddevelopmentprojects over thelast 5years     | • Research on theory of isometries and their perturbations between Banach spaces, funded by NSFC (No.11771278). Period: 2018.01-2021.12  |
| Industry<br>collaborations<br>over the last 5<br>years | • Research on Evaluation of Colleges and Universities in the Service work level of Wisdom labour union, School trade union, 2020   |
| Patents and<br>proprietary rights                      | • None   |
| Important<br>publications                              | <ul> <li>G.Q. Wang*, M.M. Li, Y.J. Yue and X.Z. Cai, New complexity analysis of interior-point methods for the Cartesian P*(k)-SCLCP, J. Inequal. Appl., 2013(1),pp. 285 (23), 2013.</li> <li>G.Q. Wang*, M.M. Li, X.J. Fan and B.C. Wang, New complexity analysis of afull-Newton step feasible interior-point algorithm for P*(k)-LCP, Submitted to Optim.Lett., 2013.</li> <li>Guoqiang Wang, Xiaojing Fan and Mingming Li. Primal-dual interior-pointmethods for convex quadratic optimization over symmetric cone. NumericalAlgorithms, 2012.</li> <li>Mingming Li, Liansheng Zhang and Yumei Liang. A filledfunction method with one parameter for integer programming. Operations Research Transactions, 12(2): 73-83, 2008.</li> </ul> |



| • | <b>MingmingLi</b> , Youlin and Liansheng Zhang. A new filled function method for integerprogramming. Journal of Computational Mathematics, 24(1): 25-32, 2006.   |
|---|--|
| • | Yumei Liang , <b>Mingming Li</b> and Dongxuan Chi. A filled function methodwith one parameter for global optimization. Operations Research Transactions, 13(4): 101-108 , 2009.  |
| • | Yongjian Yang,Xuewu Du, <b>Mingming Li</b> .A integral filter algorithm for unconstrained global optimization. AppliedMathematics and Computation, 184(2): 173-180, 2007.  |
| • | Xuewu Du, Yongjian Yang and <b>Mingming Li</b> . Further studieson the<br>Hestenes-Powell augmented Lagrangian function for equality<br>constraintsin nonlinear programming problems. Operations<br>Research Transactions, 10(1): 38-46, 2006. |
| • | Advanced collective of school trade union  |
|   | •  |



| Name   | WU Yuandong  |
|--|--|
| Post   | Associate Professor  |
| Academic career  | 1998-2002 Technische Universität Dresden, B.S.<br>Major in Inorganic chemistry   |
|  | 2003-2008 Technische Universität Dresden, M.S.<br>Major in Inorganic chemistry   |
|  | 2009-2011 Technische Universität Dresden, Ph.D.<br>Major in Inorganic chemistry  |
| Employment   | 2003-2011 Technische Universität Dresden<br>Postdoctoral Fellow  |
|  | 2011-2012 University of Applied Sciences Kiel,<br>Postdoctoral fellow  |
|  | 2013- Shanghai University of Engineering Science,<br>Professor   |
| Researchanddevelopmentprojects over thelast 5years     | <ul> <li>Study on the location reaction of 1,3-disubstituted aromatic hydrocarbons, funded by Shanghai Municipal Education Commission, Period: 2012.01-2013.12</li> <li>Polishing fluid and polishing process demonstration line for LED sapphire substrate, funded by Shanghai Science and Technology Commission, Period: 2013.12-2014.09</li> <li>Design, synthesis, performance modification and anticancer activity of phosphorus containing dendrimer nanoplatforms, funded by NSFC, Period: 2016.02-2018.02</li> <li>Application of MR technology in metabolomics, funded by Shanghai Municipal Education Commission, Period: 2017.09-2018.07</li> </ul> |
| Industry<br>collaborations<br>over the last 5<br>years | • None   |


| Patents and<br>proprietary rights   | •   | None  |
|---|-----|---|
| Important<br>publications   | •   | <b>Y. D. Wu</b> , W. Bensch, Synthesis, crystal structures, and optical properties of NaCdPnS3(Pn = As, Sb) J. Alloys Compd., 511, 35-40, 2012  |
|   | •   | <b>Y. D. Wu</b> , W Bensch, K3BiAs6Se12: A two-dimensional bismuth selenoarsenate containing crown-shaped anions [As3Se6]3J. Alloys Compd., 509, 4452-4456, 2011  |
|   | •   | <b>Y. D. Wu</b> , W Bensch, Structural diversity of rare earth and transition metal thiophosphates.CrystEngComm, 12, 1003-1015, 2010  |
|   | •   | <b>Y. D. Wu</b> , W. Bensch, K2Ln2As2Se9 (Ln = Sm, Gd): the first quaternary rare-earth selenoarsenate compounds with a 3d framework containing chairlike As2Se4 units.Inorg. Chem. 48, 2729-2731, 2009 |
|   | •   | <b>Y. D. Wu</b> , W. Bensch, syntheses, structures, and spectroscopic properties of K9Nd[PS4]4, K3Nd[PS4]2, Cs3Nd[PS4]2, and K3Nd3[PS4]4.Inorg. Chem. 47, 7523-7534, 2008                               |
|   |     |   |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | n • | None  |



| Name  | CHEN Qiang                        |   |  |
|---|-----------------------------------|---|--|
| Post  | Professor                         |   |  |
| Academic career   | 1982-1986                         | University of Yangtzh, B.S.<br>Major in Geophysics  |  |
|   | 1994-1997                         | University of Yangtzh, M.S.<br>Major in Geophysics  |  |
|   | 1998-2002                         | Tongji University, Ph.D.<br>Major in Geophysics   |  |
| Employment  | 1986-1998                         | CNPC -China National Petroleum Corporation<br>Engineer  |  |
|   | 1998-2002                         | China Petrochemical Corporation (Sinopec Group)<br>Engineer   |  |
|   | 2002-2004                         | East China Normal University<br>Associate Professor   |  |
|   | 2004-                             | Shanghai University of Engineering Science<br>Professor   |  |
| Research and<br>development<br>projects over the<br>last 5years | • Multi s<br>detection<br>and Tec | source fusion UAV navigation key technology and bridge<br>on application demonstration, funded by Shanghai Science<br>chnology Commission(No.18-). Period: 2018-2021. |  |
| Industry<br>collaborations<br>over the last 5<br>years          | • Researce integrate 2017-20      | ch and development of urban underground pipe network<br>ted service system and its trajectory detection system Period:<br>022   |  |



| Patents and<br>proprietary rights   | <ul> <li>CHEN Qiang, patent for invention, Petroleum exploration drill bit system and method with rock sheet identification function, ZL2016110456043.</li> <li>CHEN Qiang, patent for invention, Remote alarm-based child safety seat detection, reminder and alarm system and method, ZL 2017 1 0170489. 0</li> <li>CHEN Qiang, patent for invention, A child safety seat detection, reminder and alarm system and method, ZL 2017 1 0170450. 9</li> </ul>  |
|---|---|
| Important<br>publications   | <ul> <li>YUAN Tong, CHEN Qiang, ZHOU Ling. Design and implementation of urban underground pipe network information system based on Baidu maps API[J]. Intelligent Computer and Applications, 2019, 9(1): 69-76.</li> <li>YANG Jiao, CHEN Qiang, ZHOU Ling, SUN Haijing. Improved TLD target tracking algorithm based on LBP [J]. Transducer and Microsystem Technologies, 2019, 38(11): 136-138+143.</li> <li>ZHOU Ling, CHEN Qiang. Research on Augmented Reality System of Urban Underground Pipe Network [J]. Computer Engineering and Applications, 2020, 56(01): 251-256.</li> </ul> |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>Member of new Engineering Education Professional Committee of<br/>National Computer Basic Education Research Association.</li> <li>Outstanding Instructor Award in the 14th Postgraduate Electronic<br/>Design Competition.</li> </ul>   |



| Name  | HU Haomin  |  |  |
|---|--|--|--|
| Post  | Associate Professor  |  |  |
| Academic career   | 1996.09-2000.06Zhejiang Normal University, Bachelor of<br>Education  |  |  |
|   | 2000.09-2003.06 Shanghai Normal University, Master's Degree in<br>Computer Applications  |  |  |
| Employment  | Since July, 2003 Computing Center of Shanghai University of<br>Engineering Science, Faculty Member   |  |  |
| Research and<br>development<br>projects over the<br>last 5 years          | • None   |  |  |
| Industry<br>collaborations<br>over the last 5<br>years                    | • Design of control software for tire carrier CNC shaping control system   |  |  |
| Patents and<br>proprietary rights   | <ul> <li>Software copyright:</li> <li>ICDataSpyer Industrial control data communication and monitoring system</li> <li>Intrain Intelligent training system for computer-based courses</li> <li>WebSign Information management system for training services</li> <li>CreditASS Enterprise credit risk assessment system</li> </ul>                                      |  |  |
| Important<br>publications   | <ul> <li>Fundamentals of Computer Application, Tsinghua University<br/>Press, 2013</li> <li>Visual Basic.NET Programming Tutorial, China Railway<br/>Publishing House, 2019</li> </ul>   |  |  |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>In 2018, tutored three students from Railway College, namely YAO Huitao, LI Hao, KOU Xinyu, for the 10th University Computer</li> <li>Application Competition in Shanghai and won the second prize; tutored the same students for the 2018 (11th) China University</li> <li>Student Computer Design Competition, and won the national first prize.</li> </ul> |  |  |



| Name   | SHANG Shanshan  |   |  |
|--|---|---|--|
| Post   | Associate Profe   | ssor  |  |
| Academic career  | 2014-2019   | Donghua University, Textile College, Ph.D. in Textile<br>Engineering  |  |
|  | 2019.01-07  | University of Manchester, UK, Study Programme   |  |
|  | 2010-2013   | Donghua University, Textile College, Master's Degree in Textile Engineering   |  |
|  | 2010-2013   | Inner Mongolia University of Technology, Bachelor's<br>Degree in Textile Engineering  |  |
| Employment   | 2013-2019   | Shanghai University of Engineering Science, Lecturer  |  |
|  | Since 2019  | Shanghai University of Engineering Science,<br>Associate Professor  |  |
| Research and<br>development<br>projects over the<br>last 5 years | <ul> <li>Dynamic t<br/>Young Tal<br/>leader)</li> <li>Coupled fil<br/>airflow, C<br/>51076026 (</li> <li>Research o<br/>spinning, D<br/>University,</li> <li>Research o<br/>based on t<br/>Project of C</li> <li>Research o<br/>swirl field,<br/>(Participan)</li> <li>Research o<br/>universities<br/>Information</li> <li>Shanghai n<br/>map resea<br/>Commission</li> <li>Robot deve<br/>Commission</li> </ul> | wisting mechanism of airflow under gas-solid coupling,<br>lent Projects of National Natural Science Fund (project<br>ber/airflow dynamics model based on high-speed spinning<br>General Projects of National Natural Science Fund,<br>(Participant)<br>on the coupled motion of airflow and fiber in jet vortex<br>Octoral Dissertation Innovation Grant Project of Donghua<br>16D310104 (Project leader)<br>on key technology of high-speed vortex spinning machine<br>he coupling between fiber and airflow, Basic Research<br>China National Textile and Apparel Council (Participant)<br>on the nonlinear dynamics of fiber bundles in tangential jet<br>Young Talent Projects of National Natural Science Fund<br>t)<br>on reading promotion strategies in libraries of colleges and<br>a based on effective reading, Public libraries and<br>on Research Project of Yangtze River Delta (Participant)<br>marine engineering industry innovation and competence<br>arch, Shanghai Municipal Science and Technology<br>on (Participant) |  |



| <b>T I</b> (               |   |
|----------------------------|---|
| Industry<br>collaborations | • Simulation and research on battery pack heat dissipation (Project leader) 2020.06-2020.12   |
| years                      | • Research on academic service team building in libraries of colleges and universities (Project leader) 2020.06-2020.10   |
|                            |   |
|                            |   |
| Patents and                | SHANC Shanshan, VII Changwan, DEI Zaguang, I I Mailing, HIII  |
| proprietary rights         | <ul> <li>Huayi. A jet vortex spinning nozzle device with a three-section internal structure [P]. Patent No.: ZL 2012104350 89.5, Grant date: 20150812.</li> </ul>   |
|                            | • MENG Chaoran, YU Chongwen, <b>SHANG Shanshan</b> , CUI Qilu, ZHANG Bin. A hydroxylated bacterial cellulose aqueous/aerogel-assisted oxidative degumming of ramie [P]. Application No.: CN201710157038.3. Substantive review.      |
|                            |   |
|                            |   |
| Important<br>publications  | • Shang Shanshan, Yang Jianping, Yu Chongwen. Numerical Simulation of Airflow Field in Vortex Spinning Processing [J]. Textile Research Journal, 2019, 89 (6): 1113-1127.   |
|                            | • Shang Shanshan, Yang Jianping, Yu Chongwen. Numerical Simulation of Swirling Airflow Dynamics in Vortex Spinning [J]. Textile Research Journal, 2018, 88 (7): 833-843.  |
|                            | • Shang Shanshan, Hu Biyu, Yu Chongwen, Pei Zeguang. Effect of Wrapped Fiber on Tenacity of Viscose Vortex Yarn [J]. Indian Journal of Fiber & Textile Research, 2016, 41 (3): 278-283.   |
|                            | • Shang Shanshan, Sun Na, Yu Chongwen, Chang Tao, Li Meiling.<br>Optimization of Nozzle Structure Parameters of Vortex Spinning [J].<br>Textile Research Journal, 2015, 85(9): 998-1006.  |
|                            | • Li Meiling, Yu Chongwen, <b>Shang Shanshan</b> . Effect of Vortex Tube Structure on Yarn Quality in Vortex Spinning Machine [J]. Fibers and Polymers, 2014, 15 (8), 1786-1791.  |
|                            | • Li Meiling, Yu Chongwen, <b>Shang Shanshan</b> . A Numerical and Experimental Study on the Effect of the Orifice Angle of Vortex Tube in Vortex Spinning Machine [J]. Journal of the Textile Institute, 2013, 104 (12):1303-1311. |
|                            |   |
|                            |   |
|                            |   |
| Activity in                | • 2017 Calligraphy  |
| professional               | Boardwriting  |
| associations               | • Penmanship  |
| years                      | <ul> <li>Chinese Painting Competition of University Teachers in Shanghai,<br/>second prize, organizer: Shanghai Committee of the China<br/>Education Union</li> </ul>   |



| Name  | SUN Yixia   |   |
|---|---|---|
| Post  | Associate Pro   | ofessor   |
| Academic career   | 2002-2006   | Shandong University, B.S.<br>Major in Engineering Mechanics   |
|   | 2006-2009   | Shandong University, M.S.<br>Major in Solid Mechanics   |
|   | 2009-2015   | Tongji University, Ph.D.<br>Major in Mechanics  |
| Employment  | 2015-2018   | Shanghai University of Engineering Science,<br>Assistant Professor  |
|   | 2018-   | Shanghai University of Engineering Science,<br>Associate Professor  |
| Research and<br>development<br>projects over the<br>last 5years | <ul> <li>Control<br/>of a Tin<br/>Period: 2</li> <li>Design :<br/>Shangha<br/>Period: 2</li> <li>Real-Tin<br/>Model a<br/>NSFC (I<br/>(Particip)</li> </ul> | Parameter Optimization and Experimental Implementation<br>me-delayed Absorber, funded by NSFC (No.11602135).<br>2016-2019. Funding: RMB 250,000 (Lead)<br>and Optimization of a Time-delayed Absorber, funded by<br>i Municipal Education Commission (ZZGCD15083).<br>2016-2017. Funding: RMB 50,000 (Lead)<br>me Parameters Identification of Rate-dependent Hysteresis<br>and Adaptive Vibration Control for Smart Structure, by<br>No.11702186). Period: 2017-2020. Funding: RMB 240,000<br>pate in) |
| Industry<br>collaborations<br>over the last 5<br>years          | <ul> <li>Vibratio<br/>Shinyou<br/>(Particip</li> </ul>  | n analysis of SCARA Mechanical Arm. Partner: Dongguan<br>Intelligent Technology Co., Ltd. Period: 2017- 2018<br>pate in)  |
| Patents and<br>proprietary rights                               | • None  |   |



| Important<br>publications   | <ul> <li>Yixia Sun, Jian Xu. Experiments and analysis for a controlled mechanical absorber considering delay effect. Journal of Sound and Vibration, 2015, 339:25-37</li> <li>Jian Xu, Yixia Sun. Experimental studies on active control of a dynamic system via a time-delayed absorber. Acta Mechanica Sinica, 2015, 31(2):229-247</li> <li>Yixia Sun. Design and Experimental Studies of an Active Vibration Absorber with Adjustable Time Delay. Proceeding of the 2017 International Conference on Advanced Mechatronic Systems, Xiamen, China, December 6-9, 2017</li> <li>Jianjun Liu, Yixia Sun, Sheng Li. Time delay feedback control and parameter optimization of automotive suspension system. Journal of Mechanical &amp; Electrical Engineering, 2020, 37(1): 54-58</li> </ul> |
|---|--|
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • Member of the Chinese Society of Theoretical and Applied Mechanics   |



| Name   | LI Peichao  |
|--|---|
| Post   | Associate Professor   |
| Academic career  | 1994-1998 University of Science and Technology of China,<br>Bachelor of Science in Theoretical and Applied<br>Mechanics   |
|  | 1998-2003University of Science and Technology of China,<br>M.Sc. and Ph.D. in Fluid Mechanics   |
| Employment   | 2004.02-2006.02 China University of Petroleum (Beijing) and Changqing<br>Petroleum Exploration Bureau, Postdoctoral<br>Researcher   |
|  | 2006.03-2009.03 Shanghai Institute of Applied Mathematics and Mechanics, Assistant Researcher, Master Supervisor  |
|  | Since April, 2009 Shanghai University of Engineering Science, School of<br>Basic Teaching, School of Mechanical Engineering,<br>and School of Mechanical and Automotive<br>Engineering, Associate Professor, Master's<br>Supervisor   |
|  | 2013.07-2014.07 School of Engineering and Applied Science,<br>Princeton University, U.S.A., Senior Research<br>Scholar  |
|  | 2016.09-2017.09 School of Mechanical and Power Engineering,<br>Shanghai Jiao Tong University, Visiting Scholar  |
| Research and<br>development<br>projects over the<br>last 5 years | <ul> <li>Science and Technology Commission of Shanghai Municipality,<br/>Shanghai Natural Science Fund Project, 19ZR1421400, Study of<br/>LTNE-based Heat-Flow-Solid Complete Coupling Mechanism for<br/>Saturated Porous Media, 2019-07 to 2022-06, RMB 200,000,<br/>Research-in-progress, project leader</li> </ul> |
| Industry<br>collaborations<br>over the last 5<br>years           | • CAS Strategic Science and Technology Project for Testing, Shale Rock Mechanics Parameter Testing and Analysis, 2018.5-2018.8.   |
| Patents and<br>proprietary rights                                | • SONG Zhenyun, <b>LI Pechao</b> *, WU Zengzhi. A method for achieving repeated fracturing to create new fractures, China, Patent No.: ZL200510096443.6, Grant date: 2010.11.24.  |
|  | • <b>LI Peichao</b> *, LI Xiangui, FAN Zhiyi. A simple and efficient marine oil spill collector and recovery method, China, Patent No.: ZL201710291888.2, Date of application: 2017.04.28, Grant date: 2019.03.15, Grant No.: CN106988288B.   |
|  | • SHEN Airu, <b>LI Peichao</b> *. Load limiting device for transport vehicles at road traffic toll stations, Utility model patent, Patent No.: ZL201920557435.4: ZL201920557435.4, Application date: 2019.04.23, Date of grant: 2020.02.18, Grant No.: CN210086115U.  |



| Important<br>publications | • Fu Fangda, Li Peichao*, Wang Keyong, Wu Rui. Numerica simulation of sessile droplet spreading and penetration on porous substrates[J]. Langmuir, 2019, 35(8): 2917–2924.   |
|---------------------------|--|
|                           | • Shen Airu, <b>Li Peichao</b> *, Wang Keyong, Qian Guian*, Berto Filippo<br>A simplified method for parameters calibration of the new loca<br>approach model for cleavage fracture in a ferritic steel[J]<br>Theoretical and Applied Fracture Mechanics, 2019, 100: 426–433.  |
|                           | • Li Peichao, Zhong Jialun, Wang Keyong, Zhao Changying*. Analy, is of thermally developing forced convection heat transfer in a porou medium under local thermal non-equilibrium condition: A circula tube with asymmetric entrance temperature[J]. International Journa of Heat and Mass Transfer, 2018, 127: 880–889. |
|                           | • Xu Chunyuan, <b>Li Peichao</b> *, Lu Zhiwei, Liu Jianwu, Lu Detang Discrete fracture modeling of shale gas flow considering rocl deformation[J]. Journal of Natural Gas Science and Engineering 2018, 52: 507–514.   |
|                           | • Li Peichao*, Wang Keyong, Fang Guankao, Lu Detang. Steady- state<br>analytical solutions of flow and deformation coupling due to a poin<br>sink within a finite fluid-saturated poroelastic layer[J]. Internationa<br>Journal for Numerical and Analytical Methods in Geomechanics<br>2017, 41(8): 1093–1107.          |
|                           |  |
| Activity in               | • 2016 Outstanding Young Scholar Award of Shanghai Society of  |
| associations              | Theoretical and Applied Mechanics  |
| within the last 5         | • Chief Editor of Concise Engineering Mechanics, 2015 Shanghai   |
| years                     | Excellent University Textbook Award  |
|                           | • Member of the Chinese Society of Mechanics   |
|                           | • Member of the Chinese Society of Engineering Thermophysics   |
|                           | • Member of the Committee of Rock and Soil Mechanics, Shanghai   |
|                           | Society of Theoretical and Applied Mechanics   |
|                           | • Member of the Youth Work Committee of the Shanghai Society of  |
|                           | Theoretical and Applied Mechanics  |
|                           | • Academic Ambassador of Bentham Science Publishers  |
|                           |  |



| Name  | CAO Lijie  |  |
|---|--|--|
| Post  | Associate Pr                                       | ofessor  |
| Academic career                               | 1988-1992  | Jiamusi Institute of Technology, Bachelor of Engineering in Welding Technology and Equipment   |
|   | 1999-2001  | Harbin Institute of Technology, Master of Science in<br>Materials Processing and Engineering   |
| Employment                                    | 1992-1996  | Jiamusi Explosion-Proof Electric Engine Co. Ltd  |
|   | 1772 1770  | Assistant Engineer, Engineer   |
|   | 1996-2003  | Jiamusi University (School of Engineering), Lecturer   |
|   | 2003-  | Shanghai University of Engineering Science, Lecturer,<br>Associate Professor   |
|   |  |  |
|   |  |  |
| Research and development                      | • None   |  |
| projects over the                             |  |  |
| last 5years                                   |  |  |
|   |  |  |
| Industry<br>collaborations<br>over the last 5 | <ul> <li>Design<br/>pharmae<br/>Technol</li> </ul> | and optimization of photoelectric control system for<br>ceutical machines, Shanghai Jiyouyi Precision Machinery<br>logy Co., Ltd, 2016-2018. |
| years   | • Design<br>Optical                                | of optical platform welding structure, Changchun Fifth Machinery Factory, 2011-2012  |
|   |  |  |
| Patents and proprietary rights                | • A restra<br>reductio                             | int device for precise control of punching depth and<br>on of punching offset, Patent code: CN 208162678 U                                   |
|   | An optimistructure                                 | mized intelligent vibration damping system for suspension<br>es, Patent code: ZL2017 2 351888.9  |
|   |  |  |
|   |  |  |
|   |  |  |



| Important<br>publications   | <ul> <li>Kai Yin, Lijie Cao, Nannan Wang. Mechanical properties and residual stresses of 5083 to AM60B dissimilar friction stir welding with different process parameters, Journal of Adhesion Science and Technology, 2019, 33: 2615-2629.</li> <li>Guangning Hou, Lijie Cao. Improving mechanical strength of La2O3 and ZrO2 co-doped silicate glasses for touch screen, Functional Materials Letters, 2018, 11: 1850026.</li> <li>Li-jie CAO, Yu-juan WU, Li-ming PENG, Qu-dong WANG, Wenjiang DING. Microstructure and tribological behavior of Mg–Gd–Zn–Zr alloy with LPSO structure, Trans. Nonferrous Met. Soc. China 2014 (24) :3785–3791.</li> <li>Li-Jie Cao, Qu-Dong Wang, Yu-Juan Wu, Bing Ye. Friction and wear behavior of Mg–11Y–5Gd–2Zn–0.5Zr (wt%) alloy with oil lubricant. Rare Met. (2013) 32(5):453–458.</li> </ul> |
|---|--|
| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>2015 Shanghai Excellent Textbook Award</li> <li>2018 Outstanding Instructor for Shanghai Mechanics Competition</li> <li>2017 Second prize of teaching achievement of fundamental engineering mechanics education, Shanghai University of Engineering Science</li> <li>Board member of Shanghai Society of Theoretical and Applied Mechanics, member of the Education Committee</li> </ul>   |



| Name  | SONG Fang   |  |
|---|---|--|
| Post  | Associate Professor   |  |
| Academic career   | 1998-2002   | Harbin University of Science and Technology,<br>Bachelor's degree of Mechanical Manufacture and<br>Automation  |
|   | 2002-2005   | Harbin University of Science and Technology,<br>Master's degree of Mechanical Design and Theory  |
|   | 2005-2010   | Harbin Institute of Technology,<br>Doctor's degree of Mechanical Design and Theory   |
| Employment  | 2010-2015   | Shanghai University of Engineering Science,<br>Lecturer  |
|   | 2016-   | Shanghai University of Engineering Science,<br>Associate Professor   |
|   |   |  |
| Research and<br>development<br>projects over the<br>last 5years | <ul> <li>Microstr<br/>of high-<br/>control<br/>2018.</li> </ul> | ructure-array-based high-efficient transmission mechanism friction & low-adhesion for the wafer transfer and active method, funded by NSFC (No. 51505273). Period: 2016- |
| Industry<br>collaborations<br>over the last 5<br>years          | • None  |  |
| Patents and proprietary rights                                  | • Song Fa making  | ng.Gas Flow Sensor of Pressure Difference and its method. Patent code: ZL 201711462917.3   |
|   | • Song Fa   | <b>ing</b> . A 3-DOF silicon based nano-positioning platform and cation method Patent code: ZL201410276938.6   |
|   | • Chen Xu<br>reducer  | uesen, <b>Song Fang</b> . An adjustable and self stable velocity for pipeline. Patent code: ZL201510259662.5   |
|   | • Chen Xu<br>Patent cu  | uesen, <b>Song Fang</b> . A self-adjusting velocity retarder .<br>ode: ZL 2014101333030.0  |
|   |   |  |



| Important<br>publications   | <ul> <li>Fang SONG, Jiang CHENG.A New Mechanism for High<br/>Acceleration Wafer Transfer Based on Position and Orientation<br/>Adjustment, International Journal of Simulation Systems, Scie<br/>&amp; Technology, 2016.12, 45(17): 28.1~28.5</li> <li>Jia Chou Wang, Fang SONG. On-Chip Integration of Press<br/>Plus 2-Axis (X/Z) Acceleration Composite TPMS Sensors wit<br/>Single-Sided Bulk-Micromachining Technique. Micromachin<br/>2019.10,473:1-11</li> <li>Yu Zhong XIONG, Fang SONG. A piezoelectric cantilever-be<br/>energy harvester (PCEH) with a rectangular hole in the metal substr<br/>Mocrosystem Technologies. 2020,26:801-810</li> <li>Da Chao Wang, Fang SONG. Consensus control of nonlin<br/>multiagent systems with incremental quadratic constraints and the<br/>delays. Mathematical Problems in Engineering. 2020,1-11</li> </ul> |  |  |
|---|---|--|--|
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • The first prize of The third teaching competition of young teachers in Shanghai University of Engineering Science   |  |  |



| Name   | Cai Yingling   |  |
|--|--|--|
| Post   | Professor  |  |
| Academic career  | 1981-1985  | Dong Hua University, B.E.<br>Major in Textile Engineering.   |
|  | 2000-2003  | Dong Hua University, M.E.<br>Major in Environmental Engineering  |
|  | 2009-2015  | University of Shanghai for Science and Technology, Ph.D.<br>Major in Refrigeration and Cryogenic Engineering   |
| Employment   | 1985-1992  | Henan Institute of Engineering,<br>Assistant   |
|  | 1993-1998  | Henan Institute of Engineering,<br>Lecturer, Head of the teaching and research section   |
|  | 1999-2004  | Henan Institute of Engineering,<br>Associate Professor, Vice Dean  |
|  | 2004-2016  | Shanghai University of Engineering Science,<br>Associate Professor, Department Head  |
|  | 2017-2019  | Shanghai University of Engineering Science,<br>Professor, Vice Dean  |
|  | 2020-  | Shanghai University of Engineering Science,<br>Professor   |
| Researchanddevelopmentprojects over thelast 5years     | Techno<br>conditio<br>Qingpu<br>2020-20  | logy development of automatic control system for air<br>oning with metal radiation ceiling, funded by Shanghai<br>District Science and Technology Commission, Period:<br>021.                      |
| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>Standardization debugging and testing of ventilation and air conditioning system in Suzhou Modern Media Plaza, No. (17)JX-011: E4-6000-17-0122, funded by Shanghai Jianshe Construction Engineering Quality Inspection Co. LTD. Period: 2017-2018.</li> <li>Comparison test of dehumidification capacity and energy saving performance adding a dehumidification heat pipe for the combined air conditioning unit, No. (19)JQ-004: E4-6000-19-0006, funded by Shanghai Jianshe Construction Engineering Quality Inspection Co. LTD. Period: 2018-2019.</li> </ul> |  |
|  |  |  |
|  | <ul> <li>2019 Pt<br/>0190,fu<br/>Techno</li> </ul>   | ablic Buildings Energy Audit, No. (19)JQ-044:E4-6000-19-<br>nded by Shanghai Oriental Yanhua Energy Saving<br>logy Service Co. LTD. Period: 2019-2020.   |
|  | • Techno<br>conditio<br>6000-19<br>Co.,LT  | logy development of automatic control system for air<br>oning with metal radiation ceiling, No. (19)JQ-045: E4-<br>9-0210,funded by Shanghai Hefu New Material Technology<br>D. Period: 2019-2021. |
|  |  |  |



| Patents and proprietary rights              | Drawer type phase change heat storage tank, Patent code: ZL 2018 2 1338752.9  |                     |
|---|---|---------------------|
|   |   |                     |
| Important<br>publications                   | • <b>Cai Yingling</b> ,Xu Hui,Chen Shuai,Testing and analysis of tinfluence factors for the ground thermal parameters[J]. Applithermal engineering,2016,107(2):662-671.   | the<br>ied          |
|   | <ul> <li>Cai Yingling, Zhang Hua, Xu Hui, est and analysis of influence<br/>factors based on TRNSYS geotechnical thermal response test<br/>Heating Ventilating and Air Conditioning, 2016, 046 (009):135-14</li> </ul>                        | ing<br>[J].<br>40.  |
|   | Xu Hui, Cai Yingling(Corresponding author), Study on s<br>Temperature Variation characteristics of solar-ground source he<br>pump combined Heating in Shanghai area[J]. Journal of So<br>Energy,2016, 37(9):2314-2319.                        | oil<br>eat<br>lar   |
|   | <ul> <li>Liu Kai, Cai Yingling(Corresponding author), Experimental stu<br/>of a new phase change heat storage tank applied to a solar ener<br/>combination system[J]. Energy Storage Science a<br/>Technology,2019,8(6):1230-1234.</li> </ul> | ıdy<br>rgy<br>ınd   |
|   | <ul> <li>Li Hao, Cai Yingling(Corresponding author), Experimental sture<br/>of closed cooling Tower-soil source heat pump Air-condition<br/>system in summer[J]. Fluid Machinery, 2019,47(8): 81-88.</li> </ul>                               | ıdy<br>ing          |
|   | <ul> <li>Jing Bolong, Cai Yingling(Corresponding author), Simulation a<br/>verification of PV/T heat transfer unit structure[J]. Energy- Savi<br/>Technology, 2019,37(01):32-36.</li> </ul>   | ınd<br>ing          |
|   | <ul> <li>Cui Yun Xiang, Cai Yingling(Corresponding author), Experiental Study on Joint Operation Characteristics of Solar-Ground H<br/>Pump System in Shanghai[J]. Fluid Machinery, 2019,47(2): 65-6</li> </ul>                               | m-<br>eat<br>59.    |
|   | <ul> <li>Liu Kai, Cai Yingling(Corresponding author), Study on a<br/>experimental characteristics of gas-assisted solar ener<br/>combination system in winter operation[J]. Flu<br/>Machinery,2020(2):</li> </ul>                             | the<br>rgy<br>uid   |
|   | <ul> <li>JingBolong, Cai Yingling(Corresponding author<br/>Springexperimental study on Inflation Micro-flow-path So<br/>Photovoltaic/thermal(PV/T)Collector System[J]. Building Scient<br/>2020,36(04):123-128.</li> </ul>                    | or),<br>olar<br>ce, |
| Activity in<br>professional<br>associations | <ul> <li>Member of the Teaching Committee of Energy and Pow<br/>Engineering, China Electric Power Education Association. Perio<br/>2019-2023.</li> </ul>  | ver<br>od:          |
| within the last 5                           | <ul> <li>Evaluation expert of National Energy Conservation Center</li> </ul>  |                     |
| years                                       | <ul> <li>Member of Shanghai Science and Technology Special Commit<br/>of Jiusan Society. Period: 2017-2022.</li> </ul>  | tee                 |
|   | • Shanghai Government Procurement Evaluation Expert   |                     |
|   | <ul> <li>Shanghai Energy Conservation and Environmental Protecti<br/>Industry Expert</li> </ul>   | ion                 |
|   | • Member of China Refrigeration Society   |                     |



| Name  | ZHANG Liqiang  |  |
|---|--|--|
| Post  | Professor  |  |
| Academic career   | 1997-2001  | Shandong University, Bachelor of Engineering<br>Mechatronic Engineering  |
|   | 2001-2004  | Qingdao Technological University, Master of Engineering<br>Mechanical design and theory  |
|   | 2004-2008  | Shanghai Jiaotong University, Doctor of Engineering<br>Mechanical Manufacturing and Automation   |
| Employment  | 2009-2013  | Shanghai University of Engineering Science,<br>Lecturer  |
|   | 2013-2018  | Shanghai University of Engineering Science,<br>Associate Professor   |
|   | 2019-  | Shanghai University of Engineering Science,<br>Professor   |
|   | 2017-2018  | Missouri University of Science and Technology<br>A visiting scholar  |
|   |  |  |
| Research and<br>development<br>projects over the<br>last 5years | • The the walled adaptati (No.517                              | ory and method of efficient mirror image processing of thin-<br>parts based on surface shape reconstruction and stiffness<br>on, National Natural Science Foundation of China<br>775328), implementation period: 2018.01-2021.12 |
|   | • The the of thin-<br>Natural period:                          | ory and method of tool path planning for efficient machining<br>walled parts based on constraint fusion mechanism, National<br>Science Foundation of China (No.51305254), implementation<br>2014.01-2016.12                      |
|   | <ul> <li>Researc<br/>Machin<br/>Scientif<br/>Commis</li> </ul> | h on the Theory and Application of 5-axis High-efficiency<br>ing Tool Path Planning Based on Conformal Mapping,<br>ic Research Innovation Project of Shanghai Education<br>ssion (No.13YZ108), Execution Period: 2013.01-2015.12 |
| Inductor  |  |  |
| collaborations<br>over the last 5                               | <ul> <li>Stability<br/>stiffness<br/>Topu Cl</li> </ul>        | y analysis of high-speed milling of thin-walled parts with low<br>s and optimization of process parameters, partner: Shanghai<br>NC Technology Co., Ltd., 2013   |
| years   | • Target r<br>Shipbui  | ecognition model based on radar echo, partner: China<br>lding Industry Corporation, 2018.09-2020.08  |
|   |  |  |



| Patents and<br>proprietary rights | • Liqiang Zhang, Geometry and mechanics integrated optimization information processing method for complex curved surface without interference toolpath. Chinese invention patent, authorization number: ZL2010105901773.                        |  |  |
|-----------------------------------|---|--|--|
|                                   | • Liqiang Zhang, five-axis CNC machining toolpath optimization simulation software Vsimul V1.0, software copyright, registra number: 2011SR038352.  |  |  |
|                                   | • Shoujun Zhang (Graduate), <b>Liqiang Zhang</b> , Jun Zhang. Five-axis equidistant double NURBS toolpath interpolation algorithm based on parameter synchronization. Chinese invention patent, authorization number: ZL2014102289389.          |  |  |
|                                   | • Liqiang Zhang, Tian Gao, Jian Mao. Continuous small line segment high-speed smooth interpolation software v1.0 based on RTX platform, software copyright, registration number: 2017SR069215.  |  |  |
|                                   | • Jinghao Guo (Graduate), <b>Liqiang Zhang</b> . Attitude angle monitoring software V1.0 based on motion carrier, software copyright, registration number: 2018SR682361.  |  |  |
|                                   |   |  |  |
| Important<br>publications         | <ul> <li>L Q Zhang, J F Du. Acceleration smoothing algorithm based on<br/>jounce limited for corner motion in high-speed machining.<br/>International Journal of Advanced Manufacturing Technology,<br/>2018, 95(1-4): 1487-1504.</li> </ul>    |  |  |
|                                   | • J F Du, L Q Zhang. Acceleration smoothing algorithm for global motion in high-speed machining. Journal of Engineering Manufacture, 2019, 233(8):1844-1858.  |  |  |
|                                   | <ul> <li>Liqiang Zhang, Kai Zhang. Local Corner Smoothing Transition<br/>Algorithm Based on Double Cubic NURBS for Five-axis Linear<br/>Tool Path. Strojniski vestnik - Journal of Mechanical Engineering,<br/>2016, 62(11):647-656.</li> </ul> |  |  |
|                                   | • Liqiang Zhang. Process modeling and toolpath optimization for five-axis ball-end milling based on tool motion analysis. International Journal of Advanced Manufacturing Technology, 2011, 57(9-12): 905-916.                                  |  |  |
|                                   | • Kai Zhang, <b>Liqiang Zhang</b> . Single spherical angle linear interpolation for the control of non-linearity errors in five-axis flank milling. International Journal of Advanced Manufacturing Technology, 2016, 87(9): 3289-3299.         |  |  |
|                                   |   |  |  |



| Activity in<br>professional<br>associations<br>within the last 5 | <ul> <li>2017 - One second prize of the Science and Technology Award of the China Business Federation, ranking second;</li> <li>2017 - One third prize of China Machinery Industry Science and Technology Award, ranking third;</li> </ul> |
|--|--|
| years  | • 2018 、 2014 - Second Prize of Shanghai Teaching Achievement Award;   |
|  | • 2018 - "Youth May 4th Medal" by Shanghai University of Engineering Science;  |
|  | • 2015 - 2014-2015 Excellent Head Teacher of Shanghai University of Engineering Science;   |
|  | • 2012 - The 11th Outstanding Young Teacher of Shanghai University of Engineering Science.   |
|  | • Served as a reviewer for "International Journal of Advanced<br>Manufacturing Technology"   |
|  | • Evaluation Expert of the Second Division of Engineering Science,<br>Ministry of Engineering and Materials Science, National Natural<br>Science Foundation of China   |
|  | Member of China Machinery Industry Metal Cutting Tool<br>Technology Association  |
|  |  |





| Name   | MAO Jian  |  |
|--|---|--|
| Post   | Professor   |  |
| Academic career                                    | 1992-1996   | Xi'an University of Technology, Bachelor<br>Mechanical Manufacturing and Automation  |
|  | 1999-2002   | Xi'an University of Technology, Master<br>Mechanical Manufacturing and Automation  |
|  | 2002-2007   | Mechanical Engineering, Zhejiang University, PhD<br>Mechanical Manufacturing and Automation  |
| Employment   | 2007-2009   | Chinese University of Hong Kong<br>Postdoc   |
|  | 2009-2010   | Shanghai University of Engineering Science,<br>Lecturer  |
|  | 2011-2017   | Shanghai University of Engineering Science,<br>Associate Professor   |
|  | 2018-   | Shanghai University of Engineering Science,<br>Professor   |
| Researchanddevelopmentprojects over thelast 5years | <ul> <li>Researce<br/>product<br/>Founda<br/>2012.1-</li> </ul>   | ch on tolerance modeling and design methods of complex<br>is for assembly planning, National Natural Science<br>tion of China (No. 51175322), implementation period:<br>2015.12        |
| Industry<br>collaborations<br>over the last 5      | <ul> <li>Target recognition model based on radar echo, execution period: 2018.08-2019.12</li> <li>Development of the intelligent logistics system for finished</li> </ul>   |  |
| ycal s   | <ul> <li>Dynam milling 2016.07</li> </ul>   | 5-2018.10<br>ic simulation and optimization system for high-speed<br>of low-rigidity thin-walled parts, execution period:<br>7-2018.06   |
| Patents and<br>proprietary rights                  | • Lubin Hang, <b>Jian Mao</b> , Wushan Cheng, Peiwen Liu, Chiyu Gong,<br>Bingfang Wei, Lijun Cai. Photovoltaic panel group cleaning device<br>based on monorail walking part, China, invention patent<br>number:ZL201210457688.7, publication number: CN102974557B. |  |
|  | • Yingge adjustal number  | Yan, <b>Jian Mao</b> , Yang Xu, Ning Wang, Dejia Chen. An ble axial fast locking device, China, invention patent ::ZL201420272654.5,publication number: CN203843733U.                  |
|  | Ning W<br>type of<br>invention<br>CN2050  | Vang, <b>Jian Mao</b> , Yang Xu, Yingge Yan, Dejia Chen. A new f marking tool for automatic riveting machine, China, on patent number: ZL 201520419147.4, publication number: 085961U. |
|  |   |  |



| Important<br>publications   | • | <ul> <li>Fang Wu, Jian Mao, Yu-feng Zhou, Li Qing Three-line structured light measurement system and its application in ball diameter measurement, Optik 157 (2018) 222–229.</li> <li>Jian Mao, Yingge Yan. A noninvasive online system for biomass monitoring in shaker flasks using backward scattered light. Biotechnology and Bioprocess Engineering, 2017, 22 (2) :161-1699.</li> <li>Mao Jian, Chen Dejia, Zhang Liqiang. Mechanical Assembly Quality Prediction Method Based on State Space Model. International Journal of Advanced Manufacturing Technology. (2016) 86:107–116).</li> <li>Jian Mao, Xianshuai Chen, Wei Feng, Songmei Yuan, Ruxu Du. A precision CNC turn-mill machining center with gear hobbing capability, Precision Engineering, 2015 (41) 126–134.</li> </ul> |
|---|---|---|
|   | • | Man Zhao, <b>Jian Mao</b> . The Study of Assembly Tolerance Relational Diagram Based on the Assembly Hierarchical Model. Procedia CIRP, 2016, 56:220-224.   |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • | Low-rigidity and complex thin-walled parts precision machining<br>and testing technology and equipment China Federation of<br>Commerce Science and Technology Award Second Prize (first)<br>Multi-axis linkage CNC equipment contour error detection and<br>compensation technology and its application China Machinery<br>Industry Science and Technology Award Third Prize (first)<br>Member of the National Standardization Technical Committee for<br>Product Dimensions and Geometric Technical Specifications<br>(SAC/TC240)<br>Director of the National Institute of Interchangeability and<br>Measurement Technology in Universities  |



| Name   | SU Shengchao   |   |
|--|--|---|
| Post   | Associate Pr   | ofessor   |
| Academic career  | 2000-2004  | Jiangnan University,<br>Bachelor's Degree in Electrical Engineering and<br>Automation   |
|  | 2004-2007  | Jiangnan University,<br>Master's Degree in Detection Technology and Automation<br>Device  |
|  | 2011-2017  | Donghua University,<br>Doctor's Degree in Control Theory and Control<br>Engineering   |
| Employment   | 2007-2009  | Shanghai University of Engineering Science,<br>Assistant  |
|  | 2009-2014  | Shanghai University of Engineering Science,<br>Lecturer   |
|  | Since 2014   | Shanghai University of Engineering Science,<br>Associate Professor  |
|  |  |   |
| Research and<br>development<br>projects over the       | • Dyeing<br>Science<br>2017-20                                     | robot management software system, funded by Shanghai<br>and Technology Commission (17511110204). Period:<br>019. Funding: RMB 100,000   |
| last 5years  | • The Re<br>Observa<br>6160324                                     | search of System Identification Based on the Quantized<br>ations in a Networked Environment, funded by NSFC (No.<br>41). Period: 2017-2019. Funding: RMB 190,000                          |
|  |  |   |
| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>System<br/>national<br/>Partner:<br/>Funding</li> </ul>   | integration and testing for assembly line, Subproject of<br>science and technology support plan (2015BAF10B01).<br>Shanghai Electric Group Co., Ltd. Period: 2015-2017.<br>g: RMB 160,000 |
| Patents and  | • FPGA-t   | based serial interface and PWM combined application IP  |
| proprietary rights                                     | <ul> <li>core. Pa</li> <li>A track<br/>of NF<br/>ZL2018</li> </ul> | atent code: ZL201210529630.9<br>detection and positioning system based on the combination<br>C technology and machine vision. Patent code:<br>222051863.8                                 |



| Important<br>publications                  | • Su Sheng Chao, Zhao Shu Guang, Wireless sensor routing algorithm based on energy balance, Computer Science, 2018, 45(10): 111-114   |
|--|---|
|  | • Su Sheng Chao, Zhao Shu Guang, An optimal clustering mechanism based on Fuzzy-C means for wireless sensor networks, Sustainable Computing: Informatics and Systems, 2018, 18: 127-134   |
|  | • <b>Su Sheng Chao</b> , Zhao Shu Guang, A Novel Virtual Force-based Data Aggregation mechanism with mobile Sink in Wireless Sensor Networks, Cluster Computing, 2019, 22: 13219-13234  |
|  | • Su Sheng Chao, Zhao Shu Guang, A hierarchical hybrid of genetic algorithm and particle swarm optimization for distributed clustering in large-scale wireless sensor networks, Journal of Ambient Intelligence and Humanized Computing, Published Online: 2017, 11: 1-11 |
| Activity in professional                   | • 2016 Outstanding Young Teacher in Shanghai Universities of<br>Engineering Science   |
| associations<br>within the last 5<br>years | • 2016 Outstanding instructor of Shanghai industrial automation challenge round awarded by Shanghai Municipal Education Commission  |
|  | • 2017 Second prize of teaching achievement of Shanghai University of Engineering and Science   |
|  | • 2019 Third prize of young teachers' teaching competition of   |
|  | Shanghai University of Engineering and Science  |
|  |   |



| Name   | ZHANG Wei   |   |
|--|---|---|
| Post   | Professor   |   |
| Academic career  | 1995-1999   | University of Electronic Science and Technology of China,<br>B.S.<br>Major in Applied Chemistry   |
|  | 2000-2003   | University of Electronic Science and Technology of China,<br>M.S.<br>Major in Computational Mathematics   |
|  | 2003-2007   | Shanghai Jiao Tong University, Ph.D.<br>Major in Control Theory and Control Engineering   |
| Employment   | 1999-2001   | Sichuan Changhong Group<br>Senior Engineer  |
|  | 2010-2014   | Shanghai University of Engineering Science Lecturer,  |
|  | 2014-2019   | Shanghai University of Engineering Science<br>Associate Professor   |
|  | 2019-   | Shanghai University of Engineering Science<br>Professor   |
| Researchanddevelopmentprojects over the                | <ul> <li>Research on Unknow Input Observer Design for On<br/>Lipschitz Nonlinear Systems, funded by Shanghai Mu<br/>Natural Science (No.12ZR1412200). Period: 2012-2015. (</li> </ul> |   |
| last 5years  | <ul> <li>Flockin<br/>Systems<br/>PI)</li> </ul>   | g Control of Networked Heterogeneous Multi-Agent<br>s, funded by NSFC (No.61473129). Period: 2015-2018. (Co-                                    |
| Industry<br>collaborations<br>over the last 5<br>years | <ul> <li>Simulat</li> <li>Welding</li> <li>Meike N</li> </ul>   | ion Analysis and Algorithm Design for Gas Metal Arc<br>g Control Systems, Period: 2019-2020, Fund by Shanghai<br>New Energy Technology Co., Ltd |
| Patents and proprietary rights                         | • Li Jian,<br>brake bl  | <b>Zhang Wei</b> , Wu Rui, Wu Zhiyang, Xie Hongyang.An ABS<br>lock with elastomer. Patent code: ZL201410102743.X                                |
|  | • Guo Hu<br>Ningnir<br>code: Z  | n, wang ransong, Au Chi, <b>Zhang wei</b> , Wang Xiaolan, Liu<br>ng. A wide screen sound energy recovery device. Patent<br>L201610052090.8      |



| Important<br>publications                  | • | Younan Zhao, <b>Wei Zhang</b> <sup>*</sup> , Housheng Su, Junqi Yang, Observer-<br>based synchronization of chaotic systems satisfying incremental<br>quadratic constraints and its application in secure communication,<br>IEEE Transactions on Systems, Man, and Cybernetics: Systems, in<br>press. doi: 10.1109/TSMC.2018.2868482 |
|--|---|--|
|  | • | Wei Zhang, Housheng Su, Fanglai Zhu, Shankar P. Bhattacharyya,<br>Improved exponential observer design for one- sided Lipschitz<br>nonlinear systems, International Journal of Robust and Nonlinear<br>Control, vol.26, pp.3958-3973, 2016   |
|  | • | <b>Wei Zhang</b> , Housheng Su, Fanglai Zhu, Ghassan M. Azar, Unknown input observer design for one-sided Lipschitz nonlinear systems, Nonlinear Dynamics, vol.79, pp.1469-1479, 2015  |
|  | • | Wei Zhang, Housheng Su, Fanglai Zhu, Dong Yue, A note on observers for discrete-time Lipschitz nonlinear systems, IEEE Transactions on Circuits and Systems-II: Express Briefs, vol. 59, no. 2, pp. 123-127, 2012.   |
|  | • | Wei Zhang, Housheng Su, Hongwei Wang, Zhengzhi Han, Full-<br>order and reduced-order observers for one-sided Lipschitz nonlinear<br>systems using Riccati equations, Communications in Nonlinear<br>Science and Numerical Simulation, vol.17, no.12, pp. 4968- 4977,<br>2012.  |
| Activity in professional                   | • | <b>Wei Zhang</b> . Second prize of science and technology of Henan<br>Province, 2019   |
| associations<br>within the last 5<br>years | • | <b>Wei Zhang</b> . Second prize of Wu Wenjun artificial intelligence<br>Natural Science, 2019  |
|  | • | Wei Zhang. Member of Shanghai Automation Society   |
|  | • | Wei Zhang. Mathematical Review in American Mathematical Society  |
|  |   |  |



| Name   | ZHANG Xu  |  |  |
|--|---|--|--|
| Post   | Professor   |  |  |
| Academic career  | 1997.9-2001.7   | Liaoning University of Technology, Bachelor's Degree in Mechatronics   |  |
|  | 2001.9-2004.2   | Liaoning University of Technology, Master's<br>Degree in Vehicle Engineering (Rail Transit<br>Vehicle)   |  |
|  | 2004.2-2008.9   | Zhejiang University, Ph.D. in Mechanical Engineering   |  |
| Employment   | 2008.10-2010.6  | Ningbo Institute of Technology, Zhejiang University  |  |
|  | Since July, 2010  | Shanghai University of Engineering Science   |  |
| Research and<br>development<br>projects over the<br>last 5 years | • None  |  |  |
| Industry<br>collaborations<br>over the last 5<br>years           | <ul> <li>Digitalization<br/>Shanghai Tob</li> </ul>   | of ZB45-type medium tobacco packing machine.<br>acco Machinery Co., Ltd. 2019.9-2020.8   |  |
| Patents and<br>proprietary rights                                | • A cross-section reconstruction  | onal curve reconstruction method for 3d model<br>n. Patent code: ZL 2015 1 0341939.9   |  |
| Important<br>publications  | • Lushan Cher<br>classification<br>Communicati  | ng, <b>Xu Zhang</b> , Jie Shen. Road surface condition<br>using deep learning[J]. Journal of Visual<br>on and Image Representation, 2019, 64, 1-7                |  |
|  | • Xin Liu, <b>Xu Zhang</b> , Dazhong Wang. Numerical analysis of different cutting edge radii in hot micro-cutting of Inconel 718[J]. Proceedings of the Institution of Mechanical Engineers Part C-Journal of Mechanical Engineering Science, 2019, 1-15 |  |  |
|  | • Xu Zhang, Haibo Zhang, Liqiang Zhang, Jie Shen. High-Precision<br>Extraction of Segment Points of 2D Profiles Based on a Dynamic<br>Grid Method[J]. Mathematical Problems in Engineering, 2019,<br>2019: 1-12   |  |  |
|  | • Zhang Xu; V<br>residual stress<br>Journal of Au<br>791-797.   | Wu HB. Effect of tool angle on cutting force and<br>s in the oblique cutting of TC21 alloy[J]. International<br>dvanced Manufacturing Technology, 2018, 98(1-4): |  |
|  | • Zhang Xu;<br>polishing pro<br>Journal of Au<br>1155-1162.   | Wu HB. Influence of path on the ultra-precision acess of titanium alloy Ti6A14V [J]. International dvanced Manufacturing Technology, 2018, 98(5-8):              |  |



| Activity in<br>professional<br>associations<br>within the last 5<br>years | • | None |
|---|---|------|
|   |   |      |



| Name   | WANG Ping   |   |  |  |
|--|---|---|--|--|
| Post   | Associate Pr  | rofessor  |  |  |
| Academic career  | 1980-1984   | Northwest Normal University, B.A.<br>Major in English Language and Literature   |  |  |
|  | 1999-2004   | Northwest Normal University, M.A.<br>Major in English Language and Literature   |  |  |
|  | 2008-2011   | Shanghai International Studied University, Ph.D.<br>Major in English Language and Literature  |  |  |
| Employment   | 1984-1990   | Gansu Agricultural University<br>Lecturer   |  |  |
|  | 1990-2004   | Gansu Agricultural University<br>Associate Professor  |  |  |
|  | 2004-2011   | Huzhou Teachers University<br>Lecturer  |  |  |
|  | 2011-2016   | Shanghai University of Engineering Science<br>Lecturer  |  |  |
|  | 2016-   | Shanghai University of Engineering Science<br>Associate Professor   |  |  |
|  |   |   |  |  |
| Research and<br>development<br>projects over the       | • A Study<br>the Ba<br>Departr  | y on English Teaching Reform of Non-English Majors Under<br>ackground of New Engineering, funded by Graduate<br>nent of SUES (No.2019XJG007). Period: 2019.           |  |  |
| last 5 years   | <ul> <li>Integrat<br/>Functio<br/>funded</li> </ul>   | te Chinese and Western Culture to Give Full play to the<br>n of College English for College Students' Moral Education,<br>by SUES (No.k201718001). Period: 2017-2018. |  |  |
|  |   |   |  |  |
| Industry<br>collaborations<br>over the last 5<br>years | • Development of Chinese College English Teachers' Educational<br>Technology Ability. Partner: Shanghai Foreign Language Education<br>Press. Period: 2019-2020. |   |  |  |
|  |   |   |  |  |
| Patents and proprietary rights                         | • None  |   |  |  |
|  |   |   |  |  |
|  |   |   |  |  |



| Important<br>publications         | • Yiling Zhang, <b>Ping Wang</b> (Coach), The Relationship Between the Degree of Urban Development and Human Happiness, (SSPHE 2018), CPCI, 201901                       |
|-----------------------------------|--|
|                                   | • <b>Ping Wang</b> , Cultural Characteristics of Idiomatic Expressions and their Approaches of Translation, Journal of Literature and Art Studies, 2018, 8 (2): 295-300  |
|                                   | • <b>Ping Wang</b> , Analysis of the Characteristics of Lanzhou Dialect and Research of its Cultural Connotation Under the Background of the Belt and Road. CPCI, 201709 |
|                                   | • <b>Ping Wang</b> , The Superficial and Innate Characteristics of Anomalous Collocations on Idiomatic Expressions, Foreign Language and Literature, 2014, 160 (4):72-75 |
|                                   | • <b>Ping Wang</b> , A Study on English and Chinese Phrase Structure,<br>National Defense Industry Press, 2013   |
|                                   | • <b>Ping Wang</b> , Discussing the Cohesive Function of Idiomatic Expressions, Hubei Social Sciences, 2013, 317(5)  |
|                                   | • <b>Ping Wang</b> , Holistic Cognition and Meanings of Restricted Combinations, Academics, 2012, 173 (10): 267-272  |
|                                   | • <b>Ping Wang</b> , The Motivation and Convention of Idiomatic Expressions, Foreign Language and Literature, 2012, 150 (6):84-89  |
|                                   |  |
|                                   |  |
| Activity in<br>professional       | • <b>Ping Wang</b> , 2016 Third Coach Award in the Shanghai Provincial Final of 2016 "FLTRP Cup" English Reading Contest   |
| associations<br>within the last 5 | • <b>Ping Wang</b> , 2018 Woman Achievement Model of Shanghai Universities of Engineering Science  |
| years                             | • Ping Wang, Member of the Global Rhetoric Society   |
|                                   | • <b>Ping Wang</b> , Council Member of Shanghai International Studies Association  |
|                                   |  |



| Name   | GU Qingson   | g   |
|--|--|---|
| Post   | Associate Pr   | ofessor   |
| Academic career  | 1985-1989<br>2004-2006   | China Ocean University, B.A.<br>Major in English<br>Shanghai Maritime University, M.A.<br>Major in English  |
| Employment<br>Research and<br>development<br>projects over the<br>last 5 years | <ul> <li>1989-1993</li> <li>1993-2000</li> <li>2000-2006</li> <li>2007-</li> <li>Presider of Engi<br/>Writing 2014-20</li> <li>Preside Shangh</li> <li>Major I system students National</li> </ul> | Shandong University of Science and Technology<br>Lecturer<br>Nantong Far-east Trading Co.,<br>Imp. & Exp. Manager<br>Nantong University,<br>Lecturer<br>Shanghai University of Engineering Science,<br>Associate Professor<br>d over the Teaching Reform Project of Shanghai University<br>neering Science: "General Academic English Reading and<br>course" Teaching Material Construction Project. Period:<br>016.<br>over the support program for young teachers training of<br>ai Higher Education Commission.<br>Participants in "A study on the standards and evaluation<br>of foreign language ability of primary and secondary school<br>s in China", Major Projects for the 12th Five Year Plan of the<br>al Language Commission, 2013-2018. |
| Industry<br>collaborations<br>over the last 5<br>years                         | • Study of funded (2019)   | on the Model of TEFL Supported by VR/AR Techniques,<br>by Shanghai Foreign Language Education Publishing House<br>SH0024A). Period: 2019-2020.  |
| Patents and proprietary rights   | • None   |   |



| Important<br>publications   | • | <b>Gu, Q.</b> (2020). "A New Study on Parenthesis in the English<br>Language from the Perspective of Modification". In WOP in<br>Education, Social Sciences and Psychology. London: Francis<br>Academic Press. pp. 365-369. (CPCI)  |
|---|---|---|
|   | • | <b>Gu, Q</b> . (2019). A Study on Modifiers in the English Language.<br>Journal of Language Teaching and Research 10(6), 1312-1317.   |
|   | • | <b>Gu, Q</b> . & Schwartz, M. W. (2018). An Automatic Quantification of the Randomness of Answering Correctly in Taking Traditional Multiple-choice Tests. Theory and Practice in Language Studies 8(9), 1152-1159.   |
|   | • | <b>Gu, Q</b> . (2018). The Listen-to-write Approach Proposed for EFL Teachers of College English in China: Definition and Its Essentials. Journal of Language Teaching and Research 9(2), 398-407.  |
|   | • | Gu, Q. & Liu, J. (2015). "Listen-to-Write: A computer-assisted<br>approach to improving college English writing in mainland China".<br>In Hsiang-Chuan Liu; Wen-Pei Sung; Wenli-Yao.<br>Management, Information and Educational Engineering. London:<br>Taylor & Francis Group. pp. 601–603. (EI) |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • | None  |
|   |   |   |



| Name   | HU Ping                    |  |
|--|----------------------------|--|
| Post   | Professor                  |  |
| Academic career  | 1985-1989                  | Hubei Normal University,<br>Bachelor's degree of English Language and Literature<br>East China Normal University,  |
|  | 2000-2003                  | Master's degree of World Literature and Comparative<br>Literature<br>East China Normal University,                 |
|  | 2011-2014                  | Phd of World Literature and Comparative Literature   |
| Employment   | 1989-1997                  | Jingzhou Teacher's College, Hubei<br>Lecturer  |
|  | 2000-2015                  | Shanghai Qibao High School<br>Lecturer   |
|  | 2015-                      | Shanghai University of Engineering Science,<br>Professor   |
| Researchanddevelopmentprojects over thelast 5years     | • Ezra Pound<br>17BWW00    | d's Poetic Creations and Myth, funded by NSFC (No.<br>65). Period: 2017-20205. Funding: RMB 200,000                |
| Industry<br>collaborations<br>over the last 5<br>years | • None                     |  |
| Patentsandproprietary rights                           | • None                     |  |
| Important<br>publications                              | • Hu Ping. A Shanghai U    | A Research on Ezra Pound's the Pisan Cantos. Shanghai:<br>Jniversity Press, 2017.                                  |
|  | • Hu Ping. I<br>Comparativ | Poetic Confucianism in Pound's the Pisan Cantos.<br>ve Literature in China. (CSSCI). 2013(4).p123-132.             |
|  | • Hu Ping. Cantos. Co      | On the Totalitarian Confucianism in Ezra Pound's The Pisan ontemporary Foreign Literature(CSSCI). 2016(3). p59-65. |
|  | • Hu Ping. I in China. (   | Kuanon in Ezra Pound's Creations. Comparative Literature CSSCI). 2019(1).p148-158.                                 |
|  | • Hu Ping. 7 of Hennan     | The Images of Dionysus in Ezra Pound's Creations. Journal University (CSSCI). 2019(4). p96-102.                    |
|  |                            |  |



| Activity in       | • | None |
|-------------------|---|------|
| professional      |   |      |
| associations      |   |      |
| within the last 5 |   |      |
| years             |   |      |



| Name   | WU Yuanqiong  |  |  |  |
|--|---|--|--|--|
| Post   | Associate Professor   |  |  |  |
| Academic career  | 1994-1998 Xuzhou Normal University, B.A.E.<br>Major in English Education  |  |  |  |
|  | 2000-2003 East China Normal University, M.A.<br>Major in English language and literature  |  |  |  |
| Employment   | 1998-2003 Xuzhou Normal University,<br>Lecturer   |  |  |  |
|  | 2003- Shanghai University of Engineering Science,<br>Associate Professor  |  |  |  |
| Researchanddevelopmentprojects over thelast 5years     | • The Mutual Construction of Discourse and Power: A Study on the External Communication Mechanism of American English (1945-2000), Shanghai Philosophy and Social Science Planning General Project (No. 2018BYY004). Period: 2019-2021. |  |  |  |
| Industry<br>collaborations<br>over the last 5<br>years | • Concentration optimization of TM doped laser crystal. Partner:<br>Shanghai Haolan photoelectric Co., Ltd. Period: 2019-2020   |  |  |  |
| Patents and<br>proprietary rights                      | • None  |  |  |  |
| Important<br>publications                              | • WU, Y.Q. (2018). "On the fluid texts of Hong Lou Meng and the influence on related publications" [J]. Translation Forum, 2018(3): 77-81.  |  |  |  |
|  | • WU, Y.Q. (2018). "Hongloumeng, Honglou Meng, Hong Loumeng, or Hong Lou Meng" [J]. Theory and Practice in Language Studies, 8(7):742-748.  |  |  |  |
|  | • WU, Y.Q. & N. FERNANDEZ DIAZ. (2017). "Translating the fluid texts of Hong Lou Meng". Asia Pacific Translation and Intercultural Studies, 4(3):236-252.   |  |  |  |
|  | • WU, Y.Q. (2016). "A comparative study of metaphor in Chinese and English". Bilingual Education Studies. 3(2): 57-62.  |  |  |  |
|  | • WU, Q.Y.& <b>Y.Q. WU.</b> (2015). "Chinese-specific features should be retained in translating Chinese personal names". Publishing Research. 2015(4): 68-71.  |  |  |  |
|  | • WU, Y.Q. (2013). "On the English translation of personal names in Hong Lou Meng". Journal of Jixi University. 13 (4): 69-71.  |  |  |  |
|  | • WU, Y.Q. (2013). "Latest progress in research about metaphor and mind". Journal of Mudanjiang College of Education. 2013(2): 29-30.   |  |  |  |
|  | • WU, Y.Q. (2012). "On the English version of Chinese personal names". Perspectives: studies in translatology. 20(2): 139-149.  |  |  |  |



|   | • | <b>WU, Y.Q.</b> (2009). "On the relationship between metaphor and cultural models". Metaphorik.de. 2009 (17): 115-134.              |
|---|---|---|
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • | 2010.3-2010.10 Staff of EU Pavilion at Shanghai World Expo<br>2009.3-2009.8 Volunteer guide at Zhongshan Park, Vancouver,<br>Canada |



| Name  | CHEN Huin  | nin  |  |
|---|--|--|--|
| Post  | Senior Expe  | rimentalist  |  |
| Academic career   | 1984-1988  | Donghua University, B.S.<br>Major in Physics   |  |
|   | 1988-1991  | Donghua University, M.S.<br>Major in Theoretical Physic  |  |
| Employment  | 1991-2000  | Nantong University,<br>Lecturer  |  |
|   | 2000-2008  | Shanghai University of Engineering Science,<br>Lecturer  |  |
|   | 2008-  | Shanghai University of Engineering Science,<br>Senior Experimentalist  |  |
| Research and<br>development<br>projects over the<br>last 5years | <ul> <li>"University Physics Experiment Basic Course" textbook construction, Shanghai University of Engineering Science Textbook Construction Project (No.J200721001), implementation period: 2007-2009</li> <li>The construction and practice of innovative research-oriented physics experiment teaching platform, Shanghai University of Engineering Science Laboratory Construction Project (No.p202021001), implementation period: 2020-2021</li> </ul> |  |  |
| Industry<br>collaborations<br>over the last 5<br>years          | • Concen<br>Shangh   | atration optimization of TM doped laser crystal. Partner:<br>ai Haolan photoelectric Co., Ltd. Period: 2019-2020 |  |
| Patents and proprietary rights                                  | CHEN     function  | Huimin, Manufacturing method and product of additive nal viscose fiber, publication number: CN1740412            |  |


| Important<br>publications   | • | <b>CHEN Huimin,</b> ZHANG Chaomin. Measuring of the Time Constant of the RC Series Circuit with the Capacitor Voltage Extremes[J]. Digital Technology & Application, 2018, 36(09): 229-230.                           |
|---|---|---|
|   | • | <b>CHEN Hui-min.</b> Measurement Error and Elimination of Sensitive Galvanometer Internal Resistance[J]. Journal of Shanghai University of Engineering Science, 2010, 24(04): 331-334.                                |
|   | • | <b>CHEN Huimin,</b> LIU Lie. Influence of Alternating Current<br>Frequency to Experimental Result of Static Field Description[J].<br>Journal of Shanghai University of Engineering Science, 2009,<br>23(03): 254-257. |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • | The construction of innovative and practical teaching mode based<br>on "One Main Line, Multiple Combinations" of "Physics<br>Experiment Course"-Third Prize of 2014 School Teaching<br>Achievement Award              |



## Appendix A – Staff Resume

| Name  | GU Bei  |  |  |  |  |
|---|---|--|--|--|--|
| Post  | Senior Laboratory Technician  |  |  |  |  |
| Academic career   | 1996-2000 Tianjin Vocational and Technical Teachers' College,<br>Bachelor's Degree                                |  |  |  |  |
| Employment  | Since 2020 Engineering Training Center of Shanghai University of<br>Engineering Science                           |  |  |  |  |
| Research and<br>development<br>projects over the<br>last 5 years          | • None  |  |  |  |  |
| Industry<br>collaborations<br>over the last 5<br>years                    | • None  |  |  |  |  |
| Patents and<br>proprietary rights   | • None  |  |  |  |  |
| Important<br>publications   | • Training Tutorial for Typical Cases of Measurement Technology,<br>Hefei University of Technology Press, 2016-07 |  |  |  |  |
| Activity in<br>professional<br>associations<br>within the last 5<br>years | • None  |  |  |  |  |



| Name   | PU Yonghong   |
|--|---|
| Post   | Senior Laboratory Technician  |
| Academic career  | 2004-2007 Shandong University<br>Master's Degree in Electrical Engineering and<br>Automation  |
|  | 1995-1999 Xi'an Shiyou University<br>Bachelor's Degree in Electrical Engineering and<br>Automation  |
| Employment   | 1999-2004 Ji'nan Diesel Engine Co., Ltd.  |
|  | Since 2007 Shanghai University of Engineering Science<br>Engineering Training Center  |
| Research and<br>development<br>projects over the<br>last 5 years | • Development of talent teams for laboratories in Shanghai 2015-2017  |
| Industry<br>collaborations<br>over the last 5<br>years           | <ul> <li>Design of multifunctional digital chip detector, self-developed experimental equipment</li> <li>Development of AC programmable power supply for experiments, self-developed experimental equipment</li> </ul>  |
| Patents and<br>proprietary rights                                | • None  |
| Important<br>publications  | <ul> <li>Experimental Practice Teaching of PLC-based Industrial<br/>Automation Production Line, 2019.12, Industry and Technology<br/>Forum</li> <li>Design of Labview-based Virtual Experiment Platform, 2017.9,<br/>Journal of Shanghai University of Engineering Science</li> <li>Common Failure Analysis and Discussion in Electrotechnical<br/>Experiments, Research and Exploration in Laboratory, 2015.9</li> <li>Design of Microcontroller-based control system for energy-saving<br/>lamps. Industry and Tachnology Forum 2015.3</li> </ul> |
|  | ramps, muusu y anu reennology roruni, 2013.5  |



| Activity in<br>professional<br>associations<br>within the last 5<br>years | <ul> <li>In 2016, tutored students for the "Shanghai Creativity Cup competition, second prize at the provincial and municipal level</li> <li>In 2016, tutored for the Shanghai Mechanical Engineering Innovation Competition, second prize at the provincial and municipal level</li> </ul> |
|---|---|
|   | <ul> <li>In 2017, tutored students for the 6th Shanghai Mechanica<br/>Engineering Innovation Competition, second prize at the provincia<br/>and municipal level</li> </ul>  |
|   | • In 2019, tutored students for the 14th National University Students<br>"NXP" Cup Smart Vehicle Competition, second prize in the four-<br>wheel category for East China Region   |