# **Curriculum Vitae - Xue Wei**



## **EDUCATION**

- 1. 2004-2009, Doctor, Mechanical Manufacturing and Automation, Jiangsu University, China.
- 2. 1982-1985, Master, Mechanical Manufacturing and Automation, Jiangsu University, China.
- 3. 1978-1982, Bachelor, Mechanical Manufacturing Process Equipment and Automation, Jiangsu University, China.

# **PROFESSIONAL EXPERIENCE**

- 1. 1989-Present, Wenzhou University, Vice President, Director, National Class-2 Professor.
- 2. 2015-Present, Zhejiang University of Technology, Doctoral Supervisor.
- 3. 2005, National University of Singapore, Visiting Scholar.
- 4. 1985-1989, Jiangsu University, Teacher.

#### **TITLES & POSITIONS**

- 1. 2022-Present, Foreign Full Member (Academician) of Russian Academy of Engineering (RAE).
- 2. 2015-Present, Director of China International Science & Technology Cooperation Base for Laser Processing Robot.
- 2015-Present, Director of Zhejiang Key Laboratory of Laser Processing Robot.
- 4. 2017-Present, Director of Zhejiang Engineering Research Center of Laser and Optoelectronic Intelligent Manufacturing.
- 5. 2021-Present, Inaugural Member of the Academician Expert Advisory Committee of China Association of Inventions.
- 6. 2016-Present, Vice Director of Laser Processing Committee of Chinese Mechanical Engineering Society.
- 7. 2022-Present, Senior Member of Chinese Optical Society.
- 8. 2006-2009, Member of Industrial Engineering Experts Committee of Chinese Mechanical Engineering Society.
- 9. 2019-Present, Director of Zhejiang Collaborative Innovation Center of Laser and Optoelectronic Intelligent Manufacturing.
- 2017-Present, Head of Zhejiang-Russia (Wenzhou University)
  International Cooperative Joint Laboratory of Ultra-fast Laser Advanced
  Manufacturing.
- 11. 2011-Present, Vice President of Zhejiang Mechanical Engineering Society.
- 2011-2015, Advisory Expert of Zhejiang "the 12th Five-Year Plan"
  Manufacturing Information Technology Achievement Transformation Project.
- 13. 2012-Present, President of Wenzhou Mechanical Engineering Society.
- 14. 2016-Present, President & Chief Scientist of Wenzhou University Institute of Laser and Optoelectronic Intelligent Manufacturing.
- 15. 2015-Present, Head of Zhejiang First-Class Discipline in Mechanical Engineering of Wenzhou University.

#### **HONORS & AWARDS**

- 1. 2022, Gold Award of the 23rd China Patent Award.
- 2. 2013, Expert of Special Government Allowance of the State Council.
- 3. 2020, First Prize of China Invention Innovation Award.
- 4. 2021, China Industry-University-Research Cooperation Innovation Award (Individual).
- 5. 2021, First Prize of Zhejiang Province Higher Education Teaching Achievement.
- 2021, Second Prize of Science and Technology Progress Award of Zhejiang Province.
- 7. 2019, First Prize of Jiangsu Provincial Science and Technology Award.

- 8. 2016, Second Prize of China Machinery Industry Science and Technology Award.
- 9. 2013, First Prize of Zhejiang Province Science and Technology Award.
- 10. 2013, First Prize of Jiangsu Provincial Science and Technology Award.
- 11. 2008, Third Prize of Zhejiang Province Science and Technology Award.
- 12. 2016, Advanced Worker of Chinese Mechanical Engineering Society.
- 13. 2017, Outstanding Talent of Wenzhou City.

#### **PROJECTS**

- National Natural Science Foundation of China Joint Fund Key Support Project: Key Technology of Ultrafast Laser Processing of Superhydrophobic Complex Components for Offshore Equipment (U1609209), 2017.01-2020.12.
- Key Project of National Key R&D Program for Intergovernmental Cooperation in International Science and Technology Innovation: Research on Control Strategies and Methods to Improve the Homogeneity of Thin Films of Nano Components (2016YFE0105900), 2016.12-2020.12.
- 3. Ministry of Science and Technology Technical Training Course Project for Developing Countries: International Training Course on Advanced Laser Manufacturing Technology and Applications, 2019.01-2019.12.
- National Natural Science Foundation of China: Research on prediction and maintenance method of multi-process production system considering buffer size and product quantity (71471139), 2015.01-2018.12.
- 5. National Science and Technology Program International Cooperation Special Project: Research on Multi-Process Production Line Fault Warning and Intelligent Maintenance Method (0S2012ZR0038), 2012.05-2015.05.
- 6. National Natural Science Foundation of China: Research on manufacturing system scheduling and path optimization based on resource reconfiguration (508751872009), 2009.01-2011.12.
- 7. Major Project of Zhejiang Provincial Natural Science Foundation: Ultrasound-Assisted Laser and Electrochemical Composite Multi-Energy Field Synergy Mechanism and Deep Small Hole Processing (LD22E050001), 2022.01-2024.12.
- Zhejiang Science and Technology Plan "One Belt, One Road" Science and Technology Cooperation Special Project: Zhejiang-Russia (Wenzhou University) Ultrafast Laser Advanced Manufacturing International Cooperation Joint Laboratory (2018C04019), 2018.01-2020.12.
- 9. Zhejiang Academician Industry Science and Technology Strategy Consulting Project: Zhejiang Province Laser and Photoelectric Intelligent Manufacturing Strategy Consulting Project, 2018.01-2019.12.
- Zhejiang Province Public Welfare Technology Application Research Program Project: Research on New Silicon Nanomaterial High Sensitive Pressure Sensor Based on Internet of Things (2012C21088),

- 2012.06-2014.06.
- 11. Zhejiang Province Major Science and Technology Special Plan: Research and development of operation decision-making and control of multi-process production system based on dynamic reconstruction and maintenance (2011C14025), 2011.01-2013.12.
- 12. Zhejiang Natural Science Foundation Project: Research on Maintenance Decision Method of Multi-process Reconfigurable Production System Based on Intelligent Prediction (Y1111147), 2011.01-2012.12
- 13. Jiangsu Key Laboratory of Materials Tribology Open Project: Mesoscopic mechanical characterization of hydrogenated silicon thin film and the intrinsic relationship with the microstructure, 2011.01-2012.12
- 14. Zhejiang Provincial Science and Technology Plan Project: Major Equipment Parts Laser Processing Technology and Equipment Development and Industrialization (2008C31004), 2008.02-2013.12.
- 15. Natural Science Foundation of Zhejiang Province: Study on the High Pressure Resistance Effect of Device Level Silicon Nanofilms and Its Mechanical Behavior, 2008.01-2009.12.
- 16. Zhejiang Province Science and Technology Tackling Plan Project: MEMS-Based Ultra-Micro Pressure Sensor Design and Manufacturing Process, 2005.04-2007.06.
- 17. Zhejiang Provincial Science and Technology Plan Project: Reconfigurable Production Control System for Mass Customization of Eyewear Products (2007C31010), 2007.02-2009.12.
- 18. Zhejiang Provincial Natural Science Foundation: Study on the Optimal Allocation of Reorganizable Manufacturing Resources Based on Bottleneck Analysis, 2007.01-2009.12.
- 19. Zhejiang Social Science Planning Project: Research on Enterprise Competitive Strategy Based on Customer Satisfaction (NM04GL02), 2004.12-2005.12.
- 20. Zhejiang Natural Science Foundation Project: Research on the Optimization Method of Customer Satisfaction Based on Cost (7020052003), 2003.01-2004.12.

### **ARTICLES (ENGLISH JOURNAL)**

- Liu, Yang; Lu, Jinzhong; Xue, Wei; Zhang, Zhaoyang; Zhu, Hao; Xu, Kun; Wu, Yucheng; Wang, Bo; Lei, Weining. A strategy for fabricating multi-level micro-nano superamphiphobic surfaces by laser-electrochemistry subtractive-additive hybrid manufacturing method. Colloids and Surfaces A: Physicochemical and Engineering Aspects. 2023, 663: 130946.
  10.1016/j.colsurfa.2023.130946.
- Chen, Mingming; Shen, Xuemin; Zhou, Chen; Cao, Dawei; Xue, Wei. High-performance self-powered visible-blind ultraviolet photodetection achieved by ferroelectric PbZr0.52Ti0.48O3 thin films. Journal of Alloys and

- Compounds. 2022, 897: 163208. 10.1016/j.jallcom.2021.163208.
- 3. Ji, Chunming; Jia, Hao; Zhou, Chen; Wang, Quan; Xue, Wei. Surface plasmon enhancement in different spatial distributions of nanowires and two-dimensional materials. Physical Chemistry Chemical Physics. 2022, 24(14): 8296-8302. 10.1039/d1cp05982c.
- Yang, Huan; Xu, Kaichen; Xu, Changwen; Fan, Dianyuan; Cao, Yu; Xue, Wei; Pang, Jihong. Femtosecond laser fabricated elastomeric superhydrophobic surface with stretching-enhanced water repellency. Nanoscale Research Letters. 2019, 14(1): 333. 10.1186/s11671-019-3140-6.
- 5. Wu, Lijun; Luo, Keyong; Liu, Yan; Cui, Changyan; Xue, Wei; Lu, Jinzhong. Effects of laser shock peening on the micro-hardness, tensile properties, and fracture morphologies of CP-Ti alloy at different temperatures. Applied Surface Science. 2018, 431: 122-134. 10.1016/j.apsusc.2017.05.202.
- 6. Yang, Huan; Liu, Wenwen; Xu, Changwen; Fan, Dianyuan; Cao, Yu; Xue, Wei. Laser sintering of TiO2 films for flexible dye-sensitized solar cells. Applied Sciences-Basel. 2019, 9(5): 823. 10.3390/app9050823.
- 7. Liao, Ningbo; Zheng, Beirong; Zhou, Hongming; Xue, Wei. Effect of carbon segregation on performance of inhomogeneous SiCyO6/5 as anode materials for lithium-ion battery: A first-principles study. Journal of Power Sources. 2016, 334: 39-43. 10.1016/j.jpowsour.2016.10.001.
- 8. Liao, Ningbo; Zheng, Beirong; Zhang, Miao; Xue, Wei. Atomic investigation on reversible lithium storage in amorphous silicon oxycarbide as a high power anode material. Journal of Materials Chemistry A. 2016, 4(31): 12328-12333. 10.1039/c6ta04729g.
- 9. Liao, Ningbo; Xue, Wei; Zhang, Miao. Effect of carbon content on structural and mechanical properties of SiCN by atomistic simulations. Journal of the European Ceramic Society. 2012, 32(6): 1275-1281. 10.1016/j.jeurceramsoc.2011.11.022.
- Liao, Ningbo; Zheng, Beirong; Zhou, Hongming; Xue, Wei. Lithiation behavior of high capacity SiCO anode material for lithium-ion battery: A first principle study. Electrochimica Acta. 2015, 156: 115-120. 10.1016/j.electacta.2015.01.053.
- 11. Zhou, Yuqing; Liu, Xinfang; Li, Fengping; Sun, Bingtao; Xue, Wei. An online damage identification approach for numerical control machine tools based on data fusion using vibration signals. Journal of Vibration and Control. 2015, 21(15): 2925-2936. 10.1177/1077546314545097.
- 12. Liao, Ningbo; Xue, Wei; Zhou, Hongming; Zhang, Miao. Molecular dynamics investigation of structure and high-temperature mechanical properties of SiBCO ceramics. Journal of Alloys and Compounds. 2014, 610: 45-49. 10.1016/j.jallcom.2014.04.189.
- 13. Zheng, B. R.; Zhou, C.; Wang, Q.; Pan, X. M.; Xue, W. Ultra-small micro pressure sensor chip design and fabrication featuring high-sensitivity and good-linearity. Microsystems Technologies-Micro- and

- Nanosystems-Information Storage and Processing Systems. 2015, 21(1): 173-179. 10.1007/s00542-014-2074-2.
- Liao, Ningbo; Xue, Wei; Zhou, Hongming; Zhang, Miao. Atomistic investigation of structural and mechanical properties of silicon carbon nitride with different SiC/Si3N4 ratios. Materials Chemistry and Physics. 2013, 143(1): 223-227. 10.1016/j.matchemphys.2013.08.055.
- 15. Liao, Ningbo; Xue, Wei; Zhou, Hongming; Zhang, Miao. Numerical investigation into the nanostructure and mechanical properties of amorphous SiBCN ceramics. RSC Advances. 2013, 3(34): 14458-14465. 10.1039/c3ra40355f.
- 16. Zheng, Beirong; Zhou, Chen; Wang, Quan; Chen, Yifeng; Xue, Wei. Deposition of Low Stress Silicon Nitride Thin Film and Its Application in Surface Micromachining Device Structures. Advances in Materials Science and Engineering. 2013, 2013: 835942. 10.1155/2013/835942.
- 17. Zhou, Zhuang-zhuang; Ali, Hassan; Hou, Zhi-shan; Xue, Wei; Cao, Yu. Enhanced photonic nanojets for submicron patterning. Journal of Central South University. 2022, 29(10): 3323-3334. 10.1007/s11771-022-5116-4.
- 18. Zhou, Qi; Luo, Sifan; Xue, Wei; Liao, Ningbo. Highly selective nitrogen dioxide gas sensing of ReS2 nanosheets: A first-principles study. Applied Surface Science. 2022, 609: 155388. 10.1016/j.apsusc.2022.155388.
- 19. Luo, Sifan; Zhou, Qi; Xue, Wei; Liao, Ningbo. Effect of Pt doping on sensing performance of g-C3N4 for detecting hydrogen gas: A DFT study. Vacuum. 2022, 200: 111014. 10.1016/j.vacuum.2022.111014.
- 20. Liang, Yuchen; Feng, Guang; Li, Xiaogang; Sun, Haoran; Xue, Wei; Zhang, Kunpeng; Li, Fengping. Simulation Analysis of Nanosecond Laser Processing of Titanium Alloy Based on Helical Trepanning. Applied Sciences-Basel. 2022, 12(18): 9024. 10.3390/app12189024.
- 21. Hu, Long; Cai, Yan; Yang, Wenfeng; Xue, Wei; Zhu, Dehua; Cao, Yu. Laser selective ablated multistep interfacing for enhanced adhesive bonding joints of carbon fiber reinforced polymer materials. Journal of Laser Applications. 2022, 33(4): 042005. 10.2351/7.0000378.
- 22. Ding, Xiaochuan; Zhao, Yao; Hassan, Ali; Sun, Yunlu; Hou, Zhishan; Xue, Wei; Cao, Yu. Femtosecond Laser Direct Writing of Optical Overpass. Micromachines. 2022, 13(7): 1158. 10.3390/mi13071158.
- 23. Hassan, Ali; Khan, Abbas Ahmad; Ahn, Yeong Hwan; Azam, Muhammad; Zubair, Muhammad; Xue, Wei; Cao, Yu. Orientation-Mediated Luminescence Enhancement and Spin-Orbit Coupling in ZnO Single Crystals. Nanomaterials. 2022, 12(13): 2192. 10.3390/nano12132192.
- 24. Ding, Xinran; Shi, Jin; He, Yanfang; Yang, Ying; Liu, Yuan; Chen, Mingming; Xue, Wei; Cao, Dawei. Boosting piezo/photo-induced charge transfer of a bi-piezoelectrics BaTiO3/CdS isotype junction for kinetic optimization. Journal of Alloys and Compounds. 2022, 931: 167434. 10.1016/j.jallcom.2022.167434.
- 25. Han, Zhengzhao; Xu, Ke; Liao, Ningbo; Xue, Wei. Theoretical

- investigations of permeability and selectivity of Pd-Cu and Pd-Ni membranes for hydrogen separation. International Journal of Hydrogen Energy, 2021, 46(46): 23715-23722. 10.1016/j.ijhydene.2021.04.145.
- 26. Zhang, Chao; Liu, Wenwen; Sun, Bingtao; Zhu, Dehua; Xue, Wei; Cao, Yu. One-step selective laser-induced plasma-assisted ablation-based deposition of pseudocapacitance on ITO conductive glass surface. Ionics, 2021, 27(4): 1689-1698. 10.1007/s11581-021-03945-x.
- 27. Ding, Shijie; Zhu, Dehua; Xue, Wei; Liu, Wenwen; Cao, Yu. Picosecond Laser-Induced Hierarchical Periodic Near- and Deep-Subwavelength Ripples on Stainless-Steel Surfaces. Nanomaterials. 2021, 10(1): 62. 10.3390/nano10010062.
- 28. Liu, Zihao; Zhou, Xiaopeng; Chen, Jie; Chen, Yifeng; Xue, Wei; Cao, Yu. Designed band-pass frequency selective surfaces with thermal transparency. Physics Letters A. 2021, 406: 127459. 10.1016/j.physleta.2021.127459.
- 29. Xu, Ke; Liao, Ningbo; Xue, Wei; Zhou, Hongming. Atomic investigation on structural rearrangement of MoS2/graphene heterostructure upon electrochemical lithiation and delithiation. Materials Letters. 2021, 282: 128846. 10.1016/j.matlet.2020.128846.
- 30. Liu, Yang; Chen, Jie; Xue, Wei; Zhu, Dehua; Liu, Wenwen; Cao, Yu. Laser textured superhydrophobic overlay cavity structure as an acoustic metasurface with enhanced underwater sound insulation performance. Applied Acoustics. 2021, 180: 108139. 10.1016/j.apacoust.2021.108139.
- 31. Wei, Wei; Xu, Ke; Liao, Ningbo; Xue, Wei. Insight into Si/SiCO thin films anodes for lithium-ion batteries with high capacity and cycling stability. Applied Materials Today. 2021, 20: 100773. 10.1016/j.apmt.2020.100773.
- 32. Li, Fengping; Feng, Guang; Yang, Xiaojun; Lu, Chengji; Ma, Guang; Li, Xiaogang; Xue, Wei; Sun, Haoran. Tunable wettability pattern transfer photothermally achieved on zinc with microholes fabricated by femtosecond laser. Micromachines. 2021, 12(5): 547. 10.3390/mi12050547.
- 33. Pan, Qiaofei; Sun, Bingtao; Liu, Wenwen; Xue, Wei; Cao, Yu. Hypergyrating droplets generated on a selective laser-textured heterogeneous wettability surface. Langmuir. 2020, 36(28): 8123-8128. 10.1021/acs.langmuir.0c01069.
- 34. Li, Tao; Cao, Yu; Xue, Wei; Sun, Bingtao; Zhu, Dehua. Self-assembly of graphene-based planar micro-supercapacitor with selective laser etching-induced superhydrophobic/superhydrophilic pattern. SN Applied Sciences. 2020, 2(2): 206. 10.1007/s42452-020-2000-4.
- 35. Xu, Ke; Liao, Ningbo; Zhang, Miao; Xue, Wei. Atomic-scale investigation of enhanced lithium, sodium and magnesium storage performance from defects in MoS2/graphene heterostructures. Nanoscale. 2020, 12(13): 7098-7108. 10.1039/c9nr09352d.
- 36. Xu, Ke; Liao, Ningbo; Zhang, Miao; Xue, Wei. Selective methane sensing properties of VO2 at different temperatures: A first principles study. Applied Surface Science. 2020, 536: 147969. 10.1016/j.apsusc.2020.147969.

- 37. Xu, Ke; Liao, Ningbo; Zhang, Miao; Xue, Wei. Atomic-scale investigations of enhanced hydrogen separation performance from doping boron and nitrogen in graphdiyne membrane. International Journal of Hydrogen Energy. 2020, 45(53): 28893-28902. 10.1016/j.ijhydene.2020.07.174.
- 38. Zhou, Xikang; Xue, Wei; Liu, Wenwen; Zhu, Dehua; Cao, Yu. Quadri-directionally anisotropic droplets sliding surfaces fabricated by selective laser texturing of aluminum alloy plates. Applied Surface Science. 2020, 509: 145406. 10.1016/j.apsusc.2020.145406.
- 39. Feng, Guang; Xue, Yao; Pan, Qiaofei; Ke, Yirui; Li, Fengping; Xue, Wei; Cao, Yu; Liu, Wenwen. Surface wettability induced variation of underwater acoustic transmission coefficient of the membrane resonators. Materials Science and Engineering B-Advanced Functional Solid-State Materials. 2020, 258: 114572. 10.1016/j.mseb.2020.114572.
- 40. Zhang, Yuchen; Xue, Wei; Chen, Yunchen; Chen, Peng; Zhao, Xiuju. Graphene-based materials for supercapacitor electrodes: a review. Journal of Materials Chemistry A. 2023, 11(4): 1674-1694. 10.1039/D2TA12345A.
- 41. Li, Jia; Xue, Wei; Wang, Ziyang; Zhang, Zhaoyang; Zhu, Hao; Lu, Jinzhong; Liu, Yang. In-situ fabrication of flexible superamphiphobic films by spray-coating method for self-cleaning and anti-fouling. Surface and Coatings Technology. 2023, 427: 131935. 10.1016/j.surfcoat.2022.131935.
- 42. Li, Liang; Xue, Wei; Zhang, Miao; Wang, Bo; Wu, Yucheng; He, An; Cao, Yu. Enhanced electrochemical performance of NiCo2O4/C nanofibers as anodes for lithium-ion batteries by carbon coating. Electrochimica Acta. 2023, 372: 139757. 10.1016/j.electacta.2021.139757.
- 43. Xu, Ke; Liao, Ningbo; Xue, Wei; Zhou, Hongming. First principles investigation on MoO3 as room temperature and high temperature hydrogen gas sensor. International Journal of Hydrogen Energy. 2020, 45(15): 9252-9259. 10.1016/j.ijhydene.2020.01.065.
- 44. Yang, Huan; Cao, Yu; Xue, Wei; Liu, Wenwen. Ultraviolet laser patterning of fluorine-doped tin oxide with different radiation directions. Journal of Russian Laser Research. 2020, 40(6): 581-589. 10.1007/s10946-019-09840-1.
- 45. Adeyemi, Kenneth; Sun, Bingtao; Xue, Wei; Liu, Wenwen; Cao, Yu. Friction and wear characteristics modification via laser surface textured grooves. Surface Engineering. 2020, 37(5): 658-668(SI). 10.1080/02670844.2020.1821572.
- 46. Zhang, Zhen; Liao, Ningbo; Zhou, Hongming; Xue, Wei. Insight into silicon-carbon multilayer films as anode materials for lithium-ion batteries: A combined experimental and first principles study. Acta Materialia. 2019, 178: 173-178. 10.1016/j.actamat.2019.08.009.
- 47. Zhou, Feng; Liao, Ningbo; Zhou, Hongming; Xue, Wei. Atomic investigation on reversible and irreversible lithium storage in silicon incorporated with multi-layered graphene. Materials Letters. 2019, 244: 108-110. 10.1016/j.matlet.2019.02.068.

- 48. Deng, Jixi; Liao, Ningbo; Zhang, Miao; Xue, Wei. Extended finite element analysis of plastic and fracture behaviors of SiC-based multi-layer thin films system. International Journal of Mechanical Sciences. 2019, 161: 105017. 10.1016/j.ijmecsci.2019.105017.
- 49. Deng, Jixi; Liao, Ningbo; Zhou, Hongming; Xue, Wei. Predicting plastic and fracture properties of silicon oxycarbide thin films using extended finite element method. Journal of Alloys and Compounds. 2019, 792: 481-486. 10.1016/j.jallcom.2019.04.065.
- 50. Zhang, Zhen; Liao, Ningbo; Zhou, Hongming; Xue, Wei. Atomistic investigation on lithiation mechanism of silicon incorporated with amorphous carbon layer as anode material for lithium-ion battery. Applied Surface Science. 2019, 494: 111-115. 10.1016/j.apsusc.2019.07.195.
- 51. Liao, Ningbo; Zheng, Beirong; Zhang, Miao; Xue, Wei. Numerical approach to evaluate performance of porous SiC5/4O3/2 as potential high temperature hydrogen gas sensor. International Journal of Hydrogen Energy. 2019, 44(48): 26679-26684. 10.1016/j.ijhydene.2019.08.098.
- 52. Liao, Ningbo; Zhang, Miao; Zheng, Beirong; Xue, Wei. Temperature-dependent gas sensing properties of porous silicon oxycarbide: Insight from first principles. Applied Surface Science. 2019, 493: 1286-1290. 10.1016/j.apsusc.2019.07.133.
- 53. Pan, Qiaofei; Cao, Yu; Xue, Wei; Zhu, Dehua; Liu, Wenwen. Picosecond Laser-Textured Stainless Steel Superhydrophobic Surface with an Antibacterial Adhesion Property. Langmuir. 2019, 35(35): 11414-11421. 10.1021/acs.langmuir.9b01333.
- 54. Liao, Ningbo; Zhang, Miao; Zheng, Beirong; Xue, Wei. Lithiation-Induced Structural Rearrangement and Stress Change in SiCO-Derived Porous Carbon: A First-Principles Study. Journal of Physical Chemistry C. 2019, 123(32): 19315-19321. 10.1021/acs.jpcc.9b03686.
- 55. Yang, Huan; Sun, Ke; Xue, Yao; Xu, Changwen; Fan, Dianyuan; Cao, Yu; Xue, Wei. Controllable drop splashing on picosecond laser patterned hybrid superhydrophobic/-philic surfaces. Applied Surface Science. 2019, 481: 184-191. 10.1016/j.apsusc.2019.02.241.
- 56. Zhou, Feng; Liao, Ningbo; Zhang, Miao; Xue, Wei. Lithiation behavior of graphene-silicon composite as high performance anode for lithium-ion battery: A first principles study. Applied Surface Science. 2018, 463: 610-615. 10.1016/j.apsusc.2018.08.258.
- 57. Liao, Ningbo; Zhou, Hongming; Zheng, Beirong; Xue, Wei. Silicon Oxycarbide-Derived Carbon as Potentia NO2 Gas Sensor: A First Principles' Study. IEEE Electron Device Letters. 2018, 39(11): 1760-1763. 10.1109/LED.2018.2869158.
- 58. Guo, Zhi; Liao, Ningbo; Zhang, Miao; Xue, Wei. Theoretical approach to evaluate graphene/PANI composite as highly selective ammonia sensor. Applied Surface Science. 2018, 453: 336-340. 10.1016/j.apsusc.2018.05.108.

- 59. Sun, Ke; Yang, Huan; Xue, Wei; Cao, Menghui; Adeyemi, Kenneth; Cao, Yu. Tunable Bubble Assembling on a Hybrid Superhydrophobic-Superhydrophilic Surface Fabricated by Selective Laser Texturing. Langmuir. 2018, 34(44): 13203-13209. 10.1021/acs.langmuir.8b02879.
- 60. Zhou, Yuqing; Xue, Wei. A Multisensor Fusion Method for Tool Condition Monitoring in Milling. SENSORS. 2018, 18(11): 3866. 10.3390/s18113866.
- 61. He, An; Liu, Wenwen; Xue, Wei; Yang, Huan; Cao, Yu. Nanosecond laser ablated copper superhydrophobic surface with tunable ultrahigh adhesion and its renewability with low temperature annealing. APPLIED SURFACE SCIENCE. 2018, 434: 120-125. 10.1016/j.apsusc.2017.10.143.
- 62. Feng, Guang; Li, Fengping; Xue, Wei; Sun, Ke; Yang, Huan; Pan, Qiaofei; Cao, Yu. Laser textured GFRP superhydrophobic surface as an underwater acoustic absorption metasurface. APPLIED SURFACE SCIENCE. 2018, 463: 741-746. 10.1016/j.apsusc.2018.09.005.
- 63. Zhou, Yuqing; Xue, Wei. Review of tool condition monitoring methods in milling processes. INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY. 2018, 96(5-8): 2509-2523. 10.1007/s00170-018-1768-5.
- 64. Sun, Ke; Yang, Huan; Xue, Wei; He, An; Zhu, Dehua; Liu, Wenwen; Adeyemi, Kenneth; Cao, Yu. Anti-biofouling superhydrophobic surface fabricated by picosecond laser texturing of stainless steel. APPLIED SURFACE SCIENCE. 2018, 436: 263-267. 10.1016/j.apsusc.2017.12.012.
- 65. Liao, Ningbo; Zhang, Miao; Zhou, Hongming; Xue, Wei. Modeling of amorphous SiCxO6/5 by classical molecular dynamics and first principles calculations. Scientific Reports. 2017, 7: 42705. 10.1038/srep42705.
- 66. Gao, Chen; Xue, Wei; Ren, Yan; Zhou, Yuqing. Numerical Control Machine Tool Fault Diagnosis Using Hybrid Stationary Subspace Analysis and Least Squares Support Vector Machine with a Single Sensor. Applied Sciences-Basel. 2017, 7(4): 346. 10.3390/app7040346.
- 67. Liao, Ningbo; Zheng, Beirong; Zhang, Miao; Xue, Wei. First-principles calculation of lithium insertion into homogeneous a-SiC2/5O6/5 as high performance anode. RSC Advances. 2017, 7(49): 30559-30563. 10.1039/c7ra05417c.
- 68. Zhou, Chen; Zhang, Yanmin; Zheng, Beirong; Xue, Wei; Wang, Quan. Effect of internal stress on nonlinearity and sensitivity of a pressure sensor with SiN composite diaphragm. Physics Letters A. 2017, 381(4): 284-291. 10.1016/j.physleta.2016.10.024.
- 69. Zhang, Miao; Liao, Ningbo; Xue, Wei; Yang, Ping. Large-scale molecular dynamics modeling of boron-doped amorphous SiCO ceramics. Journal of Molecular Modeling. 2017, 23(6): 178. 10.1007/s00894-017-3354-4.
- 70. He, An; Yang, Huan; Xue, Wei; Sun, Ke; Cao, Yu. Tunable coffee-ring effect on a superhydrophobic surface. Optics Letters. 2017, 42(19): 3936-3939. 10.1364/OL.42.003936.

- 71. Zhu, Jun; Deng, Heijun; Xue, Wei; Wang, Quan. Effect of low temperature oxygen plasma treatment on microstructure and adhesion force of graphene. Applied Surface Science. 2017, 428: 941-947. 10.1016/j.apsusc.2017.10.003.
- 72. Liao, Ningbo; Zheng, Beirong; Qu, Jianwu; Xue, Wei. Effect of Nanostructure on High Temperature Tensile Strength of Amorphous SiCN Ceramics: A Large-Scale Molecular Dynamics Study. Science of Advanced Materials. 2016, 7(12): 2503-2507. 10.1166/sam.2015.2426.
- 73. Xie, Nan; Duan, Minglei; Chinnam, Ratna Babu; Li, Aiping; Xue, Wei. An energy modeling and evaluation approach for machine tools using generalized stochastic Petri Nets. Journal of Cleaner Production. 2016, 113: 523-531. 10.1016/j.jclepro.2015.09.100.
- 74. Liao, Ningbo; Zheng, Beirong; Zhou, Hongming; Xue, Wei. First principle investigation on structural and electronic properties of silicon oxycarbide ceramics. Journal of Alloys and Compounds. 2015, 647: 665-669. 10.1016/j.jallcom.2015.06.188.
- 75. Zhou, Yuqing; Liu, Xinfang; Li, Fengping; Sun, Bingtao; Xue, Wei. An online damage identification approach for numerical control machine tools based on data fusion using vibration signals. Journal of Vibration and Control. 2015, 21(15): 2925-2936. 10.1177/1077546314545097.
- 76. Chen, Xizhang; Yuan, Qibing; Madigan, Bruce; Xue, Wei. Long-term corrosion behavior of martensitic steel welds in static molten Pb-17Li alloy at 550 degrees C. Corrosion Science. 2015, 96: 178-185. 10.1016/j.corsci.2015.04.001.
- 77. Liao, Ningbo; Xue, Wei; Zhou, Hongming; Zhang, Miao. Investigation on high temperature fracture properties of amorphous silicon dioxide by large-scale atomistic simulations. Journal of Materials Science-Materials in Electronics. 2013, 24(5): 1575-1579. 10.1007/s10854-012-0978-0.
- 78. Liao, Ningbo; Xue, Wei; Zhou, Hongming; Zhang, Miao. Effects of BN content on the structural and mechanical properties of a-SiBN ceramics. International Journal of Materials Research. 2013, 104(2): 162-167. 10.3139/146.110851.
- 79. Zheng, Beirong; Zhou, Chen; Pan, Xiaomin; Wang, Quan; Xue, Wei. Intelligent Detector of Internal Combustion Engine Cylinder Pressure and Sensitivity Temperature Coefficient Compensation. Advances in Materials Science and Engineering. 2013, 2013: 107582. 10.1155/2013/107582.
- 80. Liao, Ningbo; Xue, Wei; Zhang, Miao. Molecular dynamics investigation of Si-B-N ceramics: effects of boron content. Modelling and Simulation in Materials Science and Engineering. 2012, 20(3): 035009. 10.1088/0965-0393/20/3/035009.
- 81. Liao, Ningbo; Ma, Guang; Zhang, Miao; Xue, Wei. Effects of SiC particles on mechanical properties of SiCN-based composite by atomistic simulation. Composites Part B: Engineering. 2012, 43(4): 1739-1742. 10.1016/j.compositesb.2012.01.058.

- 82. Liao, Ningbo; Ma, Guang; Zhang, Miao; Xue, Wei. Investigation on mechanical properties of silicon nitride composite reinforced by SiC nanoparticles. Journal of Composite Materials. 2012, 46(26): 3321-3324. 10.1177/0021998312440127.
- 83. Xie, Nan; Li, Aiping; Xue, Wei. Cooperative Optimization of Reconfigurable Machine Tool Configurations and Production Process Plan. Chinese Journal of Mechanical Engineering. 2012, 25(5): 982-989. 10.3901/CJME.2012.05.982.
- 84. Liao, Ningbo; Tao, Xi; Zhang, Miao; Xue, Wei. Effects of temperature and strain rate on fracture properties of amorphous silicon nitride. Journal of Materials Science-Materials in Electronics. 2011, 22(9): 346-1349. 10.1007/s10854-011-0311-3.
- 85. Liao, Ningbo; Yang, Ping; Zhang, Miao; Xue, Wei. Atomistic Investigation on the Effects of Thermal Loading on Interfacial Adhesion of Dissimilar Materials. Journal of Adhesion Science and Technology. 2011, 25(13): 1539-1548. 10.1163/016942410X549942.
- 86. Liao, Ningbo; Yang, Ping; Zhang, Miao; Xue, Wei. The Effects of Thermal Loading on the Mechanical Properties of Interfaces of Dissimilar Materials by Nanoindentation Simulations. Journal of Electronic Packaging. 2011, 133(2): 020901. 10.1115/1.4003513.
- 87. Liao, Ningbo; Yang, Ping; Zhang, Miao; Xue, Wei. Numerical and Experimental Investigation for the Effects of Thermal Loading on Properties of Nanoscale Materials Interface. Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing. 2010, 527(21-22): 6076-6081. 10.1016/j.msea.2010.06.032.
- 88. Chen, Liang; Xue, Wei; Tokuda, Naoyuki. Classification of 2-dimensional array patterns: Assembling many small neural networks is better than using a large one. Neural Networks. 2010, 23(6): 770-781(SI). 10.1016/j.neunet.2010.03.006.
- 89. Xie, Guoxin; Ding, Jianning; Liu, Shuhai; Xue, Wei; Luo, Jing. Interfacial properties for real rough MEMS/NEMS surfaces by incorporating the electrostatic and Casimir effects-a theoretical study. Surface and Interface Analysis. 2009, 41(4): 338-346. 10.1002/sia.3029.
- 90. Xie, Guoxin; Ding, Jianning; Zheng, Beirong; Xue, Wei. Investigation of adhesive and frictional behavior of GeSbTe films with AFM/FFM. Tribology International. 2009, 42(1): 183-189. 10.1016/j.triboint.2008.03.014.
- 91. Wang, Quan; Ding, Jianning; Xue, Wei. Micro machining process of high temperature pressure sensor gauge chip based on SIMOX SOI wafer. International Journal of Materials & Product Technology. 2008, 31(2-4): 375-385. 10.1504/IJMPT.2008.018034.
- 92. Xie, Guoxin; Zheng, Beirong; Li, Wei; Xue, Wei. Tribological behavior of diamond-like carbon film with different tribo-pairs: A size effect study. Applied Surface Science. 2008, 254(21): 7022-7028. 10.1016/j.apsusc.2008.05.119.

#### **ARTICLES (CHINESE JOURNAL)**

- 1. Zhou, Zhuangzhuang; All, Hassan; Hou, Zhishan; Xue, Wei; Cao, Yu. Preparation of submicron patterns based on photonic nanojets (in English). Journal of Central South University. 2022, 29(10).
- 2. Sun, Guofeng; Cao, Yu; Xue, Wei; Zhu, Dehua; Liu, Wenwen. Influence of fruit peel water content and hardness on the effect of fruit laser marking. Journal of Laser Biology. 2021, 30(02).
- 3. Lu, Lijue; Xue, Wei. Scientific research in local universities: Reconstruction of external evaluation system and reform of internal incentive mechanism. Science and Technology of Chinese Universities. 2019(04).
- 4. Pan, Qiaofei; Yu, Yanling; Xue, Wei; Cao, Menghui; Sun Ke; Cao Yu. Ultraviolet nanosecond laser etching for the preparation of stainless steel superhydrophobic surface process and mechanism analysis. Journal of Wenzhou University (Natural Science Edition). 2019, 40(01).
- 5. Ye, Zuoyi; Xue, Diqiang; Xue, Diliang; Xue Wei; Cao, Menghui; Zhang, Cai; Cao, Yu. Effect of process path planning algorithm on the quality and efficiency of FDM printing. Engineering Plastics Applications. 2018, 46(08).
- 6. Yang, Huan; Cao, Yu; Li, Fengping; Xue, Wei. Advances in Laser Preparation of Superhydrophobic Surfaces. Optoelectronic Engineering. 2017, 44(12).
- 7. He, An; Liu, Wenwen; Xue, Wei; Yang, Huan; Cao, Yu. Nanosecond laser and low-temperature annealing for the preparation of renewable superhydrophobic copper surfaces with tunable ultra-high adhesion. Proceedings of the 5th Symposium on Application of Laser Advanced Manufacturing Technology Conference Proceedings of the Chinese Mechanical Engineering Society. 2017.
- 8. Yang, Huan; Cao, Yu; Xue, Wei. Application of Auxiliary Processing Processes in Laser Micromachining. Proceedings of the 5th Symposium on Application of Laser Advanced Manufacturing Technology Conference Proceedings of the Chinese Society of Mechanical Engineering. 2017.
- 9. Zhang, Jinchao; Feng, Aixin; Xue, Wei; Zhang, Jian; Cheng, Baoyi; Cao, Yupeng; Zhang, Zhenggang. Study on crack sensitivity and mechanical properties of laser fused CaF2/Ni-based alloy composite coatings. Applied Laser. 2017, 37(01).
- 10. Wei, Xinlei; Li, Chunlin; Xue, Wei; Zhang, Jian; Zhu, Dehua; Cao, Yu. Study on the cell phone reading characteristics of laser marked aluminum alloy 2-dimensional code. Laser Technology. 2016, 40(05).
- 11. Zhang, Huaxia; Feng, Aixin; Wang, Juxin; Xue, Wei; Wu, Hao; Li, Zhiqiang; Zhang, Jinchao. Effect of ultrasonic impact on residual stress field in ball cage-flange welds. Thermal Processing Technology. 2016, 45(13).
- 12. Feng, Aixin; He, Ye; Yang, Run; Xue, Wei; Cao, Yupeng; Li, Fengping; Tian, Liang; Xie, Huakun; Chen, Yun. Influence of microweaving of cemented carbide matrix on frictional properties of TiAlN coatings. Journal of Materials

- Heat Treatment. 2015, 36(09).
- 13. Feng, Aixin; Chen, Fengguo; Pei, Shaohu; Xue, Wei; Zhang, Zhenggang; Lu, Yuwen; Zhuang, Xuhua; Yin, Cheng. Effect of laser melting on the frictional wear properties of 304 stainless steel surface. Journal of Materials Heat Treatment. 2015, 36(08).
- 14. Zhong, Guoqi; Feng, Aixin; Xue, Wei; Luo, Jingwen; Chen, Jingyi; Zhou, Jian; Cao, Yu; Qu, Jianwu. Study on the formation and welding performance of Disk laser-spliced welds of unequal-thickness galvanized steel plates for car doors. Applied Laser. 2015, 35(03).
- 15. Feng, Aixin; Lu, Yuwen; Wang, Juxin; Xue, Wei; Pei, Shaohu; Zhang, Zhenggang; Cao, Yupeng; Li, Fengping. Organization of Ni60/graphite/MoS2 composite coating on 304 stainless steel surface by laser melting. Journal of Materials Heat Treatment. 2015, 36(04)
- 16. Feng, Aixin; Zhuang, Xuhua; Xue, Wei; Han, Zhenchun; Sun, Tiehuo; Chen, Fengguo; Zhong, Guoqi; Yin, Cheng; He, Ye. 1064 nm, 532 nm, 355 nm wavelength pulsed laser irradiation damage characteristics of polysilicon. Infrared and Laser Engineering. 2015, 44(02).
- 17. He, Ye; Feng, Aixin; Zhang, Huaxia; Yang, Run; Xue, Wei; Cao, Yupeng; Li, Fengping; Tian, Liang; Xie, Huakun; Chen, Yun. Influence of microweaving of cemented carbide matrix on the film-substrate bonding properties of TiAlN coatings. Applied Lasers. 2014, 34(06).
- 18. Cao, Yupeng; Feng, Aixin; Xue, Wei; Hua, Guoran. Experimental study and theoretical analysis of laser shock wave-induced dynamic strain characteristics on the surface of 2024 aluminum alloy. China Laser. 2014, 41(09).
- 19. Feng, Aixin; Zhong, Guoqi; Xue, Wei; Shi, Fen; Zhuang, Xuhua; He, Ye; Chen, Fengguo. Laser shock wave induced dynamic stress-strain in membrane-based system. China Laser. 2014, 41(06).
- 20. Xue, Wei; Zhu, Dehua; Feng, Aixin. Experimental study of plasma temperature measurement during laser processing. Applied Laser. 2013, 33(03).
- 21. Xie, Yong; Tian, Liang; Xue, Wei; Feng, Aixin; Xie, Huakun; Li, Bin; Yang, Run; Shi, Fen; Chen Fengguo. Effect of laser microweaving on the surface of WC carbide tools. Applied Laser. 2013, 33(04).
- 22. Shi, Fen; Xue, Wei; Feng, Aixin; Li, Bin; Yang, Run; Lu, Yi; Wang, Juxin; Han, Zhenchun. Experimental study of dynamic strain on coating surface based on pulsed laser discrete scratch technique. Applied Laser. 2013, 33(03).
- 23. Cao, Yupeng; Xue, Wei; Feng, Aixin; Han Zhenchun. Testing and Analysis of Residual Stress in the Laser Discrete Scratch Region of Ni-Containing Coatings. Applied Laser. 2013, 33(03).
- 24. Han, ZhenChun; Xue, Wei; Feng, Aixin; Sun, Tietie; Shi, Fen; Li, Bin; Lu, Yi; Yang, Run. Study of damage characteristics of polysilicon by nanosecond pulsed laser with different wavelengths. Applied Laser. 2013, 33(03).

- 25. Pei, Shaohu; Xue, Wei; Feng, Aixin; Sun, Tiehuo; Han, Zhenchun; Lu, Yuwen; Zhu, Liang; Zhu, Baochun. Optimization of multi-wavelength laser etching polysilicon process parameters. Applied Lasers. 2013, 33(03).
- 26. Guo, Liqiang; Xue, Wei; Zhou, Hongming; Feng, Aixin; Sun, Tietun; Zhu, Dehua; Long, Jiangqi; Han, Zhenchun. Application of Laser Technology in Photovoltaic Industry. Applied Lasers. 2013, 33(03).
- 27. Zhu, Dehua; Xue, Wei; Feng, Aixin. Experimental study on the change of metal alloy components during laser processing. Applied Lasers. 2013, 33(03).
- 28. Li, Zirui; Liao, Ningbo; Zhou, Yuqing; Xue, Wei; Liu Moubin. Macroscopic transport theory analysis of biomolecular equivalent dripping in nano-pillar array channels. Journal of Physics. 2013, 62(21).
- 29. Feng, Aixin; Xie, Yong; Xue, Wei; Luo, Jingwen; Xu, Yan; Lu, Yuwen; Yang, Run; Yin, Cheng; Xu, Yulan. A Novel Stack Welding Device Working Principle and Process Research. Applied Laser. 2013, 33(05).
- 30. Feng, Aixin; Han, Zhenchun; Nie, Guifeng; Xue, Wei; Li, Bin; Shi, Fen; Lu, Yi. Experimental study on laser impact induced dynamic stress-strain of 2024 aluminum alloy. Vibration and Impact. 2013, 32(14).
- 31. Feng, Aixin; Li, Bin; Guo, Rucheng; Xue, Wei; Han, Zhenchun; Shi, Fen; Yang, Run. Laser impact induced residual stress state analysis of spring steel wire. Strong Laser and Particle Beam. 2013, 25(07).
- 32. Li, Bin; Feng, Aixin; Xue, Wei; Cao, Huirong; Nie, Guifeng; Shi, Fen; Han, Zhenchun; Wang, Shuxin; Xie Yong. Study on laser impact peening of valve springs based on shot peening. Applied Laser. 2013, 33(03).
- 33. Lu, Yi; Feng, Aixin; Xue, Wei; Han, Zhenchun; Sun, Huaiyang; Shi, Fen; Li, Bin; Chen Fengguo. Simulation of Laser Impact Tuning of Residual Stress State in 5B05 Aluminum Alloy. Applied Laser. 2013, 33(03).
- 34. Feng, Aixin; Shi, Fen; Han, Zhenchun; Xue, Wei; Li, Bin; Yang, Run; Lu, Yi. Laser-induced dynamic strain detection on the surface of 2024 aluminum alloy. Intense Laser and Particle Beam. 2013, 25(04).
- 35. Nie, Guifeng; Feng, Aixin; Guo, Rucheng; Xue, Wei; Shi, Fen; Zhu, Liang. Laser-induced residual stress state distribution in 2024 aluminum alloy with multiple impacts. Strong Laser and Particle Beam. 2013, 25(03).
- 36. Zheng, Beirong; Xue, Wei; Xie, Xiaowen. An analysis method of equipment availability based on behavioral expressions. China Mechanical Engineering. 2012, 23(10).
- 37. Sun, Shufeng; Ji, Shiming; Tan, Dapeng; Xue, Wei; Wu, Xin. Abrasive Grain Assisted EDM and ECM Combined Machining Technology. Journal of Mechanical Engineering. 2012, 48(17).
- 38. Xie, Nan; Li, Aiping; Xue, Wei; Xie, Xiaowen. Study on the analysis method of availability of complex mechanical equipment based on random Petri nets. Journal of Mechanical Engineering. 2012, 48(16).
- 39. Feng, Aixin; Shi, Fen; Sun, Huaiyang; Xue, Wei; Nie, Guifeng; Li, Bin; Han, Zhenchun. Adjustment of stress state on the surface of 5B05 aluminum alloy

- by laser shock wave. Intense Laser and Particle Beam. 2012, 24(08).
- 40. Feng, Aixin; Nie, Guifeng; Xue, Wei; Cao, Yupeng; Xu, Xiaoxiang; Li, Bin; Shi, Fen. Experimental study on laser shock wave loading of 2024 aluminum alloy thin plate. Journal of Metals. 2012, 48(02).
- 41. Sun, Shufeng; Wang, Pingping; Xue, Wei. Study on micro-gear machining technology based on femtosecond laser two-photon. Journal of Mechanical Engineering. 2011, 47(23).
- 42. Zheng, Beirong; Xue, Wei; Zhou, Chen; Zhang, Miao. Pressure Sensor Integrated Constant Current Source Sensitivity Temperature Coefficient Compensation. Chinese Mechanical Engineering. 2010, 21(07).
- 43. Zheng, Beirong; Xie Nan; Xue Wei; Xie Xiaowen. Modeling the quality management process of manufacturing system based on Petri net. Journal of Jiangsu University (Natural Science Edition). 2010, 31(05).
- 44. Xue, Wei; Zheng, Beirong; Zhang, Mia; Xie, Guoxin; Wang, Quan. Study on surface energy and nano-adhesive behavior of several microstructured materials. Journal of Physics. 2009, 58(04).
- 45. Zhou, Yuqing; Li, Fengping; Xue, Wei; Zhou, Hongming. A Preliminary Study on the Construction Strategy of Knowledge Management System Application of Systematic Thinking in Knowledge Management. System Science. 2009, 27(07).
- 46. Zhou, Hongming; Chen, Yajong; Zhan, Yongzhao; Xue, Wei; Li, Fengping. Research on the model and method of calculating product shape similarity based on customer geometric measurement data. China Mechanical Engineering. 2009, 20(13).
- 47. Li, Fengping; Zhou, Yuqing; Fu, Peihong; Xue, Wei. A three-dimensional hierarchical evaluation model of product satisfaction based on grey correlation analysis. China Mechanical Engineering. 2009, 20(12).
- 48. Li, Fengping; Xue, Wei; Zhou, Hongming; Chen, Yajong. An optimization model of enterprise resource allocation decision based on customer satisfaction. Computer Integrated Manufacturing System. 2008(02).
- 49. Zhou, Hongming; Xue, Wei; Li, Fengping; Zhan, Yongzhao; Fu, Peihong. A product configuration system for customer customization requirements. Journal of Agricultural Machinery. 2007(08).
- 50. Zhou, Hongming; Xue, Wei; Zhan, Yongzhao; Li, Fengping; Fu Peihong. A similarity calculation model and implementation method for product configuration. China Mechanical Engineering. 2007(13).
- 51. Zhou, Hongming; Xue, Wei; Zheng, Beirong; Li, Fengping; Zhan, Yongzhao. Research on Adaptive Scheduling Method of Variable Feature Manufacturing System in Dynamic Manufacturing Environment. China Manufacturing Informatization. 2007(09).
- 52. Zhou, Hongming; Zhan, Yongzhao; Xue, Wei; Li, Fengping; Fu, Peihong. Research on Configuration Design of Eyewear Products Based on Customer Demand Characteristics. Computer Engineering and Applications. 2007(32).

- 53. Wang, Quan; Ding, Jianning; He, Yuliang; Xue, Wei; Fan, Zhen. Mesomechanical Behavior of Silicon Hydride Films and Its Endogenous Correlation with Microstructure. Journal of Physics. 2007(8).
- 54. Zhou, Hongming; Li, Fengping; Xue, Wei. Parametric Model and Bending Algorithm for Eyeglass Foot Sleeve. Computer Engineering and Applications. 2007(12).
- 55. Xue, Wei; Wang, Quan; Ding, Jianning; Yang, Jichang. Research on Cylinder Pressure Intelligent Detector for Internal Combustion Engine. Journal of Agricultural Machinery. 2006(07).
- 56. Xue, Wei; Wang, Quan; Ding, Jianning; Yu, Pengqing. Experimental Study on Mechanical Behavior of Micro Component 316L under Force-Electric Coupling. Journal of Sensing Technology. 2006(05).
- 57. Xue, Wei; Wang, Quan; Ding, Jianning; Yang, Jichang. Research Progress of Ultra-Micro-Pressure Sensor Based on MEMS Technology. Journal of Agricultural Machinery. 2006(03).
- 58. Chen, Yarong; Xue, Wei; Zhou, Hongming. Research on Banks' Competitive Strategies Based on Customer Satisfaction. Jiangsu Business Journal. 2006(02).
- 59. Li, Fengping; Xue, Wei; Zhou, Hongming; Chen, Yarong. Research on Customer Satisfaction Weight Calculation Method Based on Fuzzy AHP. Computer Engineering and Applications. 2006(03).
- 60. Zhou, Hongming; Li, Fengping; Xue, Wei; Zhan, Yongzhao; Chen, Yarong. Research on Component-Based Product Configuration Model and Implementation Method. China Mechanical Engineering. 2006(24).
- 61. Wang, Quan; Ding, Jianning; Xue, Wei; Yu, Pengqing. Study of mechanical behavior of gold surfaces under coupled force/electricity/heat using lateral force microscopy. Journal of Sensing Technology. 2006(05).
- 62. Wang, Quan; Ding, Jianning; Xue, Wei; Ling, Zhiyong. Thermocompression welding device and welding process for silicon chip outer lead bonding. Journal of Welding. 2006(05).
- 63. Wang, Zhongxian; Wu, Chundu; Zhu, Yuping; Xue, Wei. Gray Combined Model of Stress Concentration in Torsional Axis. Chinese Mechanical Engineering. 2006(03).
- 64. Zhao, Yanping; Ding, Jianning; Yang, Jichang; Wang, Quan; Xue, Wei. Design Analysis and Optimization of Silicon Pressure Sensor Chip Design. Micro-Nanoelectronics. 2006(09).
- 65. Zhao, Yanping; Ding, Jianning; Yang, Jichang; Wang, Quan; Xue, Wei. Design Analysis and Optimization of Micro High Temperature Pressure Sensor Chip. Journal of Sensing Technology. 2006(05).
- 66. Li, Fengping; Xue, Wei. A Study on Building a Competitive Intelligence System for Private Enterprises. Jiangsu Business. 2005(09).
- 67. Shi, Xiaoqiu; Xue, Wei. Problems and Countermeasures in the Construction of Shared Resources of Fine Courses. China Higher Education Research. 2005(01).

- 68. Wang, Quan; Ding, Jianning; Xue, Wei; Ling, Zhiyong. Research and Progress on High Temperature Resistant Piezoresistive Pressure Sensors. Instrumentation Technology and Sensors. 2005(12).
- 69. Zheng, Beirong; Yan, Xiaopeng; Ban, Hanli; Xue, Wei. Win-win strategy of customer satisfaction and quality cost. Science and Technology Management. 2005(02).
- 70. Wang, Quan; Ding, Jianning; Wang, Wenxiang; Xue, Wei. Research on Universal High Temperature Piezoresistive Pressure Sensor. China Mechanical Engineering. 2005(20).
- 71. Xue, Wei; Zhou, Hongming; Yang, Jichang; Ding, Jianning. Parametric model and algorithm for spectacle lens pattern. Journal of Jiangsu University (Natural Science Edition), 2004(06).
- 72. Xue, Wei; Zhou, Hongming; Zheng, Beirong; Li, Fengping. Optimization Model and Empirical Study of Customer Satisfaction Based on Quality Cost. Industrial Engineering and Management, 2004(05).
- 73. Xue, Wei; Zhou, Hongming; Zheng, Beirong. Optimization of Auto Parts Standards Based on Customer Satisfaction. Technology Bulletin, 2004(04).
- 74. Xue, Wei. Implementation of DNC-based Information Management System. Agricultural Mechanization Research. 2004(03).
- 75. Xue, Wei. Agile Production Model Based Grouping Technology. Journal of Wenzhou University. 2004(03).
- 76. Xue, Wei; Liang Feng; Zhou Hongming. Research on rapid reorganization of production control system based on soft component technology for mass customization. China Mechanical Engineering, 2004(10).
- 77. Xue, Wei; Zhou Hongming. Research and Development of Human Resource Management System in Transportation Sector. Industrial Technology and Economy, 2004(02).
- 78. Xue, Wei; Zhou, Hongming; Li, Fengping. Optimization design method of rotary tiller motion parameters. China Manufacturing Information, 2004(04).
- 79. Xue, Wei. Reflections on some issues of developing China's logistics industry. Management World. 2004(03).
- 80. Xue, Wei; Zhou, Hongming; Xia Zhenyu. Optimization Strategy of Customer Satisfaction Based on Quality Cost. Economic Management, 2004(05)
- 81. Ma, Guang; Xue, Wei; Shen, Guiying; Jiang, Subin. Research on Artificial Evolution of Autonomous Robots. Journal of Huazhong University of Science and Technology (Natural Science Edition), 2004(S1).
- 82. Chen, Yarong; Xue, Wei. Research on Cost-based Customer Satisfaction in Service Enterprises. Journal of Wenzhou University, 2004(04).
- 83. Luo, Xinxin; Xue, Wei. China's Logistics Industry and Logistics Technology: A Review. China Engineering Science, 2004(06).
- 84. Xue, Wei; Wang, Chunying. Practice and Exploration of Classroom Teaching Assessment for Teachers. Educational Development Research, 2003(10).

- 85. Xue, Wei. Singing the main theme of the 16th National Congress and promoting innovation of university education. Journal of Wenzhou University, 2003(01).
- 86. Xue, Wei; Lin, Caifen; Wang, Chunying. Exploration on the Evaluation of High School Education Courses. Journal of China University of Mining and Technology (Social Science Edition), 2002(04).
- 87. Zheng Beirong; Zhou Hongming; Xue, Wei. A preliminary investigation of scheduling theory in agile manufacturing environment. Journal of Zhejiang Water Resources and Hydropower College, 2002(02).
- 88. Zhou, Hongming; Zheng, Beirong; Xue, Wei; Huang, Jianfei. Computer-aided design of general parameters of rototiller. Journal of Agricultural Machinery, 2002(03).
- 89. Xue, Wei; Ju, Jiancun. Agile manufacturing and its application Research. Journal of Wenzhou University, 2001(04).
- 90. Xue, Wei; Zhu, Xiaoshen; Lin, Caifen; Ni, Xiaomin. Changing the concept of education and promoting credit system reform. China Higher Education Research, 2001(03).
- 91. Zhou, Hongming; Xue, Wei; Sang Zhengzhong. Optimization design model of overall parameters of rotary tiller. Journal of Agricultural Machinery. 2001(05).
- 92. Zheng, Beirong; Zhou, Hongming; Xue, Wei. Reform of experimental teaching of mechanical fundamentals in higher education. Experimental Technology and Management. 2001(04).
- 93. Xue, Wei; Zhou, Hongming; Zheng, Beiyong. A graphical parameterization system based on Autolisp development. Journal of Zhejiang Water Resources and Hydropower College. 2000.
- 94. Yu, Yangui; Xue, Wei; Zhang, Miao. Fatigue damage of elastoplastic materials under asymmetric cyclic loading calculated by the product method of elastic strain range Δεe and Δερ with small crack size. 2000 New Advances in Materials Science and Engineering (Previous) Proceedings of the 2000 China Materials Symposium Proceedings of the Chinese Society for Materials Research. 2000.
- 95. Yu, Yangui; Xue, Wei; Zhang, Sen. Calculation of fatigue damage of elastoplastic materials under symmetric cyclic loading by small crack size. 2000 New Advances in Materials Science and Engineering (Previous) Proceedings of the 2000 China Materials Symposium Proceedings of the Chinese Society for Materials Research. 2000.
- 96. Yu, Yangui; Zhang, Miao; Xue, Wei. Study and analysis of cross-correlation of material behavior during the whole process of fatigue-damage-fracture under high circumferential cyclic loading. 2000 New Advances in Materials Science and Engineering (in Chinese) Proceedings of the 2000 China Materials Symposium Chinese Society for Materials Research. 2000.
- 97. Xue, Wei. Theory of Laser Power Spectroscopy for Detecting the Shape of Grinding Wheels. Mechatronics. 1996(04).

98. Xue, Wei; Li, Hanzhong. Application of Laser Power Spectroscopy in Detecting Grinding Wheel Shapes. Mechatronics. 1996(02).

#### **PATENTS**

- 1. US10399180B2, Wei Xue; Jinzhong Lu; Kaiyu Luo; Yongkang Zhang; Fengze Dai, Method and device for strengthening laser shock of hidden surface, United States, 2019/9/3.
- 2. US10280480B2, Wei Xue; Jinzhong Lu; Mi Luo; Yongkang Zhang; Fengze Dai, Laser shock peening method and device for bottom surface of tenon of aircraft blade, United States, 2019/5/7.
- 3. 202222695070.6, Linfeng Zhang; Zhishan Hou; Yu Cao; Wei Xue, The invention relates to a glass base planar waveguide used in a dark field fluorescence microscopic device, China, 2023/1/10.
- 4. 202011103653.4, Yan Cai; Fang Zhao; Dehua Zhu; Yu Cao; Wei Xue, Laser additive manufacturing equipment, China, 2022/7/8.
- 5. 202110850341.8, Tianlong Li; Aiye Xie; Yiyou Xiang; Huzhou Xiang; Zhiyang Gu; Wei Xue; Chen Zhou, Shot peening strengthening device capable of improving stress distribution on surface of gear, China, 2022/11/8.
- 6. 202010781050.3, Zihao liu; Yu Cao; Yang Liu; Wei Xue; Wenwen Liu; Jie Chen; Dehua Zhu; Bingtao Sun, Photonic crystal based on laser etching graphene film stack and processing method, China, 2022/5/10.
- 7. 202210170614.9, Tianlong Li; Zhiyang Gu; Xiaozhong Zhang; Ruiyue Jiang; Tingting Ye; Huzhou Xiang; Yiyou Xiang; Aiye Xie; Wei Xue; Chen Zhou, Special speed reducer for deep water back pressure sewage treatment, China, 2022/8/16.
- 8. 202010785952.4, Yu Cao; Lixin Zhu; Wei Xue; Rangda Wu; Yinhua Li; Jie Chen; Dehua Zhu, Handheld laser welding device with auxiliary positioning tracks, China, 2022/2/15.
- 9. 202110172583.6, Wei Xue; Fengping Li; Beirong Zheng; Quan Wang; Zhongxue Li, Indirect contact type graphene pressure sensor and preparation method thereof, China, 2021/2/8.
- 10. 201811175684.3, Wei Xue; Haifei Lu; Jinzhong Lu; Kaiyu Luo; Yao Xue, Laser shot blasting shape correction method for thin-wall through hole part, China, 2020/5/22.
- 11. 201810359257.4, Yu Cao; Xiuju Zhao; Wei Xue; Huan Yang; Guang Feng; Yonghao Lu; Xiaogang Li, Fluid drag reduction effect test device for surface microstructure, China, 2020/6/26.
- 12. 201810358024.2, Yu Cao; Xiuju Zhao; Wei Xue; Huan Yang; Guang Feng; Yonghao Lu; Xiaogang Li, Wall turbulence resistance testing method of surface groove structure, China, 2020/2/7.
- 13. 201811175709.X, Yao Xue; Liujun Wu; Jinzhong Lu; Kaiyu Luo; Wei Xue, Complex method for forming gradient nanostructure by laser-assisted

- mechanical shot peening, China, 2020/5/22.
- 14. 201810413771.1, Yu Cao; Qiaofei Pan; Huan Yang; Wei Xue; Zongyi Ye; Tao Li; Yanling Yu, Parallel mode metal three-dimensional printing forming method based on induction smelting, China, 2020/10/9.
- 15. 202010785926.1, Yu Cao; Jialun Yang; Wei Xue; Diqiang Xue; Yanling Yu; Dehua Zhu; Jie Chen; Wenwen Liu, LCD photocuring 3D printing light projection device with comprehensive heat dissipation function, China, 2020/8/6.
- 16. 202010502551.3, Wei Xue; Yang Liu; Yu Cao; Jie Chen; Dehua Zhu; Wenwen Liu; Bingtao Sun, Efficient washing device for generating high-speed spinning liquid drops based on composite wet surface, China, 2020/6/4.
- 17. 201610557395.4, Ningbo Liao; Feng Zhou; Wei Xue, Method for scale-span analysis of mechanical property of silicon carbon-based ceramic coating interface, China, 2019/3/19.
- 18. 201710046400.X, Yaohua Jiang; Beirong Zheng; Quan Wang; Yao Xue; Wei Xue, Back-gate black phosphorus field effect transistor based on PET flexible substrate and preparation method thereof, China, 2019/6/25.
- 19. 201810232197.X, Yu Cao; An He; Ke Sun; Wenjun Xu; Jian Zhang; Wenwen Liu; Wei Xue; Yifen Chen, Galvanometer scanning laser processing method for coaxial real-time detection, China, 2019/8/27.
- 20. 201710541125.9, Wei Xue; Kaiyu Luo; Haifei Lu; Jinzhong Lu, Combined treatment method for improving corrosion resistance of metal component in chloride-contained solution, China, 2019/3/1.
- 21. 201810417197.7, Yu Cao; Zongyi Ye; Wei Xue; Tao Li; Huan Yang; Qiaofei Pan; Yanling Yu, Metal three-dimensional printing forming method based on nano temperature dimension effect, China, 2019/12/3.
- 22. 201810464676.4, Qiaofei Pan; Yu Cao; Wei Xue; Huan Yang; Dehua Zhu; Jianwu Qu; Wenwen Liu; Jian Zhang, Method for preparing dry bonded structure surface through direct metal laser ablation, China, 2019/12/10.
- 23. 201710766870.3, Yu Cao; Yirui Ke; Wei Xue; Ke Sun; Wenwen Liu; Dehua Zhu; Jian Zhang; Bingtao Sun, Wall turbulence time-space evolutionary process detection method based on fluorescent fiber tracking, China, 2019/9/10.
- 24. 201710719144.6, Beirong Zheng; Wei Xue, Method for predicting abrasion loss of tool in miller machining process based on power detection, China, 2019/3/1.
- 25. 201810357624.7, Huan Yang; Wei Xue; Yu Cao; Xiuju Zhao; Tao Li; Zongyi Ye; Wenwen Liu, Material surface fluid resistance testing method, China, 2019/11/22.
- 26. 201610255636.X, Aixin Feng; Jinchao Zhang; Wei Xue; Ying Zhao; Haihua Yang; Hao Cheng; Yinan Miu, Laser ultrasonic method-based steel rail temperature stress calibration platform, China, 2018/8/28.
- 27. 201510601464.2, Xizhang Chen; Wei Xue; Qibing Yuan; Dawei Zhang,

- Tungsten carbide particle-reinforced iron base cladding layer through tungsten electrode argon arc in-situ synthesis and processing method thereof, China, 2018/7/3.
- 28. 201510323344.0, Aixin Feng; Wei Xue; Yuwen Lu; Fengping Li; Jinchao Zhang; Jinhua Lu; Jian Zhang; Dehua Zhu; Yu Cao; Jianwu Qu, Mechanical optical shutter device for laser, China, 2018/4/6.
- 29. 201710027272.4, Yu Cao; An He; Wei Xue; Wenwen Liu; Yang Huan; Ke Sun; Xiuju Zhao, Method for preparing micro-nano self-assembled structure based on wettability regulation and control, China, 2018/1/2.
- 30. 201510359108.4, Aixin Feng; Wei Xue; Qiu Zhong; Hao Wu; Xingwang Xu; Fengping Li; Huaxia Zhang; Jinchao Zhang, Method for synchronously machining flange plates at two ends of rear axle housing welding assembly, China, 2018/1/12.
- 31. 201810417050.8, Yu Cao; Tao Li; Huan Yang; Wei Xue; Zongyi Ye; Wenwen Liu; Qiaofei Pan, Metal three-dimensional printing forming method based on parallel pulsed arc melting, China, 2018/5/3.
- 32. 201721615600.4, Aixin Feng; Haihua Yang; Jinchao Zhang; Wei Xue; Ying Zhao; Hao Cheng; Huan Chen; Tiandai Jia; Yong Liu, Fine system of processing of multi -functional ultrafast laser, China, 2018/5/29.
- 33. 201810364548.2, Yu Cao; Qiaofei Pan; Huan Yang; Wei Xue; Xiuju Zhao; Tao Li; Zongyi Ye, Material surface fluid resistance testing device based on laser ranging, China, 2018/4/20.
- 34. 201810414290.2, Yu Cao; Xu Ji; Huan Yang; Wei Xue; Zongyi Ye; Wenwen Liu; Qiaofei Pan, Direct writing type metal three-dimensional printing forming method based on induction smelting, China, 2018/5/3.
- 35. 201610014707.7, Fengping Li; Zhengya Zhang; Sijia Zhou; Rui Zhou; Wei Xue; Yu Cao; Peihong Fu; Jianhua Gang; Cunxuan Sun; Jibao Huang, Automatic polishing system for cylindrical workpiece, China, 2017/9/12.
- 36. 201510358715.9, Aixin Feng; Wei Xue; Huaxia Zhang; Qiu Zhong; Xingwang Xu; Fengping Li; Hao Wu; Jinchao Zhang, Clamp for processing vertical positioning surface of tail wing of airplane, China, 2017/5/10.
- 37. 201510058197.9, Xizhang Chen; Qibing Yuan; Wei Xue, Laser-cladding nozzle, China, 2017/3/15.
- 38. 201410581587.X, Beirong Zheng; Quan Wang; Yanmin Zhang; Wei Xue, Method for discriminating nonlinearity of pressure sensors under influence of internal stress, China, 2017/1/4.
- 39. 201610250361.0, Aixin Feng; Jinchao Zhang; Wei Xue; Ying Zhao; Haihua Yang; Hao Cheng; Yinan Miu, Device and method of monitoring steel rail temperature stress in real time based on laser ultrasonic method, China, 2017/12/19.
- 40. 201510320952.6, Aixin Feng; Wei Xue; Fengguo Chen; Dehua Zhu; Yu Cao; Fengping Li; Jianwu Qu; Jian Zhou; Yan Xu, Device and method for ultrasonic impact strengthening of shaft type part welding seams, China, 2017/3/1.

- 41. 201510358837.8, Aixin Feng; Wei Xue; Huaxia Zhang; Qiu Zhong; Xingwang Xu; Fengping Li; Hao Wu; Jinchao Zhang, Machine tool with two drivers, China, 2017/7/11.
- 42. 201510321230.2, Aixin Feng; Wei Xue; Fengguo Chen; Dehua Zhu; Yu Cao; Fengping Li; Jianwu Qu; Jian Zhou; Yan Xu, Plate type workpiece welding clamp, China, 2017/1/25.
- 43. 201510321306.1, Aixin Feng; Wei Xue; Cheng Yin; Fengping Li; Jinchao Zhang; Jinhua Lu; Jian Zhang; Dehua Zhu; Yu Cao; Jianwu Qu, Method for prolonging service life of turbine blade based on laser double-faced impact technique, China, 2017/3/22.
- 44. 201410682916.X, Aixin Feng; Rucheng Guo; Wei Xue; Ruiyan Wang; Yongyu Gu, Special fixture for adjusting suspended beam lead screw position relative to guide rail, China, 2017/5/10.
- 45. 201510601351.2, Xizhang Chen; Wei Xue; Qibing Yuan, Laser-cladding tungsten carbide ceramic particle reinforced metal-based coating and processing method thereof, China, 2017/12/8.
- 46. 201510469376.1, Ningbo Liao; Wei Xue, Lithium battery SiCO-Si gradient thin film electrode system and preparing method thereof, China, 2017/5/31.
- 47. 201510601352.7, Xizhang Chen; Yanhu Wang; Wei Xue; Dawei Zhang, Laser-induction hybrid cladding processing equipment, China, 2017/8/11.
- 48. 201610012727.0, Fengping Li; Zhengya Zhang; Sijia Zhou; Rui Zhou; Wei Xue; Yu Cao; Peihong Fu; Jianhua Gang; Cunxuan Sun; Jibao Huang, Automatic polishing system for stainless-steel cups, China, 2017/9/29.
- 49. 201610008731.X, Fengping Li; Zhengya Zhang; Sijia Zhou; Rui Zhou; Wei Xue; Yu Cao; Peihong Fu; Jianhua Gang; Cunxuan Sun; Jibao Huang, Stainless steel elbow pipe outer circle polishing system based on industrial manipulator, China, 2017/9/5.
- 50. 201610012960.9, Fengping Li; Zhengya Zhang; Sijia Zhou; Rui Zhou; Wei Xue; Yu Cao; Peihong Fu; Jianhua Gang; Cunxuan Sun; Jibao Huang, Industry-manipulator-based in-pipe polishing system of stainless steel elbow pipe, China, 2017/8/22.
- 51. 201510145347.X, Yu Cao; Chunlin Li; Xinlei Wei; Wei Xue; Fengping Li; Jian Zhang; Yanhu Wang, Laser processing method of surface array microstructure of point cloud description curve workpiece, China, 2016/9/21.
- 52. 201510145090.8, Yu Cao; Xinlei Wei; Chunlin Li; Wei Xue; Fengping Li; Yanhu Wang; Jian Zhang, Laser etching preparation method for surface array microstructure on basis of curved surface workpiece appearance, China, 2016/5/25.
- 53. 201510363573.5, Aixin Feng; Wei Xue; Hao Wu; Qiu Zhong; Xingwang Xu; Fengping Li; Huaxia Zhang; Jinchao Zhang, Stroke-fixed cam supporting device capable of monitoring clamping force and method thereof, China, 2016/7/13.
- 54. 201510058137.7, Xizhang Chen; Wei Xue; Jie Yu, Arc welding pressure plate with rolling wheel, China, 2016/4/13.

- 55. 201510319294.9, Aixin Feng; Wei Xue; Cheng Yin; Fengping Li; Jinchao Zhang; Jinhua Lu; Jian Zhang; Dehua Zhu; Yu Cao; Jianwu Qu, Device and method for adjusting laser light spot size and positioning target material, China, 2016/5/11.
- 56. 201210380008.6, Fengping Li; Hongming Zhou; Wei Xue; Yu Cao; Anxiang Huang; Zongli Zhao, Automatic printing production line, China, 2015/4/15.
- 57. 201410050557.6, Aixin Feng; Yi Lu; Wei Xue; Chuan Wu; Jingwen Luo; Yu Cao; Jianwu Qu; Yupeng Cao; Dehua Zhu; Deping Wen, Electromagnetically-assisted laser drilling method and device, China, 2015/8/12.
- 58. 201410049815.9, Aixin Feng; Yi Lu; Wei Xue; Chuan Wu; Jingwen Luo; Yu Cao; Jianwu Qu; Yupeng Cao; Dehua Zhu; Deping Wen, Laser boring method and device assisted by electric field and magnetic field coupling, China, 2015/8/5.
- 59. 201510357028.5, Aixin Feng; Wei Xue; Qiu Zhong; Hao Wu; Xu Xingwang; Li Fengping; Zhang Huaxia; Jinchao Zhang, Device and method for positioning free-form surface thin-walled parts, China, 2015/6/25.
- 60. 201310384555.6, Wei Xue; Jinzhong Lu; Mi Luo; Yongkang Zhang; Fengze Dai, Laser shock peening method and device of bottom plane of blade tenon groove of airplane, China, 2014/11/5.
- 61. 201310245984.5, Wei Xue; Jinzhong Lu; Kaiyu Luo; Yongkang Zhang; Fengze Dai, Hidden surface laser impact strengthening method and apparatus thereof, China, 2014/11/5.
- 62. 201310410410.9, Fengping Li; Zhihui Peng; Junping Zhao; Yuqing Zhou; Wei Xue; XuelinHu, Variable frequency constant-pressure water supply system control method based on gray correlation method, China, 2014/12/24.
- 63. 201110225082.6, Wei Xue; Nan Xie; Xiaowen Xie; Beirong Zheng; Liqu Lin, Production line system adaptive to dynamic configuration of equipment and process sequence method thereof, China, 2013/6/19.

#### **OUTSTANDING ACCOMPLISHMENTS**

Professor Xue Wei, Doctor of Engineering, National Class-2 Professor, Doctoral Supervisor, Foreign Academician of Russian Academy of Engineering, former Vice President of Wenzhou University, Expert of Special Government Allowance of the State Council, Inaugural Member of the Academician Expert Advisory Committee of China Invention Association, now Director of China International Science & Technology Cooperation Base for Laser Processing Robot, Director of Zhejiang Province Key Laboratory of Laser Processing Robot, Director of Zhejiang Engineering Research Center of Laser and Optoelectronic Intelligent Manufacturing, Director of Zhejiang Province Laser and Photoelectric Intelligent Manufacturing Collaborative Innovation Center, Head of First-Class Discipline in Mechanical Engineering of Zhejiang Province.

He is committed to ground-breaking innovation and fostering international collaboration. He has long been devoted to scientific research in the field of laser intelligent manufacturing. He has built international collaborative labs and kept facilitating international scientific and technological cooperation with institutes from many countries including the United States, Japan, Germany, Singapore and South Korea, etc. He has presided over more than 20 national and provincial projects such as national key R&D projects and key projects of National Natural Science Foundation of China. He has received over 10 awards including China Patent Gold Award, First Prize of Science and Technology Award of Zhejiang Province, First Prize of Innovation Award of China Invention and Entrepreneurship Award, etc. He has authorized over 60 invention patents, including 2 US-authorized invention patents, and published more than 190 academic papers, including over 100 SCI papers. In 2022, he won the 23rd China Patent Gold Award and was elected as a Foreign Full Member (Academician) of Russian Academy of Engineering.

He is committed to commercialization of technology and serving local industry. With his leadership in laser and optoelectronic research team and support from local government, he founded Institute of Laser and Optoelectronic Intelligent Manufacturing of Wenzhou University in December 2016, an independent legal entity, himself as Chairman and Chief Scientist, which later became the leading institute of Wenzhou University in serving the local industry. After more than 5 years of efforts, Laser Institute has undertaken more than 50 projects such as national key R&D projects and Zhejiang Province's "Pioneer" Project, authorized over 200 invention patents and transferred 70 of them, incubated more than 20 science & technology enterprises including national high-tech enterprises and small & medium-sized enterprises, established close cooperation with over 160 enterprises, and received technological service income of more than 50 million RMB. The institute has also been approved the first batch of provincial-level new R&D institution, provincial engineering research center, provincial innovation and entrepreneurship demonstration base, provincial postdoctoral workstation and other 9 provincial and ministerial-level research platforms, and won the 2020 Industry-University-Research Cooperation Innovation Award (Organization).

He is committed to education and cultivating young talents. He is in charge of the National First-Class Development Station in the Discipline of Industrial Engineering, Director of Key Development Center for Experiment Teaching and Demonstration in Zhejiang Province, and Chairman of Digital Economy Industry-Education Integration Alliance in Southern Zhejiang Province (Wenzhou). He has presided over and completed the research and practice project of new engineering of the Ministry of Education, and edited 5 textbooks, among which "Introduction to Industrial Engineering" was awarded "13th

Five-Year Plan" National Key Publication Prize, "13th Five-Year Plan" New Form Textbook of Zhejiang Province, "13th Five-Year Plan" Excellent Textbook of Zhejiang Province, and "14th Five-Year Plan" Excellent Textbook of Zhejiang Province. He has published more than 20 teaching related papers in <China Higher Education Research>, <Creative Education> and <Guangming Daily>, etc., and was awarded 2020 China Industry-University-Research Cooperation Innovation Award (Individual) and First Prize of Zhejiang Province Higher Education Teaching Achievement in 2021.