

Curriculum Vitae

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Education and Employment

2008.10–now, Professor, Changjiang Chair Professor and the University Professor, Laboratory of Advanced Materials, Department of Macromolecular Science, Institute of Fiber Materials and Devices, Fudan University
2006.10–2008.09, Director's Postdoctoral Fellow, Los Alamos National Laboratory, USA
2003.08 – 2006.10, PhD, Department of Chemical and Biomolecular Engineering, Tulane University
2000.09–2003.06, MSc, Department of Macromolecular Science, Fudan University
1995.09–1999.06, BEng, Department of Polymer Materials Science and Engineering, Donghua University

Honor and Award

Top Ten Semiconductor Advances in China in 2024 (2025.01), Chambroad Technology Innovation Award by Chinese Chemical Society (2024.11), China's 2023 Annual Major Medical Advances (2024.04), Baosteel Excellent Teacher Award (2023.11), First Prize of National Teaching Achievement Award in 2022 (2023.07), Shanghai Labor Medal (2023.05), First Class of Shanghai Natural Science Award (2023.05), China's Top 100 Most Influential International Academic Papers in 2021 (2022.12), IUPAC Top Ten Technologies in Chemistry (2022.10), Xplorer Prize (2022.09), Grand Prize of Shanghai Education Award (2022.09), Shanghai Science and Technology Elite (2022.09), Falling Walls Foundation Winner in Engineering and Technology (2022.08), Fellow of Chinese Chemical Society (2022.07), Shanghai Most Beautiful Scientist (2022.05), Top Ten Optics Advances in China in 2021 (2022.03), Top Ten Technologies in China (2022.02), Top Ten Science Advances in China in 2021 (2022.02), Top Ten Semiconductor Advances in China in 2021 (2022.01), ACS Top Ten Chemistry Research (2021.12), 2021's Top Chemistry Research by C&EN (2021.12), Top Ten Social Influence Events in the Field of Optics in China in 2021 (2021.12), Polymer Science Innovation Paper Award of Chinese Chemical Society (2021.09), Second Class of National Natural Science Award (2020.01), Excellent Product Award of the 21st China Hi-Tech Fair for the Flexible Lithium-ion Battery (2019.11), Qian Baojun Fiber Award (2019.11), Shanghai Good Teacher (2019.08), Leo KoGuan Teaching Award by Fudan University (2018.12), Gold Award from International Exhibition of Inventions of Geneva (2018.04), Leading Talent of National Ten Thousand Plan (2017.12), National Outstanding Contribution Experts (2017.11), Leading Talent of National Hundred, Thousand and Ten Thousand Plan (2017.11), Top Ten Research Team at Fudan University (2017.11), The Most Creative 100 Persons by FastCompany (2017.08), National Natural Science Foundation of China Excellent Achievements for the Fiber-shaped Energy Device (2017.04), Innovation Leadership by Ministry of Science and Technology of China (2017.01), Shanghai Natural Science Peony Award (2016.10), Young Scientist Award by Chinese Society for Composite Materials (2015.06), Shanghai Outstanding Academic Leaders (2015.02), Excellent Organization Award by Chinese Materials Research Society (2015.01), Shanghai Outstanding Ten Young People (2014.12), Changjiang Chair Professor, Ministry of Education of China (2014.11), National Excellent Scientist at Composite Materials, Chinese Society for Composite Mat

erials (2014.07), The Best Graduate Advisor, Fudan University (2014.06), Fellow, Royal Society of Chemistry (2014.04), China Young Science and Technology Award (2013.12), DuPont Young Professor Award (2013.05), Biomatic Distinguished Faculty Award, Chinese-American Chemistry and Chemical Biology Professors Association (2013.04), Distinguished Young Scholar, National Natural Science Foundation of China (2012.12), China Outstanding Young Scholar (2012.12), Shanghai Professor of Special Appointment (Eastern Scholar) (2011.12), Shanghai Leading Talent (2010.12), Young Scientist Award by Chinese Chemical Society (2010.12), Excellent Graduate Advisor at Fudan University (2010.09), Li Foundation Heritage Prize for Excellence in Creativity, USA (2010.05), Chinese Chemical Society -Wiley Youth Chemical Paper Prize (2009.12), New Century Talent, Ministry of Education of China (2009.09), Shanghai Pujiang Talent (2009.06).

Activity and Service

Service in Academic Organization: Academic Committee member of State Key Laboratory of Luminescent Materials and Devices, South China University of Technology (2025.05), Strategic Advisory Committee member of State Key Laboratory of Advanced Polymer Materials, Sichuan University (2025.05), Academic Committee member of State Key Laboratory of Molecular Engineering of Polymers(Fudan University) (2025.04-2030.03), Vice Chair of the Academic Committee of Key Laboratory of Advanced Energy Materials Chemistry ,Ministry of Education,(Nankai University) (2024.11), Chairman of the Academic Committee of Next-Generation Energy Storage Center, Southeast University (2024.09) , Vice Chairman of the First Committee on Flexible Electronics, Chinese Institute of Electronics (2024.09), Chairman of the Second Council, Division of Fiber Material Modification and Composite Technology, Chinese Materials Research Society (2024.07-2027.07) , Expert Committee Member of Shanghai Polymer Molecular Engineering Technical Service Platform (2024.03-2029.02), Development Strategy Consultant of College of Biological Science and Medical Engineering, Donghua University (2023.07), Organic Committee Member of Shanghai Society of Chemistry and Chemical Engineering (2022.10), Polymer Science Committee Member of the 31st Chinese Chemical Society (2022.10), Committee Member of Functional and Smart Material Project from Ministry of Science and Technology of China (2022.10), Adjunct Professor and Doctoral Supervisor of Nanjing University (2022.01), International Fellow of Japan Society of Vacuum and Surface Science (2021.11), Academic Committee Member of Zhejiang Sci-Tech University Zhejiang Province Smart Textile and Flexible Communication Key Laboratory (2021.10), Academic Committee Member of GUT Guangxi Electrical and Magnetic Chemical Functional Materials Key Laboratory (2021.05), Young Committee Member at World Laureates Association (2021.04), Council Member at Shanghai Society of Chemistry and Chemical Industry (2021.01), Member of the 8th Science and Technology Committee of Ministry of Education (2020.12), Member for Energy Chemistry at Chinese Chemical Society (2020.11), Academic Committee Member of Nankai University Advanced Energy Materials Chemistry Key Laboratory from Ministry of Education (2020.11), Member for New Materials at Shanghai Association of Science and Technology (2020.09), Academic Committee Member of HUST Energy Conversion and Storage Materials Chemistry Key Laboratory from Ministry of Education (2020.06-2024.06), Associate Director of Fiber Materials Division of Chinese Materials Research Society (2018.12), Member for Shanghai Graphene Industry Technology Functional Platform (2017.06), Honorary Director of the 7th Council for Chinese Society for Composite Materials (2016.11), Guest Professor of Central South University of Forestry and Technology (2016.11-), Expert at the Science and Technology Commission for the Central Military Commission (2016.08-2021.09), Guest Professor of China Academy of Engineering Physics (2015.05-2017.05), Committee Member of Youth Union of Yangpu District in Shanghai (2015.03-), Committee Member of Shanghai Youth Union (2014.12-), Vice President of National Materials New Technology Development Research Institute (2014.11-), Council Member, Chinese Materials Research

Society (for Nanomaterials) (2014.04-), Standing Director of China Energy Environmental Protection High-tech Industry Association (2013.10-2017.09), Technical Committee Member of National Aramid Fiber Engineering Center (2013.05-2017.05), Director of the Council for Chinese Society for Composite Materials (2012.09-2016.09), Adjunct Professor and Doctoral Supervisor of Tongji University (2008.10-2011.10).

Service in Academic Journal: Editor-in-chief of *Watt* (2025.09), Editor Board Member of *Science Bulletin* (2023.01), Editorial Board Member of *Science China Materials* (2022.12), Editorial Board Member of *Science & Technology Review* (2022.12-2026.12), Associate Editor of *International Journal of Smart and Nano Materials* (2022.12), Section Editor and Editorial Board Member of *National Science Review* (2022.12), International Advisory Editorial Board Member of *ChemNanoMat* (2022.10), Editorial Board Member of *Progress in Polymer Science* (2022.03), Editorial Board Member of *Journal of Textile Research* (2021.08), Editorial Board Member of *Nano Research Energy* (2022.01), Editorial Board Member of *Chinese Plastics* (2019.11), Editorial Advisory Board Member of *Advanced Fiber Materials* (2019.01), Editorial Advisory Board Member of *Advanced Functional Materials* (2018.11), International Editorial Advisory Board Member of *Advanced Materials Technologies* (2018.05), Associate Editor of *Science Bulletin* (2018.01-2022.12), International Editorial Advisory Board Member of *Chemistry–An Asian Journal* (2017.11), International Editorial Advisory Board Member of *Batteries & Supercaps* (2017.11), Editor Board Member of *Small Methods* (2016.08-), Editor Board Member of *Chinese Journal of Polymer Science* (2016.04-2019.04), Editor Board Member of *Acta Chimica Sinica* (2015.08-2018.08), Editor Board Member of *Science & Technology Review* (2015.01-2019.01), Chairman of Editorial Board of *ChemNanoMat* (by Wiley-VCH) (2014.10-2022.10), Editor Board Member of *Science China Materials* (2014.07-2018.07), Guest Editor of *Polymer Chemistry* (2012.10-2013.09), Guest Editor of *Advanced Materials* (2012.09-2013.09), Editor Board Member of *Scientific Reports* published by *Nature* (2012.01-2014.12).

Research Interest

We focus on the cross-disciplinary field among chemistry, physics, energy and biomedical science. We are creating new metal-backboned polymers, designing novel fiber electronics, making extremely high-energy-density devices from inner shell electrons, proposing fractional element and discovering new learning paradigms. The final goal is to make new materials and devices for real applications.

Book

- 11 Hao Sun, Zhibin Yang, Longbin Qiu, **Huisheng Peng**; Title: Wearable Solar Cells; Pages; Publisher: Wiley-VCH.
- 10 Jia Guo, Guosong Chen, Jianfeng Li, **Huisheng Peng**; Title: Molecular Engineering of Polymers-The Research Development at Department of Macromolecular Sciences, Fudan University; Pages; Publisher: Springer.
- 9 Jia Guo, Guosong Chen, Jianfeng Li, **Huisheng Peng**; Title: Research Progress in Polymer Molecular Engineering; Pages: 418; Publisher: Science Press; Publication Date: September 2023.
- 8 Ye Zhang, Lie Wang, Yang Zhao, **Huisheng Peng**; Title: Flexible Batteries; Pages: 226; Publisher: CRC Press, Publication Date: March 2022; ISBN: 9781032226545.
- 7 **Huisheng Peng**; Title: Fiber Electronics (in Chinese); Pages: 409; Publisher: Science Press; Publication Date: May 2021; ISBN: 9787030686633.

- 6 **Huisheng Peng**; Title: Fiber Electronics; Pages: 466; Publisher: Springer; Publication Date: December 2020; ISBN: 978-981-15-9944-6.
- 5 **Huisheng Peng**; Title: Are You Ready for Graduate Study; Pages: 220; Publisher: Fudan University Press; Publication Date: December 2019; ISBN: 978-7-309-14654-7/G×2037.
- 4 **Huisheng Peng**, Qingwen Li, Tao Chen; Title: Industrial Applications of Carbon Nanotubes; Pages: 508; Publisher: Elsevier; Publication Date: October 2016; ISBN: 978-0-323-41481-4.
- 3 **Huisheng Peng**, Xuemei Sun, Wei Weng, Xin Fang; Title: Polymer Materials for Electronic Applications; Pages: 386; Publisher: Elsevier; Publication Date: September 2016; ISBN: 978-0-12-811091-1.
- 2 **Huisheng Peng**; Title: Novel Fiber Materials and Devices; Pages: 205; Publisher: Science Press; Publication Date: February 2016; ISBN: 9787030466822.
- 1 **Huisheng Peng**; Title: Fiber-Shaped Energy Harvesting and Storage Devices; Pages: 218; Publisher: Springer; Publication Date: January 2015; ISBN: 978-3-662-45744-3.

Book Chapter

- 7 Ye Zhang, Tingting Ye, Luhe Li, **Huisheng Peng**, Chapter: Carbon Nanotubes for Flexible Fiber Batteries; Book: Nanoporous Carbons for Soft and Flexible Devices; Publisher: Springer; Publication Date: 2020.
- 6 Bai Yang, Zhixiang Wei, Yi Zhang, Xuemei Sun, **Huisheng Peng**; Chapter: Polymer Nanocomposite Materials; Book: Functional Polymer Materials; Publisher: Science Press; Publication Date: 2019.
- 5 **Huisheng Peng**, Yifan Xu, Jian Pan, Yang Zhao, Lie Wang, Xiang Shi; Chapter: Flexible Metal-Air Batteries; Book: Metal-Air Batteries: Fundamentals and Applications; Publisher: Wiley-VCH Verlag GmbH & Co. KGaA; Publication Date: 2018.
- 4 Xuemei Sun, Xin Lu, Xin Fang, **Huisheng Peng**; Chapter: Aligned Carbon Nanotube-Based Sensing Materials; Book: Chemical Functionalization of Carbon Nanomaterials: Chemistry and Applications; Publisher: Taylor & Francis Group-CRC Press; Publication Date: 2015.
- 3 **Huisheng Peng**, Hao Sun, Xuemei Sun; Chapter: Aligned Carbon Nanotubes and Their Hybrids for Supercapacitors; Book: Nanocarbons for Advanced Energy Storage; Publisher: Wiley-VCH Verlag GmbH & Co. KGaA; Publication Date: June 2014.
- 2 **Huisheng Peng**, Xuemei Sun, Tao Chen; Chapter: Polymer Composites with Carbon Nanotubes in Alignment; Book: Carbon Nanotubes-Polymer Nanocomposites; Publisher: INTECH; Publication Date: June 2011.
- 1 **Huisheng Peng**; Chapter: Self-Directed Assembly of Organosilanes into Helically Mesoporous Nanocomposites; Book: Mesoporous Materials: Properties, Preparation and Applications; Publisher: Nova Science Publishers Inc.; Publication Date: Quarter 3-4, 2009.

Publication (including 5 at *Nature*, 13 at *Nature* sister journals, 4 at *Nature Communications*, 57 at *Advanced Materials*, 53 at *Angewandte Chemie International Edition*, 8 at *Journal of the American Chemical Society*, and 1 at *Physical Review Letters*)

- 425 Chengqiang Tang, Sihui Yu, Wenjun Li, Tao Huang, Yiqing Yang, Songlin Zhang, **Huisheng Peng**, Xuemei Sun*, "Design, construction, and application of implantable fiber biosensors", *Advanced Materials*, 2025, 37, 2508190.

- 424 Kaiwen Zeng*, Jizeng Liu, Zhijing Wu, Yedong Qin, Jiayi Shen, Fuyao Huang, **Huisheng Peng***, "A material viewpoint on metal-backboned polymers", *Advanced Materials*, 2025, 37, 2509064.
- 423 Shuo Wang, Yan Wang, Zhaofeng Ouyang, Shitao Geng, Qianyun Chen, Xiaoju Zhao, Bin Yuan, Xiao Zhang, Shanshan Tang, Qiuchen Xu, Peining Chen, **Huisheng Peng***, Hao Sun*, "Molecular engineering of two-dimensional polyamide interphase layers for anode-free lithium metal batteries", *Nature Materials*, 2025, 24, s41563-025-02339-y.
- 422 Jinyang Zhou, Zhen Wang, Jianzheng Li, Yue Liu, Yixuan Wang, Yajie Qin, Yuanyuan Zheng, Ya Huang*, **Huisheng Peng**, Peining Chen*, "High-resolution and stretchable textile circuit by photopatterning of surface-modified liquid metal nanoparticles", *Science China Chemistry*, 2025, 68, s11426-025-2794-x.
- 421 Yingfan Chang, Haibo Jiang, Yichi Zhang, Shiqi Sun, Xiaocheng Gong, Chenhao Lu, Chen Zhao*, Songlin Zhang, Peining Chen, **Huisheng Peng**, Bingjie Wang*, "Integrated helical fiber electrode for stable Ah-level fast-charging fiber lithium-ion batteries", *Small*, 2025, 21, 2506922.
- 420 Ziyang Kang, Shengfei Wang, Guanbin Wu, Shu Chen, Zilong Zheng, Wenwen Wang, Xinwei Du, Huajing Li, Mengyao Zhu, **Huisheng Peng**, Yue Gao*, "Nitrogen-centered organic salts enable stable lithium-ion supply for high-energy-density batteries", *Journal of the American Chemical Society*, 2025, 147, 30591-30598.
- 419 Wenjun Li, Jianyou Feng, Haoyu Zhang, Chengqiang Tang, Jinyan Li, Ziwei Liu, Yiqing Yang, Jiajia Wang, Kun Zhang, Songlin Zhang, **Huisheng Peng**, Xuemei Sun*, "Co-extrusion strategy for continuously fabricating flexible fiber electrochemical sensors with high stability and consistency", *Advanced Functional Materials*, 2025, 35, 2510120.
- 418 Yi Jiang, Yao Long, Xiangran Cheng, Haibo Jiang, Chuanfa Li, Meng Liao, Xuemei Sun, Peining Chen, Chen Zhao, **Huisheng Peng**, Bingjie Wang*, "Ah-level large-format fiber-shaped lithium-ion batteries enabled by effective field homogenization", *Advanced Materials*, 2025, 37, 2506218.
- 417 Yifeng Zhang, Kaiwen Zeng, Yanruzhen Wu, Fuyao Huang, **Huisheng Peng***, "Synthesis of nickel-backboned polymers by incorporating triazine groups", *Science Bulletin*, 2025, 70, 2223-2227.
- 416 Jiatian Song, Zhengfeng Zhu*, **Huisheng Peng***, "Engineering interfaces for fiber solar cells", *Small*, 2025, 32, 2503549.
- 415 Shaoqi Yao, Hongyu Guo, Qingquan Han, Chuanfa Li, Pengzhou Li, Zhe Yang, Xuemei Sun, Chen Zhao, **Huisheng Peng**, Bingjie Wang*, "Passive Cooling Fabrics with Tailored Cracked Structures for Personal Indoor Thermal-Humidity Management", *Advanced Materials Technologies*, 2025, 10, 2500428.
- 414 Hao Guo, Chunlei Dong, Qingquan Han, Hongyu Jiang, Hongji Sun, Xuemei Sun, Songlin Zhang*, **Huisheng Peng***, "Advancing Carbon Nanotube Fibers: Addressing Challenges from Production to Application", *ACS Central Science*, 2025, 11, 855-867.
- 413 Ziwei Liu, Jianzheng Li, Yapeng Fu, Sijia Yu, Wenjun Li, Yiqing Yang, Jiajia Wang, Sihui Yu, Peiwen Yu, Kailiang Xu, Yajie Qin*, Songlin Zhang, **Huisheng Peng**, Xuemei Sun*, "Mutual Inductance-Based Array Sensor for Continuous Monitoring and Mapping of Localized Brain Deformations", *Advanced Functional Materials*, 2025, 2501550.
- 412 Yi Jiang, Kaiwen Zeng, Zhe Yang, Tianrui Li, Yunting Zhang, Bingjie Wang, **Huisheng Peng***, "Inner-shell electrons enable both high power and energy densities", *National Science Review*, 2025, 12, nwaf139.

- 411 Jiawei Chen, Pengzhou Li, Jinyan Li, Haibo Jiang, Qingquan Han, Peiyu Liu, Songlin Zhang, **Huisheng Peng**, Xuemei Sun*, "Universal Magnetic-Conductive Interfaces Enabling Reversible Interconnections in Fiber Electronics", *Small*, 2025, 21, 2500763.
- 410 Chuyue Lei, Peiyu Liu, Ke Chen, Yue Liu, Zhengfeng Zhu, Jingxia Wu, Songlin Zhang, Bingjie Wang, Xuemei Sun, Peining Chen*, **Huisheng Peng**, "High-Purity Multicolor Electroluminescent Fibers by Incorporating With Light-Conversion Perovskite Quantum Dots", *Advanced Optical Materials*, 2025, 13, 2403573.
- 409 Chuang Wang, Yanfeng Zhang, Meng Liao, Pengzhou Li, Longmei Ma, Haixin Yao, Jiahe Qu, Kun Zhang, Chuanfa Li, Tianbing Song, Zhe Yang, Xiaocheng Gong, Haibo Jiang, Chengqiang Tang, Jianyou Feng, Xiangran Cheng, Yi Jiang, Lei Ye, Wei Li, Dongliang Chao, **Huisheng Peng**, Bingjie Wang*, "A Novel Coating-Extrusion Method Enabled, High Energy, Power Density, and Scalable Production in Monolithically Integrated Energy Storage Fibers", *Advanced Materials*, 2025, 37, 2417662.
- 408 Kaiwen Zeng, Ning Wang, Zhijing Wu, **Huisheng Peng***, "Metal-Backboned Polymers: A New Concept for Thermoelectric Materials", *Chemistry – A European Journal*, 2025, 31, 2404798.
- 407 Qiuchen Xu, Shanshan Tang, Nachuan Li, Yan Wang, Xiaoju Zhao, Xiao Zhang, Shitao Geng, Bin Yuan, Shuo Wang, Zhao Feng Ouyang, Meng Liao, Linlin Ma, Ming Shang, Yifan Sun, **Huisheng Peng**, Hao Sun*, "Harnessing organic electrolyte for non-corrosive and wide-temperature Na-Cl₂ battery", *Nature Communications*, 2025, 16, s41467-025-57316-5.
- 406 Xiangran Cheng, Chenhao Lu, Xiaocheng Gong, Chuanfa Li, Jifeng Wang, Jiahe Qu, Yunting Zhang, Tianbing Song, Yanan Zhang, Haibo Jiang, Chuang Wang, Yao Long, Yuanhong Cao, Ying Wang, Wei Li, **Huisheng Peng**, Bingjie Wang*, "Quasi-solid Fiber-shaped Lithium-ion Batteries with Fire Resistance", *Angewandte Chemie International Edition*, 2025, 64, 2423419.
- 405 Yanruzhen Wu, Yifeng Zhang, Kaiwen Zeng, Xiangran Cheng, Jiatian Song, **Huisheng Peng***, "A General Strategy for the Synthesis of Metal-Backboned Molecules with Different Metals", *Angewandte Chemie International Edition*, 2025, 64, 2502327.
- 404 Yue Liu, Yuanhang Zhang, Xufeng Zhou, Zhuming Wang, Zhe Yang, Jialin Meng, Chen Wang, Xuemei Sun, Lin Chen, Peining Chen*, **Huisheng Peng***, "High-Performing Nanofiber Memristor via Field-Induced Ion Migration Concentration at Highly-Curved Interwoven Interface", *Small*, 2025, 21, 2409951.
- 403 Shu Chen, Guanbin Wu, Haibo Jiang, Jifeng Wang, Tiantian Chen, Chenyang Han, Wenwen Wang, Rongchen Yang, Jiahua Zhao, Zhihang Tang, Xiaocheng Gong, Chuanfa Li, Mengyao Zhu, Kun Zhang, Yifei Xu, Ying Wang, Zhe Hu, Peining Chen, Bingjie Wang, Kai Zhang, Yongyao Xia, **Huisheng Peng***, Yue Gao*, "External Li supply reshapes Li deficiency and lifetime limit of batteries", *Nature*, 2025, 638, s41586-024-08465-y.
- 402 Chuanfa Li, Kun Zhang, Jiabin Li, Qian Ye, Kailin Zhang, Bingjie Wang, **Huisheng Peng***, "Polymers for Fiber Batteries", *Macromolecules*, 2025, 58, 1772-1786.
- 401 Chuanfa Li, Qian Ye, Jiaqi Wang, Xinlin Huang, Tianbing Song, Kun Zhang, Pengzhou Li, Yanan Zhang, Xiaocheng Gong, Yi Jiang, Yue Gao, **Huisheng Peng**, Bingjie Wang*, "Ultrathin and capacity-tunable lithium metal wires for lithium-based fiber batteries", *National Science Review*, 2025, 12, nwae480.
- 400 Jiaqi Wu, Yichi Zhang, Yue Liu, Yuanyuan Zheng, Kailiang Xu*, Peining Chen *, **Huisheng Peng***, "A fiber-shaped ultrasonic transducer by designing a flexible

- epoxy/nano-zirconia composite as an acoustic matching layer", *Journal of Materials Chemistry B*, 2025, 13, 3023-3031.
- 399 Tianyu Wen, Yue Wu, Jinglin Sun, Jie Zhou, Qiushi Tian, Yiheng Shi, Mengjiong Chen, Chao Yu, Yanbo Wang, Shuang Yang, Yu Hou, Zhibin Yang*, **Huisheng Peng***, "Minimizing Voltage Deficit in Perovskite Indoor Photovoltaics by Interfacial Engineering", *Small*, 2025, 21, 2408271.
- 398 Yifeng Zhang, Kaiwen Zeng, **Huisheng Peng***, "Metal-backboned polymer: concept, advance and perspective", *Science China-Materials*, 2025, 68, 105-109.
- 397 Ziwei Liu, Jianzheng Li, Yapeng Fu, Sijia Yu, Wenjun Li, Yiqing Yang, Jiajia Wang, Sihui Yu, Peiwen Yu, Kailiang Xu, Yajie Qin*, Songlin Zhang, **Huisheng Peng**, and Xuemei Sun*, "Ultrathin and capacity-tunable lithium metal wires for lithium-based fiber batteries", *National Science Review*, 2025, 12, nwae480.
- 396 Zhe Yang, Pengzhou Li, Jiaxin Li, Chuanfa Li, Yanan Zhang, Taoyi Kong, Meng Liao, Tianbing Song, Jinyan Li, Peiyu Li, Siwei Cao, Yonggang Wang, Peining Chen, **Huisheng Peng**, Bingjie Wang*, "All-in-one polymer gel electrolyte towards high-efficiency and stable fiber zinc-air battery", *Angewandte Chemie-International Edition*, 2024, 64, e202414772.
- 395 Xinyue Kang, Jiatian Song, Jiuzhou Liu, Siwei Cao, Zhengmeng Lin, Hongyu Jiang, Yiqing Yang, Xiangran Cheng, Yulu Ai, Xuemei Sun, Kaiwen Zeng, Zhengfeng Zhu*, **Huisheng Peng***, "An Efficient Fiber Gel Dye-Sensitized Solar Cell with Stable Interlaced Interfaces", *Advanced Functional Materials*, 2024, 34, 2404361.
- 394 Yulu Ai, Zhen Wang, Yue Liu, Yuanyuan Zheng, Jiaqi Wu, Junyi Zou, Songlin Zhang, Peining Chen*, **Huisheng Peng**, "Robust Fiber Strain Sensor by Designing Coaxial Coiling Structure with Mutual Inductance Effect", *Advanced Fiber Materials*, 2025, 6, 1629-1639.
- 393 Junyi Zou, Xingyi Guo, Jiaqi Wu, Dongmei Xu, Kailiang Xu*, Peining Chen*, Dean Ta, **Huisheng Peng***, "A weavable and wearable polymer ultrasonic transducer with a large bandwidth", *Science China-Materials*, 2025, 67, 2653–2660.
- 392 Jianing Xu, Kaiwen Zeng, Yifeng Zhang, Yibei Yang, Ziwei Liu, Yue Liu, Jiajia Wang, Kailin Zhang, Yanruzhen Wu, Hao Sun, **Huisheng Peng***, "High Performance Microwave Absorption Material Based on Metal-Backboned Polymer", *Chinese Journal of Polymer Science*, 2024, 42, 1881–1887.
- 391 Xiangran Cheng, Chenhao Lu, Jiaxin Li, Chuanfa Li, Haibo Jiang, Yanan Zhang, Tianbing Song, Jiajia Wang, Xiaocheng Gong, Bingjie Wang*, **Huisheng Peng***, "Fiber lithium-ion battery from a view of application", *Science Bulletin*, 2024, 69, 3796-3799.
- 390 Xiaocheng Gong, Haibo Jiang, Chenhao Lu, Kun Zhang, Yao Long, Zhe Yang, Shiqi Sun, Yingfan Chang, Longmei Ma, **Huisheng Peng**, Bingjie Wang*, "Extending The Calendar Life of Fiber Lithium-Ion Batteries to 200 Days with Ultra-High Barrier Polymer Tubes", *Advanced Materials*, 2024, 36, 2409910.
- 389 Haibo Jiang, Xiaocheng Gong, Jiaqi Wang, Zhe Yang, Chuanfa Li, Yao Long, Chenhao Lu, Shiqi Sun, Kun Zhang, Yingfan Chang, Pengzhou Li, Xiangran Cheng, **Huisheng Peng**, Bingjie Wang*, "A low-permeability and flexible polymer tube for long-life fiber lithium-ion batteries", *Advanced Functional Materials*, 2024, 34, 2408529.
- 388 Chengqiang Tang, Kailin Zhang, Sihui Yu, Hang Guan, Mingjie Cao, Kun Zhang, You Pan, Songlin Zhang, Xuemei Sun*, **Huisheng Peng***, "All-Metal Flexible Fiber by Continuously Assembling Nanowires for High Electrical Conductivity", *Small*, 2024, 20, 2405000.

- 387 Jiajie He, Xue Jiang*, Chuanxin Zhang, Ying Li, Chengcheng Liu, Xin Liu, Boyi Li, **Huisheng Peng***, Dean Ta*, “Stretchable Ultrasound Metalens for Biomedical Zoom Imaging and Bone Quality Assessment with Subwavelength Resolution”, *Small*, 2024, 20, e2312221.
- 386 Junyi Zou, Guodong Feng, Jiaqi Wu, Yuanyuan Zheng, Yue Liu, Yulu Ai, Zhen Wang, **Huisheng Peng***, Peining Chen*, "An integrated electronic textile system capable of displaying full-color images and videos", *Science China Materials*, 2024, 67, 3021–3028.
- 385 Jiawei Chen, Yuan Fang, Jianyou Feng, Xiang Shi, Jinyan Li, Shuzhuang Wang, Songlin Zhang, **Huisheng Peng**, Xuemei Sun*, “Fast-response fiber organic electrochemical transistor with vertical channel design for electrophysiological monitoring”, *Journal of Materials Chemistry B*, 2024, 12, 9206-9212.
- 384 Sihui Yu, Chengqiang Tang, Sijia Yu, Wenjun Li, Jiajia Wang, Ziwei Liu, Xinheng Yan, Liyuan Wang, Yiqing Yang, Jianyou Feng, Jiaqi Wu, Kailin Zhang, Hang Guan, Yue Liu, Songlin Zhang, Xuemei Sun*, **Huisheng Peng**, “A Biodegradable Fiber Calcium Ion Sensor by Covalently Bonding Ionophores on Bioinert Nanoparticles”, *Advanced Healthcare Materials*, 2024, 13, 2400675.
- 383 Chengqiang Tang, Zhengqi Han, Ziwei Liu, Li Wenjun; Jiahao Shen, Kailin Zhang, Shuting Mai, Jinyan Li, Xiao Sun, Xingfei Chen, Hongjian Li, Liyuan Wang, Jiaheng Liang, Meng Liao, Jianyou Feng, Chuang Wang, Jiajia Wang, Lei Ye, Yiqing Yang, Songlin Xie, Xiang Shi, Kaiwen Zeng, Xuefeng Zhang, Xiangran Cheng, Kun Zhang, Yue Guo, Han Yang, Yifei Xu, Qi Tong, Hongbo Yu*, Peining Chen, **Huisheng Peng***, Xuemei Sun*, “A Soft-Fiber Bioelectronic Device with Axon-Like Architecture Enables Reliable Neural Recording In Vivo under Vigorous Activities”, *Advanced Materials*, 2024, 36, 2407874.
- 382 Kailin Zhang, Chengqiang Tang, Sihui Yu, Hang Guan, Xiao Sun, Mingjie Cao, Songlin Zhang, Xuemei Sun*, **Huisheng Peng**, “High-performing fiber electrodes based on a gold-shelled silver nanowire framework for bioelectronics”, *Journal of Materials Chemistry B*, 2024, 12, 5594-5599.
- 381 Ning Wang, Kaiwen Zeng; Yuanyuan Zheng, Hongyu Jiang, Yibei Yang, Yifeng Zhang; Dingke Li, Sihui Yu, Qian Ye, **Huisheng Peng***, “High-Performance Thermoelectric Fibers from Metal-Backboned Polymers for Body-Temperature Wearable Power Devices”, *Angew. Chem.-Int. Edit.*, 2024, 63, e202403415.
- 380 Rouhui Yu, Changxian Wang, Xiangheng Du, Xiaowen Bai, Yongzhong Tong, Huifang Chen, Xuemei Sun, Jing Yang, Matsuhisa Naoji, **Huisheng Peng***, Meifang Zhu*, Shaow Pan*, “In-situ forming ultra-mechanically sensitive materials for high-sensitivity stretchable fiber strain sensors”, *National Science Review*, 2024, 11, nwae158.
- 379 Yuanyuan Zheng, Zhigang Chen*, **Huisheng Peng***, “Intelligent textiles for visual and smart interaction”, *Advanced Fiber Materials*, 2024, 6, 946-948.
- 378 Yangyang Chen, Xiaokang Hu, Qimin Liang, Xin Wang, Huanlei Zhang, Kangkang Jia, Yuan Li, Anning Zhang, Peining Chen, Meng Lin, Longbin Qiu, **Huisheng Peng**, Sisi He, “Large-scale flexible fabric biosensor for long-term monitoring of sweat lactate”, *Advanced Functional Materials*, 2024, 36, 2401270.
- 377 Yuanyuan Zheng, Zhen Wang, Peining Chen*, **Huisheng Peng***, “Semiconductor fibres for textile integrated electronic system”, *National Science Review*, 2024, 11, nwae143.
- 376 Ziwei Liu, **Huisheng Peng***, “Flexible electrochemical fiber sensor for intracranial nitric oxide monitoring”, *Science China Chemistry*, 2024, 67, 2431-2433.
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Granted Patent

Authorized 118 patents, including 105 Chinese patents, 3 international patent, 5 US patents, 1 South Korean patent, 1 German patent, 1 Japanese patent, 1 European patent, and 1 Australian patent; 47 of them was transferred, including 23 to Anhui Ningguo Flexible Energy Storage Material Technology Co., Ltd., 12 to Shandong Yantai Tayho Advanced Materials Group Co., Ltd., 2 to Jiangsu ZJA New Material Co., Ltd., 1 to Guangdong Shenzhen Xiwo Kang Medical Technology Co., Ltd., 1 to Shanghai Rongwei Industrial Co., Ltd., 7 to Rohm and Haas Company, USA, and 1 to Samsung Electronics, South Korea.

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- 165 **Huisheng Peng**, “Flexible textile displays”, October 2021, *Westlake International Symposium in Engineering*, Hangzhou, China.
- 164 **Huisheng Peng**, “Smart fiber materials and devices”, October 2021, *The 10th International Conference on Advanced Fibers and Polymer Materials*, Shanghai, China.
- 163 **Huisheng Peng**, “Smart polymer fiber devices”, October 2021, “*Endless Scientific Frontiers*

- and New Paradigms of Innovation" Competitive Intelligence Shanghai Forum, Shanghai.*
- 162 **Huisheng Peng**, “Some exploration in the construction of polymer materials science and engineering”, September 2021, *National Polymer Academic Conference*, Beijing.
 - 161 **Huisheng Peng**, “Light-emitting fibers and display textiles”, September 2021, *National Polymer Academic Conference*, Beijing.
 - 160 **Huisheng Peng**, “Flexible textile displays”, August 2021, *China-Korea Joint Workshop for Flexible/Stretchable Electronics*, Shanghai, China.
 - 159 **Huisheng Peng**, “Light-emitting fibers and display textiles”, May 2021, *China Materials Conference*, Xiamen.
 - 158 **Huisheng Peng**, “Light-emitting fibers and display textiles”, May 2021, *East China Science and Technology - Huawei Electronic Chemicals Seminar*, Shanghai.
 - 157 **Huisheng Peng**, “Light-emitting fibers and display textiles”, April 2021, *Donghua University*, Shanghai.
 - 156 **Huisheng Peng**, “Light-emitting fibers and display textiles”, April 2021, *Annual Meeting of Chinese Chemical Society*, Zhuhai.
 - 155 **Huisheng Peng**, “Smart polymer fiber devices”, April 2021, *Lecture Hall of Tongji University*, Shanghai.
 - 154 **Huisheng Peng**, “Smart polymer fiber devices”, April 2021, *Double First-class Academic Frontier Lecture of Chemical Materials Discipline, University of Science and Technology of China*, Hefei.
 - 153 **Huisheng Peng**, “Light-emitting fibers and display textiles”, April 2021, *the 5th China Energy Materials Chemistry Seminar*, Hefei.
 - 152 **Huisheng Peng**, “Smart fiber materials and devices”, January 2021, *Energy Materials Innovation for Sustainable Development by Susmat*, Shanghai.
 - 151 **Huisheng Peng**, “Continuous preparation and application of fiber electronics”, December 2020, *the 4th International Symposium on Polymer Science and Engineering*, Beijing.
 - 150 **Huisheng Peng**, “Smart fiber materials and devices”, November 2020, *The Nano-and Microscale Celebrating for SMALL’s 15th Anniversary*, Suzhou, China.
 - 149 **Huisheng Peng**, “The rise of fiber electronics”, November 2020, *Materials Research Society Annual Meeting*, Boston, USA.
 - 148 **Huisheng Peng**, “Some advances in fiber electronic”, November 2020, *the 14th "Feng Xinde Polymer Award" lecture conference*, Changchun.
 - 147 **Huisheng Peng**, “Smart fiber materials and devices”, November 2020, *Symposium on New Energy Devices and Systems*, Shenzhen.
 - 146 **Huisheng Peng**, “Smart fiber materials and devices”, November 2020, *InfoSummit International Conference on Information Technology Materials*, Chengdu. (Invitation Presentation)
 - 145 **Huisheng Peng**, “Smart fiber devices”, October 2020, *The 3rd World Laureates Forum*, Shanghai, China.
 - 144 **Huisheng Peng**, “Continuous preparation and application of fiber electronics”, October 2020, *the 11th China International Nanotechnology Industry Expo New Fiber Materials and Applications Frontier Forum*, Suzhou.
 - 143 **Huisheng Peng**, “Flexible fiber energy storage devices”, October 2020, *Shuangqing Forum of National Natural Science Foundation*, Beijing.

- 142 **Huisheng Peng**, “Some advances in fiber electronics”, July 2020, *Wuhan Light Source Material Chemistry and Condensed Matter Physics User Seminar*, Wuhan.
- 141 **Huisheng Peng**, “The rise of fiber electronics”, December 2019, *Wiley-Northeastern Normal University Forum*, Changchun, China. (Invitation Presentation)
- 140 **Huisheng Peng**, “Smart fiber materials and devices”, November 2019, *the 12th Symposium on High Performance Ceramics and UltraStructure*, Shanghai.
- 139 **Huisheng Peng**, “The rise of fiber electronics”, November 2019, *The 9th International Conference on Advanced Fibers and Polymer Materials*, Shanghai, China.
- 138 **Huisheng Peng**, “The rise of fiber electronics”, November 2019, *The 12th International Photonics and Optoelectronics Meetings*, Wuhan, China.
- 137 **Huisheng Peng**, “Novel fiber-shaped energy electronic devices”, October 2019, *Guilin University of Technology*, Guilin.
- 136 **Huisheng Peng**, “Smart fiber electronics”, October 2019, *the 13th China Youth Science and Technology Award Winners Interdisciplinary Forum*, Guangzhou.
- 135 **Huisheng Peng**, “Smart fiber materials and devices”, October 2019, *National Polymer Academic Conference*, Xi'an.
- 134 **Huisheng Peng**, “Novel fiber-shaped energy electronic devices”, September 2019, *the 334th Eastern Science and Technology Forum*, Shanghai.
- 133 **Huisheng Peng**, “The rise of fiber electronics”, September 2019, *Fudan-Yonsei Forum*, Shanghai, China.
- 132 **Huisheng Peng**, “The rise of fiber electronics”, August 2019, *The 8th International Conference on Nanoscience and Technology*, Beijing, China.
- 131 **Huisheng Peng**, “The new development in fiber electronics”, June 2019, *Aoshan Forum-New Marine Materials*, Qingdao, China.
- 130 **Huisheng Peng**, “Smart fiber materials and devices”, April 2019, *the 1st Symposium on Flexible Intelligent Bionic Materials*, Qingdao.
- 129 **Huisheng Peng**, “Novel fiber-shaped energy electronic devices”, April 2019, *Nankai University*, Tianjin.
- 128 **Huisheng Peng**, “Novel fiber-shaped energy electronic devices”, April 2019, *Tianjin University*, Tianjin.
- 127 **Huisheng Peng**, “Novel fiber-shaped materials and devices”, April 2019, *the 4th National New Energy and Chemical New Materials Academic Conference*, Dalian.
- 126 **Huisheng Peng**, “Novel fiber-shaped energy electronic devices”, April 2019, *East China Normal University*, Shanghai.
- 125 **Huisheng Peng**, “The rise of fiber electronics”, February 2019, *International Conference on Smart Nanomaterials*, Doha, Qatar.
- 124 **Huisheng Peng**, “Smart fiber materials and devices”, December 2018, *The Third International Conference on Polymer Science and Engineering*, Beijing, China.
- 123 **Huisheng Peng**, “Fiber-shaped energy harvesting and storage devices”, November 2018, *Materials Research Society Fall Meeting*, Boston, USA.
- 122 **Huisheng Peng**, “Fiber electronics”, October 2018, *World Laureates Forum*, Shanghai, China.
- 121 **Huisheng Peng**, “Novel fiber-shaped materials and devices”, November 2018, *Changjiang Scholars Forum Series*, Xiamen.

- 120 **Huisheng Peng**, “Smart fiber materials and devices”, October 2018, *CHInano 2018 Conference*, Suzhou, China.
- 119 **Huisheng Peng**, “The rise of fiber electronics”, October 2018, *The 30th Anniversary of Advanced Materials Symposium*, Beijing, China.
- 118 **Huisheng Peng**, “Smart fiber materials and devices”, September 2018, *Changchun Institute of Applied Chemistry, Chinese Academy of Sciences*, Changchun.
- 117 **Huisheng Peng**, “Smart fiber energy electronic devices”, May 2018, *the 31st Annual Conference of the Chinese Chemical Society*, Hangzhou.
- 116 **Huisheng Peng**, “Novel fiber-shaped energy electronic devices”, April 2018, *Xi 'an Jiaotong University*, Xi 'an.
- 115 **Huisheng Peng**, “Smart fibers”, April 2017, *Materials Research Society Spring Meeting*, Phoenix, USA.
- 114 **Huisheng Peng**, “Energy harvesting and storage in 1D devices”, January 2018, *International Symposium on Energy Science and Technology*, Okinawa, Japan.
- 113 **Huisheng Peng**, “Flexible energy and electronic devices in one dimension”, December 2017, *The 15th Pacific Polymer Conference*, Xiamen, China.
- 112 **Huisheng Peng**, “Fiber-shaped energy storage and conversion devices”, November 2017, *The 1st International Conference on Energy Storage Materials*, Shenzhen, China. (Invitation Presentation)
- 111 **Huisheng Peng**, “Novel fiber-shaped electronic devices”, November 2017, *National Post-Doctoral Academic Forum on New Materials and New Energy in the Field of Optoelectronics*, Wuhan.
- 110 **Huisheng Peng**, “Smart fibers besides energy harvesting and storing”, October 2017, *The 8th A3 Symposium on Emerging Materials: Nanomaterials for Energy and Electronics*, Suzhou, China.
- 109 **Huisheng Peng**, “Flexible fiber-shaped energy and electronic devices”, October 2017, *National Polymer Academic Conference*, Chengdu.
- 108 **Huisheng Peng**, “Fiber-shaped energy materials and devices”, August 2017, *The 7th International Conference on Nanoscience and Technology*, Beijing, China.
- 107 **Huisheng Peng**, “Novel fiber-shaped electronic materials and devices”, July 2017, *China Materials Conference*, Yinchuan.
- 106 **Huisheng Peng**, “Fiber-shaped energy harvesting and storage devices”, May 2017, *European Materials Research Society Spring Meeting*, Strasbourg, France.
- 105 **Huisheng Peng**, “Fiber-shaped energy harvesting and storage devices”, May 2017, *the 3rd Small Science Symposium-Flexible and Wearable Devices*, Hong Kong, China.
- 104 **Huisheng Peng**, “Novel fiber-shaped electronic materials and devices”, April 2017, *the 15th National Applied Chemistry Annual Meeting of the Chinese Chemical Society*, Tianjin.
- 103 **Huisheng Peng**, “Fiber-shaped energy harvesting and storage devices”, April 2017, *Materials Research Society Spring Meeting*, Phoenix, USA.
- 102 **Huisheng Peng**, “The development and thinking of smart fiber”, March 2017, *Academic Seminar on The Development of Large Fiber Industry*, Shanghai.
- 101 **Huisheng Peng**, “Fiber-shaped energy harvesting and storage devices”, January 2017, *The Second International Conference on Materials Chemistry Frontiers*, Xian, China.
- 100 **Huisheng Peng**, “Clothes will generate electricity in the future- Wearable fiber-shaped energy devices”, December 2016, *Hunan University of Forestry Science and Technology*,

- Changsha.
- 99 **Huisheng Peng**, “Smart fibers that change shapes and colors”, December 2016, *East China University of Science and Technology*, Shanghai.
 - 98 **Huisheng Peng**, “Clothes will generate electricity in the future- Wearable fiber-shaped energy devices”, November 2016, *Hunan University*, Changsha.
 - 97 **Huisheng Peng**, “Clothes will generate electricity in the future- Wearable fiber-shaped energy devices”, November 2016, *Central South University*, Changsha.
 - 96 **Huisheng Peng**, “Fiber-shaped energy harvesting and storing devices”, November 2016, *Hong Kong City University*, Hong Kong, China.
 - 95 **Huisheng Peng**, “Fiber-shaped energy harvesting and storing devices”, November 2016, *The Hong Kong University of Science and Technology*, Hong Kong, China.
 - 94 **Huisheng Peng**, “Fiber-shaped energy harvesting and storage devices”, August 2016, *International Academy of Electrochemical Energy Science*, Kunming, China.
 - 93 **Huisheng Peng**, “Wearable fiber-shaped energy devices”, July 2016, *The 30th Annual Conference of the Chinese Chemical Society*, Dalian.
 - 92 **Huisheng Peng**, “Wearable fiber-shaped energy devices”, July 2016, *Nanjing University of Posts and Telecommunications*, Nanjing.
 - 91 **Huisheng Peng**, “Clothes will generate electricity in the future”, May 2016, *Wenzhou University*, Wenzhou.
 - 90 **Huisheng Peng**, “Fiber-shaped energy harvesting and storage devices”, December 2015, *The Pacific Polymer Conference*, Hawaii, USA.
 - 89 **Huisheng Peng**, “Fiber-shaped energy harvesting and storage devices”, November 2015, *Materials Research Society Fall Meeting*, Boston, USA.
 - 88 **Huisheng Peng**, “Wearable fiber-shaped energy harvesting and storage devices”, November 2015, *Asia Symposium on Advanced Materials*, Busan, Korea.
 - 87 **Huisheng Peng**, “Fiber-shaped energy harvesting and storing devices”, November 2015, *BASF*, Shengzhen.
 - 86 **Huisheng Peng**, “Smart fibers for color changes and mechanical actuations”, October 2015, *The 2nd Sino-UK Symposium on Polymer Nanocomposites*, Shanghai, China.
 - 85 **Huisheng Peng**, “Novel fiber-shaped energy devices”, October 2015, *National Polymer Academic Conference*, Suzhou.
 - 84 **Huisheng Peng**, “Smart fibers that change shapes and colors”, October 2015, *National Polymer Academic Conference*, Suzhou.
 - 83 **Huisheng Peng**, “Novel fiber-shaped energy devices”, September 2015, *China International Composite Technology Conference*, Zhenjiang.
 - 82 **Huisheng Peng**, “Fiber-shaped energy harvesting and storing devices”, September 2015, *International Symposium on Nanomaterials and Nanotechnology*, Beijing.
 - 81 **Huisheng Peng**, “Fiber-shaped energy harvesting and storing Devices”, September 2015, *World Conference on Nanotechnology and Materials*, Beijing, China. (Invitation Presentation)
 - 80 **Huisheng Peng**, “Wearable fiber-shaped power systems”, September 2015, *China Wearables & Innovation Summit*, Shanghai, China.
 - 79 **Huisheng Peng**, “Smart fibers for color changes and mechanical actuations”, September 2015, *The 5th International Conference on Nanoscience and Technology*, Beijing, China.

- 78 **Huisheng Peng**, “Fiber-shaped energy harvesting and storage devices”, August 2015, The 5th International Conference on Nanoscience and Technology, Beijing, China.
- 77 **Huisheng Peng**, “Fiber-shaped energy harvesting and storage devices”, June 2015, The 13th International Conference of Polymers for Advanced Technologies, Hangzhou, China.
- 76 **Huisheng Peng**, “Wearable fiber-shaped energy devices”, June 2015, the 2nd National Advanced Composite Material Technology Innovation and Application Seminar, Nanjing.
- 75 **Huisheng Peng**, “Fiber-shaped energy harvesting and storage devices”, June 2015, Northwestern Polytechnical University, Xi'an.
- 74 **Huisheng Peng**, “Fiber-shaped energy harvesting and storage devices”, June 2015, International Photonics and Opto-Electronics Meetings 2015, Wuhan, China.
- 73 **Huisheng Peng**, “Wearable fiber-shaped energy harvesting and storage devices”, May 2015, The Fiber Society's Spring 2015 Conference, Shanghai, China.
- 72 **Huisheng Peng**, “Wearable fiber-shaped energy devices”, April 2015, World Congress and Expo on Nanotechnology and Materials Science, Dubai, UAE.
- 71 **Huisheng Peng**, “Fiber-shaped energy harvesting and storing devices”, April 2015, Tokyo Institute of Technology, Japan.
- 70 **Huisheng Peng**, “Fiber-shaped energy harvesting and storing devices”, April 2015, Cooperation Symposium between Yamagata University and Fudan University, Yamagata, Japan.
- 69 **Huisheng Peng**, “Novel fiber-shaped energy devices”, January 2015, Taiwan Polymer Society Annual Meeting, Taipei, China.
- 68 **Huisheng Peng**, “Wearable fiber-shaped energy devices”, December 2014, National Advanced Composite Materials Application and Development Seminar, Yangzhou.
- 67 **Huisheng Peng**, “Clothes will generate electricity in the future”, December 2014, Lanzhou University, Lanzhou.
- 66 **Huisheng Peng**, “Novel fiber-shaped energy devices”, December 2014, Lanzhou University, Lanzhou.
- 65 **Huisheng Peng**, “Fiber-shaped energy devices”, December 2014, Cooperation Symposium between University of Connecticut and Fudan University, Storrs, USA.
- 64 **Huisheng Peng**, “Novel fiber-shaped energy devices”, December 2014, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou.
- 63 **Huisheng Peng**, “Fiber-shaped energy devices”, October 2014, International Union of Materials Research Societies International Conference for Young Researchers, Haikou, China.
- 62 **Huisheng Peng**, “Wearable fiber-shaped energy devices”, October 2014, China Textile Academic Conference, Shanghai.
- 61 **Huisheng Peng**, “Novel fiber-shaped energy devices”, September 2014, Nanjing University of Science and Technology, Nanjing.
- 60 **Huisheng Peng**, “Novel fiber-shaped energy devices”, July 2014, China Materials Conference, Chengdu.
- 59 **Huisheng Peng**, “Novel fiber-shaped energy devices”, July 2014, Institute of Chemical Materials, Mianyang.
- 58 **Huisheng Peng**, “Novel aligned carbon nanotube/polymer materials”, October 2013, National Polymer Academic Conference, Shanghai.

- 57 **Huisheng Peng**, “Functionalization and applications of aligned carbon nanotube/polymer materials”, September 2013, Suzhou Institute of Nanotechnology, Chinese Academy of Sciences, Suzhou.
- 56 **Huisheng Peng**, “Aligned carbon nanotube/polymer composite materials for energy applications”, July 2013, The 9th SINO-US Chemistry Professors Conference, Chengdu, China.
- 55 **Huisheng Peng**, “Functionalization and applications of aligned carbon nanotube/polymer materials”, July 2013, Huazhong University of Science and Technology, Wuhan.
- 54 **Huisheng Peng**, “Functionalization and applications of aligned carbon nanotube/polymer materials”, May 2013, Donghua University, Shanghai.
- 53 **Huisheng Peng**, “Functionalization and applications of novel aligned carbon nanotube/polymer materials”, March 2013, Beijing University of Chemical Technology, Beijing.
- 52 **Huisheng Peng**, “Aligned carbon nanotube/polymer composite materials for electronic applications”, January 2013, Nanyang Technical University, Singapore.
- 51 **Huisheng Peng**, “Aligned carbon nanotube materials for optoelectronic applications”, January 2013, IEEE International Electronics Conference, Singapore.
- 50 **Huisheng Peng**, “Novel aligned carbon nanotube/polymer materials”, December 2012, Changzhou University, Changzhou.
- 49 **Huisheng Peng**, “Novel fiber-shaped photovoltaic devices”, November 2012, The 1st Chungju-Suzhou International Workshop on Novel Nanomaterials, Suzhou, China.
- 48 **Huisheng Peng**, “Fiber-shaped wearable photovoltaic device”, November 2012, Tongji University, Shanghai.
- 47 **Huisheng Peng**, “Aligned carbon nanotube/polymer composite materials for photoelectric conversion and energy storage”, October 2012, The Society for the Advancement of Material and Process Engineering Conference, Beijing, China.
- 46 **Huisheng Peng**, “Aligned carbon nanotube/polymer materials for electronic applications”, October 2012, International Conference on Emerging Advanced Materials, Brisbane, Australia.
- 45 **Huisheng Peng**, “Novel responsive polymer materials incorporated with aligned carbon nanotubes”, September 2012, The 1st Polymer Chemistry International Symposium, Shanghai, China.
- 44 **Huisheng Peng**, “Organic optoelectronic materials and devices based on aligned carbon nanotubes”, June 2012, The 5th International Symposium on Polymer Chemistry, Changchun, China.
- 43 **Huisheng Peng**, “Organic optoelectronic materials and devices based on aligned carbon nanotubes”, April 2012, International Symposium on Bio, Organic & Nano Electronics, Nanjing, China.
- 42 **Huisheng Peng**, “Novel aligned carbon nanotube/polymer materials and electronic applications”, February 2012, DuPont Company, Shanghai.
- 41 **Huisheng Peng**, “Aligned carbon nanotubes for dye-sensitized solar cells”, November 2011, Shanghai International Nanotechnology Cooperation Symposium, Shanghai, China.
- 40 **Huisheng Peng**, “Aligned carbon nanotube/polymer materials for electronic applications”, October 2011, China-Korea Joint Symposium on Nanoscience and Nanotechnology, Shanghai, China.

- 39 **Huisheng Peng**, “Novel polymer and dye-sensitized solar cells based on aligned carbon nanotubes”, 2011, *Global Organic Photo-Voltaic Conference*, Hangzhou, China.
- 38 **Huisheng Peng**, “Carbon nanotube fiber for photovoltaic application”, July 2011, *The 19th Annual International Conference on Composites or Nano Engineering*, Shanghai, China.
- 37 **Huisheng Peng**, “Aligned carbon nanotube/polymer materials and electronic applications”, July 2011, *Changchun Institute of Applied Chemistry, Chinese Academy of Sciences*, Changchun.
- 36 **Huisheng Peng**, “Highly aligned carbon nanotube/polymer composites with much Improved Electrical Conductivities”, July 2011, *The 19th Annual International Conference on Composites or Nano Engineering*, Shanghai, China.
- 35 **Huisheng Peng**, “Functional materials for biomedical applications”, April 2011, *China and Finland Workshop on Biomanufacturing and Evaluation Techniques*, Tianjin, China.
- 34 **Huisheng Peng**, “Hierarchical assembly to prepare functional materials”, April 2010, *East China University of Science and Technology*, Shanghai.
- 33 **Huisheng Peng**, “Hierarchical assembly to prepare functional materials”, September 2011, *University of Shanghai for Science and Technology*, Shanghai.
- 32 **Huisheng Peng**, “Optoelectronic polymer materials based on aligned carbon nanotubes”, June 2010, *Sino-US symposium on Nanoscale Science and Technology (5th Sino-US Nano Forum)*, Suzhou, China.
- 31 **Huisheng Peng**, “Highly aligned carbon nanotube composites”, April 2010, *Spring Materials Research Society Meeting*, San Francisco, USA.
- 30 **Huisheng Peng**, “Highly aligned carbon nanotube/polymer composites”, March 2009, *International Conference on Advanced Fibers and Polymer Materials*, Shanghai, China.
- 29 **Huisheng Peng**, “Intelligent polymer micelles”, October 2009, *The 1st Sino-USA Forum on Nano Biomedicine*, Shanghai, China.
- 28 **Huisheng Peng**, “Chromatic polydiacetylene nanocomposites”, September 2009, *Sino-French Bilateral Seminar on Macromolecular and Molecular Science*, Shanghai, China.
- 27 **Huisheng Peng**, “Novel carbon nanotube/polymer composite nanomaterials”, August 2008, *The 236th American Chemical Society National Meeting*, Philadelphia, PA.
- 26 **Huisheng Peng**, “Polymer nanocomposites containing aligned carbon nanotubes”, November 2007, *Fall American Chemical Institute of Chemical Engineers National Meeting*, Salt Lake City, Utah.
- 25 **Huisheng Peng**, “Chromatic carbon nanotube fibers”, November 2007, *Fall Materials Research Society Meeting*, Boston, MA.
- 24 **Huisheng Peng**, “Organic core-shell nanoobjects by living anionic polymerization”, March 2007, *The 233rd American Chemical Society National Meeting*, Chicago, IL.
- 23 **Huisheng Peng**, “Supramolecular assembly in common organic solvent from block copolymer and organic acid”, 2007, *The 233rd American Chemical Society National Meeting*, Chicago, IL.
- 22 **Huisheng Peng**, Yunfeng Lu, “Responsive polydiacetylene/silica nanocomposites”, November 2006, *Fall American Institute of Chemical Engineers National Meeting*, San Francisco, CA.
- 21 **Huisheng Peng**, Yunfeng Lu, “Hierarchical assemblies from bridged perylenediimide silsesquioxane building molecules”, November 2006, *Fall American Institute of Chemical Engineers National Meeting*, San Francisco, CA.

- 20 **Huisheng Peng**, Yunfeng Lu, “*Responsive nanocomposites through hierarchical assembly*”, November 2006, *Fall American Institute of Chemical Engineers National Meeting*, San Francisco, CA.
- 19 **Huisheng Peng**, Yunfeng Lu, “*Self-assembly of organic semiconductor molecules: experiments, molecular modeling and simulation*”, November 2006, *Fall American Institute of Chemical Engineers National Meeting*, San Francisco, CA.
- 18 **Huisheng Peng**, Yunfeng Lu, “*Experimental and theoretical study of light-responsive polydiacetylene nanocomposites*”, November 2006, *Fall American Institute of Chemical Engineers National Meeting*, San Francisco, CA.
- 17 **Huisheng Peng**, Yunfeng Lu, “*Self-assembly of homopolymer/small organic building molecules in the common solvent*”, September 2006, *The 232nd American Chemical Society National Meeting*, San Francisco, CA.
- 16 **Huisheng Peng**, Jing Tang, Yunfeng Lu, “*Chromatically responsive ordered mesoporous materials*”, August 2006, *The 5th International Mesostructured Materials Symposium (IMMS 2006)*, Shanghai, China.
- 15 **Huisheng Peng**, Yunfeng Lu, “*Polydiacetylene/silica nanocomposites with tunable mesostructure and thermochromatism from diacetylenic assembling molecules*”, March 2006, *The 231st American Chemical Society National Meeting*, Atlanta, GA.
- 14 **Huisheng Peng**, Yunfeng Lu, “*pH-responsive self-assembly of homopolymers and the applications as drug delivery*”, August 2005, *The 230 American Chemical Society National Meeting*, Washington, DC.
- 13 **Huisheng Peng**, Yunfeng Lu, “*Supramolecular self-assembly with tunable morphologies*”, August 2005, *The 230 American Chemical Society National Meeting*, Washington, DC.
- 12 **Huisheng Peng**, Yunfeng Lu, “*Temperature-responsive supramolecular assembly*”, August 2005, *The 230th American Chemical Society National Meeting*, Washington, DC.
- 11 **Huisheng Peng**, Yunfeng Lu, “*Self-assembly of Formic acid/PS-*b*-P4VP complexes into vesicles in their common solvent chloroform*”, March 2005, *The 229th American Chemical Society National Meeting*, San Diego, CA.
- 10 **Huisheng Peng**, Yunfeng Lu, “*Crystallization induced self-assembly of perfluorooctanoic acid/ PS-*b*-P4VP in the common solvent*”, March 2005, *The 229th American Chemical Society National Meeting*, San Diego, CA.
- 9 **Huisheng Peng**, Yunfeng Lu, “*Functional conjugated nanocomposites through assembly of silica and conjugated oligomers*”, March 2005, *Spring Materials Research Society Meeting*, San Francisco, CA.
- 8 **Huisheng Peng**, Yunfeng Lu, “*Responsive supramolecular particles from assemblies of homopolymers*”, March 2005, *Spring Materials Research Society Meeting*, San Francisco, CA.
- 7 **Huisheng Peng**, Yunfeng Lu, “*Supramolecular assembly of thermo-sensitive hierarchical hollow spheres*”, March 2005, *Spring Materials Research Society Meeting*, San Francisco, CA.
- 6 **Huisheng Peng**, Yunfeng Lu, “*Thermo-sensitive self-labeled hierarchical polymeric hollow spheres by supramolecular assembly*”, January 2005, *The 5th Louisiana Conference on Advance Materials and Emerging Technologies*, New Orleans, LA.
- 5 **Huisheng Peng**, Yunfeng Lu, “*Self-directed assembly of mesoscopically ordered polydiacetylene/silica nanocomposites from bridged silsesquioxanes*”, January 2005, *The 5th Louisiana Conference on Advance Materials and Emerging Technologies*, New Orleans,

LA.

- 4 **Huisheng Peng**, Yunfeng Lu, “*Self-directed assembly of mesoscopically ordered polydiacetylene/silica nanocomposites from bridged silsesquioxanes*”, December 2004, *Fall Materials Research Society Meeting*, Boston, MA.
- 3 **Huisheng Peng**, Yunfeng Lu, “*Polydiacetylene/silica nanocomposites*”, November 2004, *Fall American Institute of Chemical Engineers National Meeting*, Austin, TX.
- 2 **Huisheng Peng**, Daoyong Chen, Ming Jiang, “*Crosslinking-induced micellization of diblock copolymer*”, July 2002, *The 39th World Polymer Congress of IUPAC*, Beijing, China.
- 1 **Huisheng Peng**, Daoyong Chen, Ming Jiang, “*Organic acids induced micellization of polystyrene-block-poly (4-vinyl pyridine)*”, July 2002, *The 39th World Polymer Congress of IUPAC*, Beijing, China.