Curriculum vitae - Fei Wang

Associate Professor, Dr.
Department of Electrical and Electronic Engineering,
Southern University of Science and Technology

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BIOGRAPHY:

Aug. 2013- Associate Professor

Department of Electrical and Electronic Engineering, SUSTech, Shenzhen, China

July 2010 - July 2013 Assistant Professor

Department of Micro- and Nanotechnology (DTU Nanotech), DTU, Copenhagen, Denmark

Aug. 2008 - June 2010 Postdoctoral Researcher

Department of Micro- and Nanotechnology (DTU Nanotech), DTU, Copenhagen, Denmark

EDUCATION:

Sept. 2003 - July 2008 Ph.D.

Shanghai Institute of Microsystem and Information Technology (SIMIT),
Chinese Academy of Sciences (CAS)

Sept. 1999 - July 2003 B.E.

Department of Precision Machinery and Precision Instrumentation,
University of Science and Technology of China (USTC)

RESEARCH EXPERIENCE:

Department of Electrical and Electronic Engineering, SUSTech August 2013 – present

Associate Professor (*Principal investigator*, Supported by SUSTech start grant, 6 million RMB)

- Project: Multi-source energy harvesting technology for wireless sensor networks

Department of Micro- and Nanotechnology, DTU July 2010 - June 2013

Assistant Professor (*Principal investigator*, Supported by FTP, 3.9 million dkk)

- Project: Energy harvesting device with polymer electret for wireless electronic devices

The main objective of this project is to develop a small-size energy harvesting device which is compatible with mass-production of wireless sensor networks. During this project, we have developed a few types of energy harvesting devices based on the electrostatic methods. Maximum power output up to ~10 μW can be harvested from vibration sources with low frequency and low amplitude.

Department of Micro- and Nanotechnology, DTU Aug. 2008 - June 2010

Postdoctoral Researcher (Host professor: Ole Hansen, HTF-Højteknologifonden, 18 million dkk)

- Project: Micro Sheet Resistance Probing (μRSP) with four-point probes

The primary goal is to develop a novel metrology tool based on advanced MEMS technology, for characterization of e.g. ultra shallow junctions (USJ) in the semiconductor industry. Within this project, I have published *11 publications* in peer-reviewed journals and international conferences. *One WIPO*

patent is also granted for a faster and more accurate Hall Effect measurement method.

State Key Laboratory of Transducer Technology, SIMIT, CAS Sept. 2003 - July 2008

Research Assistant (Advisor: Prof. Xinxin Li, supported by the NSFC and Chinese 973 program)

Wafer-level IC testing is of great importance for the semiconductor industry, and the conventional testing probe cards will not be suitable for the next generation IC due to a lot of limitations. The objective of this Ph.D. program was to develop new probe cards with smaller probe pitch at cheaper cost based on MEMS technology. During this 5 years Ph.D. program, I had developed 4 different types of MEMS probe cards for various applications. Several new MEMS fabrication processes such as through-wafer electroplating and spray-coating photo-resist were also developed and are still widely used in the laboratory. Within this project, I had totally published *13 peer-reviewed papers* in the first-level journals and conferences such as *J-MEMS, JMM, IEEE IEDM, IEEE MEMS, and Transducers*. Additionally, *2 Chinese patents* are granted.

TEACHING, SUPERVISION AND MANAGEMENT EXPERIENCE:

- 2013-now, supervisor for two master students and three Ph.D students; mentor for more than 20 undergraduate students in *ShuRen College*
- 2013-now, EE202 (Digital Circuit), EE305(Introduction to VLSI Technology), EE306 (Introduction to MEMS), EE415 (Advances in Micro Energy and Micro Systems)
- 2013, teaching "33250 Semiconductor Technology" (5 ECTS) in DTU Nanotech and a Ph. D course "Sustainable wireless sensor networks" in Aalborg University.
- 2013, UDTU course, level 4.
- 2012, supervisor for two master students and one bachelor student.
- 2012, supervisor for two bachelor students for 3-weeks course 33470: Micro-3W and Grøn Dyst.
- 2012, UDTU course, level 2 &3.
- 2011, supervisor for two bachelor students with their 34029 Fagprojekt (10 ECTS points).
- 2011, supervisor for two bachelor students' project (20 ECTS points).
- 2011, project supervisor for two students in 3-weeks course 33470: Micro-3W.
- 2010, UDTU course: level 1.
- 2009, project supervisor for three students in the advanced course 33355: Micro-2
- 2004-2008, co-founder and coordinator for MEMS saloon in SIMIT.

FUNDING:

- 2018，PI，深圳市力策科技有限公司，横向课题 II，7 万元。
- 2018，PI，深圳市力策科技有限公司，横向课题 I，7 万元。
- 2017, PI, Shenzhen Fundamental Research Project, 2 Million RMB. (Project No.: JCYJ20170412154426330). (深圳市知识创新计划基础研究学科布局项目，"基于二维材料敏感薄膜的微机电系统气体传感器技术研究", 深圳市科技创新委员会, 2017-07-01 至 2020-06-30).
- 2016, PI, Open Project from State Key Laboratories of Transducer Technology, 0.25 Million RMB. (Project No.: SKT1606). (传感技术联合国家重点实验室基金，"应用于 MEMS 器件的驻极体材料研究"，2016 年 12 月-2019 年 12 月).
- 2016, PI, Guangdong Natural Science Funds for Distinguished Young Scholar, 1 Million RMB. (Project No.: 2016A030306042). (广东省自然科学基金杰出青年项目，"高效复合能量采集技术"，广东省科学技术厅, 2016-06-01 至 2020-06-01).
- 2016, PI, Guangdong Special Support Program for High-level Talents, 0.3 Million RMB. ("广东特

支计划”科技青年拔尖人才，广东省科学技术厅, 2016-07-01 至 2019-06-30, 2015TQ01X555)

- 2015, co-PI, Shenzhen Fundamental Research Project, overall 3 Million RMB, with a share of 0.9 Million RMB. (Project No.: JCYJ20150827165024088). (深圳市知识创新计划基础研究学科布局项目，“基于微机电系统（MEMS）的多级震动耦合能量收集技术研究”，深圳市科技创新委员会，2016-01-01 至 2018-12-31)
- 2015, co-PI, Shenzhen Fundamental Research Project, overall 3 Million RMB, with a share of 0.4 Million RMB. (Project No.: JCYJ20150930160634263). (深圳市知识创新计划基础研究学科布局项目，“重金属检测用高灵敏光电微纳传感器研究”，深圳市科技创新委员会，2016-01-01 至 2018-12-31)
- 2015, co-PI, Shenzhen Peacock Group Plan, overall 20 Million RMB. (Project No.: KQTD2015071710313656) (深圳市海外高层次人才创新创业团队计划，“超宽频谱超强太赫兹波研发团队”，深圳市科技创新委员会，2016-12-01 至 2020-11-30)
- 2015, PI, National Natural Science Foundation of China (NSFC): “Micro electrostatic energy harvester with broad bandwidth for wireless sensor networks”, 249,000 RMB (Project No.: 51505209) (国家自然科学基金, “应用于无线传感网络的宽带静电式微型能量采集器研究”，国家自然科学基金委员会, 2016-01-01 至 2018-12-31)
- 2015, PI, Guangdong Natural Science Foundation: “MEMS based electrostatic energy harvesting device”, 100,000 RMB (Project No.: 2015A030313812) (广东省自然科学基金, “基于微机电系统的静电式能量采集器”，广东省科学技术厅, 2015-08-01 至 2018-08-01).
- 2015, PI, Scientific Research Foundation for the Returned Overseas Chinese Scholars, State Education Ministry. 35, 000 RMB. (教育部留学回国人员科研启动基金资助项目, “应用于微型能量采集器的驻极体材料性能研究”，教育部)
- 2014, PI, Shenzhen Fundamental Research Project: “Key technologies of electret materials for wireless sensor networks”, 290,000 RMB (Project No.: JCYJ20140417105742703). (深圳市知识创新计划基础研究项目，“应用于无线传感网络的驻极体材料关键技术研究”，深圳市科技创新委员会，2014-08-18 至 2016-08-31，已顺利结题)
- 2014, co-PI, Shenzhen key laboratory: “Shenzhen Key Laboratory of 3rd Generation Semiconductor Devices”, overall 3 Million RMB, with a share of 0.3 Million RMB. (Project No.: ZDSYS20140509142721434) (深圳市创新环境建设计划重点实验室项目，“深圳市第三代半导体器件重点实验室”，深圳市科技创新委员会，2014-08-18 至 2016-08-31，已顺利结题)
- 2014, PI, start-up research grant for new faculty in SUSTech, 5.98 Million RMB. (南方科技大学引进学术人才科研启动经费, “面向无线传感网络应用的能源采集器研究”, 2014-01-01 至 2018-12-31)
- 2013, Conference stipend, *Otto Mønsted Fond*, Hellerup, Denmark, 8,000 DKK.
- 2012, Conference stipend, *Otto Mønsted Fond*, Hellerup, Denmark, 5,000 DKK.
- 2011, Conference stipend, *Otto Mønsted Fond*, Hellerup, Denmark, 7,990 DKK.
- 2010, Co-Applicant with Dr. Ming Shen as PI, Project funding: "Microwatt Radio for Self-Sustaining Wireless Sensor Networks". *Danish Research Council for Technology and Production (FTP)*, Denmark. (Project No. 10-093783)
- 2010, PI, Project funding: "Energy harvesting device with polymer electret for wireless electronic devices". *Danish Research Council for Technology and Production (FTP)*, Denmark, 3,866,400 DKK. (Project No. 10-080864)
- 2009, Conference stipend, *Otto Mønsted Fond*, Hellerup, Denmark, 6,945 DKK.

HONORS AND AWARDS:

- 2018，深圳市“先进教育工作者”荣誉称号
- 2017-，深圳市龙华区“龙舞华章计划”A 类人才
- 2016-，深圳市南山区“领航人才”
- 2016, 2017 年，南方科技大学“优秀书院导师”荣誉称号
- 2016, 2017 年，南方科技大学“青年科研奖”
- 2016 年，获得广东省第三届高校青年教师教学大赛三等奖
- 2016 年，南方科技大学首位“杰出教学”奖 (全校第 1 位获得者)
- 2016 年，南方科技大学第一届青年教师教学竞赛理论课组一等奖
- 2016, Guangdong Special Support Program for High-level Talents. (“广东特支计划”科技青年拔尖人才)
- 2015 年，获得深圳市第三届教育教学科研优秀成果奖二等奖
- 2013, Shenzhen “Overseas High-Caliber Personnel Award” (Peacock Plan, B-Class). (深圳市海外高层次人才“孔雀计划”B 类人才)
- 2008, CAS *Zhu Li Yuehua Scholarship of Outstanding Doctoral Award* (Top 240 out of 4,488 Ph.D. students graduated from CAS in 2008), 5,000 RMB. (中国科学院“朱李月华”优秀博士生奖)
- 2008, SIMIT *Presidential Scholarship*, Grade 2. (中国科学院上海微系统与信息技术研究所，所长奖学金)
- 2007, *Best Student Paper* (1st of 450 papers) in 9th Annual Domestic Conference of China Society of Micro-Nano Technology, Shanghai, 2,000 RMB. (第九届中国微米纳米技术学会国内年会一等奖)
- 2005-2006, 2006-2007, CAS *“Straight A Student”* (twice). (中国科学院三好学生)
- 1999-2002, USTC *Outstanding Student Scholarship*, Golden Scholarship (twice as Rank 2 among 89 students), Silver Scholarship (once as Rank 4 among 89 students), totally 5,000 RMB. (中国科学技术大学优秀学生奖学金)

AFFILIATION AND SCIENTIFIC SERVICE:

Institute of Electrical and Electronics Engineers (IEEE), *Senior Member* (2012-)

I have been the grant reviewer for A*STAR Agency for Science & Technology, the National Science Foundation of China, and the Shenzhen Science and Technology Innovation Committee.

I have served for several international conferences, such as,

Plenary Chair for *2014 IEEE International Conference on Consumer Electronics − China*.

International Organizing Committee for *International Conference on Small Science (ICSS, 2014-2016*)

Technical Program Committee Member, and Session Chair for *International Conference on Manipulation, Manu facturing and Measurement on the Nanoscale (IEEE 3M-NANO, 2014-2018)*

Session Chair, for *the 6th International Multidisciplinary Conference on Optofluidics (IMCO 2017)*

Technical Program Committee Member, and Session Chair for *the International Conference on Nano/Micro Engineered and Molecular Systems (IEEE NEMS 2018)*

General Chair for *the 1st International conference on vibration and energy harvesting application (VEH 2018), Nov. 2-4, Shenzhen, China.*

Technical Program Committee Member for *the International Conference on Solid-State Sensors, Actuators and Microsystems (Transducers 2017, Transducers 2019)*

2017-，中国医疗保健国际交流促进会健康大数据和数字化医疗分会委员

2018-, 中国微米纳米技术学会微纳执行器与微系统分会委员

Reviewer for: *ACS Applied Materials & Interfaces*
ACS Applied Nano Materials
Advanced Materials Interfaces
Applied Energy
Applied Mathematical Modelling
Applied Physics Letters
Beilstein Journal of Nanotechnology
Chemical Engineering Journal
Colloids and Surfaces A: Physicochemical and Engineering Aspects
ECS Solid State Letters
IEEE Access
IEEE Electron Device Letters
IEEE Journal of Microelectromechanical Systems
IEEE Potentials
IEEE Sensors Journal
IEEE/ASME Transactions on Mechatronics
IET Nanobiotechnology
Inorganic Chemistry Frontiers
Journal of Intelligent Material Systems and Structures
Journal of Micromechanics and Microengineering
Journal of Physics: Condensed Matter
Journal of the Taiwan Institute of Chemical Engineers
Macromolecular Materials and Engineering
Materials Research Bulletin
Measurement Science and Technology
Microelectronics Engineering
Microsystem Technologies
NANO
Nano Energy
Nano Today
Nature Communications
Optics Letters
Science and Technology of Advanced Materials
Sensors
Sensors & Actuators: A. Physical
Sensors & Actuators: B. Chemical
Smart Materials and Structures
Synthetic Metals
The Scientific World Journal

List of Publications

Totally published 3 book chapters, 58 articles in peer-reviewed journals, 71 abstracts/publications in peer-reviewed conference proceedings, 13 invited talks and 17 patent applications. (H-index: 15, citation: 656, web of science, Jan. 2019)

BOOK CHAPTERS:

[3] Rajendran Ramachandran, Murugan Saranya and **Fei Wang***, *Chapter: Metal Oxides/Hydroxides Composite Electrodes for Supercapacitors, in Book 'Electrochemical Capacitors - Theory, Materials and Applications'*, Materials Research Forum LLC, USA, ISBN 978-1-945291-56-2, 2018.

[2] Rajendran Ramachandran and **Fei Wang***, *Chapter: Electrochemical Capacitors Performance-Influence of Aqueous Electrolytes, in Book 'Supercapacitors - Theoretical and Practical Solutions,'* IN TECH publishing, ISBN 978-953-51-5764-9, 2017.

[1] Zhen Yang, and **Fei Wang***, *Advances in Biosensors: Reviews*, Chapter 4, International Frequency Sensor Association (IFSA) Publishing, ISBN: 978-84-697-3467-4, 2017.

JOURNAL PUBLICATIONS:

2018 [26]

[59] Rajendran Ramachandran[#], Qikun Hu[#], **Fei Wang***, Zong-Xiang Xu*****, "Synthesis of N-CuMe2Pc nanorods/Graphene Oxide nanocomposite for symmetric supercapacitor electrode with excellent cyclic stability," *Electrochimica Acta*, accepted.

[58] Changhui Zhao, Jinglong Bai, Huimin Gong, Sheng Liu, and **Fei Wang***, "Tailorable Morphology of Core-Shell Nanofibers with Surface Wrinkles for Enhanced Gas-Sensing Properties," *ACS Applied Nano Materials*, 1, pp. 6357−6367, 2018.
https://doi.org/10.1021/acsanm.8b01573

[57] Yulong Zhang, Tianyang Wang, Anxin Luo, Yushen Hu, Xinxin Li, and **Fei Wang***, "Micro electrostatic energy harvester with both broad bandwidth and high normalized power density," *Applied Energy*, Vol. 212, pp. 362–371, 2018. (***ESI Top 1% Highly Cited Paper***)
https://doi.org/10.1016/j.apenergy.2017.12.053

[56] Yulong Zhang, Yushen Hu, Xinge Guo, and **Fei Wang***, "Micro energy harvester with dual electrets on sandwich structure optimized by air damping control for wireless sensor network application," *IEEE Access*, vol. 6, pp. 26779-26788, 15 May 2018.
https://doi.org/10.1109/ACCESS.2018.2836381

[55] Yingchun Wu, Yushen Hu, Ziyu Huang, Chengkuo Lee, and **Fei Wang***, "Electret-material enhanced triboelectric energy harvesting from airflow for self-powered wireless temperature sensor network," *Sensors and Actuators A: Physical*, Vol. 271, pp. 364–372, 2018.
https://doi.org/10.1016/j.sna.2017.12.067

[54] Changhui Zhao, Huimin Gong, Weizong Lan, Rajendran Ramachandran, Hu Xu, Sheng Liu, and **Fei Wang***, "Facile synthesis of SnO_2 hierarchical porous nanosheets from graphene oxide sacrificial scaffolds for high-performance gas sensors," *Sensors and Actuators B: Chemical*, Vol. 258, pp. 492–500, 2018. (***ESI Top 1% Highly Cited Paper***)
https://doi.org/10.1016/j.snb.2017.11.167

[53] Huimin Gong, Changhui Zhao, and **Fei Wang***, "On-chip growth of SnO_2/ZnO core-shell nanosheet arrays for ethanol detection," *IEEE Electron Device Letters*, vol. 39, pp. 1065-1068, 2018.
https://doi.org/10.1109/LED.2018.2832644

[52] Changhui Zhao, **Fei Wang***, and Sheng Liu, "Structural transformation of Mo-Doped In_2O_3 nanotubes by electron-beam irradiation," *IEEE Transactions on Nanotechnology*, Vol. 17, pp. 705-708, July 2018.
https://doi.org/10.1109/TNANO.2017.2786552
[51] Changhui Zhao, Weizong Lan, Huimin Gong, Jinglong Bai, Rajendran Ramachandran, Sheng Liu, and **Fei Wang***, "Highly sensitive acetone-sensing properties of Pt-decorated $CuFe_2O_4$ nanotubes prepared by electrospinning," *Ceramics International*, Vol. 44, pp 2856-2863, 15 February 2018.
https://doi.org/10.1016/j.ceramint.2017.11.032
[50] Xiaohui Leng, Dan Luo, Zongxiang Xu, and **Fei Wang***, "Modified graphene oxide/Nafion composite humidity sensor and its linear response to the relative humidity," *Sensors and Actuators B: Chemical*, Vol. 257, pp. 372–381, March 2018.
https://doi.org/10.1016/j.snb.2017.10.174
[49] Wenlu Xuan, Rajendran Ramachandrana, Changhui Zhao, and **Fei Wang***, "Influence of synthesis temperature on Cobalt metal-organic framework (Co-MOF) formation and its electrochemical performance towards supercapacitor electrodes," *Journal of Solid State Electrochemistry*, 22:3873–3881, 2018.
https://doi.org/10.1007/s10008-018-4096-7
[48] Rajendran Ramachandran, Changhui Zhao, Dan Luo, Kai Wang and **Fei Wang***, "Synthesis of copper benzene-1, 3, 5-tricarboxylate metal organic frameworks with mixed phases as the electrode material for supercapacitor applications," *Applied Surface Science*, Vol. 460, 1, pp. 33-39, December 2018.
https://doi.org/10.1016/j.apsusc.2017.11.271
[47] Rajendran Ramachandrana, Krishnamoorthy Rajavel, Wenlu Xuan, Daohui Lin, and **Fei Wang***, "Influence of $Ti_3C_2T_x$ (MXene) intercalation pseudocapacitance on electrochemical performance of Co-MOF binder-free electrode," *Ceramics International*, vol. 44, pp. 14425–14431, 2018.
https://doi.org/10.1016/j.ceramint.2018.05.055
[46] Rajendran Ramachandran, Changhui Zhao, Dan Luo, Kai Wang and **Fei Wang***, "Morphology-dependent electrochemical properties of cobalt-based metal organic frameworks for supercapacitor electrode materials," *Electrochimica Acta*, Vol. 267, pp. 170–180, 20 March 2018.
https://doi.org/10.1016/j.electacta.2018.02.074
[45] Rajendran Ramachandran, Wenlu Xuan, Changhui Zhao, Xiaohui Leng, Dazhi Sun, Dan Luo, and **Fei Wang***, "Enhanced electrochemical properties of cerium metal-organic framework based composite electrodes for high-performance supercapacitor application," *RSC Advances*, 8, pp. 3462–3469, 2018.
https://doi.org/10.1039/C7RA12789H
[44] Zong Liu, Siyin Qin, Xingwei Chen, Dazhu Chen and **Fei Wang***, "PDMS-PDMS micro channels filled with phase-change material for chip cooling," *Micromachines*, vol. 9, 165 (14p), 2018.
http://dx.doi.org/10.3390/mi9040165
[43] X. Xu, Y. Liu, **F. Wang** and D. Luo, "Narrow linewidth and temperature insensitive blue phase liquid crystal films," in *IEEE Photonics Journal*, vol. 10, no. 6, pp. 1-7, Dec. 2018.
https://doi.org/10.1109/JPHOT.2018.2879091
[42] Yujia Zhang, Zhitao Zhou, Zhen Fan, Shaoqing Zhang, Faming Zheng, Keyin Liu, Yulong Zhang, Zhifeng Shi, Liang Chen, Xinxin Li, Ying Mao, **Fei Wang**, Yun-Lu Sun, and Tiger H. Tao, "Self-Powered Multifunctional Transient Bioelectronics," *Small*, Vol14, Issue35, pp. 1802050, August 29, 2018.

https://doi.org/10.1002/smll.201802050
[41] Yong Li, Yanjun Liu, **Fei Wang**, Dan Luo, and Xiaowei Sun, "High-performance dichroic dye-doped flexible cholesteric polymer film optical filter for laser protection application," *Optics Express*, Vol. 26, Issue 18, pp. 23000-23007 (2018).
https://doi.org/10.1364/OE.26.023000
[40] Robert Sokolovskij, Jian Zhang, Elina Iervolino, Changhui Zhao, Fabio Santagata, **Fei Wang**, Hongyu Yu, Pasqualina M. Sarro, and Guo Qi Zhang, "Hydrogen sulfide detection properties of Pt-gated AlGaN/GaN HEMT-sensor," *Sensors and Actuators B: Chemical*, vol. 274, pp. 636-644, 20 November 2018.
https://doi.org/10.1016/j.snb.2018.08.015
[39] Yuncai Chen, H.J. Woo, M.Z. Kufian, L.P. Teo, **Fei Wang**, Changhui Zhao, and A.K. Arof, "Synthesis of low vacancies PB with high electrochemical performance using a facile method," *Materials Technology*, accepted, 2018.
https://doi.org/10.1080/10667857.2018.1493835
[38] Jia-hua Liu, Xiao-ying Xu, Weibang Lu, Xinbo Xiong, Xing Ouyang, Changhui Zhao, **Fei Wang**, Si-yin Qin, Jiao-ling Hong, Jiao-ning Tang, and Da-Zhu Chen, "A high performance all-solid-state flexible supercapacitor based on carbon nanotube fiber/carbon nanotubes/polyaniline with a double core-sheathed structure," *Electrochimica Acta*, vol. 283, pp. 366-373, 1 September 2018.
https://doi.org/10.1016/j.electacta.2018.06.158
[37] Han Wu, Qiongfeng Shi, **Fei Wang**, Aaron Voon-Yew Thean, and Chengkuo Lee, "Self-powered cursor using a triboelectric mechanism," *Small Methods*, 2018, 1800078.
https://doi.org/10.1002/smtd.201800078
[36] Kristoffer G. Kalhauge, Henrik H. Henrichsen, **Fei Wang**, Ole Hansen and Dirch H. Petersen, "Vibration tolerance of micro-electrodes," *Journal of Micromechanics and Microengineering*, vol. 28, 095010, 6 June 2018.
http://dx.dox.org/10.1088/1306-6439/aac58e
[35] Xiaofang Niu, Yuanbo Zhong, Rui Chen, **Fei Wang**, Yanjun Liu, Dan Luo, "A "turn-on" fluorescence sensor for Pb^{2+} detection based on graphene quantum dots and gold nanoparticles," *Sensors and Actuators B: Chemical*, Vol. 255, pp. 1577-1581, February 2018.
https://doi.org/10.1016/j.snb.2017.08.167
[34] Santagata Fabio, Jianwen Sun, Elina Iervolino, Hongyu Yu, **Fei Wang**, Guoqi Zhang, P.M. Sarro, and Guoyi Zhang, "System in Package (SiP) Technology: Fundamentals, Design and Applications," *Microelectronics International*, Vol. 35, Issue: 4, pp. 231-243, 2018.
https://doi.org/10.1108/MI-09-2017-0045

2017 [6]

[33] Tianqi Zhang, Haodong Tang, Shang Li, Zuoliang Wen, Xiangtian Xiao, Yulong Zhang, **Fei Wang***, Kai Wang*, and Dan Wu, "Highly Efficient Chip Scale Package LED Based on Surface Patterning," *IEEE Photonics Technology Letters*, Vol. 29, Issue. 20, pp 1703-1706, Oct.15, 2017.
https://doi.org/10.1109/LPT.2017.2738100
[32] Xiaohui Leng, Weinan Li, Dan Luo and **Fei Wang***, "Differential structure with graphene oxide for both humidity and temperature sensing," *IEEE Sensors Journal*, Vol. 17, No. 14, pp 4357-4364, July 15, 2017.
https://doi.org/10.1109/JSEN.2017.2712717

[31] R. Kumuthini, R. Ramachandran, H.A. Therese, and **Fei Wang***, "Electrochemical properties of electrospun MoS_2@C nanofiber as electrode material for high-performance supercapacitor application," *Journal of Alloys and Compounds*, 705, pp 624–630, 25 May 2017.
https://doi.org/10.1016/j.jallcom.2017.02.163
[30] Rajendran Ramachandran, Murugan Saranya, Andrews Nirmala Grace, **Fei Wang***, "MnS nanocomposites based on doped graphene: simple synthesis by wet chemical route and improved electrochemical properties as electrode material for supercapacitors," *RSC Advances*, 7, pp 2249-2257, 2017.
https://doi.org/10.1039/C6RA25457H
[29] Xiaofang Niu, Yuanbo Zhong, Rui Chen, **Fei Wang**, and Dan Luo, "Highly sensitive and selective liquid crystal optical sensor for detection of ammonia," *Optics Express*, Vol. 25, No. 12, 13549, 12 Jun 2017.
https://doi.org/10.1364/OE.25.013549
[28] Feng Li, Hong Wang, Dominik Kufer, Liangliang Liang, Weili Yu, Erkki Alarousu, Chun Ma, Yangyang Li, Zhixiong Liu, Changxu Liu, Nini Wei, **Fei Wang**, Lang Chen, Omar F. Mohammed, Andrea Fratalocchi, Xiaogang Liu, Gerasimos Konstantatos, and Tom Wu "Ultrahigh carrier mobility achieved in photoresponsive hybrid perovskite films via coupling with single-walled carbon nanotubes," *Advanced Materials*, 2017, 1602432.
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INVITED TALKS IN CONFERENCES AND WORKSHOPS:

[14] **Fei Wang**, "Micro energy harvesters for self-powered wireless sensor networks," *in the 1st International conference on vibration and energy harvesting application (VEH 2018)*, **Keynote Talk,** Nov. 2-4, Shenzhen, China.

[13] **Fei Wang**, "Micro-energy Harvester Based on Electret Materials," *in the 3rd Sino-German Symposium*, **Invited Talk,** Tongji University, Shanghai, China, 09-15 October 2018.

[12] **Fei Wang**, "Energy harvesting from environment for wireless sensing," *in the 8th International Multidiscipline Conference on Optofluidics (IMCO 2018)*, **Keynote Talk,** Shanghai, August 5–8, 2018.

[11] **Fei Wang**, "Micro Energy and Micro Sensing," *in 2nd Micro-Nano Technology and Application Innovation Conference*, **Invited Talk**, Xi'an, May 18-21, 2018.

[10] **Fei Wang**, "Vibration Based Energy Harvesting Technology for Wireless Sensing," *IEEE NEMS 2018*, Singapore, April 22-27, 2018.

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