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Xiong Gong, Ph. D.  
Professor of Polymer Engineering  
Department of Polymer Engineering, College of Polymer Science and Polymer Engineering  
The University of Akron, Akron, OH 44325-0301  
Tel: (330) 972-4983; Fax: (330) 972-3406  
E-mail: [xgong@uakron.edu](mailto:xgong@uakron.edu), Homepage: <http://ohme.uakron.edu>  
Google Scholar: <https://scholar.google.com/citation?hl=en&user=XG6dILAAAAAJ>

Editorial Board Member, Scientific Reports (published by Nature)  
Associate Editor, Emergent Materials (published by Elsevier)  
Editorial Board Member, Chinese Chemistry Letter (published by Springer)

### HIGHLIGHT ACCOMPLISHMENTS

- Scientific Contributions
  - 184 articles published in the peer reviewed journals including in Science, with ~ 20000 peers citations and H-index = 56.
  - 28 granted patents plus few pending patents.
  - 1 book and 8 book chapters.
  - 149 invited talks in conferences and academic institutions.
- Research Grants at The University of Akron (UA) since 2011
  - Funding: >\$4 M
  - Gift: Value of \$250,000 equipment from Canada
- Teaching at UA
  - Development and taught three new courses for graduate students
  - Taught one course for undergraduate students in Mechanical Department
  - Teaching evaluation rates rank top 1 in the college for last 6 years

### AWARDS AND HONORS

- 2017-2018 Outstanding Researcher Award, The University of Akron
- Top 1 % Highly Cited Researcher by Thomson Reuters (2016)
- Top 1 % Highly Cited Researcher by Thomson Reuters (2015)
- The World's Most Influential Scientific Minds 2014 (2015)
- Top 1 % Highly Cited Researcher by Thomson Reuters (2014)
- NSF CAREER award (2014)
- Key International Collaboration Project Award, NSF of China (NSFC) (2013)
- 3M Non-tenured Faculty Award (2011)
- The University of Akron, Summer Research Award (2011)
- Overseas Outstanding Chinese Young Scientist Awards, NSFC (2008)
- K. C. Wong Education Foundation Fellow (2009)
- Alexander von Humboldt Research Fellowship (1999)

### EMPLOYMENT

- August 2010 – present **Assistant, Associate and Full Professor**  
Department of Polymer Engineering, College of Polymer Science and Polymer Engineering, The University of Akron, Akron, OH, USA
- January 2005 - August 2010 **Senior Research Scientist**

Center for Polymers and Organic Solids, University of California, Santa Barbara, CA, USA

- January 2005 - August 2010 **Manager and Senior Scientist**  
CBrite, Inc. Goleta, CA, USA
- July 2007 – July 2016 **Adjunct Chair Professor**  
State Key Laboratory of Luminescent Materials and Device, South China University of Technology, Guangzhou, Guangdong, P. R. China

#### EDUCATION AND PROFESSIONAL TRAINING

- **B. Sc.** in Chemistry, Northwest Normal University, P. R. China, 1986  
Project: Ru-coordination compounds and its medical applications  
Supervisor: Prof. Yuchen Pan
- **M. Sc.** in Chemistry (Solid State Chemistry), Lanzhou University, P. R. China, 1994  
Dissertation: The effect of  $\gamma$ -ray irradiation on catalytic properties of rare-earth doped inorganic nanostructured materials  
Advisors: Prof. Zhongqian Ma and Prof. Hongxie Yang
- **Ph. D.** in Physics (Optics), Nankai University, P. R. China, 1997  
Dissertation: Optical (linear and nonlinear) properties of rare-earth doped inorganic nanoparticles  
Advisors: Prof. Wenju Chen
- **Alexander von Humboldt Research Fellow** June 1999 - January 2000  
Carl-Zeis Optical Institute, Jena, Germany
- **Post-doctoral Fellow and Research Project Assistant** April 2001- December 2003  
Center for Polymers and Organic Solids, University of California, Santa Barbara (UCSB), with Professor Alan J. Heeger (2000 Noble Laureate)  
Minor (graduate courses) in Electric Engineering, UCSB

#### RESEARCH INTERESTS AND EXPERTISE

- Organic/polymer electronics and optoelectronics,
- Perovskite hybrid materials and electronics,
- Organic thermoelectric materials and devices,
- Graphene based supercapacitors
- Self-powered electronics,
- Chemistry and physics of semiconducting organic/polymer materials
- Chemistry and physics of inorganic quantum dots and nanoparticles
- Optical spectroscopy

#### GRANTS

##### 1 Current grants

- Air Force Scientific Research  
Title: Uncooled broadband solution-processed photodetectors  
Total Award Amount: \$819,543  
Role: PI  
Period: Sept. 2015 – Aug. 2018
- NSF  
Title: Ultrasensitive solution-process inverted polymer photodetectors  
Award Amount: \$408,000

Role: PI

Period: July 2014 - June 2019

- 1-Material Inc.  
Title: "Novel Polymers: Characterization and Applications"  
Award Amount: \$250,000  
Time period: July 2012 - Aug. 2018  
Role: PI
- Air Force Scientific Research  
Title: Trust in Flexible and Hybrid Electronics  
Total Award Amount: \$1.78M  
Role: Co-PI (PI: Dean Dr. Eric Amis, With another 4 Co-PIs)  
Period: Sept. 2017 – Aug. 2019

## 2. Pending proposals

- Title: Integration of organic solar cells with perovskite solar cells for approaching over 30% power conversion efficiency  
Source: NSF  
Role: PI  
Total Award Amount: \$379,050  
Total Award Covered: 07/01/2018-07/31/2020
- Title: DURIP- Instruments  
Source: Air Force Scientific Program  
Role: PI  
Total Award Amount: \$386,760  
Total Award Covered: 07/01/2018-07/31/2020
- Title: DURIP- Instruments  
Source: Air Force Scientific Program  
Role: PI  
Total Award Amount: \$386,760  
Total Award Covered: 07/01/2018-07/31/2020
- Title: Two-dimensional Polyhedral Organomer Silsesquioxanes-Conjugated Polymers  
Source: ACS PRF  
Role: PI  
Total Award Amount: \$110,000  
Total Award Covered: 07/01/2018-07/31/2019
- Title: Over 30% efficiency from polymer solar cells integrated with perovskite hybrid solar cells  
Source: ENI  
Role: PI  
Total Award Amount: \$200,000  
Total Award Covered: 07/01/2018-07/31/2020
- Title: Utilizing Photovoltaic Conjugated Polymers for Diffusionless Photocapacitive Deionization of Salt Water  
Source: NSF  
Role: Co-PI

Total Award Amount: \$345,020

Total Award Covered: 07/01/2018-07/31/2020

- Title: Efficient Bulk Heterojunction Perovskite Hybrid Solar Cells via Novel Perovskite Hybrid Materials

Source: NSF

Role: PI

Total Award Amount: \$386,363

Total Award Covered: 05/01/2016-04/31/2018

- Title: Physics, Chemistry and Mechanics of Polymer Dielectric Breakdown

Source: ONR

Role: PI

Total Award Amount: \$999,728

Total Award Covered: 06/01/2017-05/31/2020

- Title: **Ohio Soft Matter MRSEC**

Source: NSF

Role: Co- PI

Total Award Amount: \$5,340,965

Total Award Covered: 06/01/2017-05/31/2021

- Title: Uncooled Ultrasensitive Solution-Processed Broad-Band Photodetectors by Novel Perovskite Hybrid Materials and PbSe Quantum Dots as the Light Sensitizer

Source: NSF

Role: PI

Total Award Amount: \$429,910

Total Award Covered: 07/01/2016-05/31/2018

### 3. Past grants

- Mitsubishi Chemical Corporation

Title: High performance electrophosphorescent polymer light-emitting diodes

Award Amount: \$1,500,000

Time period: Aug. 2001 - Aug. 2006

Role: Project Assistant (PI: Prof. A. J. Heeger)

- DARPA

Title: Hemispherical Array Detector for Imaging

Award Amount: \$22,500,000

Time period: July 2007 - Aug. 2010

Role: Project manager (PI: Prof. A. J. Heeger)

- The University of Akron

Title: Organic electronics

Award amount: \$500,000

Time period: Aug. 2010 - July 2014

Role: PI

- The University of Akron

Title: POSS-Polymer for flexible electronics

Award Amount: \$10,000

Time period: July 2012 - Aug. 2012

Role: PI

- DOE

Title: In-situ Neutron Scattering Determination of 3D Phase-Morphology

Correlations in Fullerene-Block Copolymer Systems Block Copolymer System

Award Amount: \$831,066

Time period: Sept. 2012 – Aug. 2014

Role: Co-PI

- 3M Company

Title: Polymer electronics

Award Amount: \$45,000

Time period: July 2011 - June 2014

Role: PI

- BringSpring Science and Technology

Title: "High Performance Inverted Polymer Solar Cells"

Award Amount: \$600,000

Time period: March 2013 - March 2016

Role: PI

- System Seals Inc.

Title: Polymer processing

Award Amount: \$11,658

Time period: Feb. 2013 - Sept. 2013

Role: PI

- Bayer MaterialScience

Title: "Special Bayer Lectureship" 2013

Award Amount: \$8,000

Role: Initiated

- Aldrich Material Science

Title "Special Aldrich Lectureship" 2014

Award Amount: \$3,500

Role: Initiated

## PUBLICATIONS

1. T. Y. Meng, C. Yi, L. Liu, A. Karim and **X. Gong**\*

Enhanced thermoelectric properties of two-dimensional conjugated polymers,  
Emergent Materials, 2018, accepted, in press.

2. B. P. Ren, Y. L. Liu, Y. X. Zhang, Y. Q. X. Gong, J. Zheng,

Genistein: A Dual Inhibitor of Both Amyloid  $\beta$  and Human Islet Amylin Peptides  
ACS Chemical Neuroscience, 2018, DOI:10.1021/acscemneuro.8b00039.

3. L. Y. Zheng, T. Zhu, W. Z. Xu, L. Liu, J. Zheng, **X. Gong**,\* F. Wudl

- Solution-processed broadband polymer photodetectors with spectral response up to 2.5  $\mu\text{m}$  by a low bandgap donor-acceptor conjugated polymer  
J. Mater. Chem. C., 2018, 6, 3634-3641.
4. X. Yao, J. Qi, W. Z. Xu, X. F. Jiang, **X. Gong**,\* Y. Cao  
Cesium-doped vanadium oxide as the hole extraction layer for efficient perovskite solar cells  
ACS Omega, 2018, 3(1), 1117-1125.
  5. W. Z. Xu, L. Y. Zheng, X. T. Zhang, C. Yi, W. P. Hu, **X. Gong**\*  
Efficient perovskite solar cells fabricated by Co partially substituted hybrid perovskite,  
Adv. Eng. Mater., 2018, DOI:10.1002/aenm.201703178.
  6. W. Z. Xu, Y. K. Guo, X. T. Zhang, L. Y. Zheng, T. Zhu, D. H. Zhao, W. P. Hu, **X. Gong**\*  
Room-temperature operated ultrasensitive broadband photodetectors by perovskite incorporated with conjugated polymer and single wall carbon nanotubes,  
Adv. Func. Mater., 2017, DOI:10.1002/adfm.201705541.
  7. L. Y. Zheng, S. Mukherjee, K. Wang, M. E Hay, B. W. Boudouris and **X. Gong**\*  
Radical polymers as interfacial layers in inverted hybrid perovskite solar cells  
J. Mater. Chem. A, 2017, 5, 23831-23839.
  8. Ma, J.; Sun, Y. R.; Zhang, M. Z.; Yang, M. X.; **Gong, X.**; Yu, F.; Zheng, J.,  
Comparative Study of Graphene Hydrogels and Aerogels Reveals the Important Role of Buried Water in Pollutant Adsorption,  
Environmental Science & Technology, 2017, 51(21), 12283-12292.
  9. X. Yao, W. Z. Xu, X. J. Huang, J. Qi, Q. W. Yin, X. F. Jiang, F. Huang, **X. Gong**,\* and Y. Cao  
Solution-processed vanadium oxide thin film as the hole extraction layer for efficient hysteresis-free perovskite hybrid solar cells  
Organic Electronics, 2017, 47, 85-93.
  10. R. D. Hu, B. P. Ren, H. Chen, Y. L. Liu, L. Y. Liu, **X. Gong**, J. Zheng  
Seed-induced heterogeneous cross-seeding self-assembly of human and rat islet polypeptides  
ACS Omega, 2017, 2, 784-792.
  11. H. Peng, C. D. Wei, K. Wang, T. Y. Meng, G. F. Ma, Z. Q. Lei, **X. Gong**,\*  
The  $\text{Ni}_{0.85}\text{Se}@/\text{MoSe}_2$  nanosheet arrays as the electrode for high-performance supercapacitors  
ACS Appl. Mater. & Interfac., 2017, 9, 17067-17075.
  12. W. Z. Xu, C. Yi, X. Yao, L. L. Jiang, **X. Gong**,\* and Yong Cao  
Efficient organic solar cells with polymer-small molecule: fullerene ternary active layers  
ACS Omega, 2017, 2, 1786-1794.
  13. X. Z. Xu, X. Yao, X. J. Huang, Fei Huang, **X. Gong**\*  
Perovskite hybrid solar cells with fullerene derivative electron extraction layer

- J. Mater. Chem. C, 2017, 5, 4190-4197.
14. X. J. Huang, W. Z. Xu, X. Yao, F. Huang, **X. Gong\*** and Y. Cao  
Inverted polymer solar cells with Zn<sub>2</sub>SnO<sub>4</sub> nanoparticles as the electron extraction layer  
Chinese Chemistry Letter, 2017, 28, 1755-1759.
  15. W. Z. Xu, H. Peng, T. Zhu, C. Yi, L. Liu, **X. Gong\***  
Solution-processed near-infrared polymer:PbS QDs photodetectors  
RSC Advances, 2017, 7, 34633-34637.
  16. Y. Sun, P. Pitliya, C. Liu, **X. Gong**, D. Raghavan, A. Karim  
Block copolymer compatibilized polymer: fullerene blend morphology and properties  
Polymer, 2017, 113, 1-12.
  17. W. Wang, Z. Zhang, C. Liu, Q. Fu, W.Z. Xu, C. W. Huang, R. A. Weiss, **X. Gong\***  
Efficient Polymer Solar Cells by Lithium Sulfonated Polystyrene as a Charge Transport Interfacial Layer  
ACS Applied Materials & Interfaces, **2017**, 9, 5348-5357.
  18. Ji, T.; Cao, W.; Chen, L.; Mu, L. W.; Wang, H. Y.; **Gong, X.**; Lu, X. H.; Zhu, J. H.,  
Confined molecular motion across liquid/liquid interfaces in a triphasic reaction towards free-standing conductive polymer tube arrays, J  
J. Mater. Chem. A., 2016, 4(17), 6290-6294.
  19. C. Liu, H. Peng, K. Wang, C. D. Wei, Z. X. Wang, **X. Gong\***  
PbS Quantum Dots-Induced Trap-Assisted Charge Injection in Perovskite Photodetectors,  
Nano Energy, **2016**, 30, 27-35.
  20. C. Yi, L. Zhang, R. D. Hu, S. C. Chuang, J. Zheng, **X. Gong\***  
Highly electrically conductive polyethylenedioxythiophene thin films for thermoelectric applications  
J. Mater. Chem. A., **2016**, 4, 12730-12738.
  21. H. Chen, F. Y. Yang, M. Z. Zhang, B. P. Ren, **X. Gong**, J. Ma, B. B. Jiang, Q. Chen, J. Zheng, R. D. Hu.  
A Comparative Study of Mechanical Properties of Hybrid Double-Network Hydrogels at Swelling and As-Prepared States  
J. Mater. Chem. B., **2016**, 4(35), 5814-5824.
  22. Y. P. Huang, W.Z. Xu, C. Zhou, Cheng; W. K. Zhong, R. B. Xie, **X. Gong**, L. Ying, F. Huang, Y. Cao  
Synthesis of medium-bandgap π-Conjugated polymers based on isomers of 5-Alkylphenanthridin-6(5H)-one and 6-Alkoxyphenanthridine  
J. Polymer Science, Part A: Polymer Chemistry, **2016**, 54, 2119-2127.
  23. Long Chen, Liwen Mu, Kai Wang, **X. Gong**, J. H. Zhu  
Confined molecular motion across liquid/liquid interfaces in a triphasic reaction towards free-standing conductive polymer tube array

- J. Material Chemistry A., **2016**, 4, 6290-6294.
24. Kai Wang, Chang Liu, Tianyu Meng, Chao Yi, **Xiong Gong\***  
Inverted Organic Photovoltaic Cells  
Chem. Soc. Rev., **2016**, 45, 2937-2975.
25. Nabankur Deb, Bohao Li, Maximilian Skoda, Sarah Rogers, Yan Sun, **Xiong Gong**,  
Alamgir Karim, Bobby Sumpter and David G Bucknall  
Harnessing Structure-Property Relationships for Poly(alkyl thiophene)-Fullerene  
Derivative Thin Films to Optimize Performance in Photovoltaic Devices  
Adv. Func. Mater., **2016**, 26, 1908-1920.
26. Wenzhan Xu, Yongtao Liu; Xiaojuan Huang, Lili Jiang, Qingduan Li; Xiaowen Hu, Fei  
Huang, **Xiong Gong\***, Yong Cao  
Solution-processed VO<sub>x</sub> prepared from a novel synthetic method as the hole extraction  
layer for polymer solar cells  
J. Mater. Chem. C, **2016**, 4, 1953-1958.
27. Chang Liu, Kai Wang, Chao Yi, Xiaojun Shi, Adam W. Smith, **Xiong Gong\*** and Alan J.  
Heeger  
Efficient Perovskite Hybrid Photovoltaics via Alcohol-Vapor Annealing Treatment  
Adv. Func. Mater., **2016**, 26(1), 101-110.
28. Tianyu Meng, Chang Liu, Kai Wang, Tianda He, Yu Zhu, Abdullah Al-Enizi, Ahmen  
Elzatahry, **Xiong Gong\***  
High Performance Perovskite Hybrid Solar Cells with E-beam-Processed TiO<sub>x</sub> Electron  
Extraction Layer  
ACS Applied Materials & Interfaces, **2016**, 8(3), 1876-1883.
29. Xu Huang, Kai Wang, Chao Yi, Tianyu Meng and **Xiong Gong\***  
Efficient Perovskite Hybrid Solar Cells by Highly Electrical Conductive PEDOT:PSS Hole  
Transport Layer  
Adv. Eng. Mater., **2016**, DOI:10.1002/aenm.201501773.
30. Chao Yi, Xiaowen Hu, **Xiong Gong\***  
Interfacial Engineering for High Performance Organic Photovoltaics  
Materials Today, **2016**, 19, 169-177.
31. Chang Liu, Kai Wang, **Xiong Gong\*** and Alan J. Heeger  
Low Bandgap Polymers for Polymeric Photovoltaics  
Chem. Soc. Rev., **2016**, 45, 4825-4846.
32. Peng, Liu, Sheng Dong, Feng Liu, Xiaowen Hu, Yaocheng Jin; Shengjian Liu; **Xiong  
Gong**, Thomas Russell, Fei Huang, Yong Cao  
Optimizing Light-Harvesting Polymers via Side Chain Engineering  
Advanced Functional Materials, **2015**, 25(41), 6458-6469.
33. Kai Wang, Chang Liu Chao Yi, Long Chen, Jiahua Zhu, Robert Weiss and **Xiong Gong\***  
Efficient Perovskite Hybrid Solar Cells via Ionomer Interfacial Engineering



- Adv. Func. Mater., **2015**, 25(44), 6875-6884.
34. P. C. Du, H. Liu, C. Yi, K. Wang, **X. Gong\***  
Polyaniline Modified Oriented Graphene Hydrogel Film as the Free-Standing Electrode for Flexible Solid-state Supercapacitors  
ACS Applied Materials & Interfaces, **2015**, 7 (43), 23932–23940.
35. S. X. Sun, Y. Huo, M. M. Li, X. W. Hu, Y. W. Zhang, X. L. **X. Gong**, H. L. Zhang  
Towards Understanding the Halogenation Effects in Diketopyrrolopyrrole-Based Small Molecule Photovoltaics  
ACS Applied Materials & Interfaces, **2015**, 7(36), 19914-19922.
36. M. Z. Zhang, R. D. Hu, H. Chen, **X. Gong**, F. M. Zhang J. Zheng  
Polymorphic Associations and Structures of the Cross-Seeding of A $\beta$ 1-42 and hIAPP1-37 Polypeptides  
J. Chem. Inform. Model., **2015**, 55(8), 1628-1639.
37. Chang Liu, Kai Wang, Pengcheng Du, Enming Wang and **Xiong Gong\***  
Ultrasensitive Solution-Processed Near-Infrared Photodetectors using CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> and PbS Quantum Dots as the Light Harvesters  
Nanoscale, **2015**, 7, 16460 - 16469.
38. Xiaowen Hu, Pengcheng Du, Kai Wang, Chao Yi, Chang Liu, **Xiong Gong\*** and Yong Cao  
Process Controllable Crystallization Morphology of Planar Heterojunction Perovskite Solar Cells with High Efficiency  
J Photovoltaics, **2015**, 5, 1402-1407.
39. Chang Liu, Kai Wang, Pengcheng Du, Chao Yi, Tianyu Meng, **Xiong Gong\***  
Efficient Solution-Processed Bulk Heterojunction Perovskite Solar Cells  
Adv. Energy Mater. **2015**, DOI:10.1002/aenm.201402024.
40. Kai Wang, Chang Liu, Pengcheng Du, Hao-Li Zhang, and **Xiong Gong\***  
Efficient Perovskite Hybrid Solar Cells through Homogeneous High-Quality Organolead Iodide Layer  
Small, **2015**, 11, 3369-3376.
41. Qingduan Li, Feng Liu, Xiaowen Hu, Wenzhan Xu, Liping Wang, Xuhui Zhu, **Xiong Gong\***, and Yong Cao  
Efficient Small-Molecule-Based Inverted Organic Solar Cells With Conjugated Polyelectrolyte as a Cathode Interlayer  
J. Photovoltaics, **2015**, 5, 1118-1124.
42. Chang Liu, Kai Wang, Pengcheng Du, Chao Yi, Tianyu Meng, **Xiong Gong\***  
Solution-Processed Inverted Perovskite Hybrid Photodetectors  
J. Mater. Chem. C. **2015**, 3, 6600-6606. (The Journal Front Cover)
43. Ke Liu, Chengli Song, Lu-Ya Gup, Cheng Zhang, Yu Liu, **Xiong Gong**, Hao-Li Zhang  
Tuning the ambipolar charge transport properties of N-heteropentacenes by their frontier

- molecular orbital energy levels  
Journal of Materials Chemistry C, **2015**, 3(16), 4188-4196
44. Pengcheng Du, Xiaowen Hu, Chao Yi, Huckleberry C. Liu, Peng Liu, Hao-Li Zhang, and **Xiong Gong\***  
Self-powered electronics by integration of flexible solid-state graphene-based supercapacitors with high performance perovskite solar cells  
Advanced Functional Materials, **2015**, 25, 2420-2427.
45. Chao Yi, Abigail Wilhite, Pengcheng Du, Hucklelee Chang Liu, Rundong Hu, Yiwen Chen, Jie Zheng, **Xiong Gong\***  
High performance organic thermoelectric materials with tunable film morphology  
ACS Applied Materials & Interfaces, **2015**, 7, 8984-8989.
46. Wenzhan Xu, Xiaowen Hu, Fei Huang, **Xiong Gong\***, Y. Cao  
Efficient inverted polymer solar cells by bi-electron-extraction layer  
J. Photovoltaics, **2015**, 5, 912-916.
47. Kai Wang, Chao Yi, Chang Liu, Chih-Hao Hsu, Steven Chuang, and **Xiong Gong\***  
Effects of Magnetic Nanoparticles and External Magnetostatic Field on the Bulk Heterojunction Polymer Solar Cells  
Scientific Reports, 2015, 5, 9265.
48. M. Z. Zhang, R. D. Hu, H. Chen, Y. Chang, X. **Gong**, F. F. Liu and J. Zhen  
Interfacial interaction and lateral association of cross-seeding assemblies between hIAPP and rIAPP oligomers  
Phys. Chem. Chem. Phys., **2015**, 17, 10373-10382.
49. Kai Wang, Chang Liu, Pengcheng Du, Jie Zheng and **Xiong Gong\***  
Bulk Heterojunction Perovskite Hybrid Solar Cells with Large Fill-Factor  
Energy & Environ. Sci., **2015**, 8(4), 1245-1255.
50. Kai Wang, Chang Liu, Xiaowen Hu, Pengcheng Du, Long Chen, Chao Yia, Jiahua Zhu, Jie, Zheng, Alamgir Karima, and **Xiong Gong\***  
Efficiencies of Perovskite Hybrid Solar Cells Influenced by Film Thickness and Morphology of  $\text{CH}_3\text{NH}_3\text{Pb}_{1-x}\text{Cl}_x$  Layer  
Organic Electronics, **2015**, 21, 19-26.
51. C Liu, C. Yi, Y. L. Yang, K. Wang, S. Xiao and X. **Gong\***  
A Novel Donor-Acceptor Conjugated Polymer for Single-Junction Polymer Solar Cell with 10% Power Conversion Efficiency  
ACS Applied Materials & Interfaces, **2015**, 7(8), 4928-4935.
52. Chang Liu, Kai Wang, Pengcheng Du, Tianyu Meng Xinfei Yu, Stephen Z. D. Cheng and **Xiong Gong\***  
High Performance Planar Heterojunction Perovskite Solar Cells with Fullerene Derivatives as the Electron Transport Layer  
ACS Applied Materials & Interfaces, **2015**, 7, 1153-1159.

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53. C. Yi, X. W. Hu, H. C. Liu, R. D. Hu, C. H. Hsu, J. Zheng and **X. Gong\***  
Efficient Polymer Solar Cells Fabricated from Solvent Processing Additive Solution  
*J. Mater. Chem. C.*, 2015, 3, 26-32.
54. Liu, Chun, Wenzhan Xu, Xiong Guan, Hin-Lap Yip, **Xiong Gong**, Huang Fei,  
Yong Cao,  
Synthesis of Anthracene-Based Donor-Acceptor Copolymers with a Thermally  
Removable Group for Polymer Solar Cells  
*Macromolecules*, **2014**, 47(24), 8585-8593.
55. C. Liu, X. W. Hu, C. M. Zhong, M. J. Huang, K. Wang, Y. Cao, X. Gong,\* A. J. Heeger  
Influence of Binary Processing Additives on the Performance of Polymer Solar Cells  
*Nanoscale*, 2014, 6, 14297-14304.
56. X. W. Hu, K. Wang, C. Liu, T. Y. Meng, Y. Dong, F. Huang, X. Gong,\* Y. Cao  
High-Detectivity Inverted Near-Infrared Polymer Photodetectors using Cross-  
Linkable Conjugated Polyfluorene as an Electron Extraction Layer,  
*J. Mater. Chem. C.* 2014, 2, 9592-9598.
57. X. W. Hu, C. Yi, M. Wang, C.-H. Hsu, S. J. Liu, K. Zhang, C. M. Zhong, F. Huang, X.  
Gong\* and Y. Cao  
High-Performance Inverted Organic Photovoltaics with Over 1- $\mu\text{m}$  Thick Active Layers  
*Adv. Eng. Mater.*, 2014, DOI: 10.1002/aenm.201400378
58. C. Yi, K. Yue, H. Ren, W. B. Zhang, L. Huang, X. Lu, J. Zheng, G. R. Newkome, S. Z. D.  
Cheng and X. Gong\*  
Water/Alcohol Soluble Neutral Fullerene Derivative to Reengineer the Surface of the  
Electron Extraction Layer for High Efficiency Inverted Polymer Solar Cells  
*ACS Appl. Mater. & Interface*, 2014, 6, 14189-14195.
59. K. Wang, H. Ren, C. Yi, Y. Sun, A. Karim and **X. Gong\***  
Enhanced efficiency and stability of polymer solar cells by PEDOT:PSS doped with  $\text{Fe}_3\text{O}_4$   
magnetic nanoparticles as an anode buffer layer  
*ACS Appl. Mater. & Interfaces*, **2014**, 6, 13201-13208.
60. R. D. Hu, M. Z. Zhang, K. Patel, Q. M. Wang, Y. Chang, X. **Gong**, G. Zhang, J. Zheng  
Cross-Sequence Interactions between Human and Rat Islet Amyloid Polypeptides  
*Langmuir*, **2014**, 30, 5193-5201.
61. P. Pitliya, Y. Sun; J. C. Garza; C. Liu, **X. Gong**, A. Karim, D. Raghavan  
Synthesis and characterization of novel fulleropyrrolidine in P3HT blended bulk  
heterojunction Solar Cells  
*Polymer*, **2014**, 55, 1769.
62. X. Liu, Q. D. Li, Y. C. Li, **X. Gong**, S. J. Su, Y. Cao  
Indacenodithiophene core-based small molecules with tunable side chains for  
solution-processed bulk heterojunction solar cells  
*J. Mater. Chem. A: Mater. Ener. Sust.*, **2014**, 2, 4004-4013.

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63. Chao Yi, Rong Hu, He Ren, Xiaowen Hu, Shu Wang, **Xiong Gong\*** and Yong Cao  
Protonation process of conjugated polyelectrolytes on enhanced power conversion efficiency in the inverted polymer solar cells  
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160. P. K. Ng, **X. Gong**, and W.K. Chan.  
Quinoxaline-based conjugated polymers containing ruthenium(II) bipgridine metal complex *Macromol Rapid Commu.*, **1997**, *18*,1007.
161. P. Wu, **X. Gong**, et al.,  
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162. P. Wu, W. Chen, **X. Gong**, et al.,  
Red-band holographic storage in azo dye sensitized by noncoherent light

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***There are another 23 publications with Chinese version***

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1. **X. Gong** (invited)  
Organic electronics and self-powered electronics, Pan Stanford Publishing, 2016.
2. C. Yi and **X. Gong** (invited)  
Towards high performance inverted polymer solar cells  
Progress in Polymer Engineering, edited by Thein Kyu, Elsevier, 2012
3. **X. Gong** (invited)  
Polymer light-emitting diodes, Wiley-VCH, October 2012
4. **X. Gong** (invited)  
Polymer Photovoltaic Cells, Chinese Science Press, 2015, November
5. **X. Gong** (invited), A. J. Heeger  
Polymer White Light-emitting Diodes, Pan Stanford Publishing, 2008
6. **X. Gong** (invited), S. Wang  
Polymer Light-Emitting Diodes: Devices and Materials, CRC published, 2008
7. **X. Gong**, D. Moses, A. J. Heeger  
Polymer Based Light Emitting Diodes (PLEDs) and Displays Fabricated from Arrays of PLEDs in a book entitled "Electroluminescence-from Synthesis to Devices" edited by Prof. Klaus Müllen, Wiley-VCH Verlag, 2005.
8. **X. Gong** with other 20 co-authors  
Modern Science and Technological English-Chinese Dictionary  
Tianjing University Press, Tianjing, P. R. China, 1568pp, 1996.
9. H. X. Yang and **X. Gong**  
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1. PEDOT:PSS composite films having enhanced thermoelectric properties  
**Gong, Xiong**; Yi, Chao, US 20170222113 A1 20170803.
2. Perovskite hybrid heterojunction solar cells with fullerene perovskite composite layer for improved performance  
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3. Photodetector utilizing quantum dots and perovskite hybrids as light harvesters  
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4. An organic polymer photo device with broadband response and increased photo-responsivity  
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5. Polyhedral oligomeric silsesquioxane organic/polymeric dyads and its application for organic photovoltaic cells  
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6. P-type transition metal oxide-based films serving as hole transport layers in organic optoelectronic devices  
**Gong, Xiong**; Yang, Tingbin, US 9252365 B2 20160202
7. Ultrasensitive solution-processed perovskite hybrid photodetectors  
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8. Multilayer polymer light-emitting diodes for solid state lighting applications  
**Gong, Xiong**; Heeger, Alan J.; Moses, Daniel; Bazan, Guillermo C.; Wang, Shu  
PCT Int. Appl. (2006), WO 2006094101 A1 20060908.
9. White electrophosphorescence from semiconducting polymer blends  
**Gong, Xiong**; Ma, Wanli; Ostrowski, Jacek; Bazan, Guillermo C.; Moses, Daniel; Heeger, Alan J.  
U.S. Pat. Appl. Publ. (2005), US 20050073245 A1 20050407
10. Metal-insulator-metal device and their methods of fabrication  
**Gong, Xiong**; Yang, Kaixia; Gang, Yu; Boo, Nillson; Lee, Hsing Chung  
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11. High Sensitivity Solution-processed Polymer Photodetectors with an Inverted Device Structure  
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12. Infrared polymer photodetectors  
**Gong, Xiong**, USPTO 61/702,785
13. Broadband polymer photodetectors using zinc oxides nanowire as an electron-transporting layer  
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**Gong, Xiong**, Wang, Kai, Liu, Chang  
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15. Enhanced electrical conductivity and thermoelectric performance of poly(3,4-ethylenedioxythiophene):poly(styrene sulfonate) by binary secondary dopants  
**Gong, Xiong**, Yi, Chao, USPTO: 62/110,642.
16. Ultrasensitive solution-processed perovskite hybrid photodetectors  
**Gong, Xiong**; Wang, Kai; Liu, Chang  
PCT Int. Appl. (2015), WO 2015187225 A2 20151210.
17. Metal-oxide thin film as a hole-extraction layer for heterojunction solar cells  
**Gong, Xiong**; Li, Bohao; Ren, He  
PCT Int. Appl. (2015), WO 205070013 A1 20150514.
18. Methods and devices comprising soluble conjugated polymers  
Bazan, Guillermo C.; Liu, Bin; **Gong, Xiong**; Heeger, Alan J.; Ma, Wanli; Iyer, Parameswar.  
U.S. (2015), US 9017766 B2 20150428.
19. Electron donor-fullerene conjugated molecules for organic photovoltaic cells  
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20. An organic polymer photo device with broadband response and increased photo-responsivity  
**Gong, Xiong**; Cheng, Stephen Z. D.  
PCT Int. Appl. (2014), WO 2014089066 A1 20140612.
  21. Broadband polymer photodetectors using zinc oxide nanowire as an electron-transporting layer  
**Gong, Xiong**  
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  22. Enhanced efficiency polymer solar cells using aligned magnetic nanoparticles  
**Gong, Xiong**  
U.S. Pat. Appl. Publ. (2013), US 20130247993 A1 20130926
  23. Broadband polymer photodetectors using zinc oxide nanowire as an electron-transporting layer  
**Gong, Xiong**  
PCT Int. Appl. (2013), WO 2013142870 A1 20130926.
  24. Enhanced efficiency polymer solar cells using aligned magnetic nanoparticles  
**Gong, Xiong**  
PCT Int. Appl. (2013), WO 2013142876 A1 20130926.
  25. p-type transition metal oxide-based films serving as hole transport  
**Gong, Xiong**; Yang, Tingbin  
PCT Int. Appl. (2013), WO 2013063562 A1 20130502
  26. Multilayer polymer light-emitting diodes for solid state lighting applications  
**Gong, Xiong**; Heeger, Alan J.; Moses, Daniel; Bazan, Guillermo C.; Wang, Shu  
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  27. Multilayer films for package applications and making film by a solution process  
**Gong, Xiong**; Yu, Gang  
U.S. Pat. Appl. Publ. (2009), US 20090278277 A1 20091112
  28. Systems and methods for improving the qualities of polymer light-emitting electrochemical cells  
Shao, Yan G.; Bazan, Guillermo C.; Heeger, Alan J.; **Gong, Xiong**  
U.S. Pat. Appl. Publ. (2008), US 20080303432 A1 20081211.

#### INVITED PRESENTATIONS

1. "Solution-processed hybrid perovskite solar cells", Department of Polymer Science and Engineering, College of Materials Science and Engineering, Lanzhou Jiaotong University, March 8, 2018.
2. "High-performance solution-processed hybrid perovskite solar cells via novel materials", Institute of PhotoChemistry, Chinese Academy of Science, March 6, 2018.
3. "High-performance solution-processed hybrid perovskite solar cells via novel materials", Department of Chemical Engineering and Materials Science, Michigan State University, January 11, 2018.
4. "Organic and organic-inorganic hybrid electronics", Department of Chemical Engineering, Taiwan High Technology, Dec. 28, 2017.



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5. "Solution-processed polymer and perovskite solar cells via novel materials", Department of Chemical Engineering, National Jiaotong University, Dec. 27, 2017.
  6. "Solution-processed organic-inorganic hybrid electronics via novel materials", Department of Photonic Engineering, National Chengkung University, Dec. 26, 2017.
  7. "Solution-processed perovskite solar cells via novel materials and device engineering", Department of Chemistry, National Taiwan University, Dec. 23, 2017.
  8. "High-performance solution-processed hybrid perovskite solar cells", Charles D. Davidson School of Chemical Engineering, Purdue University, Oct. 17, 2017.
  9. "Uncooled ultrasensitive solution-processed broadband photodetectors", Department of Chemistry, Clemson University, Oct. 5, 2017.
  10. "High-performance solution-processed hybrid perovskite solar cells", College of Chemistry and Chemical Engineering, Lanzhou University, Aug. 23, 2017.
  11. "Magnetic effects on solution-processed solar cells" Chinese CAS Photochemistry Conference, Lanzhou, Aug. 24, 2017, China.
  12. "Solution-processed perovskite solar cells via novel materials and device engineering", Lanzhou Chemical Physics Institute, CAS, Lanzhou, Aug. 25, 2017, China.
  13. "Novel materials for solution-processed photovoltaics" 2<sup>nd</sup> Northwest Energy and Environmental Symposium, Lanzhou, Aug. 26, 2017, China.
  14. "Magnetic effects on solution-processed solar cells" 2017 ChinaNano, Beijing, Aug. 30, 2017, China.
  15. "Little science of plastics", Eastwood Elementary School, Hudson, OH, Jan. 27, 2017, USA.
  16. "Printable flexible electronics", Dunhuang, Jan. 11, 2017, China.
  17. "High-performance solution-processed perovskite photovoltaics", Department of Chemistry, University of Hong Kong, Hong Kong, Jan. 6, 2017, China.
  18. "High-performance perovskite photovoltaics vis novel materials and device structure", International Conferences for Renewable Energy and Advanced Materials, Hong Kong, Jan. 5, 2017, China.
  19. "High-performance perovskite photovoltaics vis novel materials and device structure", Hong Kong Baptist University, Hong Kong, Dec. 29, 2016, China.
  20. "High-performance perovskite photovoltaics vis novel materials and device structure", Lanzhou University, Lanzhou, Dec. 27, 2016, China.
  21. "Polymer solar cells vis novel materials and device structure", China University of Geosciences, Wuhan, Dec. 23, 2016, China.
  22. "High-performance perovskite photovoltaics vis novel materials and device structure", Zhejiang University of Science and Technology, Hangzhou, Dec. 22, 2016, China.
  23. "High-performance perovskite photovoltaics vis novel materials and device structure", Xian Jiaotong University, Tianjin, Dec. 21, 2016, China.

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24. "Interfacial engineering for high-performance perovskite photovoltaics", Nankai University, Tianjin, Dec. 19, 2016, China.
  25. "Solution-processed perovskite photovoltaics by novel materials", Tianjin University, Tianjin, Dec. 16, 2016, China.
  26. "Solution-processed perovskite solar cells", Institute of Chemistry, CAS, Beijing, Dec. 15, 2016, China.
  27. "Uncooled solution-processed broadband perovskite photodetectors", 2016 SPIE Annual Conference, San Diego, Sept. 1<sup>st</sup>, 2016, USA.
  28. "Solution-processed broadband perovskite photodetectors", 252 ACS Annual Conference, Philly, Aug. 23<sup>rd</sup>, 2016, USA.
  29. "Printable polymer flexible electronics" The University of Akron, July 9, Akron, USA
  30. "Solution-processed perovskite photovoltaics via novel materials and device engineering", CAS University, July 4th, Beijing, China.
  31. "Magnetic effects on solution-processed solar" 2016 Chinese Chemistry Society Conferences, July 3<sup>rd</sup>, 2016, Dalian, China.
  32. "Printable polymer flexible electronics" Shangxi Normal University, July 1st, Xian, China.
  33. "Solution-processed perovskite photovoltaics via novel materials and device engineering", International Conference of Synthetic Metals, Shangxi Normal University, July 1st, Xian, China.
  34. "Printable polymer flexible electronics" Jiangnan University, June 30, Wuhan, China
  35. "Solution-processed perovskite photovoltaics via novel materials and device engineering", International Conference of Synthetic Metals, June 28, Guangzhou, China.
  36. "Magnetic effects on solution-processed solar" 2<sup>nd</sup> International Symposium on the Science of Plastic Electronics, June 25, 2016, Beijing, China.
  37. "Solution-processed perovskite photovoltaics via novel materials and device engineering", Institute of Chemistry, CAS, June 23, Beijing, China.
  38. "Printable polymer flexible electronics" Symposium for REU Students, The University of Akron, June, 11, Akron, USA.
  39. "Uncooled solution-processed broad bandgap photodetectors", College of Engineering, North Carolina State University, March 24, 2016, Raleigh, NC, USA.
  40. "Solution-processed photovoltaics novel materials and device engineering", Department of Materials Science and Engineering, University of North Texas, Feb. 25, 2016, Houston, Denton, USA.
  41. "Higher performance solution-processed solar cells through novel materials and device engineering", Department of Electric Engineering, University of Houston, Feb. 19, 2016, Houston, TX, USA.
  42. "Higher performance solution-processed solar cells through novel materials and device engineering", Department of Materials Science and Engineering, Ohio State University, Jan. 26, 2016, Columbus, OH, USA.

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43. "Uncooled ultrasensitive solution-processed broad-band photodetectors" Air Force Research Lab., Wright-Patterson, Jan. 25, 2016, Dayton, OH, USA.
  44. "Printable flexible polymer electronics" Nanjing Normal University, Nanjing, Oct., 2015, P. R. China.
  45. "High-performance polymer solar cells via novel materials and device engineering" Nanjing Normal University, Nanjing, Oct., 2015, P. R. China.
  46. "Solution-processed perovskite hybrid solar cells?" Zhejiang University, Hangzhou, Oct., 2015, P. R. China.
  47. "15 % efficiency from single junction polymer solar cells, POSSIBILITY?" 2015 China Polymer Conference, Suzhou, Oct., 2015, P. R. China.
  48. "Magnetic effects on polymer solar cells", 10<sup>th</sup> International Chinese Organic Electronics, Aug. 7<sup>th</sup> to 10<sup>th</sup>, Beijing, P. R. China.
  49. "Possibility to observe 15% efficiency form single junction polymer solar cells", Beijing University and Technology, Aug. 6<sup>th</sup>, Beijing, P. R. China.
  50. "Solution-processed perovskite hybrid solar cells" Ningbo Institute of Materials Science, CAS, Ningbo, P. R. China, June 29, 2015.
  51. "Magnetic effect on polymer solar cells" 13<sup>th</sup> International Conference of Polymer for Advanced Technology, Hangzhou, P. R. China, June 27, 2015.
  52. "Approaching 15% Efficiency Polymer Solar Cells" Hangzhou University, P. R. China, Hangzhou, June 26, 2015.
  53. "Perovskite hybrid solar cells" Northwest Normal University, Lanzhou, P. R. China, June 15, 2015.
  54. "Perovskite hybrid solar cells" Northwest Normal University, Lanzhou, P. R. China, June 6 2015.
  55. "Polymer electronics" Hexi University, Zhangye, P. R. China, June 18, 2015.
  56. "Solution-processed high performance polymer solar cells" Northwest Normal University, Lanzhou, P. R. China, June 5, 2015.
  57. "Printable flexible polymer electronics" Lanzhou University, Lanzhou, P. R. China, June 16, 2015.
  58. "Polymer solar cells by novel materials" Lanzhou University, Lanzhou, P. R. China, June 2, 2015.
  59. "Little Science of Plastics" Hudson Elementary School, Feb. 17, 2015, Hudson, OH, USA
  60. "High efficiency of planar heterojunction perovskite solar cells by fine-tuning crystallization morphology" MRS Fall Conferences, Nov. 30<sup>th</sup>, 2014, Boston, MA, USA.
  61. "High performance solution-processed polymer solar cells via novel materials and interfacial engineering" The Akron Polymer Conferences, Akron, OH, Oct. 2-3, 2014.
  62. "Towards 15% Efficiency Polymer Solar Cells" The First International Symposium on the Science of Plastic Electronics, Beijing, P. R. China, Sept. 25, 2014.
  63. "Polymer electronics" Nanjing Chemical Company, Nanjing, P. R. China, Sept. 23, 2014

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64. "High performance polymer solar cells via novel materials" Suzhou Nanoinstitute, CAS, Suzhou, P. R. China, Sept. 22, 2014.
  65. "High performance polymer solar cells via interfacial engineering" Suzhou University, Suzhou, P. R. China, Sept. 22, 2014.
  66. "Inverted polymer solar cells via novel materials" Nanjing University, Nanjing, P. R. China, Sept. 21, 2014.
  67. "Printable Polymer Electronics", Datong University, Datong, P. R. China, Sept. 17, 2014.
  68. "High performance solution-processed polymer solar cells" First Ohio Conference on the sustainable use of greenhouse gases, Columbus, OH, Aug. 18, 2014.
  69. "Polymer solar cells with over 1  $\mu\text{m}$  thickness active layer" Chinese Chemistry Annual Congress, Beijing, Aug. 5<sup>th</sup>, 2014.
  70. "2D conjugated polymers for polymer solar cells with over 10% efficiency" Chinese Chemistry Annual Congress, Beijing, Aug. 4<sup>th</sup>, 2014.
  71. "Over 10% efficiency from single junction polymer solar cells", 6<sup>th</sup> International symposium on polymer materials science, Akron, OH, July 28, 2014.
  72. "High performance polymer solar cells via novel materials and interfacial engineering", Beihang University, Beijing, China, June 30, 2014.
  73. "High performance polymer solar cells via novel materials and interfacial engineering", Chemistry Institute, CAS, Beijing, China, June 29, 2014.
  74. "High performance polymer solar cells via device engineering", Nankai University, Tianjin, China, June 18, 2014.
  75. "High performance polymer solar cells via novel materials", Tianjin University, Tianjin, China, June 17, 2014.
  76. "Polymer electronics", Lanzhou City University, Lanzhou, China, June 10, 2014.
  77. "Inorganic Chemist meets with Polymer Scientist", Northwest Normal University, Lanzhou, China, June 9, 2014.
  78. "Interfacial engineering for high performance polymer solar cells", Lanzhou University, Lanzhou, China, June 12, 2014.
  79. "Inverted infrared polymer photodetectors", Lanzhou Institute of Chemical Physics, CAS, Lanzhou, China, June 13, 2014.
  80. "High performance single junction polymer solar cells by 2D conjugated polymers", International conference on polymer chemistry, Shanghai, P. R. China, June 4, 2014.
  81. "Interfacial engineering for high performance inverted polymer solar cells", ACS Dallas Meeting, March 17, 2014
  82. "High performance polymer solar cells through device design and novel materials", Tsinghua University, Nov. 20<sup>th</sup>, 2013, Beijing, China
  83. "Polymer Solar Cells: Device and Materials", Norfolk State University, Sept. 27<sup>th</sup>, 2013, Norfolk, VA, USA.

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85. "Novel "electron donor-fullerene" conjugated molecules for polymer solar cells with an inverted device structure", 246 ACS conference, Sept. 12, 2013, Indianapolis, IN, USA
  86. "Towards high performance solar cells" South China University and Technology, June, 2013, Guangzhou, China.
  87. "Polymer solar cells by novel conjugated fullerene molecules", Oka Ridge National Laboratory users' workshop, Aug. 12-15<sup>th</sup>, 2013, Oak Ridge, TN, USA
  88. "Over 10 % efficiency polymer solar cells", University of Tennessee, Aug. 15<sup>th</sup>, 2013, Knoxville, TN, USA.
  89. "Towards high performance inverted polymer solar cells through interfacial engineering", SPIE, Aug. 2013, San Diego, CA, USA.
  90. "Hybrid infrared polymer photodetectors", Lanzhou University, Jul. 2013, Lanzhou, China
  91. "Solution-processed high performance polymer solar cells: device structures and materials", Lanzhou Institute of Chemical Physics, CAS, Jul. 2013, Lanzhou, China
  92. "Renewable energy", Invited by Government of Dunhuang City, Gansu Province, July 2013, Dunhuang, China
  93. "How to approach high performance organic solar cells", National Science Foundation of China, Jul. 2013, Beijing, China
  94. "Inverted infrared polymer photodetectors", International workshop on organic electronics, Jun. 2013, Beijing, China
  95. "Science of Plastics", Evamere Elementary School, May, 2013, Hudson, OH, USA
  96. "High performance inverted polymer solar cells", Department of Chemical Engineering, University of Akron, April 2013, Akron, OH, USA
  97. "High performance inverted polymer solar cells", MRS Spring meeting, Apr. 2013, SFO, CA, USA
  98. "Approaching high performance polymer solar cells by interfacial engineering and novel materials", 2<sup>nd</sup> symposium of organic photovoltaic, Kent State University, April 2013, Kent, OH, USA
  99. "Towards high performance solar cells", APS March conference, Mar. 2013, Baltimore, Maryland, USA
  100. "Solution-processed polymer electronics", Research for Lunch, Research office of University of Akron, Feb. 2013, Akron, OH, USA
  101. "Towards high performance polymer photovoltaic cells", Lanzhou University, Dec. 2012, Lanzhou, China
  102. "Inverted polymer solar cells", Northwest Normal University, Dec. 2012, Lanzhou, China
  103. "Interface engineering for high performance polymer solar cells", Nov. 2012, MRS Fall meeting, Boston, MA
  104. "High performance polymer solar cells by novel materials", University of California Santa Barbara, Oct. 30<sup>th</sup>, 2012, CA, USA

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105. "High performance solution-processed polymer solar cells", University of Pittsburgh, Oct. 2012, PA, USA
  106. "Solution-processed organic photovoltaic cells", Case Western Reserve University, Sept. 2012, Cleveland, OH, USA
  107. "High performance inverted polymer solar cells", NSF and ONR workshop, Sept. 2012, DC, USA
  108. "Inverted polymer solar cells", Institute of Chemistry, CAS, July 4, 2012, Beijing, China
  109. "Towards high performance inverted polymer solar cells", IUPAC Polymer Congress, June 2012, USA
  110. "Polymer solar cells" June 2012, Polymer Conferences, Akron, OH
  111. "Flexible electronics", Plastic Society of Akron and Cleveland, Apr. 2012, Akron, OH
  112. "Organic electronics", Akron Polymer Society, Nov. 2011, Akron, OH, USA
  113. "Polymer solar cells with an inverted device structure", MRS meeting, Nov. 2011, Boston, USA
  114. "Polymer solar cells with an inverted device structure", International Chinese Organic Electronics, Oct. 2011, Zhang Jiajie, China
  115. "Solution-processed polymer photodetectors", Akron Advanced Materials, Sept. 2011, Akron, OH, USA
  116. "Solution processed infrared polymer photodetector", SPIE conference, Aug. 2011, San Diego, CA, USA
  117. "Ultrasensitive polymer photodetectors", South China University of Science and Technology, Jun. 2011, Guangzhou, China
  118. "Printable polymer electronics", Lanzhou University, Jun. 2011, Lanzhou, China
  119. "Polymer solar cells by novel electron acceptor", Polymer Congress, May, 2011, Beijing, China
  120. "Infrared polymer photodetector", Peking University, May. 2011, Beijing, China
  121. "Polymer solar cells with an inverted device structure", Beijing University Chemical Technology, May 2011, Beijing, China
  122. "Solution-processed Organic Electronics", Dec. 2010, Cleveland, OH, USA
  123. "Infrared polymer photodetector", SPIE conference, Aug. 2010, San Diego, CA, USA
  124. "Solution-processed organic photodetectors", Xi An 3<sup>rd</sup> International Organic Electronics, June 2010, Xian, China
  125. "Polymer solar cells", Northwest Normal University, June 2010, Lanzhou, China
  126. "Solution-processed organic photodetectors", Lanzhou University, Jun. 2010, Lanzhou, China
  127. "Solution-processed organic photodetectors", South China University of Science and Technology, June 2010, Guanzhou, China
  128. "Polymer photodetector", MRS Spring Meeting, SFO, April 2010, CA, USA

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129. "Polymer solar cells with larger open-circuit voltage", MRS Spring Meeting, SFO, April 2010, CA, USA
  130. "Ultrasensitive polymer photodetectors", UCSB Organic Electronics Workshop, Sept. 2009, Santa Barbara, CA, USA
  131. "Polymer photodetector", SPIE, Aug. 2009, San Diego, CA, USA
  132. "Solution-processed ultrasensitive polymer photodetectors", PS, Mar. 2009, Pittsburgh, PA, USA
  133. "Polymer photodetectors", US-Japan Polymat, Aug. 2008, Ventura, CA, USA
  134. "Semiconducting polymers and its applications", Lanzhou City University, Oct. 2007, Lanzhou, China
  135. "Organic/polymer optoelectronic devices", Lanzhou University, Sept. 2007, Lanzhou, China
  136. "Polymer electronic and optoelectronic devices", Northwest Normal University, Sept. 2007, Lanzhou, China
  137. "Polymer solar cells", South China University of Science and Technology, June 2007, Guanzhou, China
  138. "Fluorenone defects in polyfluorens", Workshop on Organic/Polymer Devices, May, 2007, Montreal, Canada
  139. "Materials and devices of PLEDs and polymer Solar Cells", Peking University, Sept. 2006, Beijing, China
  140. "Semiconducting polymers and polymer optoelectronic devices", Lanzhou Jiaotong University, Sept. 2006, Lanzhou, China
  141. "Single- and multilayer white PLEDs for solid state lighting application", Department of Electrical and Computer Engineering, University of California, San Diego, Aug. 2006, San Diego, CA, USA
  142. "Plastic electronics", Institute of Chemistry, Chinese Academy of Science, Aug. 2006, Beijing, China
  143. "Recently progress on PLEDs and solar cells at UCSB", International Conference on Organic/Polymer Devices, Jul. 2006, Changchun, China
  144. "Multilayer white PLEDs", SPIE Conference, 2006, San Diego, CA, USA
  145. "White PLEDs", SPIE Conference, 2005, Denver, CO, USA
  146. "Polymer electrophosphorescent LEDs", SPIE Conference, Aug. 2004, San Diego, CA, USA
  147. "White light PLEDs", ICSM, 2004, Australia
  148. "Stabilized blue emission from PLEDs made by polyfluorenes", APS meeting, Mar. 2003, Austin, TX, USA
  149. "Single layer white PLEDs", ACS Conference, 2003, Anaheim, CA, USA

## TEACHING AND MENTORING EXPERIENCE

## 1. 2010-present, Department of Polymer Engineering, University of Akron

## (1) Mentoring/Supervising:

- 1 research associate, 5 Ph. D. students and 6 M.Sc. students, 2 undergraduate students, 2 high-school students, 1 high school teacher currently in my research group,
- 9 Ph. D. and 20 M Sc students graduated in 2012, 2013, 2014, 2015, 2016 and 2017

## (2) Teaching

- Independent research, 3+2 AMP graduate students, evaluation rate: 4.86/5 (2017).
- Semiconducting Polymers, graduate course, evaluation ratings: 4.67/5 (2011); 4.80/5 (2012); 4.80/5 (2014), 4.80/5 (2016).
- Flexible Electronics, graduate course, evaluation ratings: 4.92/5 (2011), 4.90/5(2013), 4.88/5 (2015), 4.86/5 (2017).
- Electronic properties of materials, graduate course, evaluation ratings: 4.76/5 (2013), 4.85/5(2014), 4.88/5 (2016).
- Polymer Science for Engineers, undergraduate course, evaluation rating: 4.38/5(2012).

## 2. 2007~present State Key Laboratory of Luminescence Materials and Devices, South China University of Technology, P. R. China

## (1) Mentoring/supervising:

- 2 Ph. D. students and 2 M.Sc. students currently in my research group.
- 8 Ph.D. students and 9 M. Sc. students graduated since 2008 to 2017.

**SERVICES**

- Committees (Graduate Program Review, Admissions, Faculty Search (3 times), Library, Dean Search, University Research, etc.)
- Review Panels (Air Force, NSF, Canada, Swiss NSF, Hong Kong, China NSF, Iowa State, AAAS)
- Conference Organizer (2014 ACS Dallas, 2015 PPS Cleveland, 2016 ACS Philadelphia, 2016 ICSM Guangzhou, 2015 and 2016 First and Second Flexible Electronics: Science and Engineering)

**REGULAR REVIEWER (25 journals)**

Science	Nature Photonics	Nature Comm.
Chem. Rev.	J. Am. Chem. Soc.	Ange. Chem. Inter. Edi.
Adv. Mater.	Adv. Func. Mater.	Adv. Eng. Mater.
J. Phys. Chem.	Chem. Phys.	Polymer
J. Polymer Science	Appl. Phys. Lett.	J. Photovoltaic Cells
J. Phys. D. Appl. Phys.	Nano Sci.	Langmuir
Macromolecule	Macr. Rapid Comm.	Synth. Metal
Sol. Ener. Mate. and Sol. Cells	ACS Appl. Mate. & Inter.	Nano Scale

**MEMBERSHIP OF ACADEMIC ASSOCIATIONS**

- Member of Materials Research Society (MRS)
- Member of American Chemistry Society (ACS)



- Member of Society of Displays (SID)