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

HIGHLIGHT ACCOMPLISHMENTS

- Scientific Contributions
 - 200 articles published in the peer reviewed journals including in Science, with over 22000 peers citations and H-index of 63.
 - 28 granted patents plus 8 pending patents.
 - 8 book chapters
 - 156 invited talks in conferences and academic institutions.
- Research Grants at The University of Akron
 - Funding: >\$6 M as a single PI since 2011
- Teaching at UA
 - Developed and taught three new courses for graduate students in the Department of Polymer Engineering
 - Taught one course for undergraduate students in the Department of Mechanical Engineering
 - Taught one core course for graduate students in the Department of Polymer Engineering
 - Teaching evaluation rates rank one of top list in the College of Polymer Science and Polymer Engineering for last 8 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)
- 3M Non-tenured Faculty Award (2011)
- The University of Akron, Summer Research Award (2011)
- K. C. Wong Education Foundation Fellow (2009)
- Alexander von Humboldt Research Fellowship (1999)

EMPLOYMENT

- May 2017 – present, Full Professor, Department of Polymer Engineering, College of Polymer Science and Polymer Engineering, The University of Akron, Akron, OH
- May 2015 – May 2017, Associate Professor, Department of Polymer Engineering, College of Polymer Science and Polymer Engineering, The University of Akron, Akron, OH,
- August 2010 – May 2015 Assistant Professor, Department of Polymer Engineering, College of Polymer Science and Polymer Engineering, The University of Akron, OH
- January 2005 - August 2010 Senior Research Scientist, Center for Polymers and Organic Solids, University of California, Santa Barbara, CA
- January 2004 - August 2010 Manager and Senior Scientist, CBrite, Inc. Goleta, CA
- July 1986 – August 1994 Lecture, Associate Professor, Department of Chemistry, Northwest Normal University, P. R. China

EDUCATION AND PROFESSIONAL TRAINING

- April 2001- December 2003 Post-doctoral Fellow and Research Assistant
Center for Polymers and Organic Solids, University of California, Santa Barbara, with Professor Alan J. Heeger (2000 Noble Laureate)
Minor (graduate courses) in Electric Engineering, UC Santa Barbara
- June 1999 - January 2000 Research Fellow
Alexander von Humboldt Foundation, Cari-Zeiss Optical Institute, Jena, Germany
- August 1994 - July 1997, Ph. D. Physics (Optics)
Optics Institute, Nankai University, P, R. China
Dissertation: Optical (linear and nonlinear) properties of rare-earth doped inorganic nanoparticles
Advisors: Prof. Wenju Chen
- August 1991 - July 1994, M. Sc. Chemistry (Solid State Chemistry)
Departments of Chemistry and Materials Science, Lanzhou University, P, R. China,
Dissertation: The effect of γ -ray irradiation on catalytic properties of rare-earth doped inorganic nanostructured materials
Advisors: Prof. Zhongqian Ma and Prof. Hongxie Yang
- August 1982 - July 1986. B. Sc. Chemistry
Department of Chemistry, Northwest Normal University, P. R. China
Project: Ru-coordination compounds and its medical applications
Supervisor: Prof. Yuchen Pan

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

- NSF
Title: Bulk heterojunction perovskite solar cells by novel perovskite materials
Award Amount: \$475,000
Role: PI
Period: July 2019 - June 2022
- Air Force Scientific Research
Title: Uncooled broadband solution-processed photodetectors
Total Award Amount: \$819,543
Role: PI
Period: sept. 2015 - Aug. 2020
- NSF
Title: Ultrasensitive solution-process inverted polymer photodetectors
Award Amount: \$408,000
Role: PI
Period: July 2014 - December 2019
- 1 -Material Inc.
Title: "Novel Polymers: Characterization and Applications"
Award Amount: \$250,000
Time period: July 2015 - December 2019
Role: PI
- Air Force Scientific Research
Title: Trust in Flexible and Hybrid Electronics
Total Award Amount: \$1 .78M
Role: Co-PI)
Period: sept. 2017 - Aug. 2020

2. Pending proposals

- Title: Hysteresis-free, stable and efficient solution-processed perovskite solar cells through hybrid perovskites crosslinked with polymers
Source: DOE
Role: PI
Total Award Amount: \$250,000
- Title: Efficient perovskite solar cells by hybrid perovskite materials incorporated with heterovalent rare earth cations
Source: DOE
Role: PI
Total Award Amount: \$250,000

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: PI
 - Aldrich Material Science
Title "Special Aldrich Lectureship" 2014

Award Amount: \$3,500

Role: PI

PUBLICATIONS

2019

- 200 Suyuan Zhou, Tao Zhu, Luyao Zheng, Dong Zhang, Wenzhan Xu, Lei Liu, Gang Cheng, Jie Zheng and **Xiong Gong***
Zwitterionic Polymer as an Interfacial Layer for Efficient and Stable Perovskite Solar Cells
RSC Advance, 2019, DOI:
- 199 Y. Wang, J. H. Wu, D. Zhang, F. Chen, P. Fan, M. Q. Zhong, S. W. Xiao, Y. Chang, **X. Gong**, J. Zheng
Design of salt-responsive and regenerative antibacterial polymer brushes with integrated bacterial resistance, killing, and release properties
J. Mater. Chem. B., 2019, DOI:10.1039/c9tb01313j
- 198 Tao Zhu, Luyao Zheng, Zuo Xiao, Xianyi Meng, Lei Liu, Liming Ding, **Xiong Gong***
Functionality of Non-Fullerene Electron Acceptors in Ternary Organic Solar Cells.
Solar RRL, 2019, doi: 10.1002/solr.20190032.
- 197 Wenzhan Xu, Luyao Zheng, Tao Zhu, Lei Liu and **Xiong Gong***
Bulk Heterojunction Perovskite Solar Cells Incorporated with Zn₂SnO₄ Nanoparticles as the Electron Acceptors,
ACS Applied Materials & Interfaces, 2019, DOI: 10.1021/acsami.9b12346
- 196 L. Y. Zheng, K. Wang, T. Zhu, L. Liu, J. Zheng, and **X. Gong,***
Solution-processed ultrahigh detectivity photodetectors by hybrid perovskite incorporated with heterovalent neodymium cations
ACS Omega, 2019, DOI: 10.1021/acsomega.9b01797.
- 195 Z. Y. Chen, Y. R. Yang Z. H. Ma, T. Zhu, L. Liu, J. Zheng and **X. Gong***
All-solid-state asymmetric supercapacitors with metal selenides electrodes and ionic conductive composites electrolytes
Adv. Func. Mater., 2019, DOI: 10.1002/adfm.201904182
- 194 T. Zhu, L. Y. Zheng, C. Yi, T. Z. Yu, Y. Cao, L. Liu, **X. Gong,***
Two Dimensional Conjugated Polymeric Nanocrystals for Organic Electronics
ACS Applied Electronic Materials, 2019, DOI: 10.1021/acsaelm.9b00260.
- 193 K. Wang, L. Y. Zhang, T. Zhu, X. Yao, C. Yi, X. T. Zhang, Y. Cao, L. Liu, W. P. Hu, and **X. Gong***
Efficient Perovskite Solar Cells by Hybrid Perovskites Incorporated with Heterovalent Neodymium Cations
Nano Energy, 2019, 61, 352-360.
- 192 T. Zhu, L. Y. Zhang, S Yao, F. Huang, Y. Cao, L Liu, **X. Gong***
Ultrasensitive Solution-Processed Broadband PbSe Photodetectors through Photomultiplication Effect
ACS Appl. Mater. Interf., 2019, 11, 9205-9212.

- 191 Z. Y. Chen, L. Y. Zheng, Te Zhu, Z. H. Ma, Y. R. Yang, C. D. Wei, L. Liu, **X. Gong***
All-Solid-State Flexible Asymmetric Supercapacitors Fabricated by the Binder-Free
Hydrophilic Carbon Cloth@MnO₂ and Hydrophilic Carbon Cloth@Polypyrrole
Electrodes
Adv. Elec. Mater., 2019, DOI: 10.1002/aelm.201800721.
- 190 **X. Gong***
Organic field-effect optical waveguides: a new break-through all organic
optoelectronics
SCIENCE CHINA Chemistry, 2019, DOI: 10/1007/s11426-018-9406-1.
- 189 H. C. He, X. Xuan, C. Y. Zhang, Y. Song, S. F. Chen, **X. Gong**, B. P. Ren, J. Zheng
Simple Thermal Pretreatment Strategy to Tune Mechanical and Antifouling Properties
of Zwitterionic Hydrogels
Langmuir, 2019, 35, 1828-1836.

2018

- 188 J. Qi, X. Yao, W. Z. Xu, J. Xiao, X. F. Jiang, **X. Gong***, Y. Cao
Efficient Perovskite Solar Cells with Reduced Photocurrent Hysteresis through Tuned
Crystallinity of Hybrid Perovskite Thin Films
ACS Omega, 2018, 3, 7069-7076.
- 187 L. Y. Zheng, T. Zhu, W. Z. Xu, J. Zheng, L. Liu, and **X. Gong***
Ultrasensitive perovskite photodetectors by Co partially substituted hybrid perovskite
ACS Sust. Chem. Eng., 2018, 6, 12055-12060.
- 186 T. Y. Meng, C. Yi, L. Liu, A. Karim and **X. Gong***
Enhanced thermoelectric properties of two-dimensional conjugated polymers,
Emergent Materials, 2018, DOI: 10.1007/s42247-018-0002-4.
- 185 B. P. Ren, Y. L. Liu, Y. X. Zhang, Y. Q. **X. Gong**, J. Zheng,
Genistein: A Dual Inhibitor of Both Amyloid β and Human Islet Amylin Peptides
ACS Chemical Neuroscience, 2018, 9, 1215-1224.
- 184 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 μm by a low bandgap donor-acceptor conjugated polymer
J. Mater. Chem. C., 2018, 6, 3634-3641.
- 183 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, 1117-1125.
- 182 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.

2017

- 181 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.
- 180 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.
- 179 J. Ma, Y. R. Sun, M. Z. Zhang, M. X. Yang, **X. Gong**, F. Yu, J. Zheng
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.
- 178 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.
- 177 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.
- 176 H. Peng, C. D. Wei, K. Wang, T. Y. Meng, G. F. Ma, Z. Q. Lei, **X. Gong***
The Ni_{0.85}Se@MoSe₂ nanosheet arrays as the electrode for high-performance supercapacitors
ACS Appl. Mater. Interfac., 2017, 9, 17067-17075.
- 175 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.
- 174 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.
- 173 X. J. Huang, W. Z. Xu, X. Yao, F. Huang, **X. Gong*** and Y. Cao
Inverted polymer solar cells with Zn₂SnO₄ nanoparticles as the electron extraction layer
Chinese Chemistry Letter, 2017, 28, 1755-1759.
- 172 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.
- 171 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.
- 170 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 Appl. Mater. Inter., 2017, 9, 5348-5357.

2016

- 169 J. Qi, W. Cao, L. Chen, L. W. Mu, H. Y. Wang, X. Gong, J. Zheng
Confined molecular motion across liquid/liquid interfaces in a triphasic reaction towards free-standing conductive polymer tube arrays
J. Mater. Chem. A., 2016, 4, 6290-6294.
- 168 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.
- 167 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.
- 166 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, 5814-5824.
- 165 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.
- 164 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.
- 163 Kai Wang, Chang Liu, Tianyu Meng, Chao Yi, Xiong Gong*
Inverted Organic Photovoltaic Cells
Chem. Soc. Rev., 2016, 45, 2937-2975.
- 162 N. Deb, B. H. Li, M. Skoda, S. Rogers, Y. Sun, X. Gong, A. Karim, B. Sumpter and D. 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.
- 161 W. Z. Xu, Y. T. Liu; X. J. Huang, L. L. Jiang, Q. D. Li; X. W. Hu, F. Huang, X. Gong,* Y. Cao
Solution-processed VOX prepared from a novel synthetic method as the hole extraction layer for polymer solar cells
J. Mater. Chem. C, 2016, 4, 1953-1958.
- 160 C. Liu, K. Wang, C. Yi, X. J. Shi, A. W. Smith, X. Gong* and A. J. Heeger
Efficient Perovskite Hybrid Photovoltaics via Alcohol-Vapor Annealing Treatment

- Adv. Func. Mater.**, 2016, 26, 101-110.
- 159 T. Y. Meng, C. Liu, K. Wang, T. D. He, Y. Zhu, A. A. Elzatahry, **X. Gong***
High Performance Perovskite Hybrid Solar Cells with E-beam-Processed TiO_x
Electron Extraction Layer
ACS Appl. Mater. Inter., 2016, 8, 1876-1883.
- 158 X. Huang, K. Wang, C. Yi, T. Y. Meng and **X. Gong***
Efficient Perovskite Hybrid Solar Cells by Highly Electrical Conductive PEDOT:PSS
Hole Transport Layer
Adv. Eng. Mater., 2016, DOI:10.1002/aenm.201501773.
157. C. Yi, X. W. Hu, **X. Gong***
Interfacial Engineering for High Performance Organic Photovoltaics
Materials Today, 2016, 19, 169-177.
- 156 C. Liu, K. Wang, **X. Gong*** and A. J. Heeger
Low Bandgap Polymers for Polymeric Photovoltaics
Chem. Soc. Rev., 2016, 45, 4825-4846.
- 2015**
- 155 P. Liu, S. Dong, F. Liu, X. W. Hu, Y. C. Jin; S. J. Liu; **X. Gong**, T. Russell, F. Huang,
Y. Cao
Optimizing Light-Harvesting Polymers via Side Chain Engineering
Adv. Func. Mater., 2015, 25, 6458-6469.
- 154 K. Wang, C. Liu, C. Yi, L. Chen, J. H. Zhu, R. Weiss and **X. Gong***
Efficient Perovskite Hybrid Solar Cells via Ionomer Interfacial Engineering
Adv. Func. Mater., 2015, 25, 6875-6884.
- 153 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 Appl. Mater. Interf., 2015, 7, 23932–23940.
- 152 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 Appl. Mater. Interf., 2015, 7, 19914-19922.
- 151 M. Z. Zhang, R. D. Hu, H. Chen, **X. Gong**, F. M. Zhang J. Zheng
Polymorphic Associations and Structures of the
Cross-Seeding of Aβ1-42 and hIAPP1-37 Polypeptides
J. Chem. Inform. Model., 2015, 55, 1628-1639.
- 150 C. Liu, K. Wang, P. C. Du, E. M. Wang and **X. Gong***
Ultrasensitive Solution-Processed Near-Infrared Photodetectors using CH₃NH₃PbI₃
and PbS Quantum Dots as the Light Harvesters
Nanoscale, 2015, 7, 16460 - 16469.
- 149 X. W. Hu, P. C. Du, K. Wang, C. Yi, C. Liu, **X. Gong*** and Y. Cao
Process Controllable Crystallization Morphology of Planar Heterojunction Perovskite
Solar Cells with High Efficiency
J Photovoltaics, 2015, 5, 1402-1407.

- 148 C. Liu, K. Wang, P. C. Du, C. Yi, T. Y. Meng, **X. Gong***
Efficient Solution-Processed Bulk Heterojunction Perovskite Solar Cells
Adv. Energy Mater. 2015, DOI:10.1002/aenm.201402024.
- 147 K. Wang, C. Liu, P. C. Du, H. L. Zhang, and **X. Gong***
Efficient Perovskite Hybrid Solar Cells through Homogeneous High-Quality
Organolead Iodide Layer
Small, 2015, 11, 3369-3376.
- 146 Q. D. Li, F. Liu, X. W. Hu, W. Z. Xu, L. P. Wang, X. H. Zhu, **X. Gong***, and Y. Cao
Efficient Small-Molecule-Based Inverted Organic Solar Cells with Conjugated
Polyelectrolyte as a Cathode Interlayer
J. Photovoltaics, 2015, 5, 1118-1124.
- 145 C. Liu, K. Wang, P. C. Du, C. Yi, T. Y. Meng, **X. Gong***
Solution-Processed Inverted Perovskite Hybrid Photodetectors
J. Mater. Chem. C 2015, 3, 6600-6606. (The Journal Front Cover)
- 144 K. Liu, C. L. Song, L. Y. Gup, C. Zhang, Y. Liu, **X. Gong**, H. L. Zhang
Tuning the ambipolar charge transport properties of N-heteropentacenes by their
frontier molecular orbital energy levels
J. Mater. Chem. C, 2015, 3(16), 4188-4196.
- 143 P. C. Du, X. W. Hu, C. Yi, H. C. Liu, P. Liu, H. L. Zhang and **X. Gong***
Self-powered electronics by integration of flexible solid-state
graphene-based supercapacitors with high performance perovskite solar cells
Adv. Func. Mater., 2015, 25, 2420-2427.
- 142 C. Yi, A. Wilhite, P. C. Du, H. C. Liu, R. D. Hu, Y. W. Chen, J. Zheng, **X. Gong***
High performance organic thermoelectric materials with tunable film morphology
ACS Appl. Mater. Inter., 2015, 7, 8984-8989.
- 141 W. Z. Xu, X. W. Hu, F. Huang, **X. Gong***, Y. Cao
Efficient inverted polymer solar cells by bi-electron-extraction layer
J. Photovoltaics, 2015, 5, 912-916.
- 140 K. Wang, C. Yi, C. Liu, C. H. Hsu, S. Chuang and **X. Gong***
Effects of Magnetic Nanoparticles and External Magnetostatic Field on the Bulk
Heterojunction Polymer Solar Cells
Scientific Reports, 2015, 5, 9265.
- 139 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.
- 138 K. Wang, C. Liu, P. C. Du, J. Zheng and **X. Gong***
Bulk Heterojunction Perovskite Hybrid Solar Cells with Large Fill-Factor
Ener. Envir. Sci., 2015, 8(4), 1245-1255.
- 137 K. Wang, C. Liu, X. W. Hu, P. C. Du, L. Chen, C. Yia, J. H. Zhu, J. Zheng, A. Karim,
X. Gong*
Efficiencies of Perovskite Hybrid Solar Cells Influenced by Film Thickness and
Morphology of $\text{CH}_3\text{NH}_3\text{PbI}_{3-x}\text{Cl}_x$ Layer
Organic Electronics, 2015, 21, 19-26.

- 136 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 Appl. Mater. Inter., 2015, 7(8), 4928-4935.
- 135 C. Liu, K. Wang, P. C. Du, T. Y. Meng X. F. Yu, S. Z. D. Cheng and **X. Gong***
High Performance Planar Heterojunction Perovskite Solar Cells with Fullerene Derivatives as the Electron Transport Layer
ACS Appl. Mater. Inter., 2015, 7, 1153-1159.
- 134 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.

2014

- 133 C. Liu, W. Z. Xu, X. Guan, H. L. Yip, **X. Gong**, F. Huang, Y. Cao
Synthesis of Anthracene-Based Donor-Acceptor Copolymers with a Thermally Removable Group for Polymer Solar Cells
Macromolecules, 2014, 47(24), 8585-8593.
- 132 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.
- 131 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.
- 130 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- μm Thick Active Layers
Adv. Eng. Mater., 2014, DOI: 10.1002/aenm.201400378.
- 129 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
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- 26 P. Wu, **X. Gong**, et al.,
Biphotonic self-diffraction in azo-doped polymer film
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- 25 P. Wu, W. Chen, **X. Gong**, et al.,
Red-band holographic storage in azo dye sensitized by noncoherent light

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1995-1986

There are another 24 publications with Chinese version.

BOOK CHAPTERS

- 8 C. Yi and **X. Gong** (invited)
Towards high performance inverted polymer solar cells
Progress in Polymer Engineering, edited by Thein Kyu, Elsevier, 2012
- 7 **X. Gong** (invited)
Polymer light-emitting diodes, Wiley-VCH, October 2012
- 6 **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
4. **X. Gong** (invited), S. Wang
Polymer Light-Emitting Diodes: Devices and Materials, CRC published, 2008
3. **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 Klaus Müllen, Wiley-VCH Verlag, 2005.
2. **X. Gong** with other 20 co-authors
Modern Science and Technological English-Chinese Dictionary Tianjin University Press, Tianjing, P. R. China, 1568pp, 1996.
1. H. X. Yang and **X. Gong**
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- 28 PEDOT:PSS composite films having enhanced thermoelectric properties
Gong, Xiong; Yi, Chao, US 20170222113 A1 20170803.
- 27 Perovskite hybrid heterojunction solar cells with fullerene perovskite composite layer for improved performance
Gong, Xiong; Liu, Chang; Wang, Kai, US 20170125172 A1 20170504
- 26 Photodetector utilizing quantum dots and perovskite hybrids as light harvesters
Gong, Xiong; Liu, Chang, US 20170062139 A1 20170302
- 25 An organic polymer photo device with broadband response and increased photo-responsivity
Gong, Xiong; Cheng, Stephen Z. D. US 20150318481 A1 20151105.
- 24 Polyhedral oligomeric silsesquioxane organic/polymeric dyads and its application for organic photovoltaic cells
Cheng, Stephen Z. D.; Zhang, Wenbin; **Gong, Xiong**, US 20140060650 A1 20140306.
- 23 P-type transition metal oxide-based films serving as hole transport layers in organic

- optoelectronic devices
Gong, Xiong; Yang, Tingbin, US 9252365 B2 20160202
- 22 Ultrasensitive solution-processed perovskite hybrid photodetectors
Gong, Xiong; Hu, Xiaowen; Du, Pengcheng, WO 2016014845 A1 20160128
- 21 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.
- 20 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
- 19 Metal-insulator-metal device and their methods of fabrication
Gong, Xiong; Yang, Kaixia; Gang, Yu; Boo, Nillson; Lee, Hsing Chung US 8222,077
B2
- 18 High Sensitivity Solution-processed Polymer Photodetectors with an Inverted Device
Structure
Gong, Xiong, USPTO 61-614684
- 17 Infrared polymer photodetectors
Gong, Xiong, USPTO 61/702,785
- 16 Broadband polymer photodetectors using zinc oxides nanowire as an
electron-transporting layer
Gong, Xiong, Yang, Tingbin, US 61/614,684
- 15 Solution-processed Perovskite Based Organic Inorganic Hybrid Photodetectors
Gong, Xiong, Wang, Kai, Liu, Chang, USPTO: 61/951,567
- 14 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.
- 13 Ultrasensitive solution-processed perovskite hybrid photodetectors
Gong, Xiong; Wang, Kai; Liu, Chang
PCT Int. Appl. (2015), WO 2015187225 A2 20151210.
- 12 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.
- 11 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.
- 10 Electron donor-fullerene conjugated molecules for organic photovoltaic cells
Gong, Xiong; Cheng, Stephen Z. D.; Zhang, Wei
U.S. Pat. Appl. Publ. (2014), US 20140174536 A1 20140626.
- 9 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.

- 8 Broadband polymer photodetectors using zinc oxide nanowire as an electron-transporting layer
Gong, Xiong
U.S. Pat. Appl. Publ. (2013), US 20130248822 A1 20130926.
- 7 Enhanced efficiency polymer solar cells using aligned magnetic nanoparticles
Gong, Xiong
U.S. Pat. Appl. Publ. (2013), US 20130247993 A1 20130926
- 6 Broadband polymer photodetectors using zinc oxide nanowire as an electron-transporting layer
Gong, Xiong
PCT Int. Appl. (2013), WO 2013142870 A1 20130926.
- 5 Enhanced efficiency polymer solar cells using aligned magnetic nanoparticles
Gong, Xiong
PCT Int. Appl. (2013), WO 2013142876 A1 20130926.
- 4 p-type transition metal oxide-based films serving as hole transport
Gong, Xiong; Yang, Tingbin
PCT Int. Appl. (2013), WO 2013063562 A1 20130502
- 3 Multilayer polymer light-emitting diodes for solid state lighting applications
Gong, Xiong; Heeger, Alan J.; Moses, Daniel; Bazan, Guillermo C.; Wang, Shu
U.S. (2011), US 8076842 B2 20111213.
- 2 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
- 1 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 broadband photodetectors", Air Force Research, Dayton, OH, June, 2019
2. "Solution-processed perovskite solar cells", Department of Chemical Engineering, University of Illinois at Chicago, April, 2019
3. "Printable Polymers for Flexible Electronics", Qingdao Technology University, Lanzhou, Oct. 31, 2018, China.
4. "Novel materials for high-performance perovskite solar cells", The 11th International Conference of Organic Electronics, Qingdao, Oct. 28, 2018, China.
5. "Printable Polymers for Flexible Electronics", Qingdao Technology University, Qingdao, Oct. 29, 2018, China.
6. "Perovskite solar cells via polymer linked perovskite materials", 2018 Interface Conference of Synthetic Metals, Busan, South Korea, July 2, 2018.
7. "Solution-processed hybrid perovskite solar cells via novel materials and interfacial engineering", Lanzhou University, June 26, 2018.

8. “Perovskite solar cells by novel perovskite materials”, 2nd International conference of Bioinspired Materials and Engineering, Beihang University, June 22, 2018.
9. “Solution-processed hybrid perovskite solar cells”, Department of Polymer Science and Engineering, College of Materials Science and Engineering, Lanzhou Jiaotong University, March 8, 2018.
10. “High-performance solution-processed hybrid perovskite solar cells via novel materials”, Institute of PhotoChemistry, Chinese Academy of Science, March 6, 2018.
11. “High-performance solution-processed hybrid perovskite solar cells via novel materials”, Department of Chemical Engineering and Materials Science, Michigan State University, January 11, 2018.
12. “Organic and organic-inorganic hybrid electronics”, Department of Chemical Engineering, Taiwan High Technology, Dec. 28, 2017.
13. “Solution-processed polymer and perovskite solar cells via novel materials”, Department of Chemical Engineering, National Jiaotong University, Dec. 27, 2017.
14. “Solution-processed organic-inorganic hybrid electronics via novel materials”, Department of Photonic Engineering, National Chengkung University, Dec. 26, 2017.
15. “Solution-processed perovskite solar cells via novel materials and device engineering”, Department of Chemistry, National Taiwan University, Dec. 23, 2017.
16. “High-performance solution-processed hybrid perovskite solar cells”, Charles D. Davidson School of Chemical Engineering, Purdue University, Oct. 17, 2017.
17. “Uncooled ultrasensitive solution-processed broadband photodetectors”, Department of Chemistry, Clemson University, Oct. 5, 2017.
18. “High-performance solution-processed hybrid perovskite solar cells”, College of Chemistry and Chemical Engineering, Lanzhou University, Aug. 23, 2017
19. “Magnetic effects on solution-processed solar cells” Chinese CAS Photochemistry Conference, Lanzhou, Aug. 24, 2017, China.
20. “Solution-processed perovskite solar cells via novel materials and device engineering”, Lanzhou Chemical Physics Institute, CAS, Lanzhou, Aug. 25, 2017, China.
21. “Novel materials for solution-processed photovoltaics” 2nd Northwest Energy and Environmental Symposium, Lanzhou, Aug. 26, 2017, China.
22. “Magnetic effects on solution-processed solar cells” 2017 ChinaNano, Beijing, Aug. 30, 2017, China.
23. “Little science of plastics”, Eastwood Elementary School, Hudson, OH, Jan. 27, 2017, USA.
24. “Printable flexible electronics”, Dunhuang, Jan. 11, 2017, China.
25. “High-performance solution-processed perovskite photovoltaics”, Department of Chemistry, University of Hong Kong, Hong Kong, Jan. 6, 2017, China.
26. “High-performance perovskite photovoltaics vis novel materials and device structure”, International Conferences for Renewable Energy and Advanced Materials, Hong Kong, Jan. 5, 2017, China.
27. “High-performance perovskite photovoltaics vis novel materials and device structure”, Hong Kong Baptist University, Hong Kong, Dec. 29, 2016, China.
28. “High-performance perovskite photovoltaics vis novel materials and device structure”, Lanzhou University, Lanzhou, Dec. 27, 2016, China.

29. "Polymer solar cells via novel materials and device structure", China University of Geosciences, Wuhan, Dec. 23, 2016, China.
30. "High-performance perovskite photovoltaics via novel materials and device structure", Zhejiang University of Science and Technology, Hangzhou, Dec. 22, 2016, China.
31. "High-performance perovskite photovoltaics via novel materials and device structure", Xian Jiaotong University, Xian, Dec. 21, 2016, China.
32. "Interfacial engineering for high-performance perovskite photovoltaics", Nankai University, Tianjin, Dec. 19, 2016, China.
33. "Solution-processed perovskite photovoltaics by novel materials", Tianjin University, Tianjin, Dec. 16, 2016, China.
34. "Solution-processed perovskite solar cells", Institute of Chemistry, CAS, Beijing, Dec. 15, 2016, China.
35. "Uncooled solution-processed broadband perovskite photodetectors", 2016 SPIE Annual Conference, San Diego, Sept. 1st, 2016, USA.
36. "Solution-processed broadband perovskite photodetectors", 252 ACS Annual Conference, Philly, Aug. 23rd, 2016, USA.
37. "Printable polymer flexible electronics" The University of Akron, July 9, 2016, Akron, USA
38. "Solution-processed perovskite photovoltaics via novel materials and device engineering", CAS University, July 4th, 2016m Beijing, China.
39. "Magnetic effects on solution-processed solar" 2016 Chinese Chemistry Society Conferences, July 3rd, 2016, Dalian, China.
40. "Printable polymer flexible electronics" Shangxi Normal University, July 1st, Xian, China.
41. "Solution-processed perovskite photovoltaics via novel materials and device engineering", International Conference of Synthetic Metals, Shangxi Normal University, July 1st, 2016, Xian, China.
42. "Printable polymer flexible electronics" Jiangnan University, June 30, 2016, Wuhan, China
43. "Solution-processed perovskite photovoltaics via novel materials and device engineering", International Conference of Synthetic Metals, June 28, 2016, Guangzhou, China.
44. "Magnetic effects on solution-processed solar" 2nd International Symposium on the Science of Plastic Electronics, June 25, 2016, Beijing, China.
45. "Solution-processed perovskite photovoltaics via novel materials and device engineering", Institute of Chemistry, CAS, June 23, 2016, Beijing, China.
46. "Printable polymer flexible electronics" Symposium for REU Students, The University of Akron, June, 11, Akron, USA.
47. "Uncooled solution-processed broad bandgap photodetectors", College of Engineering, North Carolina State University, March 24, 2016, Raleigh, NC, USA.
48. "Solution-processed photovoltaics novel materials and device engineering", Department of Materials Science and Engineering, University of North Texas, Feb. 25, 2016, Houston, Denton, USA.

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

70. "Towards 15% Efficiency Polymer Solar Cells" The First International Symposium on the Science of Plastic Electronics, Beijing, P. R. China, Sept. 25, 2014.
71. "Polymer electronics" Nanjing Chemical Company, Nanjing, P. R. China, Sept. 23, 2014
72. "High performance polymer solar cells via novel materials" Suzhou Nanoinstitute, CAS, Suzhou, P. R. China, Sept. 22, 2014.
73. "High performance polymer solar cells via interfacial engineering" Suzhou University, Suzhou, P. R. China, Sept. 22, 2014.
74. "Inverted polymer solar cells via novel materials" Nanjing University, Nanjing, P. R. China, Sept. 21, 2014.
75. "Printable Polymer Electronics", Dutong University, Datong, P. R. China, Sept. 17, 2014.
76. "High performance solution-processed polymer solar cells" First Ohio Conference on the sustainable use of greenhouse gases, Columbus, OH, Aug. 18, 2014.
77. "Polymer solar cells with over 1 μm thickness active layer" Chinese Chemistry Annual Congress, Beijing, Aug. 5th, 2014.
78. "2D conjugated polymers for polymer solar cells with over 10% efficiency" Chinese Chemistry Annual Congress, Beijing, Aug. 4th, 2014.
79. "Over 10% efficiency from single junction polymer solar cells", 6th International symposium on polymer materials science, Akron, OH, July 28, 2014.
80. "High performance polymer solar cells via novel materials and interfacial engineering", Beihang University, Beijing, China, June 30, 2014.
81. "High performance polymer solar cells via novel materials and interfacial engineering", Chemistry Institute, CAS, Beijing, China, June 29, 2014.
82. "High performance polymer solar cells via device engineering", Nankai University, Tianjin, China, June 18, 2014.
83. "High performance polymer solar cells via novel materials", Tianjin University, Tianjin, China, June 17, 2014.
84. "Polymer electronics", Lanzhou City University, Lanzhou, China, June 10, 2014.
85. "Inorganic Chemist meets with Polymer Scientist", Northwest Normal University, Lanzhou, China, June 9, 2014.
86. "Interfacial engineering for high performance polymer solar cells", Lanzhou University, Lanzhou, China, June 12, 2014.
87. "Inverted infrared polymer photodetectors", Lanzhou Institute of Chemical Physics, CAS, Lanzhou, China, June 13, 2014.
88. "High performance single junction polymer solar cells by 2D conjugated polymers", International conference on polymer chemistry, Shanghai, P. R. China, June 4, 2014.
89. "Interfacial engineering for high performance inverted polymer solar cells", ACS Dallas Meeting, March 17, 2014", ACS Dallas Meeting, March 17, 2014
90. "High performance polymer solar cells through device design and novel materials", Tsinghua University, Nov. 20th, 2013, Beijing, China
91. "Polymer Solar Cells: Device and Materials", Norfolk State University, Sept. 27th, 2013, Norfolk, VA, USA.

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

114. "High performance inverted polymer solar cells", NSF and ONR workshop, Sept. 2012, DC, USA
115. "Inverted polymer solar cells", Institute of Chemistry, CAS, July 4, 2012, Beijing, China
116. "Towards high performance inverted polymer solar cells", IUPAC Polymer Congress, June 2012, USA
117. "Polymer solar cells" June 2012, Polymer Conferences, Akron, OH
118. "Flexible electronics", Plastic Society of Akron and Cleveland, Apr. 2012, Akron, OH
119. "Organic electronics", Akron Polymer Society, Nov. 2011, Akron, OH, USA
120. "Polymer solar cells with an inverted device structure", MRS meeting, Nov. 2011, Boston, USA
121. "Polymer solar cells with an inverted device structure", International Chinese Organic Electronics, Oct. 2011, Zhang Jiajie, China
122. "Solution-processed polymer photodetectors", Akron Advanced Materials, Sept. 2011, Akron, OH, USA
123. "Solution processed infrared polymer photodetector", SPIE conference, Aug. 2011, San Diego, CA, USA
124. "Ultrasensitive polymer photodetectors", South China University of Science and Technology, Jun. 2011, Guangzhou, China
125. "Printable polymer electronics", Lanzhou University, Jun. 2011, Lanzhou, China
126. "Polymer solar cells by novel electron acceptor", Polymer Congress, May, 2011, Beijing, China
127. "Infrared polymer photodetector", Peking University, May. 2011, Beijing, China
128. "Polymer solar cells with an inverted device structure", Beijing University Chemical Technology, May 2011, Beijing, China
129. "Solution-processed Organic Electronics", Dec. 2010, Cleveland, OH, USA
130. "Infrared polymer photodetector", SPIE conference, Aug. 2010, San Diego, CA, USA
131. "Solution-processed organic photodetectors", Xi An 3rd International Organic Electronics, June 2010, Xian, China
132. "Polymer solar cells", Northwest Normal University, June 2010, Lanzhou, China
133. "Solution-processed organic photodetectors", Lanzhou University, Jun. 2010, Lanzhou, China
134. "Solution-processed organic photodetectors", South China University of Science
135. and Technology, June 2010, Guanzhou, China
136. "Polymer photodetector", MRS Spring Meeting, SFO, April 2010, CA, USA
137. "Polymer solar cells with larger open-circuit voltage", MRS Spring Meeting, SFO, April 2010, CA, USA
138. "Ultrasensitive polymer photodetectors", UCSB Organic Electronics Workshop, Sept. 2009, Santa Barbara, CA, USA
139. "Polymer photodetector", SPIE, Aug. 2009, San Diego, CA, USA
140. "Solution-processed ultrasensitive polymer photodetectors", PS, Mar. 2009, Pittsburgh, PA, USA
141. "Polymer photodetectors", US-Japan Polymat, Aug. 2008, Ventura, CA, USA

142. "Semiconducting polymers and its applications", Lanzhou City University, Oct. 2007, Lanzhou, China
143. "Organic/polymer optoelectronic devices", Lanzhou University, Sept. 2007, Lanzhou, China
144. "Polymer electronic and optoelectronic devices", Northwest Normal University, Sept. 2007, Lanzhou, China
145. "Polymer solar cells", South China University of Science and Technology, June 2007, Guangzhou, China
146. "Fluorenone defects in polyfluorens", Workshop on Organic/Polymer Devices, May, 2007, Montreal, Canada
147. "Materials and devices of PLEDs and polymer Solar Cells", Peking University, Sept. 2006, Beijing, China
148. "Semiconducting polymers and polymer optoelectronic devices", Lanzhou Jiaotong University, Sept. 2006, Lanzhou, China
149. "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
150. "Plastic electronics", Institute of Chemistry, Chinese Academy of Science, Aug. 2006, Beijing, China
151. "Recently progress on PLEDs and solar cells at UCSB", International Conference on Organic/Polymer Devices, Jul. 2006, Changchun, China
152. "Multilayer white PLEDs", SPIE Conference, 2006, San Diego, CA, USA
153. "White PLEDs", SPIE Conference, 2005, Denver, CO, USA
154. "Polymer electrophosphorescent LEDs", SPIE Conference, Aug. 2004, San Diego, CA, USA
155. "White light PLEDs", ICSM, 2004, Australia
156. "Stabilized blue emission from PLEDs made by polyfluorenes", APS meeting, Mar. 2003, Austin, TX, USA
157. "Single layer white PLEDs", ACS Conference, 2003, Anaheim, CA, USA

TEACHING AND MENTORING EXPERIENCE

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

- Mentoring/Supervising:
 - 1) 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,
 - 2) 9 Ph. D. and 20 M Sc students graduated in 2012, 2013, 2014, 2015, 2016 and 2017
- Teaching
 - 1) Electronic properties of materials, graduate students, evaluation rate: 4.75/5 (2018)
 - 2) Independent research, 3+2 AMP graduate students, evaluation rate: 4.86/5 (2017).
 - 3) Semiconducting Polymers, graduate course, evaluation ratings: 4.67/5 (2011); 4.80/5 (2012); 4.80/5 (2014), 4.80/5 (2016),

- 4) Flexible Electronics, graduate course, evaluation ratings: 4.92/5 (2011), 4.90/5(2013), 4.88/5 (2015), 4.86/5 (2017).
- 5) Electronic properties of materials, graduate course, evaluation ratings: 4.76/5 (2013), 4.85/5(2014), 4.88/5 (2016).
- 6) Polymer Science for Engineers, undergraduate course, evaluation rating: 4.38/5(2012).

My teaching evaluation ratings were ranked top one in the last 8 years.

2. 2001-2010 Center for Polymers and Organic Solids, UC Santa Barbara, CA

- 1) Assisted Prof. Alan J. Heeger to supervise/train Ph. D. candidates and post-doctoral fellows on organic and polymer electronic and optoelectronic devices
- 2) Supervise/train undergraduate students on semiconducting polymers
- 3) Supervise/train high school students on semiconducting polymers

SERVICES

- Committees at UA
 - 1) Graduate Program Review
 - 2) Admissions
 - 3) Faculty Search (5 times)
 - 4) University Library
 - 5) Dean Search
 - 6) University Research, etc.
- Review Panels
 - 1) Air Force
 - 2) NSF
 - 3) Canada
 - 4) Swiss NSF
 - 5) Hong Kong
 - 6) China NSF
 - 7) Iowa State
 - 8) AAAS
- Conference Organizer
 - 1) 2014 ACS Dallas
 - 2) 2015 PPS Cleveland
 - 3) 2016 ACS Philadelphia
 - 4) 2016 ICSM Guangzhou
 - 5) 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)