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Editorial Board Member, Scientific Reports (published by Nature)
Deputy 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
  - Total 222 articles published in the peer reviewed journals including in Science
  - 135 articles published in the peer reviewed journals after joining The University of Akron in August 2010
  - Over 24,520 peers' citations, and with H-index of 66
  - 28 granted patents plus 8 pending patents
  - 8 book chapters
  - 161 invited talks in conferences and academic institutions
- Research Grants at The University of Akron
  - Funding: ~ $7 M as a PI since 2011.
- Teaching at UA
  - Totally taught seven courses, among them, four were newly developed courses,
  - Five courses for graduate students in the College of Polymer Science and Polymer Engineering
  - Two courses for undergraduates in the Department of Mechanical Engineering and Department of Chemical Engineering
  - Teaching evaluation rates ranked on the top three in the College of Polymer Science and Polymer Engineering in the past 10 years
    1) "Polymer Science for Engineers", undergraduate course, Department of Mechanical Engineering
    2) "Electrochemical Engineering", undergraduate course, Department of Chemical Engineering
    3) "Fundaments of Polymer Structure Characterization", graduate core course, Department of Polymer Engineering
    4) "Carbon-Polymer Nanotechnology", graduate core course, College of Polymer Science and Polymer Engineering
    5) "Semiconducting Polymers - Materials and Optoelectronics" (developed by myself), graduate core course, College of Polymer Science and Polymer Engineering
    6) "Flexible Electronics"(developed by myself), graduate core course, College of Polymer Science and Polymer Engineering

7) "Optical and Electronic Properties of Materials" (developed by myself), graduate core course, College of Polymer Science and Polymer Engineering

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 2004 - August 2010 Senior Research Scientist, Center for Polymers and Organic Solids, University of California, Santa Barbara (UCSB), CA
- January 2004 - August 2010 Manager and Senior Scientist, CBrite, Inc. Goleta, CA

EDUCATION AND PROFESSIONAL TRAINING

- April 2001- December 2003 Post-doctoral Fellow and Research Assistant
  Center for Polymers and Organic Solids, UCSB, with Professor Alan J. Heeger (2000 Nobel Laureate)
  Minor (graduate courses) in Electric Engineering, UCSB
- June 1999 - January 2000 Research Fellow
  Alexander von Humboldt Foundation**,** Cari-Zeis 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 y-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

- Novel organic and organic-inorganic hybrid materials
- Room-temperature operated solution-processed broadband photodetectors,
- Perovskite materials for energy generation,
- Organic/polymer electronics and optoelectronics for energy generation and storage,
- Organic/perovskite thermoelectric materials and devices,
- Graphene and 2D materials based supercapacitors
- Self-powered electronics,
- Chemistry and physics of inorganic quantum dots and nanoparticles
- Optical spectroscopy

GRANTS

1. Current grants

- Title: Bulk heterojunction perovskite solar cells by novel perovskite materials
  Award Amount: $483,000
  Source: NSF
  Role: PI
  Period: July 2019 - June 2022

- Title: Uncooled broadband solution-processed photodetectors
  Total Award Amount: $819,543
  Source: Air Force Scientific Research
  Role: PI
  Period: sept. 2015 - Dec. 2020

- Title: Ultrasensitive solution-process inverted polymer photodetectors
  Award Amount: $408,000
  Source: NSF
  Role: PI
  Period: July 2014 – Aug. 2020

- Title: "Novel Polymers: Characterization and Applications"
  Award Amount: $100,000
  Source: 1 -Material Inc.
  Role: PI
  Time period: July 2017 - December 2021

- Title: Trust in Flexible and Hybrid Electronics
  Total Award Amount: $1 .78M
  Source: Air Force Scientific Research
  Role: Co-Pl
  Period: Sept. 2017 - April 2021

- Title: REU Supplement
  Total Award Amount: $8,000
  Source: NSF
  Role: PI
  Period: July, 2020 – June 2021

2. Pending proposals

- Title: Two dimensional conjugated polymeric nanocrystals
  Source: ACS PRF
  Award Amount: $110,000
  Role: PI
  Period: Jan 1, 2021- Dec. 31, 2023

- Title: Perovskites co-crystallized with polymers for approaching high performance broadband perovskite photodetectors
  Source: Air Force Scientific Research Program
  Award Amount: $648,300
  Role: PI
  Period: Jan 1, 2021- Dec. 31, 2023

- Title: High performance perovskites solar cells by perovskites co-crystallized with polymers
  Source: DOE
  Award Amount: $300,000
  Role: PI
  Period: Jan 1, 2021- Dec. 31, 2021

- Title: Stable and efficient perovskites solar cells by 2D perovskites
  Source: DOE
  Award Amount: $300,000
  Role: PI
  Period: Jan 1, 2021- Dec. 31, 2021

- Title: Hysteresis-free, stable, and efficient solution-processed perovskites solar cells by hybrid perovskites co-crystallized with polymers
  Source: ENI
  Award Amount: $200,000

Role: PI
Period: Jan 1, 2021- Dec 31, 2022

- Title: Stable and efficient solar cells by novel perovskites and interfacial engineering
  Source: DOE
  Award Amount: $1,500,000
  Role: PI (Co-PI: Prof. Jean-Luc Bradas at University of Arizona)
  Period: July 1, 2021- June 30, 2024

- Title: Uncooled ultrasensitive solution-processed flexible broadband photodetectors
  Source: NSF
  Award Amount: $640,338
  Role: PI
  Period: July 1, 2021- June 30, 2024

3. Past grants

- Mitsubishi Chemical Corporation
  Title: High performance electrophosphorescenct 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: $25,500,000
  Time period: July 2007 - Dec. 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

2020

222 L. Y. Zheng, T. Zhu, Y. F. Li, H. D. Wu, C. Yi, J. H. Zhu, **X. Gong***
Enhanced Thermoelectric Performance of the F4-TCNQ Doped $FASnI_3$ Thin Films
J. Mater. Chem. A, 2020, **8**, 25431 - 25442.

221 T. Zhu, Y. R. Yang, K. Gui, C. M. Liu, J. Zheng, **X. Gong***
Novel Quasi-2D Perovskites for Stable and Efficient Perovskite Solar Cells
ACS Appl. Mater. Interf. 2020, DOI: 10.1021/acsami.0c16514.

220 Y. R. Yang, T. Zhu, C. Chi, L. Liu, J. Zheng, **X. Gong***
All Solid-State Asymmetric Supercapacitors with Novel Ionic Liquid Gel Electrolytes
ACS Appl. Elec. Mater.. 2020, DOI: 10.1021/acsaelm.0c00759.

219 W. Z. Xu, X. Yao, H. D. Wu, T. Zhu, **X. Gong**,*
The compositional engineering of organic-inorganic hybrid perovskites for high performance perovskite solar cells
Emergent Materials, 2020, **DOI:** 10.1007/s42247-020-00128-8.

218 T. Zhu, Y. R. Yang, Y. H. Liu, R. Lopez-Hallman, Z. H. Ma, L. Liu, and **X. Gong***
Wireless portable light-weight self-charging power packs by perovskite-organic tandem solar cells integrated with solid-state asymmetric supercapacitors
Nano Energy, 2020, 78, 105397.

217 W. Z. Xu, T. Zhu, H. D. Wu, L. Liu, **X. Gong***

Poly(Ethylene Glycol) Diacrylate as the Passivation Layer for High Performance Perovskite Solar Cells
ACS Applied Materials & Interfaces, 2020, DOI: 10.1021/acsami.0c11468

216 T. Zhu and **X. Gong***
Low-dimensional perovskite materials and their optoelectronics
InfoMat, 2020, xxx.

215 D. Zhang, Y. J. Tang, Y. X. Zhang, F. Y. Yang, Y. L. Liu, X. Y. Wang, J. T. Yang, **X. Gong**, J. Zheng
Highly Stretchable, Self-Adhesive, Biocompatible, Conductive Hydrogels as Fully Polymeric Strain Sensors
J. Mater. Chem. A. 2020, DOI:10.1039/d0ta07390c

214 W. Z. Xu, T. Zhu, Y. R. Yang, L. Y. Zheng, L. Liu and **X. Gong***
Enhanced Device Performance of Perovskite Photovoltaics by Magnetic Field-Aligned Perovskites-Magnetic Nanoparticles Composite Thin Films
Adv. Fuc. Mater., 2020, DOI:10.1002/adfm.202002808

213 T. Zhu, Y. R. Yang, **X. Gong***
Recent Advancements and Challenges for Low-Toxic Perovskite Materials
ACS, Appl. Mater. Interf., 2020, DOI: 10.1021/acsami.0c02575.

212 L. Y. Zheng, K. Wang, T. Zhu, Y. R. Yang, R. Chen, K. Gu, C. M. Liu, **X. Gong***
High-Performance Perovskite Solar Cells by One-Step Self-Assembled Perovskite-Polymer Thin Films
ACS, Appl. Eng. Mater., 2020, DOI: 10.1021/acsaem.0c00823

211 Y. L. Liu, D. Zhang, B. P. Ren, **X. Gong**, L. J. Xu, F. A. Zhang, Y. Chang, Y. He, and J. Zheng
Molecular simulations and understanding of antifouling zwitterionic polymer brushes
J. Mater. Chem. B, 2020, 8, 3814-3828.

210 T. Zhu, Y. R. Yang, X. Yao, Z. X. Huang, L. Liu, W. P. Hu, **X. Gong***
Solution-Processed Polymeric Thin Film as the Transparent Electrode for Flexible Perovskite Solar Cells
ACS, Appl. Mater. Interf., 2020, DOI:10.1021/acsami.9b22891.

209 W. Z. Xu, T. Zhu, Y. R. Yang, L. Y. Zheng, L. Liu, **X. Gong***
Enhanced Device Performance of Perovskite Photovoltaics by Magnetic Field Aligned Perovskites-Magnetic Nanoparticles Composite Thin Film
Adv. Func. Mater., 2020, DOI:10.1002/adfm.202002808.

208 Y. L. Liu, D. Zhang, B. P. Ren, **X. Gong**, A. Liu, Y. Chang, Y. He, J. Zheng
Computational Investigation of Antifouling Property of Polyacrylamide Brushes
Langmuir, 2020, 36(11), 2757-2766.

207 T. Zhu, Y. R. Yang, L. Y. Zheng, L. Liu, M. L. Becker* and **X. Gong***
Solution-Processed Flexible Broadband Photodetectors with Solution-Processed Transparent Polymeric Electrode
Adv. Func. Mater., 2020, DOI: 10.1002/adfm.201909487.

206 T. Zhu, Y. R. Yang, S. Y. Zhou, X. Liu and **X. Gong ***
Bulk Heterojunction Perovskite Solar Cells Incorporated with Solution-Processed

TiO_X Nanoparticles as the Electron Acceptors
Chinese Chemical Letters, 2020, CCLET-D-19-01800R1.

205 L. Y. Zheng, W. Z. Xu, X. Yao, T. Zhu, and **X. Gong ***
Ultrasensitive and high gain solution-processed perovskite photodetectors by $CH_3NH_3PbI_{2.55}Br_{0.45}$:$Zn_2SnO_4$ bulk heterojunction composite
Emergent Materials, 2020, DOI: 10.1007/s42247-020-00072-7.

2019

204 K. Wang, L. Y. Zheng, T. Zhu, L. Liu, M. L. Becker* and **X. Gong ***
High performance perovskites solar cells by hybrid perovskites co-crystallized with poly(ethylene oxide)
Nano Energy, 2019, 10.1016/j.nanoen.2019.104229.

203 D. Zhang, F. Y. Yang, J. He, L. J. Wang, Z. Q. Feng, Y. Chang, **X. Gong,** G. Zhang, J. Zheng
Multiple Physical Bonds to Realize Highly Tough and Self-Adhesive Double-Network Hydrogels
ACS Appl. Polymer Mate. 2019, DOI:10.1021/acsapm.9b00889

202 B. P. Ren, Y. X. Zhang, M. Z. Zhang, Y. L. Liu, D. Zhang, **X. Gong,** Z. Q. Feng, J. Xin, Y. Chang, J. Zheng
Fundamentals and introductory of cross-seeding of amyloid protein
J. Mater. Chem. B., 2019, DOI: 10.1039/c9tb01871a.

201 Xiang Yao, Luyao Zheng, Xiaotao Zhang, Wenzhan Xu, Wenping Hu, **Xiong Gong***
Efficient perovskite solar cells through suppressed non-radiative charge carrier recombination by processing additive
ACS Appl. Mater. Interf., 2019, DOI: 10.1021/acsami.9b15607.

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, 9, 30317-30324.

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.

151 Wenzhan Xu, Luyao Zheng, Tao Zhu, Lei Liu and **Xiong Gong***
Bulk Heterojunction Perovskite Solar Cells Incorporated with Zn_2SnO_4 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@MnO_2 and Hydrophilic Carbon Cloth@PoIypyrrole 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. Mate. 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 Adsorpti,
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 aof 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 $Ni_{0.85}Se@MoSe_2$ 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 Zn_2SnO_4 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-Alkoxylphenanthridine
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. Rew., 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 VO_X 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***
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46 "High performance solution-processed polymer solar cells", University of Pittsburgh, Oct. 2012, PA, USA
45 "Solution-processed organic photovoltaic cells", Case Western Reserve University, Sept. 2012, Cleveland, OH, USA
44 "High performance inverted polymer solar cells", NSF and ONR workshop, Sept. 2012, DC, USA
43 "Inverted polymer solar cells", Institute of Chemistry, CAS, July 4, 2012, Beijing, China
42 "Towards high performance inverted polymer solar cells", IUPAC Polymer Congress, June 2012, USA
41 "Polymer solar cells" June 2012, Polymer Conferences, Akron, OH
40 "Flexible electronics", Plastic Society of Akron and Cleveland, Apr. 2012, Akron, OH
39 "Organic electronics", Akron Polymer Society, Nov. 2011, Akron, OH, USA
38 "Polymer solar cells with an inverted device structure", MRS meeting, Nov. 2011, Boston, USA
37 "Polymer solar cells with an inverted device structure", International Chinese Organic Electronics, Oct. 2011, Zhang Jiajie, China
36 "Solution-processed polymer photodetectors", Akron Advanced Materials, Sept. 2011, Akron, OH, USA
35 "Solution processed infrared polymer photodetector", SPIE conference, Aug. 2011, San Diego, CA, USA
34 "Ultrasensitive polymer photodetectors", South China University of Science and Technology, Jun. 2011, Guangzhou, China
33 "Printable polymer electronics", Lanzhou University, Jun. 2011, Lanzhou, China

32 "Polymer solar cells by novel electron acceptor", Polymer Congress, May, 2011, Beijing, China
31 "Infrared polymer photodetector", Peking University, May. 2011, Beijing, China
30 "Polymer solar cells with an inverted device structure", Beijing University Chemical Technology, May 2011, Beijing, China
29 "Solution-processed Organic Electronics", Dec. 2010, Cleveland, OH, USA
28 "Infrared polymer photodetector", SPIE conference, Aug. 2010, San Diego, CA, USA
27 "Solution-processed organic photodetectors", Xi An 3rd International Organic Electronics, June 2010, Xian, China
26 "Polymer solar cells", Northwest Normal University, June 2010, Lanzhou, China
25 "Solution-processed organic photodetectors", Lanzhou University, Jun. 2010, Lanzhou, China
24 "Solution-processed organic photodetectors", South China University of Science and Technology, June 2010, Guanzhou, China
23 "Polymer photodetector", MRS Spring Meeting, SFO, April 2010, CA, USA
22 "Polymer solar cells with larger open-circuit voltage", MRS Spring Meeting, SFO, April 2010, CA, USA
21 "Ultrasensitive polymer photodetectors", UCSB Organic Electronics Workshop, Sept. 2009, Santa Barbara, CA, USA
20 "Polymer photodetector", SPIE, Aug. 2009, San Diego, CA, USA
19 "Solution-processed ultrasensitive polymer photodetectors", PS, Mar. 2009, Pittsburgh, PA, USA
18 "Polymer photodetectors", US-Japan Polymat, Aug. 2008, Ventura, CA, USA
17 "Semiconducting polymers and its applications", Lanzhou City University, Oct. 2007, Lanzhou, China
16 "Organic/polymer optoelectronic devices", Lanzhou University, Sept. 2007, Lanzhou, China
15 "Polymer electronic and optoelectronic devices", Northwest Normal University, Sept. 2007, Lanzhou, China
14 "Polymer solar cells", South China University of Science and Technology, June 2007, Guangzhou, China
13 "Fluorenone defects in polyfluorens", Workshop on Organic/Polymer Devices, May, 2007, Montreal, Canada
12 "Materials and devices of PLEDs and polymer Solar Cells", Peking University, Sept. 2006, Beijing, China
11 "Semiconducting polymers and polymer optoelectronic devices", Lanzhou Jiaoton University, Sept. 2006, Lanzhou, China
10 "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
9 "Plastic electronics", Institute of Chemistry, Chinese Academy of Science, Aug. 2006, Beijing, China
8 "Recently progress on PLEDs and solar cells at UCSB", International Conference on Organic/Polymer Devices, Jul. 2006, Changchun, China

7 "Multilayer white PLEDs", SPIE Conference, 2006, San Diego, CA, USA
6 "White PLEDs", SPIE Conference, 2005, Denver, CO, USA
5 "Polymer electrophosphorescent LEDs", SPIE Conference, Aug. 2004, San Diego, CA, USA
4 "White light PLEDs", ICSM, 2004, Australia
3 "Stabilized blue emission from PLEDs made by polyfluorenes", APS meeting, Mar. 2003, Austin, TX, USA
2. "Single layer white PLEDs", ACS Conference, 2003, Anaheim, CA, USA
1 "Polymer electrophosphorescent LEDs", MRS Spring Meeting, April 2002, San Francisco, 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
   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
   - Assisted Prof. Alan J. Heeger to supervise/train Ph. D. candidates and post-doctoral fellows on organic and polymer electronic and optoelectronic devices
   - Supervise/train undergraduate students on semiconducting polymers
   - Supervise/train high school students on semiconducting polymers

SERVICES

1. Committees at UA
   - Graduate Program Review
   - Admissions
   - Faculty Search (5 times)
   - University Library
   - Dean Search

- University Research, etc.

2. Review Panels
    1) Air Force
    2) NSF
    3) Canada
    4) Swiss NSF
    5) Hong Kong
    6) China NSF
    7) Iowa State
    8) AAAS
3. 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

1. Member of Materials Research Society (MRS)
2. Member of American Chemistry Society (ACS)
3. Member of Society of Displays (SID)