Xiong Gong, Ph. D.
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Google Scholar: https://scholar.google.com/citations?user=XG6dlLAAAAAJ&hl=en

Associate Editor: Organic Electronics
Deputy Editor: Emergent Materials
Editorial Board Members: Scientific Reports, Polymers, and Chinese Chemistry Letter

HIGHLIGHT ACCOMPLISHMENTS

- Scientific Contributions
  - Total of 241 articles published in peer-reviewed journals including in Science
  - Over 26,400 peer's citations, and with an H-index of 70 and i10-index of 173.
  - 32 granted patents (10 have listened) plus 5 pending patents
  - 8 book chapters
  - 166 invited talks in conferences and academic institutions
- Research Grants at The University of Akron (UA)
  - Funding: ~ $7 M as a PI since 2011.
- Teaching at UA
  - Taught eight courses, among them, four were newly developed courses
  - Two courses for undergraduates in the Department of Mechanical Engineering and the Department of Chemical, Biomolecular and Corrosion Engineering at UA
  - Six courses for graduate students in the College (School) of Polymer Science and Polymer Engineering (C/SPSPE) at UA
  - Teaching evaluation rates ranked on the top five in the C/SPSPE at UA in the past 11 years

AWARDS AND HONORS

- Top 2% of the World's Top Scientists (2021)
- Among the list of the World's 10,000 Top Scientists
- Outstanding Researcher Award, The University of Akron (2018)
- The World's Most Influential Scientific Minds (2015)
- Top 1% Highly Cited Researcher by Thomson Reuters (2014 - ongoing)
- NSF CAREER Award (2014)
- Alexander von Humboldt Fellowship (Germany)
- 3M Non-tenured Faculty Award
- K. C. Wong Education Foundation Fellow (Hong Kong)
- The University of Akron, Summer Research Award

RESEARCH INTERESTS AND EXPERTISE

- Conjugated polymer chemistry and physics, and their applications in electronics

- Novel organic and organic-inorganic hybrid materials
- Room-temperature operated solution-processed broadband photodetectors
- Perovskite materials for energy generation and storage
- Organic/polymer electronics and optoelectronics for energy generation and storage
- Polymer-based biosensors and biochips
- Organic/perovskite thermoelectric materials and devices
- Graphene and 2D materials based flexible supercapacitors
- Self-powered flexible electronics
- Solution-processed transparent polymeric thin-film electrodes for flexible electronics
- Roll-to-roll manufacturing and advanced manufacturing, Nano printing
- Chemistry and physics of inorganic quantum dots and nanoparticles
- Ultrafast spectroscopy

EMPLOYMENT

- December 2021 – present, Full Professor, Department of Chemical, Biomolecular and Corrosion Engineering, The University of Akron, Akron, OH
- May 2017 – present, Full Professor, Department of Polymer Engineering, C/SPSPE, Akron, OH
- May 2015 – May 2017, Associate Professor, Department of Polymer Engineering, CPSPE, Akron,
- August 2010 – May 2015 Assistant Professor, Department of Polymer Engineering, CPSPE,
- January 2004 - August 2010 Senior Research Scientist, Center for Polymers and Organic Solids (CPOS), University of California, Santa Barbara (UCSB), CA
- January 2004 - August 2010 Manager and Senior Scientist, CBrite, Inc. (Formally named DSI)
- January 2003 – December 2003, Senior Scientist, Diode Solution, Inc.(DSI) Goleta, CA

EDUCATION AND PROFESSIONAL TRAINING

- April 2001- December 2003 Post-doctoral Fellow, with Professor Alan J. Heeger (2000 Nobel Laureate in the CPOS at UCSB
- January 2002 – December 2004 Minor (graduate courses) in the Department of Electrical Engineering at 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 their medical applications
  Supervisor: Prof. Yuchen Pan

TEACHING

- "Polymer Science for Engineers", undergraduate course, Department of Mechanical Engineering at UA
- "Electrochemical Engineering", undergraduate course, Department of Chemical, Biomolecular and Corrosion Engineering at UA
- "Fundaments of Polymer Structure Characterization", graduate core course, CPSPE at UA
- "Carbon-Polymer Nanotechnology" (developed by myself), graduate course, CPSPE at UA
- "Semiconducting Polymers" (developed by myself), graduate elective course, CPSPE at UA
- "Research Problems in Polymer Engineering", graduate required course, CPSPE at UA
- "Flexible Electronics"(developed by myself), graduate elective course, CPSPE at UA
- "Optoelectronics Properties of Materials" (developed by myself), CPSPE at UA

Teaching evaluation rates ranked on the top five in the College (School) of Polymer Science and Polymer Engineering in the past 11 years

PUBLICATIONS

A: Journal Scientific Peer-Reviewed Publications

241 D. Z. Wu, L. Shen, D. Zhang, T. Zhu, J. Zheng, **X. Gong***
Effect of external magnetic field on bulk heterojunction polymer solar cells
Macromol. Rapid Commun., 2022, DOI：10.1002/marc.202100933.

240 Y. R. Yang, T. Zhu, L. Shen, Y. H. Liu, D. Zhang, B. W. Zheng, K. Gong, J. Zheng, **X. Gong***
Recent progress in the all-solid-state flexible supercapacitors
S**martMat**, 2022, under revision.

239 Y. Cao, X. J. Xu, L. Shen, J. Zheng, **X. Gong***
Origins of the photocurrent multiplication effect in the polymer photodetectors based on poly(3-hexylthiophene incorporated with fullerenes derivatives
Macromol. Rapid Commun., 2022, accepted, under revision.

238 T. Zhu, L. N. Shen, S. Xun, J. S. Sarmiento, Y. R. Yang, H. Wang, J. L. Bredas, **X. Gong***
High-performance ternary perovskite-organic solar cells
Adv. Mater., 2022, DOI: 10.1002/adma.202109348.

237 L. N. Shen, T. Zhu, X. W. Zhang, K. Gong, H. Wang, **X. Gong***
Bulk heterojunction perovskite solar cells incorporated with p-type low optical gap conjugated Polymers
Nano Energy, 2022, DOI: 10.1016/j.nanoen.2021.106907.

236 Y. J. Tang, D. Zhang, **X. Gong**, J. Zheng
A mechanistic survey of Alzheimer's disease
Biophysical Chemistry, 2022, DOI:10.1016/j.bpc.2021.106735

235 B. S. Zhang, L. N. Shen, L. Y. Zheng, T. Zhu, R. Chen, L. Liu, J. Zheng, **X. Gong***

Solution-processed bulk heterojunction broadband photodetectors based on perovskites incorporated with PbSe quantum dots
Organic Electronics, 2022, DOI: 10.1016/j.orgel.2021.106410.

234 Lening Sheng, Chao Yi, Luyao Zheng, Yanghe Liu, Jie Zheng, and **Xiong Gong***
Solution-processed broadband photodetectors without transparent conductive oxide electrodes
J. Mater. Chem. C. 2021, DOI: 10.1039/D1TC04278E

233. D. Zhang, Y. L. Liu, Y. H. Liu, Y. P. Peng, Y. J. Tang, L. M. Xiong, **X. Gong,** J. Zheng*
A General crosslinker strategy to realize intrinsic frozen resistance of hydrogels
Advanced Materials, 2021, DOI:10.1002/adma.202104006

232. C. Yi, L. N. Shen, J. Zheng, **X. Gong***
A negative piezo-conductive effect from doped semiconducting polymer thin films
Scientific Reports, 2021, doi:10.1038/s41598-021-97812-4

231. L. N. Shen, Y. R. Yang, T. Zhu, L. Liu, J. Zheng, **X. Gong***
Efficient and stable perovskite solar cells by B-site compositional engineered all-inorganic perovskites and interface passivation
ACS Appl. Mater. & Interfaces, 2021, am-2021-12250t (accepted)

230. R. Chen, L. N. Shen, L. Y. Zheng, T. Zhu, Y. H. Liu, L. Liu, J. Zheng, **X. Gong***
2D/3D perovskite bilayer thin films post-treated with solvent-vapor for high-performance perovskite photovoltaics
ACS Appl. Mater. & Interfaces, 2021, DOI: 10.1021/acsami.1c15735

229. M. X. Yang, Y. H. Liu, X. Y. Luo, Y. Cao, **X. Gong,*** and W. N. Xu*
Molecular engineering of polyaniline with ultrathin polydopamine and monolayer graphene for all-solid-state flexible micro-supercapacitors
ACS Appl. Ener. Mater.2021, DOI:10.1021/acsaem.1c01996

228. T. Zhu, L. N. Shen, H. L. Chen, Y. H. Liu, R. Chen, J. Zheng, J. P. Wang, **X. Gong***
Conjugated molecules based 2D perovskites for high-performance perovskite solar cells
J. Mater. Chem. A. 2021, DOI:10.1039/d1ta05934c.

228 T. Zhu and **X. Gong***
Low-dimensional perovskite materials and their optoelectronics
InfoMat, 2021, 3, 1039-1069.

226. Y. R. Yang, D. Zhang, Y. H. Liu, L. N. Shen, T. Zhu, J. X. Xu, J. Zheng, **X. Gong***
Solid-state double-network hydrogel redox electrolytes for high-performance flexible supercapacitors
ACS Applied Materials & Interfaces, 2021, 13, 34168-34177.

225 Y. L. Liu, D. Zhang, Y. J. Tang, Y. X. Zhang, **X. Gong,** S. W. Xie, J. Zheng
Machine learning-enabled repurposing and design of antifouling polymer brushes
Chemical Engineering Journal, 2021, 420, 129872.

224. Y. J. Tang, Y. L. Liu, Y. X. Zhang, D. Zhang, **X. Gong,** J. Zheng
Repurposing a cardiovascular disease drug of cloridarol as hIAPP inhibitor
ACS Chemical Neuroscience, 2021, 12, 1419-1427.

223. Y. J. Tang, D. Zhang, Y. X. Zhang, Y. L. Liu, X. **Gong, Y.** Chang, B. P. Ren, J. Zheng
Introduction and Fundamentals of Human Islet Amyloid Polypeptide Inhibitors
ACS Applied Bio Materials, 2020, 3, 8286-8308.

222 D. Zhang, Y. J. Tang, Y. X. Zhang, F. Y. Yang, Y. L. Liu, X. Y. Wang, **X. Gong,** J. Zheng

Highly stretchable, self-adhesive, biocompatible, conductive hydrogels as fully polymeric strain sensors

J. Mater. Chem. A., 2020, 8, 20474-20485.

221 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.

220 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.

219 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.

218 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.

217 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.

216 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

215 D. Zhang, Y. J. Tang, Y. X. Zhang, F. Y. Yang, Y. L. Liu, X. Y. Wang, **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.

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,** 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 S. Y. Zhou, T. Zhu, L. Y. Zheng, D. Zhang, W. Z. Xu, L. Liu, G. Cheng, J. Zheng, **X. 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, 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***

The 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@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.

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 a 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.

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 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 $Ni_{0.85}Se@MoSe_2$ 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.

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**, 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, **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
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B: Book Chapters

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26 Photodetector utilizing quantum dots and perovskite hybrids as light harvesters
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11 Methods and devices comprising soluble conjugated polymers
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D: Invited Presentations and/or Seminars

166 “Novel Perovskites for Solar Energy Generation”, University of Cincinnati, Jan. 20, 2022.

165 “Novel Electronic Materials for Energy Generation and Storage” INDIAN INSTITUTE OF SCIENCE ENGINEERING AND RESEARCH (IISER), KOLKATA, Indian, March 4, 2021

164 “Novel Electronic Materials for Energy Generation and Storage” Department of Chemical Engineering, University of Auburn, May, 2020

163 “High Performance Solution-Processed Perovskite Solar Cells”, Institute of Advanced Materials, Kent State University, March, 2020,

162 “High Performance Solution-Processed Perovskite Solar Cells via Novel Materials and Device Engineering”, University of Connecticut, Department of Chemical and Engineering and Materials Institute, April 8, 2020.

161 “Stable, hysteresis-free and efficient perovskite solar cells”, MRS Boston meeting, Dec. 4, 2019.

160 “High performance solution-processed perovskite solar cells through novel materials and device engineering”, Department of Chemical Engineering, University of South Florida, Nov. 27, 2019.

159 “Perovskite solar cells and flexible self-powered electronics”, International Elastomer Conference, Cleveland, OH, Oct. 8, 2019.

158 “high-performance solution-processed perovskite solar cells through novel materials and device engineering”, Colorado School of Mines, Sept. 2019, Golden, CO.

157 “Solution-processed broadband photodetectors”, Air Force Research, Dayton, OH, June, 2019.

156 “Solution-processed perovskite solar cells”, Department of Chemical Engineering, University of Illinois at Chicago, April, 2019

155 "Printable Polymers for Flexible Electronics", Qingdao Technology University, Lanzhou, Oct. 31, 2018, China.

154 "Novel materials for high-performance perovskite solar cells", The 11th International Conference of Organic Electronics, Qingdao, Oct. 28, 2018, China.

153 "Printable Polymers for Flexible Electronics", Qingdao Technology University, Qingdao, Oct. 29, 2018, China.

152 “Perovskite solar cells via polymer linked perovskite materials”, 2018 Interface Conference of Synthetic Metals, Busan, South Korea, July 2, 2018.

151 “Solution-processed hybrid perovskite solar cells via novel materials and interfacial engineering”, Lanzhou University, June 26, 2018.

150 “Perovskite solar cells by novel perovskite materials”, 2nd International conference of Bioinspired Materials and Engineering, Beihang University, June 22, 2018.

149 “Solution-processed hybrid perovskite solar cells”, Department of Polymer Science and Engineering, College of Materials Science and Engineering, Lanzhou Jiaotong University, March 8, 2018.

148 “High-performance solution-processed hybrid perovskite solar cells via novel materials”, Institute of Photo-Chemistry, Chinese Academy of Science, March 6, 2018.

147 “High-performance solution-processed hybrid perovskite solar cells via novel materials”, Department of Chemical Engineering and Materials Science, Michigan State University, January 11, 2018.

146 “Organic and organic-inorganic hybrid electronics”, Department of Chemical Engineering, Taiwan High Technology, Dec. 28, 2017.

145 “Solution-processed polymer and perovskite solar cells via novel materials”, Department of Chemical Engineering, National Jiaotong University, Dec. 27, 2017.

144 “Solution-processed organic-inorganic hybrid electronics via novel materials”, Department of Photonic Engineering, National Chengkung University, Dec. 26, 2017.

143 “Solution-processed perovskite solar cells via novel materials and device engineering”, Department of Chemistry, National Taiwan University, Dec. 23, 2017.

142 “High-performance solution-processed hybrid perovskite solar cells”, Charles Davidson School of Chemical Engineering, Purdue University, Oct. 17, 2017.

141 “Uncooled ultrasensitive solution-processed broadband photodetectors”, Department of Chemistry, Clemson University, Oct. 5, 2017.

140 “High-performance solution-processed hybrid perovskite solar cells”, College of Chemistry and Chemical Engineering, Lanzhou University, Aug. 23, 2017

139 “Magnetic effects on solution-processed solar cells” Chinese CAS Photochemistry Conference, Lanzhou, Aug. 24, 2017, China.

138 “Solution-processed perovskite solar cells via novel materials and device engineering”, Lanzhou Chemical Physics Institute, CAS, Lanzhou, Aug. 25, 2017, China.

137 “Novel materials for solution-processed photovoltaics” 2nd Northwest Energy and Environmental Symposium, Lanzhou, Aug. 26, 2017, China.

136 “Magnetic effects on solution-processed solar cells” 2017 ChinaNano, Beijing, Aug. 30, 2017, China.

135 “Little science of plastics”, Eastwood Elementary School, Hudson, OH, Jan. 27, 2017, USA.

134 “Printable flexible electronics”, Dunhuang, Jan. 11, 2017, China.

133 “High-performance solution-processed perovskite photovoltaics”, Department of Chemistry, University of Hong Kong, Hong Kong, Jan. 6, 2017, China.

132 “High-performance perovskite photovoltaics vis novel materials and device structure”, International Conferences for Renewable Energy and Advanced Materials, Hong Kong, Jan. 5, 2017, China.

131 “High-performance perovskite photovoltaics vis novel materials and device structure”, Hong Kong Baptist University, Hong Kong, Dec. 29, 2016, China.

130 “High-performance perovskite photovoltaics vis novel materials and device structure”, Lanzhou University, Lanzhou, Dec. 27, 2016, China.

129 “Polymer solar cells vis novel materials and device structure”, China University of Geosciences, Wuhan, Dec. 23, 2016, China.

128 “High-performance perovskite photovoltaics vis novel materials and device structure”, Zhejiang University of Science and Technology, Hangzhou, Dec. 22, 2016, China.

127 “High-performance perovskite photovoltaics vis novel materials and device structure”, Xian Jiaotong University, Xian, Dec. 21, 2016, China.

126 “Interfacial engineering for high-performance perovskite photovoltaics”, Nankai University, Tianjin, Dec. 19, 2016, China.

125 “Solution-processed perovskite photovoltaics by novel materials”, Tianjin University, Tianjin, Dec. 16, 2016, China.

124 “Solution-processed perovskite solar cells”, Institute of Chemistry, CAS, Beijing, Dec. 15, 2016, China.

123 "Uncooled solution-processed broadband perovskite photodetectors", 2016 SPIE Annual Conference, San Diego, Sept. 1st, 2016, USA.

122 "Solution-processed broadband perovskite photodetectors", 252 ACS Annual Conference, Philly, Aug. 23rd, 2016, USA.

121 "Printable polymer flexible electronics" The University of Akron, July 9, 2016, Akron, USA

120 "Solution-processed perovskite photovoltaics via novel materials and device engineering", CAS University, July 4th, 2016m Beijing, China.

119 "Magnetic effects on solution-processed solar" 2016 Chinese Chemistry Society Conferences, July 3rd, 2016, Dalian, China.

118 "Printable polymer flexible electronics" Shangxi Normal University, July 1st, Xian, China.

117 "Solution-processed perovskite photovoltaics via novel materials and device engineering", International Conference of Synthetic Metals, Shangxi Normal University, July 1st, 2016, Xian, China.

116 "Printable polymer flexible electronics" Jianghan University, June 30, 2016, Wuhan, China

115 "Solution-processed perovskite photovoltaics via novel materials and device engineering", International Conference of Synthetic Metals, June 28, 2016, Guangzhou, China.

114 "Magnetic effects on solution-processed solar" 2nd International Symposium on the Science of Plastic Electronics, June 25, 2016, Beijing, China.

113 "Solution-processed perovskite photovoltaics via novel materials and device engineering", Institute of Chemistry, CAS, June 23, 2016, Beijing, China.

112 "Printable polymer flexible electronics" Symposium for REU Students, The University of Akron, June, 11, Akron, USA.

111 "Uncooled solution-processed broad bandgap photodetectors", College of Engineering, North Carolina State University, March 24, 2016, Raleigh, NC, USA.

110 "Solution-processed photovoltaics novel materials and device engineering", Department of Materials Science and Engineering, University of North Texas, Feb. 25, 2016, Houston, Denton, USA.

109 "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.

108 "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.

107 "Uncooled ultrasensitive solution-processed broad-band photodetectors" Air Force Research Lab., Wright-Patterson, Jan. 25, 2016, Dayton, OH, USA.

106 "Printable flexible polymer electronics" Nanjing Normal University, Nanjing, Oct., 2015, P.R. China.

105 "High-performance polymer solar cells via novel materials and device engineering" Nanjing Normal University, Nanjing, Oct., 2015, P. R. China.

104 "Solution-processed perovskite hybrid solar cells?" Zhejiang University, Hangzhou, Oct., 2015, P. R. China.

103 "15 % efficiency from single junction polymer solar cells, POSSIBILITY?" 2015 China Polymer Conference, Suzhou, Oct., 2015, P. R. China.

102 “Magnetic effects on polymer solar cells”, 10th International Chinese Organic Electronics, Aug. 7th to 10th, Beijing, P. R. China.

101 “Possibility to observe 15% efficiency form single junction polymer solar cells”, Beijing University and Technology, Aug. 6th, Beijing, P. R. China.

100 “Solution-processed perovskite hybrid solar cells” Ningbo Institute of Materials Science, CAS, Ningbo, P. R. China, June 29, 2015.

99 “Magnetic effect on polymer solar cells” 13th International Conference of Polymer for Advanced Technology, Hangzhou, P. R. China, June 27, 2015.

98 “Approaching 15% Efficiency Polymer Solar Cells” Hangzhou University, P. R. China, Hangzhou, June 26, 2015.

97 “Perovskite hybrid solar cells” Northwest Normal University, Lanzhou, P. R. China, June 15, 2015.

96 “Perovskite hybrid solar cells” Northwest Normal University, Lanzhou, P. R. China, June 6 2015.

95 “Polymer electronics” Hexi University, Zhangye, P. R. China, June 18, 2015.

94 “Solution-processed high performance polymer solar cells” Northwest Normal University, Lanzhou, P. R. China, June 5, 2015.

93 “Printable flexible polymer electronics” Lanzhou University, Lanzhou, P. R. China, June 16, 2015.

92 “Polymer solar cells by novel materials” Lanzhou University, Lanzhou, P. R. China, June 2, 2015.

91 “Little Science of Plastics” Hudson Elementary School, Feb. 17, 2015, Hudson, OH, USA

90 “High efficiency of planar heterojunction perovskite solar cells by fine-tuning crystallization morphology” MRS Fall Conferences, Nov. 30th, 2014, Boston, MA,.

89 “High performance solution-processed polymer solar cells via novel materials and interfacial engineering” The Akron Polymer Conferences, Akron, OH, Oct. 2-3, 2014.

88 “Towards 15% Efficiency Polymer Solar Cells” The First International Symposium on the Science of Plastic Electronics, Beijing, P. R. China, Sept. 25, 2014.

87 “Polymer electronics” Nanjing Chemical Company, Nanjing, P. R. China, Sept. 23, 2014

86 “High performance polymer solar cells via novel materials” Suzhou Nanoinstitute, CAS, Suzhou, P. R. China, Sept. 22, 2014.

85 “High performance polymer solar cells via interfacial engineering” Suzhou University, Suzhou, P. R. China, Sept. 22, 2014.

84 “Inverted polymer solar cells via novel materials” Nanjing University, Nanjing, P. R. China, Sept. 21, 2014.

83 “Printable Polymer Electronics”, Datong University, Datong, P. R. China, Sept. 17, 2014.

82 “High performance solution-processed polymer solar cells” First Ohio Conference on the sustainable use of greenhouse gases, Columbus, OH, Aug. 18, 2014.

81 “Polymer solar cells with over 1 μm thickness active layer” Chinese Chemistry Annual Congress, Beijing, Aug. 5th, 2014.

80 “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.

78 “High performance polymer solar cells via novel materials and interfacial engineering”, Beihang University, Beijing, China, June 30, 2014.

77 “High performance polymer solar cells via novel materials and interfacial engineering”, Chemistry Institute, CAS, Beijing, China, June 29, 2014.

76 “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.

74 “Polymer electronics”, Lanzhou City University, Lanzhou, China, June 10, 2014.

73 “Inorganic Chemist meets with Polymer Scientist”, Northwest Normal University, Lanzhou, China, June 9, 2014.

72 “Interfacial engineering for high performance polymer solar cells”, Lanzhou University, Lanzhou, China, June 12, 2014.

71 “Inverted infrared polymer photodetectors”, Lanzhou Institute of Chemical Physics, CAS, Lanzhou, China, June 13, 2014.

70 “High performance single junction polymer solar cells by 2D conjugated polymers”, International conference on polymer chemistry, Shanghai, P. R. China, June 4, 2014.

69 “Interfacial engineering for high performance inverted polymer solar cells”, ACS Dallas Meeting, March 17, 2014 ”, ACS Dallas Meeting, March 17, 2014

68 “High performance polymer solar cells through device design and novel materials”, Tsinghua University, Nov. 20th, 2013, Beijing, China

67 “Polymer Solar Cells: Device and Materials”, Norfolk State University, Sept. 27th, 2013, Norfolk, VA, USA.

66 “Novel “electron donor-fullerene” conjugated molecules for polymer solar cells with an inverted device structure”, 246 ACS conference, Sept. 12, 2013, Indianapolis, IN, USA

65 “Towards high performance solar cells” South China University and Technology, June, 2013, Guangzhou, China.

64 “Polymer solar cells by novel conjugated fullerene molecules”, Oka Ridge National Laboratory users’ workshop, Aug. 12-15th, 2013, Oak Ridge, TN, USA

63 “Over 10 % efficiency polymer solar cells”, University of Tennessee, Aug. 15th, 2013, Knoxville, TN, USA.

62 “Towards high performance inverted polymer solar cells through interfacial engineering”, SPIE, Aug. 2013, San Diego, CA, USA.

61 “Hybrid infrared polymer photodetectors”, Lanzhou University, Jul. 2013, Lanzhou, China

60 “Solution-processed high performance polymer solar cells: device structures and materials”, Lanzhou Institute of Chemical Physics, CAS, Jul. 2013, Lanzhou, China

59 “Renewable energy”, Invited by Government of Dunhuang City, Gansu Province, July 2013, Dunhuang, China

58 “How to approach high performance organic solar cells”, National Science Foundation of China, Jul. 2013, Beijing, China

57 “Inverted infrared polymer photodetectors”, International workshop on organic electronics, Jun. 2013, Beijing, China

56 “Science of Plastics”, Evamere Elementary School, May, 2013, Hudson, OH, USA

55 "High performance inverted polymer solar cells", Department of Chemical Engineering, University of Akron, April 2013, Akron, OH, USA

54 "High performance inverted polymer solar cells", MRS Spring meeting, Apr. 2013, SFO, CA, USA

53 "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

52 "Towards high performance solar cells", APS March conference, Mar. 2013, Baltimore, Maryland, USA

51 "Solution-processed polymer electronics", Research for Lunch, Research office of University of Akron, Feb. 2013, Akron, OH, USA

50 "Towards high performance polymer photovoltaic cells", Lanzhou University, Dec. 2012, Lanzhou, China

49 "Inverted polymer solar cells", Northwest Normal University, Dec. 2012, Lanzhou, China

48 "Interface engineering for high performance polymer solar cells", Nov. 2012, MRS Fall meeting, Boston, MA

47 "High performance polymer solar cells by novel materials", University of California Santa Barbara, Oct. 30th, 2012, CA, USA

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

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. 2021

- Title: "Novel Polymers: Characterization and Applications"

Award Amount: $100,000

Source: 1 -Material Inc.

Role: PI

Time period: July 2020 - December 2025

- Title: Trust in Flexible and Hybrid Electronics

Total Award Amount: $1 .78M

Source: Air Force Scientific Research

Role: Co-Pl

Period: Sept. 2018 - April 2022

- Title: REU Supplement

Total Award Amount: $8,000

Source: NSF

Role: PI

Period: July 2021 – June 2023

2. Pending proposals

- 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: July 1, 2022- June 31, 2025

- 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: July 1, 2022- June 31, 2024

- 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, 2022- June 30, 2024

- Title: Uncooled ultrasensitive solution-processed flexible broadband photodetectors

Source: NSF

Award Amount: $640,338

Role: PI

Period: July 1, 2022- June 30, 2025

- Title: perovskite-organic ternary solar cells

Source: DOE

Award Amount: $300,000

Role: PI

Period: July 1, 2022- Dec. 30, 2023

- Title: Charge carrier mobility in perovskite and organic semiconductors

Source: Air Force Scientific Research Program

Award Amount: $280,000

Role: PI

Period: July 1, 2022- June 30, 2025

3. Past grants

- Title: High-performance electrophosphorescence polymer light-emitting diodes
  Source: Mitsubishi Chemical Corporation
  Award Amount: $1,500,000
  Time period: Aug. 2002 - Aug. 2006
  Role: Co-PI (PI: Prof. A. J. Heeger)
- Title: Hemispherical Array Detector for Imaging
  Source: DARPA
  Award Amount: $25,500,000
  Time period: July 2007 - Dec. 2010
  Role: Co-PI (PI: Prof. A. J. Heeger)
- Title: Organic electronics
  Source: The University of Akron
  Award amount: $500,000
  Time period: Aug. 2010 - July 2014
  Role. PI
- Title: Novel Polymer/Organic Materials
  Source: Gift from ONE
  Award Amount: $450,000
  Role: PI
  Period: July 2012 – Aug. 2015
- Title: Ultrasensitive solution-process inverted polymer photodetectors
  Award Amount: $408,000
  Source: NSF
  Role: PI
  Time Period: July 2014 – Aug. 2020
- Title: Polymer photodetectors

Award Amount: $1,500,000
Source: Gift from UCSB
Role: PI
Period: July 2016 – Aug. 2017

- Title: POSS-polymer for flexible electronics
  Source: DOE
  Award Amount: $10,000
  Time period: July 2012 - Aug. 2012
  Role: PI
- Title: In-situ Neutron Scattering Determination of 3D Phase-Morphology Correlations in Fullerene-Block Copolymer Systems Block Copolymer System
  Source: DOE
  Award Amount: $831,066
  Role: Co-PI
  Time period: Sept. 2012 — Aug. 2014
- Title: Polymer electronics
  Source: 3M Company
  Award Amount: $45,000
  Role: PI
  Time period: July 2011 - June 2014
- Title: "High-Performance Inverted Polymer Solar Cells"
  Source: BringSpring Science and Technology
  Award Amount: $1,000,000
  Role: PI
  Time period: March 2013 - March 2016
- Title: Polymer processing
  Source: System Seals Inc.
  Award Amount: $21, 658
  Role: PI
  Time period: Feb. 2013 - sept. 2013
- Title: "Special Bayer Lectureship" 2013
  Source: Bayer MaterialScience
  Award Amount: $8,000
  Role: PI
- Title: "Special Aldrich Lectureship" 2014
  Source: Aldrich Material Science
  Award Amount: $3,500
  Role: PI

SERVICES

1. Professional Society

Associate Editor: Organic Electronics
Deputy Editor: Emergent Materials
Editorial Board Members: Scientific Reports, Polymers, and Chinese Chemistry Letter

2. Committees at UA

UA Research Committee, University Library, Graduate Program Review; Admissions; Faculty Search (5 times); University Library; Dean Search; University Research, Director Search, etc.

3. Review Panels

Air Force Scientific Program, NSF, Canada NSF, Swiss NSF, Hong Kong Research Foundation, Iowa State Research Foundation, AAAS

4. 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

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