Curriculum Vitae

Qiquan (Quinn) Qiao, Ph.D.

Harold C. Hohbach Professor
Graduate Coordinator of Electrical Engineering
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Professional Preparation

Institution	Field	Degree	Year
Virginia Commonwealth Univ.	Engineering	Ph.D.	2006
Shanghai Institute of Optics & Fine Mechanics, Chinese Academy of Sciences	Optics	M.S.	2003
Hefei University of Technology	Engineering	B.S.	1999

Appointments

Institution	Position	Date
South Dakota State University	Harold C. Hohbach Professor and Graduate Coordinator	2017-present
South Dakota State University	Harold C. Hohbach Associate Professor and Graduate Coordinator	2016-2017
South Dakota State University	Associate Professor	2013-2016
South Dakota State University	Assistant Professor	2007-2012
University of Florida	Postdoc, Chemistry	2006-2007
Shanghai Institute of Optics & Fine Mechanics	Engineer	1999-2003

Research interests

- Solar power wireless sensor networks for precision agriculture
- Solar cells (polymer, small molecule, dye, organic-inorganic hybrid, perovskite solar cells)
- Energy storage (battery, supercapacitor, fuel cell)
- Optical coating (anti-reflection, light trapping, etc.)
- Light management
- Inorganic solar cells (Si, CZTS, CIGS solar cells)
- Organic electronics (organic light emitting diodes, organic transistors)
- Renewable energy systems (photovoltaics, biofuel)

Awards and Recognitions

- 2016 Faculty Award for Global Engagement for Excellence in International Research, SDSU
- 2016-present, Harold C. Hohbach Professorship
- 2015 Distinguished Researcher of the Year, J. Lohr College of Engineering, SDSU
- 2015 Excellence in Research, SDSU Department of Electrical Engineering and Computer Science
- 2016, 2015, 2014, 2013, 2012, 2011 J. Lohr College of Engineering Grantsmanship Award
- 2014 F O Butler Award for Excellence in Research, South Dakota State University
- 2014 Visiting Professorship from Hefei University of Technology, China.
- 2013 Best Poster Award (Hytham Elbohy) at 3rd International Conference on Nanotek and Expo, Las Vegas, NV, USA.

- 2013 Best Poster Winner (Olusegun Adebanjo), SD EPSCoR All Investigator Meeting
- 2012 Best Paper Award (Ashish Dueby), Inter-Continental Advanced Materials for Photonics (I-CAMP) Summer School on renewable and sustainable energy
- 2012 Best Poster Award, Inter-Continental Advanced Materials for Photonics (I-CAMP) Summer School on renewable and sustainable energy
- 2012 3M Non-tenured Faculty Award
- 2012 Young Investigator Award from SDSU College of Engineering.
- 2010 NSF CAREER Award
- 2010 Excellence in Research Award in the Electrical Engineering and Computer Science, SDSU
- 2009 Bergmann Memorial Research Award from US-Israel Binational Science Foundation
- 2009 Doctor New Investigator Award from American Chemical Society Petroleum Research Fund
- 2006 Chinese Government Award for Outstanding Self-financed Student Abroad, China Scholarship Council (CSC)
- 2006 ASME Solar Energy Division Graduate Student Award 2006 VCU GSA Travel Grant Award
- 2005 Energy Technology Division Travel Grant, the Electrochemical Society (ECS), 208th Meeting, - Los Angeles, California.
- 2005 VCU Graduate School Travel Grant to present at 208th meeting of ECS in Los Angeles.

US Patents and Discoveries (13)

Tech ID	Title
	Patents/provisional patents
USPTO 20110079275	Qiquan Qiao, Prakash, Hao Fong, Lifeng Zhang, David Galipeau, "Semiconductor Nanoparticle/Nanofiber Composite Electrodes", USPTO Applicaton #: 20110079275 - Class: 136252 (USPTO).
01700-0011	Carbon nanofiber based composites and electrodes and devices incorporating the same (Attorney Docket Number: 01700-0011)
	Submitted disclosures
T-00023	Variable Band-gap Block Copolymers made from n-Type Organoborane Polymers and p-Type Thiophene Polymers for Photovoltaics
T-00025	TiO2 Nanofiber/Nanoparticle Mixture Anode for Highly Efficient Dye Sensitized Solar Cells
T-00048	Flexible Triple Yield Solar Cells
T-00049	Flexible Display System
T-00050	Novel Polymer-based Electrochromic Devices
T-00051	Novel Quantum Dot Sensitizers for Highly Efficient Dye-Sensitized Solar Cells
T-00139	Carbon Nanofibers as a Low Cost Alternative to Existing Pt Counter Electrode
T-00237	Pt-incorporated Carbon Nanofibers for Higher Efficiency and Lower Cost Solar Cells
T-00249	New donor 9-alkylthiopehene-idene-9H-Fluorene and new acceptor alkylthieno[3.4-d]-1,3,2-dithiazole-1, 3-disulfonyl for conjugated polymers
T-00272	Organic Solar Energy Harvesting Wireless Sensing Platform for Soil Monitoring
T-00290	Ring-Protected Organic Chromophores for Optoelectronic Applications
	Qiquan Qiao and Hytham Ibrahim Elbohy, Urea treatment of metal transition oxides as safe efficient method for low cost and high performance electrode in solar cells and batteries, submitted to SDSU TTO, 2015

Book (1)

1. Organic Solar Cells: Materials, Devices, Interfaces, and Modeling, Edited by Qiquan Qiao, CRC Press, 2015, Print ISBN: 978-1-4822-2983-7, eBook ISBN: 978-1-4822-2984-4.

Book Chapters (10)

1. Tingting Xu, Qiquan Qiao, "Organic Photovoltaics: Basic Concept and Device Physics", in the book of "Encyclopedia of Nanotechnology 2nd edition", Springer-Verlag, 2014.
2. Ashish Dubey, Parveen Saini, Qiquan Qiao, Conjugated Polymers-Based Blends, Composites and Copolymers for Photovoltaics, in the book of Conducting Polymer Based Blends and Nanocomposites: Synthesis, Properties, and Applications, Wiley Scrivener Publishing LLC, 2014.
3. Prajwal Adhikary and Qiquan Qiao, Design Considerations for Efficient and Stable Polymer Solar Cells, in Solar Cell Nanotechnology (eds A. Tiwari, R. Boukherroub and M. Sharon), John Wiley & Sons, Inc., Hoboken, NJ, USA. doi: 10.1002/9781118845721.ch1, Chapter 1, page 1-40, Print ISBN: 9781118686256 and Online ISBN: 9781118845721, 2013.
4. Purna P. Maharjan and Qiquan Qiao, "Inverted organic solar cells" in the book of "Energy Harvesting with Functional Materials and Microsystems", editors: Madhu Bhaskaran, Sharath Sriram, Krzysztof Iniewski, ISBN 9781466587236, publisher: CRC Press, Published: November 12, 2013.
5. Ashish Dubey and Qiquan Qiao, "Metal oxide nanocrystals and their properties for application in solar cells" in the book of "Handbook of Nanomaterials Properties", Editors: Bharat Bhushan, Dan Luo, Scott R. Schricker, Wolfgang Sigmund, Stefan Zauscher, SBN 978-3-642-31106-2, publisher: Springer, 2013.
6. Ashish Dubey and Qiquan Qiao, "Chap 6 - Hybrid polymer-inorganic solar cells" in the book of "Polymers for Energy Storage and Conversion", editor: Vikas Mittal, publisher: John Wiley USA and Scrivener Publishing USA, ISBN: 978-1-118-34454-5, Page 163-198, 2013.
7. Swaminathan Venkatesan and Qiquan Qiao, "Nanoscale phase separation and device engineering in polymer solar cells", in the book of "Novel Advances in Microsystems Technologies and their Applications", Editors: Laurent A. Francis, Krzysztof Iniewski ISBN 9781466560666, publisher: Taylor & Francis, 2013
8. James.T. McLeskey, Jr. and Qiquan Qiao, "Nanostructured Organic Solar Cells" in the book of "Nanotechnology for Photovoltaics", ed. Loucas Tsakalakos, CRC Press, Chap. 6, 2010, published March 25, 2010, Page 147-186, ISBN-13: 978-1420076745.
9. Tingting Xu, Qiquan Qiao, "Organic Photovoltaics: Basic Concept and Device Physics", in the book of "Encyclopedia of Nanotechnology", Section editor Yabing Qi, Springer-Verlag, 2011
10. Qiquan Qiao, "Carbon Nanostructures as Low Cost Counter Electrode for Dye-Sensitized Solar Cells" in Solar Cells - Dye-Sensitized Devices, editor Leonid Kosyachenko, ISBN 979-953-307-191-5, Chap 20, page 457-470, InTech, 2011.

Peer reviewed journal papers (129)

1. Shelton J. P. Varapragasam, Choumini Balasanthiran, Ashim Gurung, **Qiquan Qiao**, Robert M. Rioux, James D. Hoefelmeyer, Kirkendall Growth of Hollow Mn3O4 Nanoparticles Upon Galvanic Reaction of MnO with Cu2+ and Evaluation as Anode for Lithium-Ion Batteries, Journal of Physical Chemistry C, accepted, 2017.
2. Zhengping Zhou, Hua Zhang, Yan Zhou, Hui Qiao, Ashim Gurung, Roya Naderi, Hytham Elbohy, Alevtina L. Smirnova, Huitian Lu, Shuiliang Chen, and **Qiquan Qiao***, Binder Free Hierarchical Mesoporous Carbon Foam for High Performance Lithium Ion Battery, Scientific Reports, accepted, 2017.
3. Eman A. Gaml, Ashish Dubey, Khan Mamun Reza, Md Nazmul Hasan, Nirmal Adhikari, Hytham Elbohy, Behzad Bahrami, Hamdy Zeyada, ShangfengYang and **Qiquan Qiao***, Solar Energy Materials and Solar Cells, accepted, 2017.
4. Upendra Neupane, Behzad Bahrami, Matt Biesecker, Mahdi Farrokh Baroughi, and **Qiquan Qiao***, Kinetic Monte Carlo Modeling on Organic Solar Cells: Domain Size, Donor-Acceptor Ratio and Thickness, Nano Energy, 35, 128-137, 2017.
5. Ashim Gurung, Ke Chen, Geetha Varnekar, Reza Khan, Salem Saad Abdulkarim, Rajesh Pathak, Roya Naderi, **Qiquan Qiao***, Highly Efficient Perovskite Solar Cell Photo-Charging of Lithium Ion Battery using DC-DC Booster, Advanced Energy Materials, in press, 2017.
6. Ravindra Kamble, Synthesis, Photophysical and Computational Study of Novel Coumarin-Based Organic Dyes, Journal of Photochemistry and Photobiology A: Chemistry, submitted, 2017.

7. Rajab Suliman, Abu Mitul, Lal Mohammad, Gemechis Djira, Yunpeng Pan, and **Qiquan Qiao***, Modeling of organic solar cell using response surface methodology, Results in Physics, accepted, 2017.
8. Hui Qiao, Zhaokang Xia, Yanhua Liu, Rongrong Cui, Yaqian Fei, Yibing Cai, Qufu Wei, Qingxia Yao, **Qiquan Qiao***, Sonochemical synthesis and high lithium storage properties of ordered Co/CMK-3 nanocomposites, Applied Surface Science, 400, 492-497, 2017.
9. Moneim Elshobaki, Ryan S Gebhardt, John A. Carr, William Robin Lindemann, Wenjie Wang, Eric Michael Grieser, Swaminathan Venkatesan, Evan Ngo, Ujjal Bhattacharjee, Joseph Strzalka, Zhang Jiang, **Qiquan Qiao**, Jacob W. Petrich, David Vaknin, and Sumit Chaudhary, Tailoring Nanoscale Morphology of Polymer:Fullerene Blends Using Electrostatic Field, ACS Applied Materials & Interfaces, 9 (3), 2678–2685, 2017.
10. Syed Afaq Ali Shah, Muhammad Hassan Sayyad, Nazia Nasr, and Ramshah Ahmad Toor, Sarah Sajjad and **Qiquan Qiao**. Photovoltaic performance of a purely organic dye and most common metallic dye based dye-sensitized solar cells. Materials Chemistry and Physics, 1-8, doi: 10.1007/s10854-017-6344-5, 2017.
11. Jiawei Gong, Zhengping Zhou, Sumathy Krishnan and **Qiquan Qiao**, Review on dye-sensitized solar cells (DSSCs): Advanced techniques and research trends, Renewable & Sustainable Energy Reviews, 68, Part 1, 234-246, 2017.
12. Jiawei Gong, K. Sumathy, Zhengping Zhou, **Qiquan Qiao**, Modeling of interfacial and bulk charge transfer in dye-sensitized solar cells, Cogent Engineering, 4: 1287231, 2017, https://www.cogentoa.com/article/10.1080/23311916.2017.1287231.
13. Jianyuan Sun, Swaminathan Venkatesan, **Qiquan Qiao** and Cheng Zhang, 4H-cyclopenta[2,1-b:3,4-b']dithiophen-4-one (CPDTO) homopolymer with side chains on every other CPDTO, Journal of Polymer Science, Part A: Polymer Chemistry, 55 (6), 1077-1085, 2017.
14. Sally Mabrouk, Ashish Dubey, Wenfeng Zhang, Nirmal Adhikari, Behzad Bahrami, Md Nazmul Hasan, Shangfeng Yang, **Qiquan Qiao***, Increased Efficiency for Perovskite Photovoltaics via Doping the PbI2 Layer, Journal of Physical Chemistry C, 120 (43), 24577–24582, 2016.
15. Qiliang Wu, Weiran Zhou, Qing Liu, Pengcheng Zhou, Tao Chen, Yalin Lu, **Qiquan Qiao**, and Shangfeng Yang, Solution-Processable Ionic Liquid as an Independent or Modifying Electron Transport Layer for High-Efficiency Perovskite Solar Cells, ACS Applied Materials & Interfaces, 8 (50), 34464–34473, 2016.
16. Bjorn Vaagensmith, **Qiquan Qiao**, Effect of synthesis temperature, UV-ozone treatment, and nanowire diameter on the failure of silver nanowire electrodes, IEEE Journal of Photovoltaics, 6, 1549 - 1553, 2016.
17. Swaminathan Venkatesan, Jianyuan Sun, Lianjie Zhang, Ashish Dubey, Andrew Sykes, T. Y. Lin, Yu-Chueh Hung, **Qiquan Qiao**, Cheng Zhang, An Oligothiophene Chromophore with A Macrocyclic Side Chain: Synthesis, Morphology, Charge Transport, and Photovoltaic Performance, RSC Advance, 6, 102043-102056, 2016.
18. Anastasiia Iefanova, Nirmal Adhikari, Ashish Dubey, Devendra Khatiwada, **Qiquan Qiao**, Lead Free CH3NH3SnI3 Perovskite Thin-Film with p-Type Semiconducting Nature and Metal-like Conductivity, AIP Advances, 6, 085312, 2016.
19. Belete A. Gonfa, Mee Rahn Kim, P. Zheng, S. Cushing, **Qiquan Qiao**, Nick Wu, My Ali El Khakani and Dongling Ma, Investigation of Plasmonic Effect in Air-processed PbS/CdS Core-shell Quantum Dot based Solar Cells, Journal of Materials Chemistry A, 4, 13071-13080, 2016.
20. Ashim Gurung, Roya Naderi, Bjorn Vaagensmith, Geetha Vernakar, Zhengping Zhou, Hytham Elbohy, **Qiquan Qiao***, Tin Selenide - Multi-Walled Carbon Nanotubes Hybrid Anodes for Higher Performance Lithium-Ion Batteries, Electrochimica Acta, 211, 720-725, 2016.
21. Ashish Dubey, Nick Kantack, Nirmal Adhikari, Khan Reza, Swaminathan Venkatesan, Mukesh Kumar, Devendra Khatiwada, Seth Darling and **Qiquan Qiao***, Room Temperature, Air Crystallized Perovskite film for High Performance Solar Cells, Journal of Materials Chemistry A, 4, 10231-20124, 2016.
22. Mike McGraw, Praveen Kolla, Bin Yao, Robert Cook, **Q. Qiao**, James J Wu, and Alevtina L. Smirnova, One-Step Solid-State In-situ Thermal Polymerization of Silicon-PEDOT Nanocomposites for the Application in Lithium-Ion Battery Anodes, accepted, Polymer, 99, 488-495, 2016.

23. Jieming Zhen, Qing Liu, Xiang Chen, Dan Li, **Qiquan Qiao**, Yalin Lu and Shangfeng Yang, Ethanolamine-functionalized fullerene as an efficient electron transport layer for high-efficiency inverted polymer solar cells, J. Mater. Chem. A, 4, 8072-8079, 2016.
24. Ashim Gurung, Hytham Elbohy, Devendra Khatiwada, Abu Farzan Mitul and **Qiquan Qiao**, A simple cost-effective approach to enhance performance of bifacial dye sensitized solar cells, IEEE Journal of Photovoltaics, 6, 912-917, 2016.
25. Jiawei Gong, Zhengping Zhou, K Sumathy, Huojun Yang, Qiquan Qiao, Activated Graphene Nanoplatelets as a Counter Electrode for Dye-Sensitized Solar Cells, Journal of Applied Physics, 119, 135501, 2016.
26. Zhengping Zhou, Sudhan Sigdel, Jiawei Gong, Bjorn Vaagensmith, Hytham Elbohy, Huojun Yang, Sumathy Krishnan, Xiang-Fa Wu and **Qiquan Qiao***, Graphene-beaded carbon nanofibers with incorporated Ni nanoparticles as efficient counter electrode for dye-sensitized solar cells, Nano Energy, 22, 558-563, 2016.
27. Hytham Elbohy, Mee Rahn Kim, Ashish Dubey, Khan Mamun Reza, Dongling Ma*, Jiantao Zai*, Xuefeng Qian*, **Qiquan Qiao***, Incorporation of Plasmonic Au Nanostars into Photoanode for Higher Efficiency Dye-Sensitized Solar Cells, Journal of Materials Chemistry A, 4, 545-551, 2016.
28. Ashish Dubey, Nirmal Adhikari, Swaminathan Venkatesan, Shaopeng Gu, Devendra Khatiwada, Qi Wang, Lal Mohammad, Mukesh Kumar, **Qiquan Qiao***, Solution processed pristine PDPP3T polymer as hole transport layer for efficient perovskite solar cells with slower degradation, Solar Energy Materials and Solar Cells, 145, 193-199, 2016.
29. Ashish Dubey, Nirmal Adhikari, Swaminathan Venkatesan, Shaopeng Gu, Devendra Khatiwada, Qi Wang, Lal Mohammad, Mukesh Kumar, **Qiquan Qiao***, Shelf life stability comparison in air for solution processed pristine PDPP3T polymer and doped spiro-OMeTAD as hole transport layer for perovskite solar cell, Data in Brief, 10.1016/j.dib.2016.02.021, 2016.
30. Xiaojing Ma, Sigdel Sudhan, Hytham Elbohy, Chuilin Lai, **Qiquan Qiao***, and Hao Fong*, Electrospun carbon nano-felt derived from alkali lignin for cost-effective counter electrodes of dye-sensitized solar cells,RSC Advances, 6(14), 11481-11487, 2016.
31. Soundaram J. Ananthakrishnan, Jacob Strain, Niharika N. Sreeramulu, Abu Mitul, Louis E. McNamara, Anastasiia Iefanova, Nathan I. Hammer*, **Qiquan Qiao***, and Hemali Rathnayake*, A Novel Donor-Donor Dyad of P3HT-block- Poly(anthracene-9,10-diyl): Synthesis, Solid-State Packing, and Electronic Properties, Journal of Polymer Science, Part A: Polymer Chemistry, 54 (18), 3032–3045, 2016.
32. Syed Afaq Ali Shah, Muhammad Hassan Sayyad*, Fazal Wahab, Khalil Ahmed Khan, Munawar Ali Munawar, Hytham Elbohy; Qiquan Qiao, Synthesis, modeling and photovoltaic properties of a benzothiadiazole based molecule for dye-sensitized solar cells, Journal of Materials Science: Materials in Electronics, 27 (5), 4501–4507, 2016.
33. Yinbin Huang, Lin Wei, Xianhui Zhao, James Julson, Changling Qiu, Shanmugapriya Dharmarajan, John Kiratu, Douglas Raynie, Ashish Dubey, Qiquan Qiao, Biofuel production using Pd/Zn synergistically catalyzed hydrodeoxygenation applied at bio-oil extracted in biomass pyrolysis process, International Journal of Energy Research, 40 (12), 1724-1730, 2016.
34. Gopalan Sai-Anand, Anantha-Iyengar Gopalan, Wang-Pill Lee, Swaminathan Venkatesan, Byoung-Ho Kang, Sang-Won Lee, Jae-Sung Lee, Qiquan Qiao and Shin-Won Kang*, Electrostatic nanoassembly of contact interfacial layer for enhanced photovoltaic performance in polymer solar cells, Solar Energy Materials and Solar Cells, 153, 148–163, 2016.
35. Nirmal Adhikari, Ashish Dubey, Eman A. Gaml, Bjorn Vaagensmith, Khan Mamun Reza, Sally Adel Abdelsalam Mabrouk, Shaopeng Gu, Jiantao Zai*, Xuefeng Qian*, **Qiquan Qiao***, Crystallization of Perovskite Film for Higher Performance Solar Cells by Controlling Water Concentration in Methyl Ammonium Iodide Precursor Solution, Nanoscale, 8, 2693-2703, 2016.
36. Venkataiah Mallam, Sanjib Baral, Santosh Gyawali, Robert Oda, Hytham Elbohy, Jeevan Nepal, Qiquan Qiao, Mahdi Baroughi, Brian Logue*, Functionalized Carboxylate Deposition for Rapid Sensitization of Dye-Sensitized Solar Cells, Solar Energy, 126, 128-136, 2015.

37. Qi Wang, Dongge Ma*, Junqiao Ding, Lixiang Wang, **Qiquan Qiao**, Huiping Jia, Bruce E. Gnade, Jason Hoshikawa-Halbert, An efficient dual-emissive-layer white organic light emitting-diode: Insight into device working mechanism and origin of color-shift, Organic Electronics, 19, 157-162, 2015.
38. Shoushuang Huang, Qingquan He, Wenlong Chen, Jiantao Zai*, **Qiquan Qiao***, Xuefeng Qian*, 3D hierarchical FeSe2 microspheres: Controlled synthesis and applications in dye-sensitized solar cells, Nano Energy, 2015, 15, 205-215.
39. Qingquan He, Shoushuang Huang, Jiantao Zai*, Nianqi Tang, Bo Li, Qiquan Qiao, Xuefeng Qian*, Efficient Counter Electrode Manufactured from Ag2S Nanocrystal Ink for Dye-Sensitized Solar Cells, Chem. Eur. J., 21: 15153–15157. doi: 10.1002/chem.20150233.
40. Min Wang, Wenlong Chen, Jiantao Zai*, Shoushuang Huang, Qingquan He, Wei Zhang, **Qiquan Qiao***, Xuefeng Qian*, Hierarchical Cu7S4 nanotubes assembled by hexagonal nanoplates with high catalytic performance for quantum dot-sensitized solar cells, Journal of Power Sources, 299, 212–220, 2015.
41. Nirmal Adhikari,Ashish Dubey, Devendra Khatiwada, Abu Mitul, Qi Wang, Swaminathan Venkatesan, Anastasiia Iefanova, Jiantao Zai*, Xuefeng Qian*, Mukesh Kumar, **Qiquan Qiao***, Interfacial study to suppress charge carrier recombination for high efficiency Perovskite solar cells, ACS Applied Materials &Interfaces, 7, 26445-26454, 2015.
42. Devendra Khatiwada, Swaminathan Venkatesan, Nirmal Adhikari, Ashish Dubey, Abu Farzan Mitul, Lal Mohammed, Anastasiia Iefanova, Seth Darling, and **Qiquan Qiao***, Efficient Perovskite Solar Cells by Temperature Control in Single and Mixed Halide Precursor Solutions and Films, Journal of Physical Chemistry C, 119, 25747-25753, 2015.
43. Qingquan He, Tianyue Qian, Jiantao Zai*, Qiquan Qiao, Shoushuang Huang, Yiran Li and Min Wang, Efficient Ag8GeS6 counter electrode prepared from nanocrystal ink for dye-sensitized solar cells, J. Mater. Chem. A, 2015, 3, 20359-20365. DOI:10.1039/C5TA05304H
44. Mukesh Kumar*, Ashish Dubey, Khan Mamun Reza, Nirmal Adhikari, **Qiquan Qiao*** and Venkat Bommisetty*, Origin of photogenerated carrier recombination at metal - active layer interface in polymer solar cells, Physical Chemistry Chemical Physics, 17, 27690 - 27697, 2015.
45. Abu Farzan Mitul, Lal Mohammad, Bjorn Vaagensmith, Ashish Dubey, Devendra Khatiwada, **Qiquan Qiao***, Optimization of interconnecting layers for double and triple junction polymer solar cells，IEEE Journal of Photovoltaics，5 (6), 1674-1679, 2015. DOI: 10.1109/JPHOTOV.2015.2478659.
46. Mukesh Kumar*, Ashish Dubey, Nirmal Adhikari, Swaminathan Venkatesan and **Qiquan Qiao***, Strategic review of secondary phases, defects and defect-complexes in kesterite CZTS-Se solar cells, Energy Environ. Sci., 8, 3134-3159, 2015.
47. Lal Mohammad, Abu Farzan Mitul, Sudhan Sigdel, Ashish Dubey, Devendra Khatiwada, Nirmal Adhikari, Hytham Elbohy and **Qiquan Qiao***, Interface modification of inverted structure PSBTBT:PC70BM solar cells for improved performance, IEEE Journal of Photovoltaics, 62, 3029-3033, 2015.
48. Lal Mohammad, Qiliang Chen, Abu Mitul, Jianyuan Sun, Devendra Khatiwada, Bjorn Vaggensmith, Cheng Zhang, Jing Li, **Qiquan Qiao***, Improved Performance for Inverted Organic Photovoltaics via Spacer between Benzodithiophene and Benzothiazole in Polymers, Journal of Physical Chemistry C, 2015,119(33), pp 18992 –19000.
49. Hytham Elbohy, Alex Aboagye, Sudhan Sigdel, Qi Wang, M Hassan Sayyad, Lifeng Zhang* and **Qiquan Qiao***, Graphene-embedded Carbon Nanofibers Decorated with Pt Nanoneedles for Higher Efficiency Dye-sensitized Solar Cells, Journal of Materials Chemistry A, 3, 17721-17727, 2015
50. Evan Ngo, Swaminathan Venkatesan, Devendra Khatiwada, Cheng Zhang, **Qiquan Qiao***, Enhanced lifetime of polymer solar cells by surface passivation of metal oxide buffer layers, ACS Applied Materials &Interfaces, 7, 16093-16100, 2015.
51. Lal Mohammad, Abu Mitul, Qi Wang, Swaminathan Venkatesan, Devendra Khatiwada, Ashish Dubey, Cheuk-Lam Ho, Wai-Yeung Wong* and **Qiquan Qiao***, Influence of nanoscale morphology on performance of inverted structure metallated conjugated polymer solar cells, IEEE Transactions on Electron Devices, 62(9), 3029-3033, 2015.

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53. Jiawei Gong, Hui Qiao*, Sudhan Sigdel, Hytham Elbohy, Nirmal Adhikari, K. Sumathy, Qufu Wei*, and **Qiquan Qiao***, Characteristics of SnO2 Nanofiber/TiO2 Nanoparticle Composite for Dye-Sensitized Solar Cells, AIP Advance, 5, 067134, 2015.
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55. Nirmal Adhikari, Devendra Khatiwada, Ashish Dubey, **Qiquan Qiao***, Device and morphological engineering of organic solar cells for enhanced charge transport and photovoltaic performance, Journal of Photonics for Energy 5 (1), 057207-057207
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57. Devendra Khatiwada, Swaminathan Venkatesan, Jihua Chen, Qiliang Chen, Nirmal Adhikari, Ashish Dubey, Abu Farzan Mitul, Lal Mohammed, Jianyuan Sun, Cheng Zhang, Linbao Luo and **Qiquan Qiao***, Morphological Evolution and its Impacts on Performance of Polymer Solar Cells, IEEE Transactions on Electron Devices, 62 (4), 1284-1290, 2015.
58. Sudhan Sigdel, Hytham Elbohy, Jiawei Gong, Nirmal Adhikari, Krishnan Sumathy, Hui Qiao, Qufu Wei, M. Hassan Sayyad, Jiantao Zai, Xuefeng Qian and **Qiquan Qiao***, Dye-Sensitized Solar Cells Based on Porous Hollow Tin Oxide Nanofibers, IEEE Transactions on Electron Devices, 62(6), 2027 - 2032, 2015.
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62. Qingquan He, Shoushuang Huang, Cheng Wang, **Qiquan Qiao***, Na Liang, Miao Xu, Wenlong Chen, Jiantao Zai*, and Xuefeng Qian*, The Role of Mott–Schottky Heterojunctions in Ag–Ag8SnS6 as Counter Electrodes in Dye-Sensitized Solar Cells, ChemSusChem, 8(5), 817-820, 2015.
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Invited Talks, Contributed Presentations, Posters and Seminars (164)

1. Qiquan Qiao, Efficient Solar-Rechargeable Lithium Ion Battery Energy Storage, East China University of Science and Technology, August 4, 2016, Shanghai, China, Invited Talk.
2. Qiquan Qiao, Simultaneously Combined Photovoltaics and Batteries, Anhui Normal University, August 1, 2016, Wuhu, Anhui, China, Invited Talk.
3. Qiquan Qiao, Nanoscale characterization of high performance Perovskite solar cells for efficient charge transport, 4th Annual International Conference on Material Science and Engineering (ICMSE2016), June 18, 2015, Guangzhou, Guangdong, China. Keynote speaker.
4. Qiquan Qiao, Perovskite Solar Cells: Air Processing and Moisture Effects, Hefei Institute of Plasma Physics, Invited Talk, June 20, 2016, Hefei, Anhui, China.
5. Qiquan Qiao, Perovskite solar cells, Anhui Polytechnic University, Invited Talk, June 23, 2016, Wuhu, Anhui, China.
6. Qiquan Qiao, Charge transport in high performance Perovskite solar cells, Shanghai Jiaotong University, Invited Talk, June 16, 2016, Shanghai, China.
7. Nirmal Adhikari, Md Nazmul Hasan, Ashish Dubey, Anastasiia Iefonova, Behzad Bahrami, Bjorn Vaagensmith, Mukesh Kumar, **Qiquan Qiao**, Nanoscale characterization of high performance Perovskite solar cell in controlled humidity for efficient charge transport, 2016 International Electro/Information Technology Conference (2016 IEEE EIT), Grand Forks, North Dakota, May 19-21, 2016.

8. Sally Mabrouk, Nirmal Adhikari, Ashish Dubey, Md Nazmul Hasan, **Qiquan Qiao**, Transparent conducting Polyaniline as an alternate hole transport material for p-i-n perovskite solar cell, 2016 International Electro/Information Technology Conference (2016 IEEE EIT), Grand Forks, North Dakota, May 19-21, 2016.
9. Ashish Dubey, Eman Gaml, Nirmal Adhikari, Khan Reza, Hamdy zeyada, **Qiquan Qiao**, Engineering of ambient processing conditions to control solvent induced intermediate phase in mixed halide organic-inorganic perovskite (CH3NH3PbI3-xClx) film for efficient planar perovskite solar cells, 2016 International Electro/Information Technology Conference (2016 IEEE EIT), Grand Forks, North Dakota, May 19-21, 2016.
10. Jiawei Gong, Sumathy Krishnan, Zhengping Zhou, **Qiquan Qiao**, Effect of Graphene Nanoplatelet Thickness on Electrochemical Performance of Dye-Sensitized Solar Cell, 2016 International Electro/Information Technology Conference (2016 IEEE EIT), Grand Forks, North Dakota, May 19-21, 2016.
11. Hytham Elbohy, **Qiquan Qiao**, Urea treated WO3 and SnO2 as cost effective and efficient counter electrodes of dye sensitized solar cells2016 International Electro/Information Technology Conference (2016 IEEE EIT), Grand Forks, North Dakota, May 19-21, 2016.
12. Anastasiia Iefanova, Devendra Khatiwada, Nirmal Adhikari, Ashish Dubey, **Qiquan Qiao**, Lead Free CH3NH3SnI3 Perovskite Thin-Film with p-Type Semiconducting Nature and Metal Like Conductivity, 2016 MRS Spring Meeting & Exhibit, March 28-April 1, 2016, Phoenix, Arizona.
13. Ashish Dubey, Nirmal Adhikari and **Qiquan Qiao**, Room temperature, air crystallized single halide perovskite nanorods for efficient planar perovskite solar cells, 2016 MRS Spring Meeting & Exhibit, March 28-April 1, 2016, Phoenix, Arizona.
14. Sally Mabrouk, Nirmal Adhikari, Ashish Dubey,Md Nazmul Hassan, **Qiquan Qiao,** High performance perovskite solar cells by doping PbI2 precursor in sequential deposition method, 2016 MRS Spring Meeting & Exhibit, March 28-April 1, 2016, Phoenix, Arizona.
15. Roya Naderi, Ashim Gurung, **Qiquan Qiao,** Reduction of PVdF-HFP penetration into polyethylene (PE) separator in Lithium ion batteries using low molecular weight ionic conductors, 2016 MRS Spring Meeting & Exhibit, March 28-April 1, 2016, Phoenix, Arizona.
16. Bjorn Vaagensmith, Eman Gaml, Khan Mamum Reza, Nick Kantack, Ashish Dubey, **Qiquan Qiao,** Acid Free Method for Conductivity Enhancement in PEDOT:PSS Thin Films as Flexible Transparent Electrodes in Perovskite Solar cells, 2016 MRS Spring Meeting & Exhibit, March 28-April 1, 2016, Phoenix, Arizona.
17. Ashim Gurung, Geetha Varnekar, Bjorn Vaagensmith, Roya Naderi, Hytham Elbohy, **Qiquan Qiao**, "Engineering of Photo-Rechargeable Storage Device - Solar Battery", 2016 GIKI-SDSU International Conference on Next Generation Energy Technologies (ICONGET2016), 01-03 APRIL, 2016, held at the GIK Institute, **invited talk**
18. Nirmal Adhikari, Ashish Dubey, Md. Hasan Nazmul, Khan Mamun Reza, Behzad Bahrami, Qiquan Qiao, "Nanoscale study of Perovskite solar cells for efficient charge transport", 2016 GIKI-SDSU International Conference on Next Generation Energy Technologies (ICONGET2016), 01-03 APRIL, 2016, held at the GIK Institute, **invited talk**
19. **Qiquan Qiao**, Ashish Dubey, Nirmal Adhikari, and Muhammad Hassan Sayyad "Measurements of Solar Cell Energy Conversion Efficiency and Quantum Efficiency" 2016 GIKI-SDSU International Conference on Next Generation Energy Technologies (ICONGET2016), 01-03 APRIL, 2016, held at the GIK Institute, **invited talk**
20. Muhammad Hassan Sayyad and **Qiquan Qiao** "Next generation efficient solar energy harvesting technologies: Challenges and Opportunities" 2016 GIKI-SDSU International Conference on Next Generation Energy Technologies (ICONGET2016), 01-03 APRIL, 2016, held at the GIK Institute.
21. Nazia Nasr, Muhammad Hassan Sayyad, Ramshah Ahmad, Sarah Sajjad, Syed Afaq Ali Shah and **Qiquan Qiao** "Doped photoanode for higher efficiency of DSSCs" 2016 GIKI-SDSU International Conference on Next Generation Energy Technologies (ICONGET2016), 01-03 APRIL, 2016, held at the GIK Institute
22. Sarrah Sajjad, Muhammad Hassan Sayyad, Syed Afaq Ali Shah, Ramshah Ahmed Toor, Nazia Nasr and **Qiquan Qiao**, "Synthesis of quantum dots for dye-sensitized solar cells",

2016 GIKI-SDSU International Conference on Next Generation Energy Technologies (ICONGET2016), 01-03 APRIL, 2016, held at the GIK Institute

23. Syed Afaq Ali Shah, Muhammad Hassan Sayyad, Nazia Nasr, Ramshah Ahmad, Sarah Sajjad and **Qiquan Qiao,** "Photovoltaic and Impedance Spectroscopic Study of Broad Absorbing Organic Dye for Higher Efficiency of DSSC." 2016 GIKI-SDSU International Conference on Next Generation Energy Technologies (ICONGET2016), 01-03 APRIL, 2016, held at the GIK Institute
24. Syed Afaq Ali Shah, Muhammad Hassan Sayyad, Nazia Nasr, Ramshah Ahmad, Sarah Sajjad and **Qiquan Qiao** " Photovoltaic and impedance spectroscopic studies on broad absorbing metallic and organic dyes based DSSCs." 2016 GIKI-SDSU International Conference on Next Generation Energy Technologies (ICONGET2016), 01-03 APRIL, 2016, held at the GIK Institute
25. Hytham Elbohy, Nazia Nasr, Ramshah Ahmed, Syed Afaq A. Shah, M. Hassan Sayyad and **Qiquan Qiao**, 'Vanadium (V) Oxide (V_2O_5) as charge recombination blocking layer to improve the dye sensitized solar cell efficiency'' 2016 GIKI-SDSU International Conference on Next Generation Energy Technologies (ICONGET2016), 01-03 APRIL, 2016, held at the GIK Institute
26. Ramshah Ahmed Toor, Muhammad Hassan Sayyad, Syed Afaq Ali Shah, Sarah Sajjad, Nazia Nasr and **Qiquan Qiao** "Study of additive on the performance enhancement of DSSC" 2016 GIKI-SDSU International Conference on Next Generation Energy Technologies (ICONGET2016), 01-03 APRIL, 2016, held at the GIK Institute
27. Ramshah Ahmed Toor, Fatima Ijaz, Munawar Ali Munawar, Muhammad Hassan Sayyad, Nazia Nasr, Syed Afaq Ali Shah, Sarah Sajjad and **Qiquan Qiao** "Novel Organic Azo Dye for stable Dye-Sensitized Solar Cell" 2016 GIKI-SDSU International Conference on Next Generation Energy Technologies (ICONGET2016), 01-03 APRIL, 2016, held at the GIK Institute
28. Qiquan Qiao, Nanofibers for Photovoltaics, International Symposium on Functional Fibrous Material 2015 (ISFFM2015), Jiangnan University, Dec 14-16, 2015, Wuxi, Jiangsu, China, **invited talk**.
29. Qiquan Qiao, Perovskite Solar Cells, Shanghai Jiaotong University, December 9, 2015, **invited seminar**.
30. Nirmal Adhikari, Ashish Dubey, Devendra Khatiwada, Abu Farzan Mitul, Lal Mohammad, Mukesh Kumar, Qiquan Qiao, Effect of humidity on electronic grain boundary properties of Perovskite solar cells using nanoscale characterization, 2015 MRS Fall Meeting & Exhibit, November 29-December 4, 2015, Boston, Massachusetts. Oral presentation.
31. Md Saleh Akram Bhuiyan, Abiral Baniya, Huitian Lu, Qiquan Qiao, Development of Graphene based Wellness Sensors, 3rd Annual Sanford -SDSU Biomedical Research Symposium, Sioux Falls, South Dakota, Nov 10, 2015.
32. Ashim Gurung and Qiquan Qiao, Simultaneous Energy Conversion and Storage using Combined Solar Cells and Lithium-ion Batteries Mini symposium on Power & Power Electronics, Prairie Room, North Dakota State University, Fargo, ND, October 28, 2015.
33. Qiquan Qiao, Center for Advanced Photovoltaics and Sustainable Energy Systems, John Deere, Fargo, ND, October 15, 2015.
34. Qiquan Qiao, Perovskite solar cells, ACS Sioux Valley Undergraduate Research Symposium, Sept 26, 2015, Sioux Falls. **Keynote talk**
35. Abu Farzan Mitul, Lal Mohammad, Nirmal Adhikari, Ashish Dubey, Devendra Khatiwada, Bjorn Vaagensmith, Sudhan Sigdel and Qiquan Qiao, Optimization of interfacial layer for double and triple junction polymer solar cell, Organic Photonics + Electronics 2015 -Part of SPIE Optics + Photonics, San Diego Convention Center, San Diego, CA , United States, 9th - 13th August 2015.
36. Rajab Suliman, Abu Farzan Mitul, Lal Mohammad, Yunpeng Pan and Qiquan Qiao, Modelling of bulk heterojunction polymer solar cell based on response surface methodology, Organic Photonics + Electronics 2015 -Part of SPIE Optics + Photonics, San Diego Convention Center, San Diego, CA , United States, 9th - 13th August 2015.
37. Qiquan Qiao, Simultaneous Energy Conversion and Storage using Combined Solar Cells and Lithium-ion Batteries, NASA GRC EPSCoR/OAI Power and Energy Forum, July 23, 2015, Ohio Aerospace Institute (OAI), Cleveland, OH. **Invited talk**
38. Zhengping Zhou and Qiquan Qiao, Novel Carbon Nanofibers for Dye-Sensitized Solar Cells (DSSCs), 2015 GIKI-SDSU International Seminar on Alternative Energy Solutions for Pakistan. May 2nd, 2015. **Invited talk.**

39. Renewable Energy Research at South Dakota State University, Ashish Dubey, Nirmal Adhikari, Swaminathan Venkatesan, Reinaldo Tonkoski, Qiquan Qiao, The first renewable Energy Day at the Capital in South Dakota, Feb 17, 2015.
40. Sudhan Sigdel, Ashish Dubey, Hytham Elbony, Alex Aboagye, David Galipeau, Lifeng Zhang, Hao Fong, and Qiquan Qiao, Dye-Sensitized Solar Cells Based on Spray-coated Carbon Nanofibers/TiO2 Nanoparticles Composite Counter Electrodes, 2014 MRS Fall Meeting &Exhibit, November 30 - December 5, 2014, Boston, Massachusetts
41. Nirmal Adhikari, Ashish Dubey, SwaminathanVenkatesan, Devendra Khatiwada, Sudhan Sigdel,QiquanQiao, Nanoscale characterization of energetically favorable offsets of interfaces and charge transport in Perovskite solar cells, 2014 MRS Fall Meeting &Exhibit, November 30 - December 5, 2014, Boston, Massachusetts
42. Energy Sustainability at South Dakota State University (Research directions), Ashish Dubey, Nirmal Adhikari , Swaminathan Venkatesan, Qiquan Qiao, 2014 MRS Fall Meeting &Exhibit, November 30 - December 5, 2014, Boston, Massachusetts.
43. Ashish Dubey, NirmalAdhikari , SwaminathanVenkatesan, Devendra Khatiwada, Qiquan Qiao, Low band gap PDPP3T polymer as hole transport material in perovskite based solar cells, 2014 MRS Fall Meeting &Exhibit, November 30 - December 5, 2014, Boston, Massachusetts
44. Qiquan Qiao, Dye Sensitized Solar Cells, IGERT Renewable Energy Symposium, Sioux Falls, South Dakota, October 4, 2014. **Invited talk**
45. Swaminathan Venkatesan, Evan C Ngo, Jihua Chen, Ashish Dubey, and Qiquan Qiao, Critical role of domain purity and interfaces for efficient charge transport in polymer solar cells, Kentucky Organic Electronic Materials Symposium, Lexington, Kentucky, June 22-24, 2014
46. Nirmal Adhikari, Ashish Dubey, Swaminathan Venkatesan, Devendra Khatiwada, Sudhan Sigdel,Qiquan Qiao, Nanoscale characterization of energetically favorable offsets of interfaces and charge transport in perovskite solar cells, Kentucky Organic Electronic Materials Symposium, Lexington, Kentucky, June 22-24, 2014
47. Ashish Dubey, Nirmal Adhikari , Swaminathan Venkatesan, Devendra Khatiwada, Qiquan Qiao, Low band gap PDPP3T polymer as hole transport material in perovskite based solar cells, Kentucky Organic Electronic Materials Symposium, Lexington, Kentucky, June 22-24, 2014
48. Bjorn Vaagensmith, Qiquan Qiao, Enhanced stability of semi-transparent silver nanowire electrodes though ZnO encapsulation, Kentucky Organic Electronic Materials Symposium, Lexington, Kentucky, June 22-24, 2014
49. Abu Farzan Mitul, Lal Mohammad, SwaminathanVenkatesan, Nirmal Adhikari, Ashish Dubey, Devendra Khatiwada, Qi Wang and Qiquan Qiao, A novel low temperature solution processed interfacial layer for double and tripple junction polymer solar cell, Kentucky Organic Electronic Materials Symposium, Lexington, Kentucky, June 22-24, 2014.
50. Qiquan Qiao, Graduate program at South Dakota State University, Hefei, Anhui, China, July 9, 2014. **Invited seminar**
51. Qiquan Qiao, Development of Cost Effective Solar Cells, University of Science and Technology of China, Hefei, Anhui, China, July 15, 2014**. Invited seminar**
52. Qiquan Qiao, Development of Cost Effective Solar Cells, Changchun Institute of Applied Chemistry, Changchun, Jilin, China, July 11, 2014. **Invited seminar**.
53. Qiquan Qiao, Development of Cost Effective Solar Cells, Jilin University, Jilin, Changchun, China, July 10, 2014. **Invited seminar.**
54. Qiquan Qiao, Engineering of active layer nanomorphology for improved charge transport in polymer solar cells, Hefei Institutes of Physical Science, The Chinese Academy of Science, Hefei, Anhui, China, June 25, 2014. **Invited talk.**
55. Qiquan Qiao, Development of Cost Effective Organic Solar Cells, International Nanophotonics and Nanoenergy Conference (INPEC), Ewha Womans University (EWU), Seoul, Korea, July 1st to July 3rd, 2014, **Invited talk.**
56. Qiquan Qiao, Engineering of active layer nanomorphology for improved charge transport in polymer solar cells, Seminar at INRS (Institut national de la recherche scientifique), May 26, 2014, Montreal, Canada.
57. Qiquan Qiao, Polymer Solar Cells, Photonics North 2014, Montreal, Canada, May 28-30, 2014, **invited talk and session chair.**
58. Ashish Dubey, Swaminathan Venkatesan, Shaopeng Gu, Nirmal Adhikari, Cheng Zhang, Qiquan Qiao, Ring protected chromophore with high open-circuit voltage for solution processed organic solar cells, MRS Spring Meeting, 2014.

59. Qiquan Qiao, Graduate program at South Dakota State University and Internship Opportunities for Undergraduates, International Symposium on DSSCs & Industrial Exhibition, Faculty of Engineering Sciences, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Pakistan, December 13-14, 2013. **Plenary talk**
60. Qiquan Qiao, New Photoanode made of TiO2 nanofibers and nanoparticles for high efficiency dye-sensitized solar cells, International Symposium on DSSCs & Industrial Exhibition, Faculty of Engineering Sciences, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Pakistan, December 13-14, 2013. **Invited talk**
61. Qiquan Qiao, Enhanced performance in dye-sensitized solar cells via carbonnanofibers - platinum composite counter electrodes, International Symposium on DSSCs & Industrial Exhibition, Faculty of Engineering Sciences, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Pakistan, December 13-14, 2013. **Invited talk**
62. Qiquan Qiao, Vanadium Oxide as new Charge Recombination Blocking Layer for High Efficiency Dye-Sensitized Solar Cells, International Symposium on DSSCs & Industrial Exhibition, Faculty of Engineering Sciences, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Pakistan, December 13-14, 2013. **Invited talk.**
63. Olusegun Adebanjo, Purna P. Maharjan, Qiliang Chen, Lianjie Zhang & Qiquan Qiao, A new conjugated copolymer based on dodecyloxybenzothiadiazole for application in photovoltaic solar cells, 23rd National Science Foundation Experimental Program to Stimulate Competitive Research (NSF EPSCoR) Conference to be held in Nashville, Tenn., Nov. 3-7, 2013.
64. Alex Aboagye, Hytham Ibrahim Elbohy, Ajit Kelkar, Qiquan Qiao, Lifeng Zhang, Carbon Nanofibers with Surface-attached Platinum Nanoparticles as Cost-effective and Efficient Counter Electrode for Dye-sensitized Solar Cells, NanoTek 2013, December 2 - 4, 2013, Las Vegas (USA)
65. Swaminathan Venkatesan, Qiquan Qiao, Jihua Chen, Nirmal Adhikari, Evan C Ngo, Role of Nanoscale Domain Size, Purity and Interfaces on the Charge Transport and Recombination Dynamics of Organic Bulk Heterojunction Solar Cells, MRS Fall Meeting, Boston, December 1-6, 2013.
66. Qiquan Qiao, Development of Cost Effective Organic Solar Cells, International Conference on Electrical Information and Communication Technology, Dec 19-21, 2014, KUET, Khulna, Bangladesh. **Keynote speaker.**
67. Qiquan Qiao, International Conference on Small Science (ICSS 2013), 15 to 18 December 2013, Red Rock Casino Resort and Spa, Las Vegas, NV, USA. **Invited talk.**
68. Jianyuan Sun, Lianjie Zhang, Ashish Dubey, Swaminathan Venkatesan, Ting-Yu Lin, Logan P. Sanow, Yu-Chueh Hung, Andrew Sykes, Hongshan He, Qiquan Qiao, Cheng Zhang, Ring-protected small molecules for organic photovoltaics, SPIE Organic Photovoltaic XIV, San Diego, California, United States, August 25, 2013
69. Qiquan Qiao, Organic Solar Cells, 3M Science and Engineering Faculty Day, June 12-13, 2013, St Paul, MN. **Invited talk.**
70. Olusegun Adebanjo, Purna P. Maharjan, Qiliang Chen, Lianjie Zhang & Qiquan Qiao, A new conjugated copolymer based on dodecyloxybenzothiadiazole for application in photovoltaic solar cells, SD EPSCoR All Investigator Meeting, Chamberlein, SD, May 29-31, 2013.
71. Bjorn Vaagensmith, Ashish Dubey, Swaminathan Venkatesan, Qiquan Qiao, Simple continuous polyol method for synthesis of controlled silver nanowires, SD EPSCoR All Investigator Meeting, Chamberlein, SD, May 29-31, 2013.
72. Hytham Elbohy, Qiquan Qiao, David W Galipeau, Vanadium (V) Oxide (V2O5) as charge recombination blocking layer to improve the dye sensitized solar cell efficiency, SD EPSCoR All Investigator Meeting, Chamberlein, SD, May 29-31, 2013.
73. Amit Thapa, Yong Zhao, Prashant Poudel, Ashish Dubey, Hao Fong, Qiquan Qiao, Platinum incorporated titanium carbide nanofibers as an efficient counter electrode in DSSC, SD EPSCoR All Investigator Meeting, Chamberlein, SD, May 29-31, 2013
74. Nirmal Adhikari, Swaminathan Venkatesan, Purna Maharjan, Prajwal Adhikary, Qiquan Qiao, Transient photoconductivity measurement in bulk heterojunction solar cells: tradeoff between charge carrier collection and recombination time, SD EPSCoR All Investigator Meeting, Chamberlein, SD, May 29-31, 2013
75. Evan Ngo, Qiquan Qiao Fully Solution Processed Polymer Solar Cells, SD EPSCoR All Investigator Meeting, Chamberlein, SD, May 29-31, 2013
76. Swaminathan Venkatesan, Evan Ngo, Jihua Chen, Prajwal Adhikary, Qiquan Qiao, Importance of Structural Ordering on Optoelectronic Properties of PDPP3T Films, SD EPSCoR All Investigator Meeting, Chamberlein, SD, May 29-31, 2013

77. Qiquan Qiao, Organic Solar Cells, Anqing Normal University, Anqing, Anhui, China, May 24, 2013. **Invited talk.**
78. Qiquan Qiao, Organic Solar Cells and their Potential Applications in Window PVs, University Relations Energized, Agilent University Research Fair 2013, California, May 2013.
79. Qiquan Qiao, Organic Solar Cells, Institute of Plasma Physics, Hefei, Anhui, China, May 22, 2013. **Invited talk.**
80. Qiquan Qiao, Organic Solar Cells, Chongqing Institute of Green and Intelligent Technology, Chongqing, China, May 20, 2013. **Invited talk.**
81. Qiquan Qiao, Kelvin Probe Force Microscopic Study of Nanoscale Interlayers in Double Junction Organic Solar Cells, 2nd International Congress on Advanced Materials (AM2013),Jiangsu China, 16-19 May 2013. **Invited talk.**
82. Qiquan Qiao, Organic Solar Cells, Sigma Xi Annual Banquet, April 22, 2013, SDSU. **Keynote talk.**
83. Qiquan Qiao, Organic solar cells, 3rd Annual UND-NDSU-SDSU Engineering Research Summit, April 23, 2013, South Dakota State University, Brookings, SD.
84. Prajwal Adhikary & Swaminathan Venkatesan & Qiquan Qiao, Enhanced Performance of PDPP3T/PCBM Solar Cells with UV Ozone Treated Inverted Structure, 3rd Annual UND-NDSU-SDSU Engineering Research Summit, April 23, 2013, South Dakota State University, Brookings, SD.
85. Swaminathan Venkatesan, Nirmal Adhikari, Jihua Chen, Evan Ngo, Qiquan Qiao, Importance of Structural Ordering on Optoelectronic Properties of PDPP3T Films, 3rd Annual UND-NDSU-SDSU Engineering Research Summit, April 23, 2013, South Dakota State University, Brookings, SD.
86. Qiquan Qiao, Organic solar cells, ABE 792 S01 (72021): Renewable Energy Engineering, April 15 and 17, 2013, **Invited speaker.**
87. Qiquan Qiao and Prajwal Adhikary, Enhanced Performance of PBDTTT-C-T/PC70BM Solar Cells with UV Ozone Treated Inverted Structure, 214th ACS Meeting, April 6-12, 2013, New Orleans, LA. **Invited talk.**
88. Swaminathan Venkatesan, Nirmal Adhikari, Jihua Chen, Evan Ngo, Qiquan Qiao, Importance of Structural Ordering on Optoelectronic Properties of PDPP3T Films, MRS Spring Meeting, April 1-5 2013, San Francisco, California.
89. Qiquan Qiao, Kelvin Probe Force Microscopic Study of Nanoscale Interlayers in Double Junction Organic Solar Cells, 3rd Academic and Industry Nanotechnolgy Conference, St. Cloud State University, Minesota, Feb 28, 2013, **invited talk.**
90. Prajwal Adhikary & Swaminathan Venkatesan & Qiquan Qiao, Enhanced Performance of PDPP3T/PCBM Solar Cells with UV Ozone Treated Inverted Structure, 3rd Academic and Industry Nanotechnolgy Conference, St. Cloud State University, Minesota, Feb 28, 2013, **invited talk.**
91. Qiquan Qiao, Kelvin probe force microscopic study of nanoscale interlayers in double junction organic solar cells, Second international conference on small science, Dec 16-19, 2012, Orlando, Fl, **invited talk.**
92. Qiquan Qiao, Organic Solar Cells and their Potential Applications in Window PVs, 3M Science and Engineering Faculty Day, Twin Cities, MN, Oct 31 – Nov 1, 2012, **invited talk**.
93. Swaminathan Venkatesan, Qiliang Chen, Purna Maharjan and Qiquan Qiao, Novel low bandgap benzothiadiazole based polymers for photovoltaic applications, SPIE Organic Photovoltaics, Aug 2012, San Diego, CA.
94. Shake Ebrahim , Qiquan Qiao, Ashish Douby, Moataz Soliman, CdHgTe quantum dots for applications in solar cells, Inter-Continental Advanced Materials for Photonics (I-CAMP) Summer School on renewable and sustainable energy, July 16 – Aug 11, 2012, Boulder, Colorado, USA
95. Qiquan Qiao, Cost Effective Solar Cells – Polymer Solar Cells and Dye-sensitized Solar Cells, University of Science and Technology of China, Hefei National Laboratory for Physical Sciences at the Microscale, China, July 2012, **invited seminar.**
96. Qiquan Qiao, Cost Effective Solar Cells – Polymer Solar Cells and Dye-sensitized Solar Cells, Nanjing Science and Technology University, Materials Science and Technology, China, July 2012, **invited seminar**.
97. Qiquan Qiao, Cost Effective Solar Cells – Polymer Solar Cells and Dye-sensitized Solar Cells, Southeast University, Physics Department, China, July 2012, **invited seminar**.

98. Qiquan Qiao, Cost Effective Solar Cells – Polymer Solar Cells and Dye-sensitized Solar Cells, Nanjing University, Physics Department, China, July 2012, **invited seminar**.
99. Qiquan Qiao, Cost Effective Solar Cells – Polymer Solar Cells and Dye-sensitized Solar Cells, Shanghai Jiaotong University, China, July 2012, **invited seminar**.
100. Qiquan Qiao, Cost Effective Solar Cells – Polymer Solar Cells and Dye-sensitized Solar Cells, Fudan University, China, July 2012, invited seminar.
101. Qiquan Qiao, Carbon nanofibers for dye-sensitized solar cells. International Conference of Young Researchers on Advanced Materials (ICYRAM), International Union of Materials Research Societies (IUMRS), Singapore, July 2012, **keynote speakers and panelist.**
102. Mahbube Khoda Siddiki, David W. Galipeau, Qiquan Qiao, Nb2O5 as a New Electron Transport Layer for Double Junction Polymer Solar Cells, NSF/SD EPSCoR All Investigator Meeting, Chamberlain, SD, June 4-7, 2012
103. Qiliang Chen, Purna P. Maharjan, Olusegun Adebanjo & Qiquan Qiao, New Conjugated Polymer for Single Bulk Heterojunction Polymer Solar cell, NSF/SD EPSCoR All Investigator Meeting, Chamberlain, SD, June 4-7, 2012
104. Olusegun Adebanjo, Lianjie Zhang, Purna P. Maharjan, Cheng Zhang & Qiquan Qiao, Single Bulk-Heterojunction Polymer Solar Cell based on PTOT-DT Conjugated Polymer, NSF/SD EPSCoR All Investigator Meeting, Chamberlain, SD, June 4-7, 2012
105. Prajwal Adhikary & Swaminathan Venkatesan & Qiquan Qiao, Enhanced Performance of PDPP3T/PCBM Solar Cells with UV Ozone Treated Inverted Structure, NSF/SD EPSCoR All Investigator Meeting, Chamberlain, SD, June 4-7, 2012
106. Swaminathan Swaminathan, Qiliang Chen and Qiquan Qiao, Optoelectronic Characterization of Novel Low Bandgap Polymer for Photovoltaic application, NSF/SD EPSCoR All Investigator Meeting, Chamberlain, SD, June 4-7, 2012
107. Qiquan Qiao, Organic solar cells, 2nd Annual UND-NDSU-SDSU Engineering Research Summit, April 23, 2012, University of North Dakota
108. Swaminathan Venkatesan and Qiquan Qiao, Materials and Devices Design for Organic Photovoltaics, US-Egypt Joint Workshop on Solar Energy Systems and Materials, Cairo, Egypt, March 11-14, 2012.
109. Qiquan Qiao, "Materials and Device Design in Single and Multijunction Organic Solar Cells", First European-Mediterranean Conference on Material and Renewable Energies (EMCMRE-1), Nov 21-25, 2011, Marrakech-Morocco, **invited talk.**
110. Qiquan Qiao, "Materials and Devices Design for High Efficiency Organic Solar Cells",US-Morocco Workshop on Nano-Materials and Renewable Energies, Al Akhawayn University in Ifrane, Morocco, November 17 – 19, 2011, **invited talk.**
111. Shangke Pan, Tingting Xu, Swaminathan Venkatesan, Jing Li, Qiliang Chen, Qiquan Qiao, "Direct Growth of CdSe Nanorods on Transparent Conductive Oxide Substrates for Organic Solar Cells", Richmond, Virginia, November 7-10, 2011.
112. Tingting Xu, Swaminathan Venkatesan, Yu Xie, Mahbube Siddiki, Qiquan Qiao, "Charge Transport of ZnO nanostructured Organic/Inorganic Hybrid Solar Cells", Richmond, Virginia, November 7-10, 2011.
113. Qiquan Qiao, "Development of Cost Effective Solar Cells: Dye-Sensitized Solar Cells and Polymer Photovoltaics", Shanghai Institute of Ceramics, Chinese Academy of Sciences, Oct 25, 2011, Shanghai, China, **invited talks.**
114. Qiquan Qiao, Development of Cost Effective Solar Cells: Polymer Solar Cells and Dye-Sensitized Solar Cells, Hefei Institute of Physical Sciences, Chinese Academy of Sciences, Hefei China, Oct 21 2011, invited talks.6. Qiquan Qiao, "Development of Cost Effective Solar Cells: Dye-Sensitized Solar Cells and Polymer Photovoltaics", Dalian University of Technology, Dalian, China, Oct 20, 2011, **invited talks.**
115. Qiquan Qiao, Prakash Joshi, and Prashant Poudel, Novel Carbon Nanofibers for Efficient Dye-Sensitized Solar Cells, Low Carbon Earth Summit-2011 (LCES-2011), Dalian, China, Oct 20 2011, **invited talk.**
116. Qiquan Qiao, "Development of Cost Effective Solar Cells: Dye-Sensitized Solar Cells and Polymer Photovoltaics", Dalian Institute of Chemical Physics (DICP), Chinese Academy of Sciences, Oct 19, 2011, Dalian, China, **invited talks.**
117. Qiquan Qiao, Novel Nanofibers for Dye-Sensitized Solar Cells, North Dakota State University, Oct 4, 2011, **invited talk.**
118. Prajwal Adhikary, Swaminathan Venkatesan, Mahbube Siddiki, Tingting Xu, David Galipeau, and Qiquan Qiao, "Fabrication of Inverted Polymer Organic Solar cells with

ZnO as Electron Transport Layer", ND-SD Joint EPSCoR Conference, Fargo, ND, Oct 4, 2011.

119. Prashant Poudel, Lifeng Zhang, Prakash Joshi, Swaminathan Venkatesan, David Galipeau, Hao Fong, and Qiquan Qiao, "Electrospun Carbon Nanofiber/Platinum Counter Electrode for Efficient Dye-Sensitized Solar Cells", ND-SD Joint EPSCoR Conference, Fargo, ND, Oct 4, 2011.
120. Zhihe Zhao and Qiquan Qiao, "Device Simulation of Bulk Heterojunction Solar cells using Monte Carlo Model Coupled with Continuum Model", ND-SD Joint EPSCoR Conference, Fargo, ND, Oct 4, 2011.
121. Buddhi Sagar Lamsal, Swaminathan Venkatesan, Qi Hua Fan, Qiao Qiquan, Yung Huh, David W Galipeau, Effect of annealing on the optoelectronic properties of Indium Tin Oxide, ND-SD Joint EPSCoR Conference, Fargo, ND, Oct 4, 2011.
122. Qiquan Qiao, "Materials and Devices Design for High Efficiency Single and Multijunction Organic Solar Cells", 22nd Space Photovoltaic Research and Technology (SPRAT) Conference (SPRAT XXII), Ohio Aerospace Institute, Cleveland, OH, Sept 20-22, 2011, **invited talk**.
123. Swaminathan Venkatesan, Buddhi S. Lamsal, Qihua Fan, and Qiquan Qiao, "Nanoscale Electrical Characterization of Sputter-Deposited ITO Films", 22nd Space Photovoltaic Research and Technology (SPRAT) Conference (SPRAT XXII), Ohio Aerospace Institute, Cleveland, OH, Sept 20-22, 2011.
124. Tingting Xu and Qiquan Qiao, "ZnO Nanorods/Polymer Interface Modification for Efficient Hybrid Solar Cells", 22nd Space Photovoltaic Research and Technology (SPRAT) Conference (SPRAT XXII), Ohio Aerospace Institute, Cleveland, OH, Sept 20-22, 2011.
125. Ahmed Abdelrahem, Prakash Joshi, Prashant Poudel, Lifeng Zhang, Hao Fong, and Qiquan Qiao, "Carbon Nano-Fiber/Nano-Particle Composite Film For Dye Sensitized Solar Cell (DSSC)", 2011 NPURC End of Summer Symposium, Ponca State Park in Ponca , NE, July 29, 2011.
126. Christian Tchamda, Tingting Xu, Qiliang Chen, Choumini Balasanthira, James D Hoefelmeyer, and Qiquan Qiao, "P3HT-Based Hybrid Solar Cells with TiO2 Nanorods", 2011 NPURC End of Summer Symposium, Ponca State Park in Ponca , NE, July 29, 2011.
127. Mahbube K Siddiki, Qiquan Qiao, "Novel Recombination Layer for Polymer Multijunction Solar Cell", 37th IEEE Photovoltaic Specialist Conference (PVSC), Seattle, Washington, June 19-24, 2011.
128. Qiquan Qiao, "Organic Photovoltaics for Renewable Energy", 2011 CMOS Emerging Technologies Meeting, Whistler, British Columbia, Canada, June 14-17, 2011, **invited talk**.
129. Qiquan Qiao, "Novel Tandem Polymer Photovoltaics using Printing or Roll-to-Roll Processing", South Dakota EPSCoR AAAS PANS Review Meeting, Chamberlain, SD, June 2-3, 2011.
130. Tingting Xu, Yu Xie, Qiliang Chen, David Galipeau, Qiquan Qiao, "Novel Approach to Fabricate P3HT/ZnO Nanorod Polymer Hybrid Solar Cells", South Dakota EPSCoR AAAS PANS Review Meeting, Chamberlain, SD, June 2-3, 2011.
131. Jing Li, Yu Xie, and Qiquan Qiao, "Linker Effects on the Design of Conjugated Copolymers", South Dakota EPSCoR AAAS PANS Review Meeting, Chamberlain, SD, June 2-3, 2011.
132. Mahbube Khoda Siddiki, D. W. Galipeau, Qiquan Qiao, "Novel interfacial layer for polymer double junction solar cells", South Dakota EPSCoR AAAS PANS Review Meeting, Chamberlain, SD, June 2-3, 2011.
133. Prakash Joshi, Lifeng Zhang, Qiliang Chen, David Galipeau, Hao Fong, and Qiquan Qiao, "Electrospun Carbon Nanofibers for Dye-Sensitized Solar Cells", South Dakota EPSCoR AAAS PANS Review Meeting, Chamberlain, SD, June 2-3, 2011.
134. Yu Xie, Pavel Dutta, Jikai Du, Venkat Bommisetty, David Galipeau, Qiquan Qiao, "Spin-Casting Solvent Mediated Microscale Associated with Nanoscale Surface Morphology Engineering on P3HT/PCBM Blend Films" South Dakota EPSCoR AAAS PANS Review Meeting, Chamberlain, SD, June 2-3, 2011.
135. Qiquan Qiao, "Organic Solar Cells", 2011 Engineering Research Summit, Fargo, ND, April 29, 2011.
136. Diane M Hinkens, Qiquan Qiao, Malika Jeffries-EL, and Seth B Darling, “Investigation of the properties of the p-n junction of donor-acceptor block copolymer fragments”, 241st ACS National Meeting, Anaheim, CA, March 27-31, 2011.

137. Qiquan Qiao, “Materials and device design for organic photovoltaics”, Weizmann Institute of Science, Rehovot, Israel, Nov 3, 2010.
138. Qiquan Qiao, “New materials and device design for organic photovoltaics”, North Caronia State University, Materials Science and Engineering Department Seminar, Raleigh, NC, Sept 24, 2010.
139. Tingting Xu, Qiliang Chen, Dai-Hong Lin, Hsueh-Yu Wu, Ching-Fuh Lin and Qiquan Qiao, “Electropolymerization of Conjugate Polymer in Vertical Aligned ZnO Nanowires”, SPIE Organic Photovoltaics Conference, San Diego, CA, August 2010.
140. Tingting Xu, Jing Li, Heather Rohwer, James D. Hoefelmeyer, David Galipeau and Qiquan Qiao, “in-Situ polymerization of P3HT and TiO2 nanocomposites for solar cells”, Presented at 35rd IEEE Photovoltaic Specialists Conference, Honolulu, HI, Date: June 21-25, 2010.
141. Qiquan Qiao “PANS Grand Opportunity - Cost Effective Tandem Polymer Photovoltaics using Printing or Roll-to-Roll Processing”, South Dakota SD EPSCoR Annual Meeting, Chamberlain, SD, (June, 2010).
142. Mahbube Khoda Siddiki, Yu Xie, Qiliang Chen, Jing Li, Diane Hinkens, D. W. Galipeau, Qiquan Qiao, “Tandem Polymer Solar Cells”, Presented at SD EPSCoR Annual Meeting, Chamberlain, SD, Date: June 13-15, 2010.
143. Yu Xie, Yong Li, Qiquan Qiao, Rabin Dhakal, Zhiling Zhang, David Galipeau, Xingzhong Yan, “Time-resolved Femtosecond Fluorescence Study of P3HT/PCBM Blend Films”, Presented at SD EPSCoR Annual Meeting, Chamberlain, SD, Date: June 13-15, 2010.
144. Prakash Joshi, Lifeng Zhang, Hao Fong, Qiliang Chen, David Galipeau, and Quiquan Qiao, “Electrospun Carbon Nanofiber Counter Electrode for Dye-Sensitized Solar Cells” , Presented at SD EPSCoR Annual Meeting, Chamberlain, SD, Date: June 13-15, 2010.
145. Qiquan Qiao, “Nano and Organic Photovoltaic Materials and Devices for Renewable Energy” The State University of New York at Buffolo, Department of Electrical Engineering Seminar, Buffalo, New York, May 3, 2010.
146. Pavel Dutta, Yu Xie, Dorin Cengher, Jing Li, David Galipeau, Qiquan Qiao and Venkat Bommisetty “Effect of Solvent on the Nanoscale Phase Separation and Surface Potential Distribution in P3HT/PCBM Blends”, MRS Spring Meeting, April 5 - 9, 2010, San Francisco, CA.
147. Diane Hinkens, Seth Darling, and Qiquan Qiao, “Studies of the Molecular p-n Junction Formed with an n-type and p-type Polymer Fragment: Theoretical and Experimental”, Argonne Center for Nanoscale Materials (CNM) Users Meeting, Oct. 5-7, 2009, Argonne, Chicago, IL.
148. Yu Xie, Pavel Dutta, Dorin Cengher, Venkat Bommisetty, Jing Li, David Galipeau, and Qiquan Qiao, “Solvent effect on the morphology of P3HT/PCBM films”Argonne Center for Nanoscale Materials (CNM) Users Meeting, Oct. 5-7, 2009, Argonne, Chicago, IL.
149. Mahbube Siddiki, Qiquan Qiao, et al. poster presentation, Argonne Center for Nanoscale Materials (CNM) Users Meeting, Oct. 5-7, 2009, Argonne, Chicago, IL.
150. Prakash Joshi and Qiquan Qiao, “Dye-Sensitized Solar Cells Using Low Cost Nanocarbon as Counter Electrode” The 21st Space Photovoltaic Research and Technology (SPRAT) Conference, NASA Glenn Research Center, Cleveland, OH, October 6, 2009.
151. Prakash Joshi, Lifeng Zhang, Hao Fong, David Galipeau, and Qiquan Qiao, “PbS Quantum Dots Embedded TiO2 Nanofibers for Dye Sensitized Solar Cells”, Presented at 34th IEEE Photovoltaic Specialists Conference, Philadelphia, PA, Date: June 7-12, 2009.
152. Yu Xie, Pavel Dutta, Dorin Cengher, Venkat Bommisetty, Jing Li, David Galipeau, and Qiquan Qiao, “Solvent effect on the morphology of P3HT/PCBM films”, Presented at SPIE Organic Organic Photovoltaics, San Diego, CA, Aug 2009.
153. Diane Hinkens, Seth Darling, and Qiquan Qiao, “Studies of the Molecular p-n Junction Formed with an n-type and p-type Polymer Fragment: Theoretical and Experimental”, Presented at SPIE Organic Photovoltaics, San Diego, CA, Aug 2009.
154. Qiquan Qiao, “Organic Solar Cells”, The Northern Plains Undergraduate Research Center (NPURC) Workshop, University of South Dakota, Vermillion, SD, May 28 2009. **Invited speaker.**

155. Yu Xie, Shaoyan Li, Ting Zhang, Prakash Joshi, Hao Fong, Mike Ropp, David Galipeau, Qiquan Qiao. Dye-Sensitized Solar Cells based on ZnO Nanorod Arrays. SPIE Photonic Devices + Applications, 10-14 August 2008, San Diego, CA
156. Y. Xie, P. Joshi, M. Ropp, D. Galipeau, Y. You, and Q. Qiao. Core-Modified Porphyrins as Sensitizers for Dye-Sensitized Solar Cells. in 33rd IEEE Photovoltaic Specialists Conference. San Diego, CA, May 11-16, 2008.
157. Q. Qiao, J.T. Mcleskey Jr, Y. Xie, Y. You, P. Joshi, M. Ropp, and D. Galipeau. "Polymer Photovoltaics from All-Water-Solution Processing". in 33rd IEEE Photovoltaic Specialists Conference. San Diego, CA, May 11-16, 2008.
158. Prakash Joshi, Xie Yu, Jeremiah Mwaura, Mike Ropp, David Galipeau, and Q. Qiao. "Carbon Nanoparticle Catalyst for Dye-Sensitized Solar Cells". in 33rd IEEE Photovoltaic Specialists Conference. San Diego, CA, May 11-16, 2008.
159. Santosh, V. Bommisetty, Q. Qiao, M. Ropp, "Electrolytically Deposited Titanium Dioxide Films for Dye Sensitized Solar Cell Applications". 33rd IEEE Photovoltaic Specialists Conference, San Diego, May 11–16, 2008.
160. Prakash Joshi, Xie Yu, Jeremiah Mwaura, Mike Ropp, David Galipeau, Qiquan Qiao. Carbon Nanoparticles for Counter Electrode Catalyst in Dye-Sensitized Solar Cells. MRS spring meeting, March 17, 2008, San Francisco, CA.
161. Qiquan Qiao, "Organic Light Emitting Diodes (OLED) for Plastic Displays", Presented at Daktronics Inc, Brookings, SD, January 30, 2008.
162. Qiquan Qiao, "Organic Photovoltaics", Midwest state and Argonne Workshop, Argonne, IL, January 14 2008.
163. J. R. Reynolds, K. S. Schanze, H. Jiang, Y.-G. Kim, J. Mei, K. Ogawa, Q. Qiao and P. Taranekar, "Variable Gap Conjugated, Organometallic and Hyperbranched Polymers in Hybrid Photovoltaic Devices". MRS 2007 Fall Meeting, Symposium H: Nanostructured Solar Cells, November 28, 2007.
164. Qiquan Qiao, "Organic Solar Cells", SDSU Department of Electrical Engineering Seminar, Brookings, SD, Oct 16, 2007.
165. Qiquan Qiao, "Organic Solar Cells", CPSS fall meeting, SDSU Student Union, Brookings, SD, Oct 16, 2007. **Invited speaker.**
166. P. Walke, D. Friedrichs, V. Bommisetty, and Q. Qiao, "Growth of TiO2 nanotubes for dye-sensitized solar cells", ND/SD 6th Biennial Joint State Conference, Fargo, North Dakota, Sept. 2007.
167. Q. Qiao and J. T. McLeskey, Jr., "Organic solar cells from a water soluble polymer and nanocrystalline TiO2", presented at Virginia Nanotech 2006, Newport News, VA, June 11-13, 2006.
168. James T. McLeskey, Jr. and Qiquan Qiao, "Hybrid Solar Cells from Water-Soluble Polymers", The 9th International Conference on Solar Energy and Applied Photochemistry [SOLAR '06], Cairo, Egypt, January 2006 (invited keynote address).
169. Qiquan Qiao and James T. McLeskey, low-cost solar cells using water-soluble polymers, presented at International Solar Energy Conference (ISEC 2006), Denver, Colorado, July 8-13, 2006.
170. Qiquan Qiao "Green organic solar cells from a water-soluble polymer and nanocrystalline TiO2", University of Rochester, Department of Chemistry, Rochester, NY, June22, 2006.
171. Qiquan Qiao "Green organic solar cells from a water-soluble polymer and nanocrystalline TiO2", University of Arizona, Department of Chemistry, Tucson, AZ, May 2006.
172. Qiquan Qiao and James T. McLeskey, Jr., "PTEBS applications in photovoltaic devices," presented at the 17th Workshop on Quantum Solar Energy Conversion, Quantsol 2005, Rauris, Austria, March 14-18, 2005.
173. Qiquan Qiao, James Beck, James T. McLeskey, Photovoltaic devices from self-doped polymers. presented at Optics & Photonics 2005 (SPIE 2005), August 2005, San Diego, CA.
174. Qiquan Qiao, James Beck, James T. McLeskey, Optimization of Photovoltaic Devices from Layered PTEBS and Nanocrystalline TiO2. presented at the 208th ECS Meeting 2005 (ECS 2005). Los Angeles, California from October 16 - October 21, 2005.
175. J. A. Rud, L. S. Lovell, J. W. Senn, Q. Qiao, and J. T. McLeskey, Jr., Water soluble polymer/carbon nanotube bulk heterojunction solar cells, presented at the International Conference on the Physics, Chemistry and Engineering of Solar Cells (SCELL-2004), May 13 – 15, 2004, Badajoz, Spain.

Serve as paper reviewers for the following journals (36)

1. IEEE Transactions of Electron Devices
2. American Chemical Society Journal of Physical Chemistry (A, B, and C)
3. American Chemical Society Chemistry of Materials
4. MRS Proceedings
5. Journal of Materials Chemistry
6. Electrochemical Communication
7. Thin Solid Films
8. ACS Applied Materials and Interfaces
9. Physical Chemistry and Chemical Physics
10. Journal of Materials Chemistry
11. Chemical Communications
12. Energy and Environmental Science
13. Nanoscale
14. Solar Energy Materials and Solar Cells
15. Journal of Applied Physics
16. ACS Nano
17. Advanced Energy Materials
18. Chemistry A European Journal
19. ChemSusChem
20. Electrochimica Acta
21. Global journal of energy technology research
22. Hindawi Publishing
23. IEEE Photovoltaic Specialists Conference (PVSC)
24. International Journal of Green Energy
25. Journal of Inorganic and Organometallic Polymers and Material
26. Journal of Physical Chemistry
27. Journal of Thermal Analysis and Calorimetry
28. Langmuir
29. Materials Science and Engineering B
30. MDPI Energies
31. Nano Energy
32. Nanotechnology
33. Organic Electronics
34. Polymer
35. Science of Advanced Materials
36. scientific report

Serve as proposal reviewers for the following agents (11)

1. National Science Foundation (NSF)
2. Department of Energy (DOE)
3. Defense Threat Reduction Agency (DTRA)
4. American Association for the Advancement of Science (AAAS)
5. American Chemical Society Petroleum Research Fund (ACS-PRF)
6. Louisiana Board of Regents
7. Oak Ridge Associated Universities
8. NASA postdoctoral program
9. Argonne National Laboratory Center for Nanoscale Materials user program
10. US-Israel Binational Science Foundation
11. US-Egypt Joint Science and Technology Fund Program

Editorships of journals or other learned publications (4)

1. Served as Editorial Board Member of ISRN Renewable Energy
2. Served as Editorial Board Member of Global Journal of Energy Technology Research Updates, Avanti Publishers
3. Served as Springer Editorial Board Member for Encyclopedia of Nanotechnology
4. Served as editor on CRC Press book of Organic Solar Cells

General chair, conference organizer or session chair (12)

1. Conference organizer, together with Prof Hassan Sayyad, 2013 GIKI-SDSU International Symposium on Design of Dye-sensitized Solar Cells for Cost effective

Energy Harvesting, GIK Institute of Engineering Sciences and Technology, Topi, District Swabi, Khyber Pakhtunkhwa, Pakistan, Dec 13-15, 2013.

2. Session chair, 2013 GIKI-SDSU International Symposium on Design of Dye-sensitized Solar Cells for Cost effective Energy Harvesting, GIK Institute of Engineering Sciences and Technology, Topi, District Swabi, Khyber Pakhtunkhwa, Pakistan, Dec 13-15, 2013.
3. Session chair, 2nd International Congress on Advanced Materials (AM2013), Zhengjiang, Jiangsu, China, May 16-19, 2013
4. Session chair, 2014 International Nanophotonics and Nanoenergy Conference (INPEC), Seoul, Korea, July 1-3, 2014
5. Session chair, Photonics North 2014, Montreal, Canada, May 28-30, 2014
6. Session chair, 2015 International Symposium on Functional Fibrous Material (ISFFM2015), Jiangnan University, Wuxi, Jiangsu, China, Dec 14-16, 2015.
7. Conference organizer, together with Prof Hassan Sayyad, 2016 GIKI-SDSU International Conference on Next Generation Energy Technologies, GIK Institute of Engineering Sciences and Technology, Topi, District Swabi, Khyber Pakhtunkhwa, Pakistan, April 1-3, 2016.
8. Conference organizer, 2016 Workshop on solar cell characterization technology, GIK Institute of Engineering Sciences and Technology, Topi, District Swabi, Khyber Pakhtunkhwa, Pakistan, April 1-3, 2016.
9. Session chair, 2016 GIKI-SDSU International Conference on Next Generation Energy Technologies, GIK Institute of Engineering Sciences and Technology, Topi, District Swabi, Khyber Pakhtunkhwa, Pakistan, April 1-3, 2016.
10. Session organizer and Chair, Session 2A: Solar Cells and Batteries, 2016 International Electro/Information Technology Conference, Grand Forks, North Dakota, USA, May 19-21, 2016
11. General chair, 2016 International Conference on Material Science and Engineering [ICMSE2016], June 17-19, 2016 in Guangzhou, Guangdong, China.
12. Technical Program Committee and Keynote Speaker, 2016 International Conference on Material Science and Engineering [ICMSE2016], June 17-19, 2016 in Guangzhou, Guangdong, China.

News & Reports on Qiao group research

1. Sioux Falls news http://siouxfalls.suntimes.com/sxf-news/7/136/26516/improving-organic-solar-cell-efficiency-essential-to-providing-clean-abundant-energy (2015)
2. SDSU news http://www.sdstate.edu/news/articles/organic-solar-cell-efficiency.cfm (2015)
3. SDSU J Lohr College of Engineering News http://www.sdstate.edu/engr/research/activities/awards/2011-awards.cfm (2012)
4. SDSU College of Engineering News www.sdstate.edu/news/articles/qiaoaward.cfm (2010)
5. X-journal news (2010). http://x-journals.com/2010/award-will-help-researcher-build-efficient-organic-solar-cells/qiquan-qiao/
6. South Dakota State University News (2010)
7. South Dakota EPSCoR News (2009) (http://www.sdepscor.org/newsletter_fallwinter10_edition.pdf)
8. NSF discovery webpage (2008) (http://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=112862&org=EPSC)
9. South Dakota EPSCoR update (2008) http://sdepscor.org/PDF%20files/Newsletters/summer%20newsletter%2008%20web.pdf
10. ScienceDaily (2008) (http://www.sciencedaily.com/releases/2008/08/080821212854.htm)
11. News at the state of South Dakota (2008) http://www3.sdstate.edu/SDSU/NewsDetail45702.cfm?ID=46,6591
12. Nanowerk News (2008) http://www.nanowerk.com/news/newsid=6864.php
13. Knk Decoration News (2008) http://knkdecoration.blogspot.com/
14. Environmental Protection News (2008) http://www.eponline.com/articles/66926/
15. Chemical and Engineering News (2007) http://pubs.acs.org/email/cen/html/071807134454.html
16. SPIE Newsroom (2006) http://spie.org/x8746.xml?ArticleID=x8746

17. Advanced Ceramics Reports (2005) (http://www.performance-materials.net/secure/assets/i20050811.543911_42faf8a71080f.pdf)
18. Nanotechweb (2005) http://nanotechweb.org/cws/article/tech/22482/1/Quiquan_Qiao

Courses Taught

- EE 735 - Fundamental of Photovoltaics
- EE 4/560 - Sensors and Measurements
- EE 260 - Electronic Materials
- EE 760 - Advanced Electronic Materials
- EE 692 - Organic Electronics/ Photovoltaics

Collaborators

• Sheila Bailey	NASA Glenn
• Michael Bendikov	Weizmann Institute of Sciences, Israel
• Jihua Chen	Oak Ridge National Laboratory
• Seth Darling	Argonne National Laboratory
• Hao Fong	South Dakota School of Mines and Technology
• James D Hoefelmeyer	University of South Dakota
• Chaoyang Jiang	University of South Dakota
• Brian Logue	South Dakota State University
• Linbao Luo	Hefei University of Technology, China
• Greg Nelson	OLAMco Solar
• Oleg G. Poluektov	Argonne National Laboratory
• Steven Smith	South Dakota School of Mines and Technology
• Alevtina L. Smirnova	South Dakota School of Mines and Technology
• Moataz Soliman	Alexandria University, Egypt
• Shangfeng Yang	University of Science and Technology of China
• Mingtai Wang	Hefei Institute of Plasma Physics, China
• Zhengtao Zhu	South Dakota School of Mines and Technology

Graduate advisor (1)

- Prof. James T McLeskey, Virginia Commonwealth University, Richmond, VA

Postdoctoral advisors (2)

- Prof. John R. Reynolds, currently in Chemistry & Biochemistry, Materials Science & Engineering, Georgia Institute of Technology.
- Prof. Kirk K.S. Schanze, University of Florida, Gainesville, FL.

Served as dissertation advisor for Ph.D. students (23)

1. Yu Xie, graduated, (University of Kansas)
2. Prakash Joshi, graduated, (Nepal)
3. Mahbube Khoda Siddiki, graduated, (University of Missouri)
4. Tingting Xu, graduated, (Northwestern Polytechnical University, China)
5. Swaminathan Venkatesan (PhD), graduated, (University of Houston)
6. Olusegun Adebanjo (PhD), graduated
7. Anastasiia Iefanova (PhD), graduated
8. Ashim Gurung (PhD), graduated
9. Nirmal Adhikari (PhD), graduated
10. Ashish Dubey (PhD), graduated
11. Bjorn Vaagensmith (PhD), graduated
12. Sharmin Haq (PhD), transferred to another university
13. Hytham Elbohy (PhD), current student
14. Sally Mabrouk (PhD), current student
15. Behzad Bahrami (PhD), current student
16. Reza Khan Mamun (PhD), current student
17. Eman A. Gaml (current visiting PhD student)
18. Salem Saad Mohammed Abdulkarim (PhD), current student
19. Ke Chen (PhD), current student
20. Rajesh Pathak (PhD), current student
21. Ashraful Haider Chowdhury (PhD), current student
22. MD Tawabur Raman (PhD), current student
23. Ahmed Almagroos (PhD), current student

Served as thesis advisor for MS students (22)

1. Amit Thapa (T-mobile)
2. Prashant Poudel (Texas)
3. Porna Maharjan (Nepal)
4. Prajwal Adhikary (Solarmer Energy, Inc)
5. Abu Mitul (MS), graduated
6. Sudhan Sigdel (MS), graduated
7. Lal Mohammad (MS), graduated
8. Santosh Gyawali (MS), graduated
9. Upendra Neupane (MS), graduated
10. Bjorn Vaagensmith (MS), graduated
11. Devendra Khatiwada (MS), graduated
12. Ravi Kasaudhan (MS), transferred to SDSU computer science program
13. Roya Naderi (MS), graduated
14. Geetha Varnekar (MS), current student
15. Md. Saleh Akram Bhuiyan (MS), current student
16. Md. Nazmul Hasan (MS), current student
17. Bigyan Khanal (MS), current student
18. Abiral Baniya (MS), current student
19. Faisal Kabir (MS), current student
20. Santosh Chapagain (MS), current student
21. Basanta Chalise (MS), current student
22. Ataul Mamun (MS), current student

Served as advisor for visiting scholars, postdoc research associates (15)

1) Wenjin Yue (visiting scholar)
2) Mao Liang (visiting scholar)
3) Dr. Ravindra R. Kamble (visiting scholar)
4) Wenfeng Zhang (visiting scholar)
5) Mukesh Kumar (Indian Institute of Technology Ropar)
6) Zhengping Zhou (Virginia Tech)
7) Qi Wang (University of Michigan)
8) Diane Hinkens (SGI-USA)
9) Jing Li (Chongqing Institute of Green and Intelligent Technology, China)
10) Qiliang Chen (Han Energy, China)
11) Yue Song (Xidian University, China)
12) Shangke Pan (Shanghai Institute of Ceramics, China),
13) Shaker Atia (Alexandria university, Egypt)
14) Zhihe Zhao (unknown current institution)
15) Lianjie Zhang (South China University of Technology, China)

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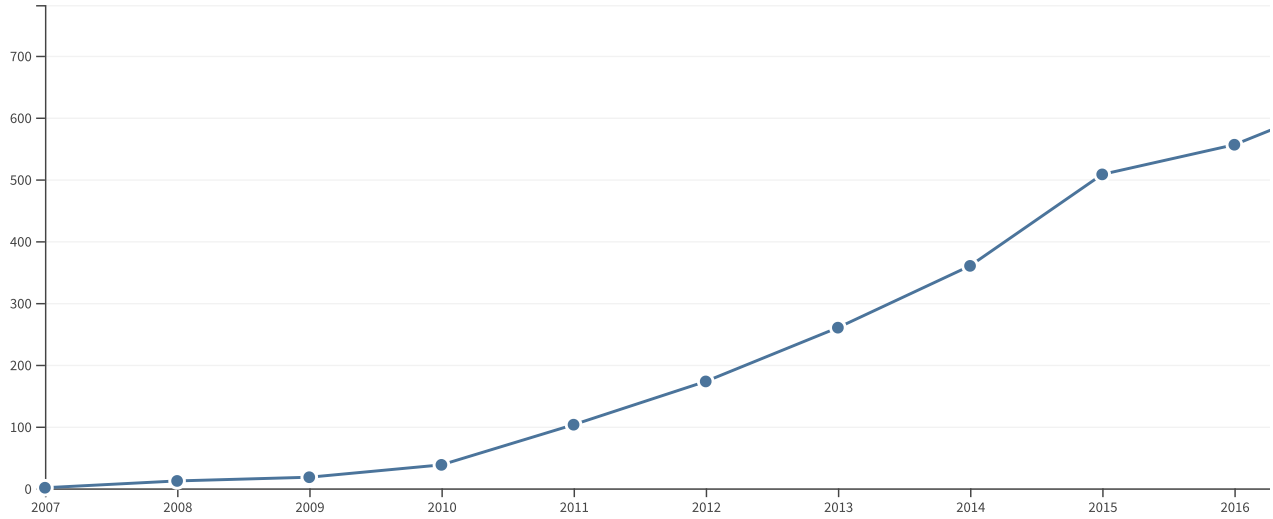

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	Dye-Sensitized Solar Cells By: Joshi, Prakash; Zhang, Lifeng; Chen, Qiliang; et al. ACS APPLIED MATERIALS & INTERFACES Volume: 2 Issue: 12 Pages: 3572-3577 Published: DEC 2010								
2.	**Conjugated polymer-inorganic semiconductor hybrid solar cells** By: Xu, Tingting; Qiao, Qiquan ENERGY & ENVIRONMENTAL SCIENCE Volume: 4 Issue: 8 Pages: 2700-2720 Published: AUG 2011	34	17	26	13	4	215	23.89
3.	**Review on dye-sensitized solar cells (DSSCs): Advanced techniques and research trends** By: Gong, Jiawei; Sumathy, K.; Qiao, Qiquan; et al. RENEWABLE & SUSTAINABLE ENERGY REVIEWS Volume: 68 Pages: 234-246 Part: 1 Published: FEB 2017	0	0	25	99	67	191	63.67
4.	**Dye-sensitized solar cells based on low cost nanoscale carbon/TiO2 composite counter electrode** By: Joshi, Prakash; Xie, Yu; Ropp, Mike; et al. ENERGY & ENVIRONMENTAL SCIENCE Volume: 2 Issue: 4 Pages: 426-429 Published: 2009	17	18	9	11	2	156	14.18
5.	**Strategic review of secondary phases, defects and defect-complexes in kesterite CZTS-Se solar cells** By: Kumar, Mukesh; Dubey, Ashish; Adhikari, Nirmal; et al. ENERGY & ENVIRONMENTAL SCIENCE Volume: 8 Issue: 11 Pages: 3134-3159 Published: 2015	1	24	45	55	24	149	29.80
6.	**Composite of TiO2 nanofibers and nanoparticles for dye-sensitized solar cells with significantly improved efficiency** By: Joshi, Prakash; Zhang, Lifeng; Davoux, Daren; et al. ENERGY & ENVIRONMENTAL SCIENCE Volume: 3 Issue: 10 Pages: 1507-1510 Published: 2010	21	14	17	12	6	149	14.90
7.	**Hyperbranched conjugated polyelectrolyte bilayers for solar-cell applications** By: Taranekar, Prasad; Qiao, Qiquan; Jiang, Hui; et al. JOURNAL OF THE AMERICAN CHEMICAL SOCIETY Volume: 129 Issue: 29 Pages: 8958-+ Published: JUL 25 2007	13	2	2	6	0	111	8.54
8.	**A Non-Doped Phosphorescent Organic Light-Emitting Device with Above 31% External Quantum Efficiency** By: Wang, Qi; Oswald, Iain W. H.; Yang, Xiaolong; et al. ADVANCED MATERIALS Volume: 26 Issue: 48 Pages: 8107-8113 Published: DEC 23 2014	24	21	21	20	8	94	15.67
9.	**A review of polymer multijunction solar cells** By: Siddiki, Mahbube Khoda; Li, Jing; Galipeau, David; et al. ENERGY & ENVIRONMENTAL SCIENCE Volume: 3 Issue: 7 Pages: 867-883 Published: 2010	15	7	5	4	0	91	9.10
10.	**Femtosecond Time-Resolved Fluorescence Study of P3HT/PCBM Blend Films** By: Xie, Yu; Li, Yong; Xiao, Lixin; et al. JOURNAL OF PHYSICAL CHEMISTRY C Volume: 114 Issue: 34 Pages: 14590-14600 Published: SEP 2 2010	10	11	5	5	2	84	8.40

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