

Biographical Sketch— Jiaxing Huang

Materials Science & Engineering
Northwestern University
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PROFESSIONAL PREPARATION

- Miller Research Fellow (2004-2007), University of California, Berkeley
Sponsor: Prof. Peidong Yang
- PhD in Chemistry (2000-2004), University of California, Los Angeles
Advisor: Prof. Richard B. Kaner
- BS in Chemical Physics (1995-2000), University of Science and Technology of China
Research Advisor: Prof. Yi Xie

APPOINTMENTS

2013- Associate Professor of Materials Science and Engineering, Northwestern University
2011-13 Morris E. Fine Junior Professor in Materials and Manufacturing
2007-13 Assistant Professor of Materials Science and Engineering, Northwestern University

HONORS AND AWARDS

- Humboldt Research Award (Alexander von Humboldt-Foundation, 2016)
- Highly Cited Researcher in Chemistry (Thomson Reuters, 2014, 2015, 2016)
- Most Cited Researcher in Materials Science and Engineering (Scopus, Elsevier, 2016)
- JSPS Fellow (Japan Society for the Promotion of Science, 2016)
- Guggenheim Fellow (John Simon Guggenheim Memorial Foundation, 2014-2015)
- Fissan-Pui-TSI Award (International Aerosol Research Assembly, 2014)
- AVS Prairie Chapter Early Career Award (American Vacuum Society, 2014)
- SME Gustav Olling Outstanding Young Manufacturing Engineer Award (Society of Manufacturing Engineers, 2013)
- Inaugural ISEN Early Career Investigator Award (Initiative for Sustainability and Energy at Northwestern, 2011)
- Morris E. Fine Chair in Materials and Manufacturing (Northwestern University, 2011-2013)
- Searle Center for Teaching Excellence Junior Fellow (Northwestern University, 2011-2012)
- Sloan Research Fellow (The Alfred P. Sloan Foundation, 2011)
- NSF CAREER Award (National Science Foundation, 2010-2015)
- Miller Research Fellow (UC-Berkeley, 2004-2007)
- National Starch and Chemical Award for Outstanding Graduate Research in Polymer Science and Engineering (POLY/PMSE divisions, American Chemical Society, 2006)
- IUPAC Young Chemists Prize (The International Union of Pure & Applied Chemistry, 2005)

SELECTED PROFESSIONAL SERVICES

- Member of editorial/advisory board, *Carbon* (American Carbon Society, Elsevier), *Journal of Materials Chemistry - A* (Royal Society of Chemistry), *Chemistry of Materials* (American Chemical Society), *Applied Materials Today* (Elsevier)
- Guest editor of special issues for *Journal of Solid State Chemistry* (Elsevier, 2015), *Advanced Drug Delivery Review* (Elsevier, 2016)

- Co-editor (with Alexander A. Balandin, Andre Geim and Dan Li), MRS symposium proceeding Vol 1344 “Functional 2D Layered Materials - From Graphene to Topological Insulators”, Cambridge University Press, 2011, ISBN:9781605113210
- Member of international advisory committee, New Diamond and Nano Carbons Conference (2013, 2016); Member of international scientific committee, International Conference of Young Researchers on Advanced Materials (IUMRS-ICYRAM) (2014)
- Symposium organizer for ACS Meeting (2012-2014), MRS meeting (2011), Pacificchem (2015), ICMCTF (Sponsored by AVS Advanced Surface Engineering Division, 2013-2017), The 5th International Conference on Multifunctional, Hybrid and Nanomaterials (Lisboa, Portugal, 2017)
- External reviewer for President’s Science Award, Singapore
- Chair of proposal review panel, European Science Foundation

PATENTS AND INVENTION DISCLOSURES

- From Northwestern research: 3 US and 1 Korean patents issued, many more pending
- From prior research: 4 US patents issued

PEER-REVIEWED PUBLICATIONS

Google scholar profile: <http://scholar.google.com/citations?user=sbfLJqUAAAAJ&hl=en>

Selected Publications at Northwestern (* Denotes corresponding author)

1. Andrew R. Koltonow and Jiaying Huang* “Two-dimensional Nanofluidics” *Science*, **2016**, 351, 1395-1396
2. Xuan Dou, Andrew R. Koltonow, Xingliang He, Hee Dong Jang, Qian Wang,* Yip-Wah Chung* and Jiaying Huang* “Self-dispersed Crumpled Graphene Balls in Oil for Friction and Wear Reduction” *Proceeding of National Academy of Sciences*, **2016**, 13, 1528–1533 (Cover article, featured in *C&EN*, *Fortune.com*)
3. Jiayan Luo, Jun Gao, Aoxuan Wang, and Jiaying Huang* “Bulk Nanostructured Materials Based on Two-Dimensional Building Blocks: A Roadmap” *ACS Nano*, **2015**, 9, 9432-9436 (Invited Perspective)
4. Huali Nie, Xuan Dou, Zhihong Tang, Hee Dong Jang and Jiaying Huang* “High-Yield Spreading of Water-Miscible Solvents on Water for Langmuir-Blodgett Assembly” *Journal of the American Chemical Society*, **2015**, 137,10683-10688 (Featured in *C&EN*, H.L. Nie featured in *Women in Nanoscience*)
5. Xiaoding Wei, Lily Mao, Rafael A. Soler-Crespo, Jeffrey T. Paci, Jiaying Huang,* SonBinh T. Nguyen* and Horacio D. Espinosa* “Plasticity and Ductility in Graphene Oxide - A Novel Mechanochemically Induced Damage-Tolerance Mechanism”, *Nature Communications*, **2015**, 6, 8029
6. Jiao-Jing Shao, Kalyan Raidongia, Andrew R. Koltonow and Jiaying Huang* “Self-assembled Two-dimensional Nanofluidic Proton Channels with High Thermal Stability” *Nature Communications*, **2015**, 6, 7602 (Featured in *Materials360.com*)
7. Hee Dong Jang,* Hyekyoung Kim, Hankwon Chang, Jiwoong Kim, Kee Min Roh, Ji-Hyuk Choi, Bong-Gyoo Cho, Eunjun Park, Hansu Kim,* Jiayan Luo and Jiaying Huang*

- “Aerosol-Assisted Extraction of Silicon Nanoparticles from Wafer Slicing Waste for Lithium Ion Batteries” *Scientific Reports*, **2015**, 5, 9431 ([Featured in C&EN](#))
8. Stanley S. Chou,* Yi-Kai Huang, Jaemyung Kim, Bryan Kaehr, Brian M. Foley, Ping Lu, Conner Dykstra, Patrick E. Hopkins, C. Jeffrey Brinker, Jiaying Huang* and Vinayak P. Dravid* “Controlling the Metal to Semiconductor Transition of MoS₂ and WS₂ in Solution” *Journal of the American Chemical Society*, **2015**, 137, 1742-1745 ([In JACS Spotlights](#))
 9. Rodrigo A. Bernal, Amin Aghaei, Sangjun Lee, Seunghwa Ryu, Kwonnam Sohn, Jiaying Huang, Wei Cai, and Horacio Espinosa* “Intrinsic Bauschinger Effect and Recoverable Plasticity in Pentatwinned Silver Nanowires Tested in Tension” *Nano Letters*, **2015**, 15, 139-146 ([Cover article](#))
 10. Che-Ning Yeh, Kalyan Raidongia, Jiaojing Shao, Quan-Hong Yang and Jiaying Huang* “On the Origin of the Stability of Graphene Oxide Membrane in Water” *Nature Chemistry*, **2015**, 7, 166-170 ([Featured in Science, C&EN, Materials Today, C.N. Yeh featured in Women in Nanoscience](#))
 11. Alexander J. Smith, Chen Wang, Dongning Guo, Cheng Sun* and Jiaying Huang* “Repurposing Blu-ray Movie Discs as Low-cost, Quasi-random Nanoimprinting Templates for Photon Management” *Nature Communications*, **2014**, 5, 5517 ([Featured in Nature, C&EN, Scientific American, The Washington Post, NBC, PBS, NPR](#))
 12. Cheng Wei Lin, Zhibo Zhao, Jaemyung Kim and Jiaying Huang* “Pencil Drawn Strain Gauges and Chemiresistors on Paper” *Scientific Reports*, **2014**, 4, 3812 ([Featured in Materials360, Fox News-Tech Take](#))
 13. Deepti Krishnan, Kalyan Raidongia, Jiaojing Shao and Jiaying Huang* “Graphene Oxide Assisted Hydrothermal Carbonization of Carbon Hydrates” *ACS Nano*, **2014**, 8, 449-457
 14. Alvin T. L. Tan, Jaemyung Kim, Jing-Kai Huang, Lain-Jong Li and Jiaying Huang* “Seeing 2D Sheets on Arbitrary Substrates by Fluorescence Quenching Microscopy” *Small*, **2013**, 9, 3253-3258 ([Frontispiece article](#))
 15. Jaemyung Kim, Segi Byun, Alexander J. Smith, Jin Yu, and Jiaying Huang* “Enhanced Electrocatalytic Properties of Transition Metal Dichalcogenides Sheets by Spontaneous Gold Nanoparticle Decoration”, *Journal of Physical Chemistry Letters*, **2013**, 4, 1227-1232 ([Featured in Chemistry World](#))
 16. Stanley S. Chou, Mrinmoy De, Jaemyung Kim, Conner Dykstra, Jiaying Huang*, Vinayak P. Dravid* “Ligand conjugation of chemically exfoliated MoS₂”, *Journal of the American Chemical Society*, **2013**, 134, 16725-16733
 17. Jiayan Luo, Hee Dong Jang and Jiaying Huang* “Effect of Sheet Morphology on the Scalability of Graphene-Based Ultracapacitors” *ACS Nano*, **2013**, 7, 1464-1471 ([Featured in C&EN](#))
 18. Jiayan Luo, Jaemyung Kim and Jiaying Huang* “Material Processing of Chemically Modified Graphene: Some Challenges and Solutions” *Accounts of Chemical Research*, **2013**, 46, 2225-2234 ([Invited, cover article](#))
 19. Jaemyung Kim, Laura J. Cote and Jiaying Huang* “Two Dimensional Soft Material: New Faces of Graphene Oxide” *Accounts of Chemical Research*, **2012**, 45, 1356-1364

20. Kalyan Raidongia and Jiaying Huang* “Nanofluidic Ion Transport through Reconstructed Layered Materials” *Journal of the American Chemical Society*, **2012**, 134, 16528-16531 (Featured in *Materials Today*, *IEEE Spectrum*)
21. Stanley S. Chou, Mrinmoy De,* Jiaying Luo, Vincent M. Rotello, Jiaying Huang* and Vinayak P. Dravid* “Nanoscale Graphene Oxide (nGO) as Artificial Receptors: Implications for Biomolecular Interactions and Sensing” *Journal of the American Chemical Society*, **2012**, 134, 16725-16733
22. Jian Yao Zheng, Yongli Yan, Xiaopeng Wang, Yong Sheng Zhao,* Jiaying Huang and Jianning Yao* “Wire-on-wire Growth of Fluorescent Organic Heterojunctions” *Journal of the American Chemical Society*, **2012**, 134, 2880-2883 (Featured in *Chemistry World*)
23. Jiaying Luo, Xin Zhao, Jinsong Wu, Hee Dong Jang, Harold H. Kung and Jiaying Huang* “Crumpled Graphene-Encapsulated Si Nanoparticles for Lithium Ion Battery Anodes” *Journal of Physical Chemistry Letters*, **2012**, 3, 1824-1829
24. Vincent C. Tung, Jen-Hsien Huang, Jaemyung Kim, Alexander J. Smith, Chih-Wei Chu, Jiaying Huang* “Towards Solution Processed All-Carbon Solar Cells: A Perspective” *Energy & Environmental Science*, **2012**, 5, 7810-7818 (Inside cover article)
25. Jiaying Luo, Vincent C. Tung, Hee Dong Jang, and Jiaying Huang* “Graphene Oxide based Conductive Glue as Binder for Ultracapacitor Electrodes” *Journal of Materials Chemistry*, **2012**, 22, 12993-12996
26. Kwonnam Sohn, Yoon Joo Na, Hankwon Chang, Ki-Min Roh, Hee Dong Jang and Jiaying Huang* “Capillary Molding Route to Oil Absorbing Graphene Capsules” *Chemical Communications*, **2012**, 48, 5968-5970 (Cover article, featured in *Chemistry World*)
27. Deepti Krishnan, Franklin Kim, Jiaying Luo, Rodolfo Cruz-Silva, Laura J Cote, Hee Dong Jang and Jiaying Huang* “Energetic Graphene Oxide: Challenges and Opportunities” *Nano Today*, **2012**, 7, 137-152 (Invited)
28. Vincent C. Tung, Jaemyung Kim and Jiaying Huang* “Graphene Oxide:Single Walled Carbon Nanotube Based Interfacial Layer for All-solution-processed Multijunction Solar Cells in Both Regular and Inverted Geometries” *Advanced Energy Materials*, **2012**, 2, 299-303 (Frontispiece article)
29. Jiaying Luo, Hee Dong Jang, Tao Sun, Li Xiao, Zhen He, Alexandros P. Katsoulidis, Mercouri G. Kanatzidis, J. Murray Gibson, and Jiaying Huang* “Compression and Aggregation-resistant Particles of Crumpled Soft Sheets” *ACS Nano*, **2011**, 5, 8943–8949 (Cover article, featured in *Nature*, *C&EN*, *Materials Today* and *Chemistry & Industry*)
30. Jaemyung Kim, Vincent C. Tung and Jiaying Huang* “Water Processable Graphene Oxide:Single Walled Carbon Nanotube Composite as Anode Modifier for Polymer Solar Cells” *Advanced Energy Materials*, **2011**, 1, 1052-1057 (Frontispiece article)
31. Ken C. Pradel, Kwon Nam Sohn and Jiaying Huang* “Cross-flow Purification of Nanowires” *Angewandte Chemie International Edition*, **2011**, 50, 3412-3416 (Named a “hot paper”, frontispiece article, and featured in *ChemViews Magazine*)
32. Tae Hee Han, Yi-Kai Huang, Alvin T. L. Tan, Vinayak P. Dravid* and Jiaying Huang* “Steam Etched Porous Graphene Oxide Network for Chemical Sensing” *Journal of the*

- American Chemical Society*, **2011**, 133, 15264-15267 (Selected for *JACS* and *Analytical Chemistry* virtual issue on “Nanomaterials in Analytical Chemistry”)
33. Vincent C. Tung, Jaemyung Kim, Laura J. Cote, and Jiaying Huang* “Sticky Interconnect for Solution-Processed Tandem Solar Cells” *Journal of the American Chemical Society*, **2011**, 133, 9262-9265 (Featured in *Nanowerk.com*)
 34. Vincent C. Tung, Jen-Hsien Huang, Ian Tevis, Franklin Kim, Jaemyung Kim, Chih-Wei Chu, Samuel I. Stupp, and Jiaying Huang* “Surfactant-free Water-processable Photoconductive All-carbon Composite” *Journal of the American Chemical Society*, **2011**, 133, 4940-4947 (Featured in *C&EN*, and *Fast Company*)
 35. Laura J. Cote, Jaemyung Kim, Vincent C. Tung, Jiayan Luo, Franklin Kim, and Jiaying Huang* “Graphene Oxide as Surfactant Sheets” *Pure and Applied Chemistry*, **2011**, 83, 96-110 (Cover article, invited Perspective) Chinese translation published in *Industrial Materials* (工業材料雜誌) by ITRI, Taiwan
 36. Jiayan Luo, Laura J. Cote, Vincent C. Tung, Alvin T. L. Tan, Philip E. Goins, Jinsong Wu and Jiaying Huang* “Graphene Oxide Nanocolloids” *Journal of the American Chemical Society*, **2010**, 132, 17667-17669 (Featured in *Materials Today*)
 37. Laura J. Cote, Jaemyung Kim, Zhen Zhang, Cheng Sun* and Jiaying Huang* “Tunable Assembly of Graphene Oxide Surfactant Sheets: Wrinkles, Overlaps and Impacts on Thin Film Properties” *Soft Matter*, **2010**, 6, 6096-6101 (Inside cover article)
 38. Franklin Kim, Jiayan Luo, Rodolfo Cruz-Silva, Laura J. Cote, Kwonnam Sohn and Jiaying Huang* “Self-Propagating Domino-Like Reactions in Oxidized Graphite” *Advanced Functional Materials*, **2010**, 20, 2867-2873 (Frontispiece article, featured in *C&EN*, *Chemistry & Industry* and highlighted in *Journal of Materials Chemistry*)
 39. Jaemyung Kim, Franklin Kim, Laura J. Cote, Wa Yuan, Kenneth R. Shull and Jiaying Huang* “Graphene Oxide Sheets at Interfaces” *Journal of the American Chemical Society*, **2010**, 132, 8180-8186 (Featured in *Nature Chemistry*)
 40. Jaemyung Kim, Franklin Kim and Jiaying Huang* “Seeing Graphene-Based Sheets” *Materials Today*, **2010**, 13, 28-38 (Invited Review, cover article, a top 25 Hot Article)
 41. Franklin Kim, Laura J. Cote and Jiaying Huang* “Graphene Oxide: Surface Activity and Two Dimensional Assembly” *Advanced Materials*, **2010**, 22, 1954-1958 (Invited)
 42. Jaemyung Kim, Laura J. Cote, Franklin Kim and Jiaying Huang* “Visualizing Graphene Based Sheets by Fluorescence Quenching Microscopy” *Journal of the American Chemical Society*, **2010**, 132, 260-267 (Featured in *Nature Chemistry*, *C&EN*)
 43. Yongsheng Zhao, Peng Zan, Jaemyung Kim, Cheng Sun and Jiaying Huang* “Patterned Growth of Vertical Organic Nanowire Waveguide Arrays” *ACS Nano*, **2010**, 4, 1630-1636
 44. Yongsheng Zhao, Jinsong Wu and Jiaying Huang* “Vertical Organic Nanowire Arrays: Controlled Synthesis and Chemical Sensors” *Journal of the American Chemical Society*, **2009**, 131, 3158-3159
 45. Kwon Nam Sohn, Franklin Kim, Ken Pradel, Jinsong Wu, Yong Peng, Feimeng Zhou and Jiaying Huang* “Construction of Evolutionary Tree for Morphological Engineering of Nanoparticles” *ACS Nano*, **2009**, 3, 2191-2198 (Featured in *Nature Nanotechnology*)

46. Laura J. Cote, Rodolfo Cruz-Silva and Jiaxing Huang* “Flash Reduction and Patterning of Graphite Oxide and Its Polymer Composite” *Journal of the American Chemical Society*, **2009**, 131, 11027-11032 (Featured in *C&EN* and its 2009 end of year review, *Physics World*)
47. Laura J. Cote, Franklin Kim and Jiaxing Huang* “Langmuir-Blodgett Assembly of Graphite Oxide Single Layers” *Journal of the American Chemical Society*, **2009**, 131, 1043-2049 (Cover article, featured in *C&EN*)
48. Franklin Kim, Kwon Nam Sohn, Jinsong Wu and Jiaxing Huang* “Chemical Synthesis of Au Nanowires in Acidic Solutions” *Journal of the American Chemical Society*, **2008**, 130, 14442-14443
49. Shabnam Virji, Bruce H. Weiller, Jiaxing Huang*, Heather Shepherd, Phil Hausmann, Tanya Faltens, Richard Blair, Sarah Tolbert* and Richard B. Kaner* “Construction of a Polyaniline Nanofiber Gas Sensor” *Journal of Chemical Education*, **2008**, 158, 1102-1104

Selected Publications Prior to Northwestern

Postdoctoral research: Dewetting instability and patterning of nanostructures

1. Ruoxue Yan, Peter Pausauskie, Jiaxing Huang and Peidong Yang “Direct Photonic-Plasmonic Coupling and Routing in Single Nanowires” *Proceedings of the National Academy of Sciences*, **2009**, 106, 21045-21050
2. Jiaxing Huang, Rong Fan, Stephen Connor and Peidong Yang “One Step Patterning of Aligned Nanowire Arrays by Programmed Dip Coating” *Angewandte Chemie International Edition*, **2007**, 119, 2466-2469
3. Jiaxing Huang, Andrea R. Tao, Stephen Connor and Peidong Yang “A General Method for Assembling Single Colloidal Particle Lines”, *Nano Letters*, **2006**, 6, 524-529
4. Jiaxing Huang, Franklin Kim, Andrea R. Tao, Stephen Connor and Peidong Yang “Spontaneous Formation of Nanoparticle Stripe Patterns via Dewetting” *Nature Materials*, **2005**, 4, 896-900

Graduate research: Conducting polymer nanostructures

5. [Book chapter] Jiaxing Huang and Richard B. Kaner “Polyaniline Nanofibers: Syntheses, Properties and Applications” Chapter 7 (page 1-49) for *Handbook of Conducting Polymers*, 3rd Ed., Edited by Skotheim T.A. and Reynolds, J.R. CRC Press, **2007**
6. Jiaxing Huang* “Syntheses and Applications of Conducting Polymer Polyaniline Nanofibers” *Pure and Applied Chemistry*, **2006**, 78, 15-27 (invited Review)
7. Jiaxing Huang and Richard B. Kaner “The Intrinsic Nanofiber Morphology of Polyaniline” *Chemical Communications*, **2006**, (4), 367-376 (invited Feature Article, cover article)
8. Ling Ma, Julie Hamdi, Jiaxing Huang, and M. Frederick Hawthorne “Camouflaged Carborane Amphiphiles: Synthesis and Self-Assembly” *Inorganic Chemistry*, **2005**, 44, 7249-7258
9. Jiaxing Huang, James A. Moore, J. Henry Acquaye and Richard B. Kaner “A Mechanochemical Route to the Conducting Polymer Polyaniline” *Macromolecules*, **2005**, 38, 317-321

10. Ricky J. Tseng, Jiaxing Huang, Jianyong Ouyang, Jun He, Richard B. Kaner and Yang Yang "Polyaniline Nanofiber/Gold Nanoparticle Non-Volatile Memory" *Nano Letters*, **2005**, 5, 1077-1080
11. Shabnam Virji, Christina Baker, Jiaxing Huang, Richard B. Kaner and Bruce H. Weiller "Polyaniline Nanofiber Composites with Metal Salts: Chemical Sensors for Hydrogen Sulfide" *Small*, **2005**, 1, 624-627
12. Jiaxing Huang and Richard B. Kaner "Flash Welding of Conducting Polymer Nanofibers" *Nature Materials*, **2004**, 3, 783-786
13. Jiaxing Huang and Richard B. Kaner "Nanofiber Formation in the Chemical Polymerization of Aniline: A Mechanistic Study" *Angewandte Chemie International Edition*, **2004**, 43, 5941-5945
14. Jiaxing Huang and Richard B. Kaner "A General Chemical Route to Polyaniline Nanofibers" *Journal of the American Chemical Society*, **2004**, 126, 851-855
15. Jiaxing Huang, Shabnam Virji, Bruce H. Weiller and Richard B. Kaner "Nanostructured Polyaniline Sensors" *Chemistry-A European Journal*, **2004**, 10, 1314-1319 (invited Concept Article)
16. Shabnam Virji, Jiaxing Huang, Richard B. Kaner and Bruce H. Weiller "Polyaniline Nanofibers as Gas Sensors: Response to Classes of Vapors and Comparison to Thin Films" *Nano Letters*, **2004**, 4, 491-496
17. Jiaxing Huang, Shabnam Virji, Bruce H. Weiller and Richard B. Kaner "Polyaniline Nanofibers: Facile Synthesis and Chemical Sensors" *Journal of the American Chemical Society*, **2003**, 125, 314-315
18. Jiaxing Huang, Veronica M. Egan, Hailan Guo, Jeong-Yeol Yoon, Alejandro L. Briseno, Iris E. Rauda, Robin L. Garrell, Charles M. Knobler, Feimeng Zhou and Richard B. Kaner "Enantioselective Discrimination of D- and L-Phenylalanine by Chiral Polyaniline Films" *Advanced Materials*, **2003**, 15, 1158-1161

Undergraduate research: Synthesis of inorganic nanoparticles

19. Jiaxing Huang, Yi Xie, Bin Li, Yu Liu, Yitai Qian and Shuyuan Zhang "In-Situ Source–Template–Interface Reaction Route to Semiconductor CdS Submicrometer Hollow Spheres" *Advanced Materials*, **2000**, 12, 808-811
20. Bin Li, Yi Xie, Jiaxing Huang, Yu Liu and Yitai Qian "Sonochemical Synthesis of Nanocrystalline Copper Tellurides Cu₇Te₄ and Cu₄Te₃ at Room Temperature" *Chemistry of Materials*, **2000**, 12, 2614-2616
21. Yi Xie, Jiaxing Huang, Bin Li, Yu Liu and Yitai Qian "A Novel Peanut-like Nanostructure of II-VI Semiconductor CdS and ZnS" *Advanced Materials*, **2000**, 12, 1523-1526
22. Bin Li, Yi Xie, Jiaxing Huang, Yitai Qian "Synthesis by Solvothermal Route and Characterization of CuInSe₂ Nano-whisker and Nanoparticle" *Advanced Materials*, **1999**, 11, 1456-1459

RESEARCH GROUP MEMBERS AND THEIR ACHIEVEMENTS

Former trainees (i.e. students and postdocs) in faculty positions

1. Franklin Kim, Associate Professor (independent), Kyoto University, Japan
2. Yong Sheng Zhao, Professor, Institute of Chemistry, Chinese Academic of Science, China
3. Rodolfo Cruz-Silva, Associate Professor, Shinshu University, Japan
4. Vincent Tung, Assistant Professor, University of California, Merced, USA
5. Bo Hu, Professor, Xidian University, China
6. Tae Hee Han, Assistant Professor, Hanyang University, South Korea
7. Jiayan Luo, Professor (1000 talent), Tianjin University, China
8. Jiao-Jing Shao, Professor, Guizhou University, China
9. Kalyan Raidongia, Assistant Professor, Indian Institute of Technology, Guwahati, India
10. Ying Tao, Associate Professor, Tianjin University, China (starting 2017)

Former students in industry

1. Laura Cote, Senior Staff Material and Process Engineer, Continental
2. Kwon Nam Sohn, Senior Manager, LG Chem
3. Jay Jaemyung Kim, Senior Project Scientist, Merck
4. Alexander Smith, Senior Reliability Engineer, Apple
5. Deepti Krishnan, Staff Engineer, Intel

Significant external awards received by students based on their work in the group

- ECS Nanocarbons Division SES Young Investigator Award 2016
- Carbon Journal Prize for Outstanding PhD Thesis in Carbon Research (2 awards in 2014)
- Josephine de Karman Fellowship (<8 awards per year to PhD candidates in any discipline in North America)
- P.E.O. Scholar Awards (recognizes outstanding female PhD candidates in North America)
- MRS Graduate Student Awards (2 Gold and 2 Silver awards)
- 1000 Plan Program for Young Talents, China
- Chinese Government Award for Outstanding Self-Financed Students Abroad
- Taiwanese Ministry of Education's Scholarship for Studying Abroad
- NSF East Asia and Pacific Summer Institutes (EAPSI) Fellowship
- NSF Graduate Fellowship (4 awards+1 honorable mention)
- NSF Engineering Innovation Fellowship
- NDSEG Fellowship
- Forbes 30 Under 30
- Dow Sustainability Innovation Student Competition (1 Grand Prize and 2 Second Prizes)
- Clean Energy Trust Consumer Favorite Prize
- Illinois Technology Foundation Fifty For The Future Award
- Phi Beta Kappa