

## Zhenan Bao, Ph.D.

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**H-INDEX: 202; TOTAL CITATION: >153,900**  
(Data from Google Scholar)

### PROFESSIONAL APPOINTMENTS & EDUCATION:

Department of Chemical Engineering, Stanford University, California

- K.K. Lee Professorship, **2016-present**

Department of Chemical Engineering, Stanford University, California

- Department Chair, **2018-2022**

Stanford Wearable Electronics Initiative (eWEAR), California

- Founder and Director, **2016-present**

Chan Zuckerberg BioHub

- Investigator, **2022-2027**

Taiwan Science and Technology Hub at Stanford

- Co-chair, **2023-present**

Department of Chemical Engineering, Stanford University, California

- Professor, **2012-present**

Department of Chemistry, Stanford University, California

- Professor by courtesy, **2012-present**

Department of Materials Science and Engineering, Stanford University, California

- Professor by courtesy, **2012-present**

Department of Chemical Engineering, Stanford University, California

- Associate Professor, **2004-2012**

PyrAmes, Stanford, California

- Founder, Board of Directors, **2016-present**

C3 Nano Co., Hayward, California

- Founder, Board of Directors, *2010-present*

Bell Labs, Lucent Technologies, Murray Hill, NJ.

- Distinguished Member of Technical Staff, Materials Research Department, *2001-2004*.
- Member of Technical Staff, Polymer and Organic Materials Research Department, *1995-2001*.

KU Leuven, Leuven, Belgium

- Honorary Doctor Degree, *2021*

University of Chicago, Chicago, IL.

- Ph.D., Chemistry, *1995*
- MS, Chemistry, *1993*

University of Illinois, Chicago, IL.

- Chemistry Major, *1991*.

Nanjing University, Nanjing, China.

- Chemistry Major, *1987-1990*.

#### **MEMBERSHIP OF ACADEMY AND SOCIETY:**

1. **RSC Fellow**, Royal Society of Chemistry, 2022.
2. **Honorary Member, Chinese Chemical Society**, 2022
3. **Member, American Academy of Arts and Sciences**, 2021.
4. **Foreign Member, Chinese Academy of Science**, 2021.
5. **Member, National Academy of Inventors**, 2017.
6. **Member, National Academy of Engineering**, 2016.
7. **MRS Fellow**, Materials Research Society, 2014.
8. **POLY Fellow**, ACS Polymer Chemistry Division, 2014.
9. **AAAS Fellow**, American Association for Advancement of Science, 2012.
10. **ACS Fellow**, American Chemical Society, 2011.
11. **PMSE Fellow**, ACS Polymeric Materials: Science and Engineering Division, 2011.
12. **SPIE Fellow**, 2008.

#### **HONORS AND AWARDS:**

1. **VinFuture Prize Female Innovator**, 2022.
2. **Citation Laurate in Chemistry**, Clarivate, 2022
3. **ACS Chemistry of Materials Award**, American Chemical Society, 2022.
4. **Materials Today Innovation Award**, Elsevier, 2022
5. **ACS Outstanding Global Mentor Award in Polymer Science and Engineering**, American Chemical Society, 2022.
6. **MRS Mid-Career Award**, Material Research Society, 2021.
7. **AICHE Alpha Chi Sigma Award for Chemical Engineering Research**, American Institute of Chemical Engineering, 2021.

8. **Charles G. Overberger International Prize for Excellence Polymer Research**, American Chemical Society Polymer Chemistry Division, 2021.
9. **Alumni Professional Achievement Award**, Alumni Board of The University of Chicago, 2021.
10. **Outstanding Achievement Award**, Chinese American Chemical Society, 2021.
11. **ACS Central Science Disruptors and Innovators Prize**, American Chemical Society, 2020
12. **Gibbs Medal**, by American Chemical Society Chicago section, 2020.
13. **Alumni Achievement Award**, The University of Chicago, Department of Chemistry, 2020.
14. **ACS Nano Lectureship Award**, by American Chemical Society ACS Nano, 2018.
15. **Wilhelm Exner Medal** presented by Austrian Federal Minister of Science, 2018.
16. **American Chemical Society (ACS) Applied Polymer Science Award**, 2017.
17. **L'Oreal UNESCO Women in Science Award in Physical Science**, 2017.
18. **Nature's 10**, "Master of Materials", top ten people who mattered in 2015.
19. **Andreas Acrivos Award for Professional Progress in Chemical Engineering**, American Institute of Chemical Engineers (AIChE), 2014.
20. **American Chemical Society (ACS) Polymer Division Carl S. Marvel Creative Polymer Chemistry Award**, 2013.
21. **World Technology Award Finalist, Materials Category**, presented in association with TIME, Fortune, CNN, and Science, 2013.
22. **Top 100 Materials Scientists**, Ranked by Citation Impact by Thomson Reuters, ranging from 2000-2010.
23. **Cheung Kong Scholar**, Li Ka Shing Foundation and Chinese Ministry of Education, 2012.
24. **Arthur C. Cope Scholar Award**, ACS, for excellence in Organic Chemistry, 2011.
25. **"2010 Most influential Chinese in the World", Science and Technology Category**. As selected by Phoenix TV, China (other recipients include Li Na for the sports category, who has recently won the Ladies 2011 French Open). April, 2011
26. **The Royal Society of Chemistry Beilby Medal and Prize** for the contributions and discoveries in the field of organic semiconductors, including the demonstration that conjugated polymers can produce high mobilities of charge carriers when self-assembled using solution deposition, 2009.
27. **National Science Foundation (NSF) American Competitiveness and Innovation Fellow (ACIF)** for her significant contributions to advancing the technology of flexible organic electronics through understanding of organic semiconductor growth and innovative approaches for highly efficient patterning of organic single-crystal and nano/microwire transistors, 2009.
28. **David Filo and Jerry Yang Faculty Fellow, Stanford University**, 2009.
29. **Polymer International IUPAC Polymer Prize** for creativity and industrial application in polymer science, 2008.
30. **Top 20 most cited authors in the field of Organic Thin Film Transistors by ISI** with a total of 2226 citations from 1997 to 2007 (<http://esi-topics.com/otft/authors/b1a.html>).
31. **Nanotech Briefs®' Nano 50™ Awards** in the Innovator category, 2007.
32. **Teaching Excellence Award**, Stanford Society of Women Engineering, 2007.
33. **Sloan Research Fellow**, Sloan Foundation, 2006.

34. **3M Faculty Award**, 2005.
35. **DuPont Science and Technology Award**, 2005
36. **Finmeccanica Faculty Scholar**, Stanford University, 2004-2007.
37. **Terman Fellow**, Stanford University, 2004-2007.
38. **Robert Noyce Faculty Scholar**, Stanford University, 2004-2005.
39. **MIT TR-100** by MIT Technology Review magazine as one of the top 100 young innovators for this century, September 2003.
40. **Best Mentor Award** honoring mentors who have gone above and beyond their duties to ensure that their intern(s) were successful during their internship of summer 2003, by the University Relations of Lucent Technologies, August 2003.
41. **Outstanding Young Woman Scientist** who is expected to make a substantial impact in chemistry during this century, Women Chemists Committee of the American Chemical Society as an 2002 (featured in Chemical & Engineering News, March 25, 2002).
42. **ACS Team Innovation Award**, American Chemical Society, for the demonstration of a flexible electronic paper, 2002.
43. **Distinguished Member of Technical Staff**, Bell Labs, 2001.
44. **R&D Magazine's Editor's Choice Award** of the "Best of the Best" new technology, 2001.
45. **R&D 100 Award** for the work on "Printed Plastic Circuits for Electronic Paper Displays", 2001.
46. **Science Magazine Top 10 Research Breakthroughs** in 2000 for work on large scale integrated circuits based on organic materials (Details can be seen in <http://www.sciencemag.org/cgi/content/full/290/5500/2221>).
47. **National Academy of Engineering as Top 100 Young Engineers**, 2000.
48. GAANN Fellowship, University of Chicago, 1995.
49. Proctor & Gamble Travel Grant, University of Chicago, 1994.
50. Ou Yangzhao Prize for Undergraduate Student, Nanjing University, China, 1989.
51. Outstanding Undergraduate Student Award, Nanjing University, China, 1989.

#### **HONORARY TITLES:**

1. **Yanyuan Honorary Professorship**, Peking University, Shengzhen Campus, China, 2016.
2. **Visiting Fellow**, Singapore Institute of Manufacturing Technology (SIMTech), Singapore, 2014-2015.
3. **Cheung Kong Scholar**, Li Ka Shing Foundation and Chinese Ministry of Education, 2012.
4. **Distinguished Chair Professor and Research Consultation**, Center for Human Interface Nano Technology, SAINT, SKKU, South Korea, 2012-2013.
5. **Honorary Guest Professorship**, Nanjing Industry University, China, 2012.
6. **Honorary Si Yuan Chair Professorship**, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing, China, 2010-2013.
7. **Zhu Ke Zheng Honorary Professorship**, Zhejiang University, China
8. **Honorary Professorship**, Hua Dong University of Science and Technology, China, 2001.

## **DISTINGUISHED LECTURESHIP:**

1. **Kelly Lectureship in Chemical Engineering**, Purdue University, Department of Chemical Engineering, 2023.
2. **Closs Lectureship in Chemistry**, University of Chicago, Department of Chemistry, 2023.
3. **Martin Friedman University Lectureship in Chemistry**, Rutgers University at Newark, Department of Chemistry, 2023.
4. **Merck-Karl Pfister Visiting Professorship in Organic Chemistry**, Massachusetts Institute of Technology, Department of Chemistry, 2022.
5. **PPG Lectureship**, Northwestern University, Department of Material Science and Engineering, 2022.
6. **Max Planck Distinguished Lectureship**, Max Planck Institute for Intelligent Systems, Stuttgart, Germany, 2022
7. **Chair's Distinguished Lectureship**, University of Washington, Seattle, WA, Department of Chemical Engineering, 2022.
8. **DB Robinson Lectureship**, University of Alberta, Edmonton, Canada, Department of Chemical Engineering, 2022.
9. **Saint Gobain Materials Science Lecturer**, Department of Material Science and Engineering, Boston University, 2020.
10. **STAR Lectureship**, Seoul National University, Department of Mechanical Engineering, Seoul, Korea, 2021
11. **Distinguished Lectureship**, Penn State University, University Park, PA, Department of Chemical Engineering, 2021.
12. **Distinguished Lectureship**, University of Toronto, Toronto, Canada, Department of Electrical and Computer Engineering, 2021.
13. **David Pope Distinguished Lectureship**, University of Pennsylvania, Philadelphia, PA, Department of Material Science and Engineering, 2021.
14. **Stein-Covestro Lectureship**, University of Massachusetts at Amherst, Amherst, MA, Department of Chemistry, 2021
15. **Kavli Distinguished Lectureship**, California Institute of Technology, Pasadena, CA, 2021.
16. **BASF Lectureship**, Department of Chemistry, University of California at Berkeley, Berkeley, CA, 2021.
17. **Shipley Distinguished Lectureship**, Department of Chemistry, Clarkson University, 2021.
18. **Abbot Award Lectureship**, Department of Chemical and Biological Engineering, Rensselaer Polytechnic Institute, Troy, NY, 2021
19. **Jan Talbot Lectureship**, Department of NanoEngineering/Chemical Engineering, University of California at San Diego, San Diego, CA, November 2020.
20. **3M Lectureship**, Department of Chemistry, University of British Columbia, 2020.
21. **Chapman Lecturer**, Department of Electrical and Computer Engineering, Rice University, Houston, TX, 2020.
22. **Leonard Lecturer**, School of Chemical Science, University of Illinois at Urbana-Champaign, 2019
23. **Distinguished Lecturer**, Department of Chemistry and Biochemistry, University of California at Los Angeles, 2019.

24. **Katz Lectureship**, Department of Chemical Engineering, University of Michigan, 2019.
25. **Dauben Lectureship**, Department of Chemistry, University of California at Berkeley, 2019
26. **NUSS Professorship**, National Singapore University, Singapore, 2018
27. **Xinda Lectureship**, College of Chemistry and Molecular Engineering, Peking University, 2018
28. **Brown Lectureship**, Department of Chemistry, Purdue University, 2018.
29. **Fredrickson Lectureship**, Department of Chemical Engineering and Material Science, University of Minnesota, 2018.
30. **National Science Foundation (NSF) Distinguished Lecturer**, National Science Foundation, 2017
31. **Racheff Award Lectureship**, Department of Material Science and Engineering, University of Illinois at Urbana-Champaign, 2017
32. **Director's Distinguished Lectureship**, Lawrence Livermore National Lab, 2017.
33. **Nanjing University Distinguished Lectureship**, Nanjing University, Nanjing, China, 2017.
34. **cfaed Distinguished Lectureship**, Technical University of Dresden, Center for Advancing Electronics Dresden, Dresden, Germany, 2017.
35. **The Shannon Luminary Lectureship and Award**, Nokia Bell Labs, 2016.
36. **Dean's Distinguished Lectureship**, School of Engineering, National Nanyang University, 2016
37. **The Warren K. Lewis Lecturer in Chemical Engineering**, Department of Chemical Engineering, Massachusetts Institute of Technology (MIT), 2016.
38. **Covestro Lectureship in Polymer Science and Engineering**, Department of Polymer Science and Engineering, University of Akron, 2016.
39. **The Wilma and Ephraim Shaw Roseman Award Lectureship**, Department of Chemistry, Johns Hopkins University, 2016.
40. **Sigma-Aldrich Lecturer in Materials Chemistry**, Department of Chemistry, University of North Carolina at Chapel Hill, 2015.
41. **Xue Tang Lecture**, Tsing Hua University, China, 2015.
42. **MRS Symposium-X lecturer**, MRS Fall, Boston, 2015.
43. **The Joe Smith Lectureship in Chemical Engineering and Material Science**, UC Davis, 2015.
44. **The Dale Pearson Distinguished Lectureship in Chemical Engineering**, UC Santa Barbara, 2014.
45. **Kavli Lecturer** at the Frontier in Science Symposium organized by the National Academy of Science, 2014.
46. **Molecular Forum Distinguished Lecturer**, Institute of Chemistry, Chinese Academy of Science, Beijing, China, May 2013.
47. **Xerox Distinguished Lecturer**, Xerox Research Centre of Canada (XRCC), Toronto, Canada, November, 2012.
48. **Myalr Giri Lecturer** in Physical Sciences, Penn State University at Hazleton, April, 2012.
49. **Distinguished Lecturer**, Global Climate and Energy Program, 2011.
50. **Peter B. Sherry Lecturer**, Georgia Institute of Technology, Department of Chemistry, April, 2011

51. **Weissberger/Williams/Farid Distinguished Lecturer**, Kodak Co., April 2010.
52. **Zhu Kezhen Distinguished Lecturer**, Zhejiang University, Hangzhou city, Zhejiang province, China. 2003.
53. **Elizabeth Crosby Lecturer** honoring achievement of women in Materials Science and Engineering, University of Michigan, Department of Material Sciences and Engineering, 2002.
54. **Eastman Lecturer**, University of Akron, Department of Polymer Science, 2001.
55. **Nobel Laureates in Polymer Chemistry Symposium lecturer**, American Chemical Society Polymer Chemistry Division, 2001.

#### **PROFESSIONAL ACTIVITIES:**

1. **Council member**, *The Stanford Emerging Tech Review*, chaired by Condoleezza Rice, Hoover Institution, 2023.
2. **Member**, Stanford Bio-X Scientific Leadership Council, 2023.
3. **Board of Directors**, Camille and Henry Dreyfus Foundation, 2022-present.
4. **Advisory Council Member**, Pritzker School of Molecular Engineering, University of Chicago, 2022-present.
5. **Advisor**, Science for America, (<https://www.scienceforamerica.org/people/>), a 'solutions-incubator' to address urgent challenges, driven by an unprecedented alliance of leading philanthropic organizations, chaired by Eric Lander, 2022-present.
6. **Review Panel Member**, New Materials and New Energy for the BOCHK Science and Technology Innovation Prize, Hong Kong, 2022.
7. **Scientific Advisor**, WearLinq, Inc, 2022-present.
8. **Scientific Advisor**, Anthro Energy, 2021-present.
9. **Science Committee member**, Future Science Prize of China, 2018-2021.
10. **Advisory Board Member**, Nanjing University, 2019
11. **Scientific Advisor**, Anthro Energy, 2021-present.
12. **Scientific Advisor**, Azul 3D, Inc, 2021-present.
13. **Scientific Advisor**, PeroPure, Inc, 2021-present.
14. **Advisory board member**, PHI BIOMED, Inc., South Korea, 2020-present.
15. **President's Advisory Board Member**, Nanjing University, China, 2020.
16. **Scientific Advisor**, Tanovus, Inc, 2018-2022.
17. **Scientific Advisory Board Member**, Beijing Institute for Collaborative Innovation, 2018-2022.
18. **NUSS Professorship**, National Singapore University, Singapore, 2018
19. **Scientific Advisory Board Member**, Solvay, 2017-2020.
20. **Award committee member**, AIChE, 2015-2018.
21. **International advisory board member**, LG Display, 2010-2014.
22. **International advisory board member**, ShanghaiTech, School of Physical Science and Technology, 2014-2019.
23. **Board member**, National Academies Board on Chemical Sciences and Technology, 2009-2012.
24. **Scientific Advisory Board Member**, Plastic Electronics Foundation, 2006-2009.
25. **Board member**, International Advisory Board for the International Conference on the Science and Technology of Synthetic Metals, 2010-present.

26. **Board member**, International Advisory Board for the International Symposium on Functional  $\pi$ -Electron Systems advisory board, 2010-present.
27. **Scientific Advisory Board Member**, NSF Science and Technology Center on Information Technology Research at University of Washington, Georgia Institute of Technology and University of Arizona, 2008-2009.
28. **Member of Board of Directors**, Materials Research Society (MRS), 2003-2005.
29. Canvassing Committee Member in charge of selection of Team Innovation Award recipients, 2003-2006.
30. **Executive Committee Member/Member-at-Large**, Division of Polymer Materials Science and Engineering, American Chemical Society, 2000-2006, 2009-2012.
31. **Program co-chair**, Division of Polymer Materials Science and Engineering, American Chemical Society, 2004-2006.
32. **Ford Travel Grant selection committee**, Division of Polymer Materials Science and Engineering, American Chemical Society, 2003.
33. **Membership Co-Chair**, Division of Polymer Materials Science and Engineering, American Chemical Society, 2000-2001.

#### **OTHER PROFESSIONAL RELATIONSHIPS:**

1. **Consulting**, Nextsense, 2021-2022.
2. **Consulting**, Guidepoint, 2021-2022.
3. **Advisor**, Boutique Venture Fund, 2021-present.
4. **Consulting**, AlphaSights, 2020.
5. **Consulting**, SABIC Global Technologies BV, 2019-2020.
6. **Consulting**, Nectome, 2019.
7. **Consulting**, Kaneka, 2018.
8. **Consulting**, Department of Material Science and Engineering, Nanyang Technological University, 2017-2019.
9. **Advisor**, Fusion Fund, 2016-present.
10. **Consulting**, LytEn, 2016.
11. **Consulting**, Huawei Technology, Inc, 2016-2018.
12. **Consulting**, Corning, 2010-2013

#### **SYMPOSIA ORGANIZED AND CONFERENCE ADVISORY BOARD:**

1. **Program Chair**, "US-China National Academy of Engineering Frontier of Engineering Symposium", June 2019, San Diego, CA. Co-chair with Professor Jing Cheng, Tsinghua University.
2. **International advisory board member**, International Conference on Synthetic Metals, 2015-2023.
3. **International advisory board member**, International Conference on Functional p-Electron Systems, 2015-2023.
4. **International advisory board member**, CIMTEC 2018, Symposium FA "Materials Issues in Flexible and Stretchable Electronics" of the Forum on New Materials, 2017-2018.



5. **Symposium co-chair:** “Organic Transistors”, SPIE Annual International Symposium on Optical Science and Technology, August 2014. Co-chair with Iain McCulloch.
6. **Symposium co-chair:** “Organic Transistors”, SPIE Annual International Symposium on Optical Science and Technology, August 2013. Co-chair with Iain McCulloch.
7. **Symposium co-chair:** “Organic Transistors”, SPIE Annual International Symposium on Optical Science and Technology, August 2012. Co-chair with Iain McCulloch.
8. **Symposium co-chair:** “Materials Science and Charge Transport in Organic Semiconductors”, MRS symposium Spring 2012. Co-chair with Alejandro Briseno, Jason Locklin, Wei You, Mark Roberts.
9. **Symposium co-chair:** “Organic Transistors”, SPIE Annual International Symposium on Optical Science and Technology, August 2011. Co-chair with Iain McCulloch.
10. **Symposium co-chair:** “Organic, Flexible, and Printed Electronics”, International Conference on Materials for Advanced Technologies (ICMAT), July 2011. Co-chair with Beng Ong, Jie Zhang, and Ananth Dodabalapur.
11. **Symposium co-chair:** “Materials Science and Charge Transport in Organic Electronics”, MRS symposium Spring 2010. Co-chair with Ian McCulloch, Alejandro Briseno, Vitaly Podzorov.
12. **Symposium co-chair:** “Organic Transistors”, SPIE Annual International Symposium on Optical Science and Technology, August 2010. Co-chair with Iain McCulloch.
13. **Conference co-chair:** Gordon Conference on Electronic Processes in Organic Materials, July 2010, co-chair with Greg Scholes.
14. **Conference co-vice chair:** Gordon Conference on Electronic Processes in Organic Materials, July 2008, co-vice chair with Greg Scholes.
15. **Scientific Program Committee member,** Ninth International Conference on Functional Pi-Electron Systems at the Georgia Institute of Technology on May 23-28, 2010.
16. **Symposium co-chair:** “Organic Transistors”, SPIE Annual International Symposium on Optical Science and Technology, August 2009. Co-chair with Iain McCulloch.
17. **Symposium co-chair:** “Organic Microelectronics”, San Francisco, July 2008. Co-chair with Paul Blom, Vladimir Bulovic, Duncan Stewart.
18. **Symposium co-chair:** “Organic Transistors”, SPIE Annual International Symposium on Optical Science and Technology, July 2008. Co-chair with Iain McCulloch.
19. **Symposium co-chair:** “Conjugated Polymers: Synthesis, Structure, and Applications”, MRS symposium Spring 2008. Co-chair with Jason Locklin, Wei You, and Jian Li.
20. **Symposium co-chair:** “Organic Transistors”, SPIE Annual International Symposium on Optical Science and Technology, July 2007. Co-chair with David Gundlach.
21. **Symposium co-chair:** “Organic Electronics”, Japan-American Frontier of Engineering meeting, National Academy of Engineering, Tsukuba, Japan, November 2006.
22. **Symposium co-chair:** Topical Conference on Organic Electronics, AIChE Annual Meeting, San Francisco, November 2006. Co-chair with Rachel Segalman.
23. **Symposium co-chair:** “Organic Transistors”, SPIE Annual International Symposium on Optical Science and Technology, July 2006. Co-organize with David Gundlach.
24. **Symposium co-chair:** “Conjugated Polymers: Synthesis, Structure, and Applications”, MRS symposium Spring 2006. Co-organize with Rachel Segalman, Lynn Loo, and Anna Hwang.
25. **Symposium co-chair:** “Organic Transistors”, SPIE Annual International Symposium on Optical Science and Technology, July 2005. Co-organize with David Gundlach.

26. **Symposium co-chair:** “Organic Thin Film Electronics: Transistors, Light Emitting Diodes, and Solar Cells”, American Chemical Society ProSpectives Conference, January 2004. Co-organize with Dan Frisbie and Christos Dimitrakopoulos.
27. **Symposium co-chair:** “Organic and Polymeric Materials for Plastic and Molecular Electronics”, American Chemical Society Meeting, September 2003. Co-organize with Cherie Kagan, Bert de Boer.
28. **Meeting chair,** Materials Research Society in San Francisco, CA, April 2002. Kenneth Rodbell, Eugene Fitzgerald, and Ulrich Goesele, Co-chair.
29. **Symposium co-chair:** “Organic and Molecular Electronics”, American Chemical Society Meeting, April 2002. Co-organize with Cherie Kagan.
30. **Member of Program Subcommittee,** “Optical Materials, Fabrication, and Characterization”, CLEO 2002, Filbert J. Bartoli, Chair.
31. **Member of the International Advisory Board,** “The Sixth International Conference on Organic Nonlinear Optics”, ICONO'6, Tucson, AZ, December 2001. Seth Marder, Chair.
32. **Symposium co-chair:** “Organic Electrical and Optical Devices and Materials Processing”, Materials Research Society in Boston, MA, November 2001. Co-organized with Alex Jen, Vladimir Bulovic, George Malliaras, Susan Ermer, and Michael McGehee.
33. **Member of Program Committee,** “Nano and Microsystems: Materials, Devices, and Technology”, SPIE Annual International Symposium on Optical Science and Technology, July 2001. Ghassan E. Jabbour, Chair.
34. **Member of Program Committee,** “Solid State Lighting”, SPIE Annual International Symposium on Optical Science and Technology, July 2001. Ian Ferguson, Chair.
35. **Symposium co-chair:** “Organic Transistors”, SPIE Annual International Symposium on Optical Science and Technology, July 2001. Co-organized with Dennis Fichou.
36. **Member of Program Committee,** “Novel Organic Materials and Technological Advances for Photonics”, European Materials Research Society in Strasbourg, France, June 2001. Isabelle Ledoux and Joseph Zyss, Co-organizers.
37. **Member of Program Committee,** “Polymer/Photonic Devices Symposium”, Photonics West '01: San Jose, CA, January 2001, B. Kippelen, Chair.
38. **Member of Program Committee,** “Organic Electronics: from Light Emitting Diodes to Integrated Circuits”, European Materials Research Society in Strasbourg, France, June 2000. H. von Seggern, C. Taliani, M. Schuorer, Co-organizers.
39. **Symposium co-chair:** “Molecular Photonics: From Macroscopic to Nanoscopic Applications”, European Materials Research Society in Strasbourg, France, June 2000. Co-organized with Isabelle Ledoux and Joseph Zyss.
40. **Symposium co-chair:** “Light-Emitting, Light-Harvesting, and Light-Responding Organic Systems”, American Chemical Society National Meeting in San Francisco, CA, April 2000, Co-organized with Bing R. Hsieh, Fotios Papadimitrakopoulos, and Aaron Wayne Harper.
41. **Symposium co-chair:** “Electronically and Optically Active Polymers”, Materials Research Society in San Francisco, CA, April 2000. Co-organized with Mary Galvin, John Reynolds, and Lewis Rothberg.
42. **Symposium co-chair:** “Molecular Photonics at the Interface of Physics, Chemistry and Biology”, European Materials Research Society in Strasbourg, France, June 1999. Co-organized with Isabelle Ledoux and Joseph Zyss.

43. **Symposium co-chair:** “Electrical, Optical, and Magnetic Properties of Organic Solid State Materials (V)”, Materials Research Society in Boston, MA, November 1999. Co-organized with Alex Jen, John Reynolds, Susan Ermer, and Joe Perry.

#### **JOURNAL EDITORSHIP AND ADVISORY BOARD:**

1. Member, Executive Advisory Board, **Advanced Sensor Research**, 2022-present.
2. Member, Executive Advisory Board, **Advanced Healthcare Materials**, 2022-present.
3. Member, Executive Advisory Board, **Advanced Materials**, 2020-present.
4. Member, Executive Advisory Board, **Advanced Science**, 2014-present.
5. Member, International Editorial Advisory Board, **Devices**, 2023-present.
6. Member, International Editorial Advisory Board, **Natural Sciences**, 2020-present.
7. Member, International Editorial Advisory Board, **Advanced Health Materials**, 2020-present.
8. Member, International Editorial Advisory Board, **Matter**, 2018-present.
9. Member, International Editorial Advisory Board, **Accounts of Chemical Research**, 2017-2022.
10. Member, International Editorial Advisory Board, **Journal of American Chemical Society**, 2015-present.
11. Member, International Editorial Advisory Board, **Macromolecules**, 2015-2017.
12. Member, International Editorial Advisory Board, **Chemical Science**, 2016-present.
13. Member, International Editorial Advisory Board, **ACS Macro Letters**, 2015-2017.
14. Member, International Editorial Advisory Board, **Advanced Electronic Materials**, 2014-present.
15. Member, International Editorial Advisory Board, **Advanced Materials**, 2013-2020.
16. Member, International Editorial Advisory Board, **Materials Horizon**, 2013-present.
17. Member, International Editorial Advisory Board, **Advanced Energy Materials**, 2012-present.
18. Member, International Editorial Advisory Board, **Chemical Communications**, 2012-2015.
19. Member, International Editorial Advisory Board, **Nature Asia Materials**, 2011-present.
20. Member, International Editorial Advisory Board, **Nanoscale**, 2012-present.
21. Member, International Editorial Advisory Board, **ACS Nano**, 2010-present.
22. Member, International Editorial Advisory Board, **Materials Today**, 2002-present.
23. Member, International Editorial Advisory Board, **Chemistry of Materials**, 2006-2011.
24. Member, International Editorial Advisory Board, **Advanced Functional Materials**, 2001-2005.
25. Associate Editor, **Chemical Sciences**, 2014-2016.
26. Associate Editor, **Synthetic Metals**, 2009-2011.
27. Associate Editor, **Polymer Reviews**, 2004-2008.
28. Editor, Book on “Organic Thin Film Transistors”, CRC Press, Jason Locklin, co-editor, to appear April 2007.
29. Guest Editor, **Synthetic Metals**, Proceedings of the EMRS 1999 Spring Meeting, Symposium on “Molecular Photonics at the Interface of Physics, Chemistry and Biology”. Co-edit with I. Ledoux.

30. Editor, MRS Symposium Proceedings Volume 598 on “Electrical, Optical, and Magnetic Properties of Organic Solid-State Materials V”. Co-edit with A. Jen, J. Perry, J. Reynolds, and S. Ermer.
31. Guest Editor, Synthetic Metals, Proceeding of the EMRS 2000 Spring Meeting, Symposium on “Molecular Photonics: From Macroscopic to Nanoscopic Applications”. Co-edit with I. Ledoux and J. Zyss.
32. Guest Editor, special issue on “Electroactive Polymers”, MRS Bulletin, July 2002 Issue. Co-Edit with A. Holmes and V. Bulovic.

#### **EDITORIAL REVIEWER**

Served as reviewer for the following journals:

*Science, Science Advance, Science Robotics, Nature, Nature Materials, Nature Photonics, Nature Nanotechnology, Nature Chemistry, Nature Communications, Nature Biomedical Engineering, Asian Nature Materials, Nature Electronics, Nature Biotechnology, PNAS, Journal of the American Chemical Society, Nanoletters, Chemistry of Materials, Macromolecules, Advanced Materials, Advanced Functional Materials, Advanced Electronic Materials, Advanced Science, ACS Central Science, ACS Nano, Angewandte Chemie International Edition, Applied Physics Letters, Journal of American Chemical Society, Journal of Applied Physics, Journal of Physical Chemistry, Journal of Polymer Science: A. Polymer Chemistry, Organic Electronics, Polymer, Synthetic Metals, Small, Langmuir.*

#### **PROPOSAL/PROGRAM REVIEWER:**

1. **Review Panel Member**, New Materials and New Energy for the BOCHK Science and Technology Innovation Prize, Hong Kong, Hong Kong, 2022.
2. National Science Foundation (Division of Materials Research: Polymer Program, Solid State Chemistry & Electronic Materials, Division of Chemistry).
3. National Research Council of Canada.
4. Research Grants Council of Hong Kong.
5. National Research Council of Taiwan.
6. American Chemical Society (ACS) Petroleum Research Fund.
7. Panel member, Polymers review panel for the Faculty Early Career Development (CAREER) Program by National Science Foundation (NSF), October 2004.
8. Panel member, Polymers review panel for the Faculty Early Career Development (CAREER) Program by National Science Foundation (NSF), October 2002.
9. Reverse Site Panel member, Nanoscale Science and Engineering Centers (NSEC) by National Science Foundation (NSF), May 2001.
10. Panel member, site visit, Material Research Science and Engineering Centers (MRSEC) funded by National Science Foundation (NSF) in MIT, October 2000.
11. Panel member, Material Research Science and Engineering Centers (MRSEC) by National Science Foundation (NSF), 1999.
12. Panel member, Material Research Science and Engineering Centers (MRSEC) by National Science Foundation (NSF), 1997.

## PROFESSIONAL SOCIETY MEMBERSHIP:

1. American Chemical Society
2. Materials Research Society
3. Society of Photo-optical Instrumentation Engineers
4. American Association for the Advancement of Science
5. American Institute of Chemical Engineers

## PRESENTATIONS:

### (A) Invited Research Lectures:

1. National Tsiao Tung University, Taiwan (Chemistry) June 1994
2. Stevens Institute of Technology, NJ (Materials) Apr 1998
3. Northeastern University, MA (Materials) Nov 1998
4. Princeton University, NJ (Electrical Engineering) Nov 1998
5. Norfolk State University, VA (Chemistry) Nov 1998
6. Cornell University, NY (Materials) May 1999
7. NEC Research Lab, Princeton, NJ (Materials) May 1999
8. Ecole Normale Supérieure de Cachan, France (Physics) June 1999
9. Georgia Institute of Technology, GA (Chemistry) Nov 1999
10. University of Chicago, IL (Chemistry) Feb 2000
11. Queen's University, Canada (Chemistry) Apr 2000
12. University of California, Los Angeles, CA (Materials) May 2000
13. National Research Council, Canada (Materials) Oct 2000
14. Xerox, Canada (Materials) Oct 2000
15. IBM, Yorktown Heights, NY (Materials) Nov 2000
16. University of Arizona, Tucson, AZ (Chemistry) Feb 2001
17. University of Washington, Seattle, WA (Materials) Feb 2001
18. University of California, Davis, CA (Chemistry) Feb 2001
19. University of California, Los Angeles, CA (chemistry) Apr 2000
20. Yale University, CT (Applied Physics) May 2001
21. Columbia University, NY (Materials) June 2001
22. University of Tokyo, Japan (Electrical Engineering) July 2001
23. Tokyo Institute of Technology, Japan (Materials) July 2001
24. Yale University, CT (Chemistry) Sept 2001
25. University of Akron, OH (Eastman Lecturer, Polymer Science) Nov 2001
26. Rochester University, NY (Chemistry) Nov 2001
27. Caltech, CA (Materials Science and Chemistry) Jan 2002
28. MIT, MA (Chemical Engineering) Feb 2002
29. Columbia University, NY (Chemistry) Apr 2002
30. East China University of Science and Technology,  
China (Chemical Engineering) July 2002
31. Air Products & Chemicals, NY Aug 2002
32. Cornell University, NY (Chemistry) Sept 2002
33. New York University, NY (Chemistry) Sept 2002
34. Rensselaer Polytechnic Institute, NY (Chemistry) Sept 2002
35. Kodak, NY Sept 2002

36. University of Michigan, MI (Elizabeth Crosby Lecturer, Materials Science)	Oct 2002
37. Georgia Institute of Technology, GA (Chemistry)	Nov 2002
38. Stanford University (Chemical Engineering)	Nov 2002
39. Northwestern University (Materials Science)	Mar 2003
40. University of California, Los Angeles, CA (Materials Science)	Mar 2003
41. University of Pennsylvania (Materials Science)	Mar 2003
42. Northwestern University (Chemistry)	Apr 2003
43. University of Pennsylvania (Chemistry)	June 2003
44. Samsung Advanced Research Institute	Dec 2003
45. Zhe-Jiang University (Zhu Kezhen Distinguished Lecturer, Physics/Chemistry)	Dec 2003
46. IBM Almaden Research Center	Mar 2004
47. Agilent Lab (Palo Alto)	July 2004
48. NIST (Polymer Division)	July 2004
49. Stanford University, Stanford, CA (Chemistry)	Nov 2004
50. University of California, Santa Barbara, CA (Chemical Engineering)	Sept 2004
51. University of Texas, Austin, TX (Chemical Engineering)	Oct 2004
52. University of California, Riverside, CA (Chemical Engineering)	Oct 2004
53. GE Corporation, Albany, NY	Oct 2004
54. Stanford University, Stanford, CA (Material Science)	Nov 2004
55. Intel Corporation, Santa Clara, CA	Nov 2004
56. Zhejiang University, Zhejiang, China (Polymer Science/Engineering)	Nov 2004
57. Stanford University, Stanford, CA (Applied Physics)	Jan 2005
58. University of Minnesota, Minneapolis, MN (Chemical Engineering)	Jan 2005
59. University of South Carolina, Columbia, SC (Chemistry)	May 2005
60. Annual Meeting of Stanford Center for Integrated Systems, Stanford, CA	May 2005
61. University of California, San Diego, CA (Electrical Engineering)	June 2005
62. Samsung Advanced Institute of Technology, Korea	July 2005
63. Sanyo Corporation, Japan	July 2005
64. Williams College, Williams, MA (Chemistry)	Oct 2005
65. Toshiba Research Center, Japan	Dec 2005
66. Rensselaer Polytechnic Institute, NY (Microelectronics Center)	Mar 2006
67. University of Tokyo, Japan (Applied Physics)	May 2006
68. Annual Meeting of Stanford Center for Integrated Systems, Stanford, CA	May 2006
69. Cornell University, Ithaca, NY (Material Science)	Aug 2006
70. Georgia Institute of Technology, Atlanta, GA (Chemical Engineering)	Sept 2006
71. PARC Research Center, Palo Alto, CA	Oct 2006
72. Lockheed-Martin Co., Palo Alto, CA	Jan 2007
73. Columbia University, New York City, NY (Chemistry)	Sept 2007
74. University of Washington, Seattle, WA (Chemical Engineering)	Nov 2007
75. Simon Fraser University, Vancouver, Canada (Chemistry)	Dec 2007
76. Stanford University, Stanford, CA (Electrical Engineering)	Jan 2008

77. University of Minnesota, Minneapolis, MN (Chemical Engineering)	Feb 2008
78. University of California, Berkeley, CA (Chemical Engineering)	Mar 2008
79. Applied Materials Co., Santa Clara, CA	Apr 2008
80. California Institute of Technology, Pasadena, CA (Chemical Engineering)	May 2008
81. Tsing Hua University, Beijing, China (Chemistry)	June 2008
82. Nanjing University, Nanjing, China (Chemistry)	June 2008
83. University of Wisconsin, Madison, WI (Chemical Engineering)	Sept 2008
84. University of Illinois, Urbana-Champaign, IL (Chemical Engineering)	Sept 2008
85. Harvard University, Cambridge, MA (Chemistry)	Sept 2008
86. MIT, Cambridge, MA (Chemical Engineering)	Sept 2008
87. UCLA, Los Angeles, CA (Chemical Engineering)	Nov 2008
88. Vanderbilt, Nashville, TN (Chemical Engineering)	Sept 2009
89. Oak Ridge National Lab, Knoxville, TN	Sept 2009
90. Austrian Institute of Technology, Vienna, Austria	Oct 2009
91. Kodak, Rochester, NY	Apr 2010
92. Samsung Institute of Technology, Seoul, Korea	June 2010
93. Nanjing University, Nanjing, China (Chemistry)	July 2010
94. Peking University, Peking, China (Chemistry)	July 2010
95. Tsinghua University, Peking, China (Chemistry)	July 2010
96. Institute of Chemistry, Chinese Academy of Sciences, Peking, China	July 2010
97. University of Oklahoma, Norman, OK (Chemical Engineering)	Aug 2010
98. BASF-The Chemical Company, Ludwigshafen, Germany	Oct 2010
99. Solvay, Brussels, Belgium	Oct 2010
100. Corning, Corning, NY	Nov 2010
101. LG Display, Seoul, Korea	Nov 2010
102. Georgia Inst of Tech, Atlanta, GA (Chemistry)	Apr 2011
103. University of Chicago, Chicago, IL (Chemistry)	Apr 2011
104. University of Massachusetts, Amherst, MA (Poly. Sci. Eng.)	May 2011
105. Nanjing University, Nanjing, China (Chemistry)	July 2011
106. Peking University, Peking, China (Chemistry)	Aug 2011
107. Drexel University, Philadelphia, PA (Chemical Engineering)	Sept 2011
108. Cornell University, Ithaca, NY (IGERT seminar)	Sept 2011
109. Sungkyunkwan University, Seoul, Korea	Nov 2011
110. Samsung Institute of Technology, Seoul, Korea	Nov 2011
111. LG Display, Seoul, Korea	Nov 2011
112. Yamagata University, Yamagata, Japan	Apr 2012
113. Penn State University at Hazleton, PA	Apr 2012
114. Sungkyunkwan University, Seoul, Korea	July 2012
115. East China University of Science and Technology, Shanghai, China	July 2012
116. Nanjing University, Nanjing, China	July 2012
117. Nanjing Industry University, Nanjing, China	Aug 2012
118. Nanjing Post and Telecommunication University	Aug 2012
119. University of Pittsburg, Pittsburg, PA (Chemistry)	Feb 2013
120. Nanjing University	May 2013
121. University of California, Berkeley, CA (Chemistry)	Oct 2013

122.	Tongji University, Shanghai, China (Chemistry)	Nov 2013
123.	Tufts University, Medford, MA (Chemical Engineering)	Mar 2014
124.	MIT, Cambridge, MA (Material Science and Engineering)	Apr 2014
125.	EPFL at Lausanne, Switzerland (Material Science)	May 2014
126.	Harvard University, Cambridge, MA (Chemistry)	June 2014
127.	Singapore Institute of Manufacturing Technology	Oct 2014
128.	University of Chicago, Chicago, IL (Molecular Engineering)	Apr 2015
129.	University of Delaware, Newark, WI (Chemical Engineering)	May 2015
130.	Tsing Hua University, Beijing, China (Chemistry)	June 2015
131.	North Carolina State (Chemical Engineering)	Aug 2015
132.	Duke University, Durham, NC (Chemistry)	Sept 2015
133.	University of North Carolina, Chapel Hill (Chemistry)	Sept 2015
134.	Carnegie Mellon University, Pittsburg, PA (Material Science)	Sept 2015
135.	University of Colorado, Boulder, CO (Chemical Engineering)	Sept 2015
136.	University of Colorado, Boulder, CO (Chemistry)	Sept 2015
137.	Harvard University, Boston, MA (Bioengineering)	Apr 2016
138.	Hong Kong Baptist University, Hong Kong (Chemistry)	June 2016
139.	University of Akron, Akron, OH (Polymer Engineering)	Sept 2016
140.	Johns Hopkins University, Baltimore, MD (Chemistry)	Oct 2016
141.	National Nanyang University of Singapore (School of Engineering)	Dec 2016
142.	Peking University, Shenzhen, China (Materials)	Dec2016
143.	National Science Foundation, Arlington, VA	Apr 2017
144.	AStar, Singapore	May 2017
145.	Peking University, Shenzhen, China (Materials)	June 2017
146.	Technical University of Dresden, Dresden, Germany	Sept 2017
147.	Lawrence Livermore National Lab, Livermore, CA	Aug 2017
148.	Linkoping University, Linkoping, Sweden	Sept 2017
149.	Nanjing University, Nanjing, China	Sept 2017
150.	University of Illinois, Urbana-Champaign, IL (Material Science)	Nov 2017
151.	Northwestern University, Evanston, IL (Material Science)	Nov 2017
152.	University of Texas, Austin, TX (Mechanical Engineering)	Nov 2017
153.	Purdue University, Lafayette, IN (Chemistry)	Apr 2018
154.	Cornell University, Ithaca, NY (Chemical Engineering)	Apr 2018
155.	Corning Corporation, NY	Apr 2018
156.	Solvay Corporation, Bollate, Italy	June 2018
157.	Austrian Institute of Technology, Vienna, Austria	Oct 2018
158.	Peking University, Beijing, China (Chemistry)	Nov 2018
159.	University of Minnesota, Minneapolis, MI (ChemE)	Nov 2018
160.	University of California, Berkeley, CA (Chemistry)	Jan 2019
161.	Exxon Mobile, Annandale, NJ	Mar 2019
162.	University of Michigan, Ann Arbor, MI (ChemE)	Apr 2019
163.	University of California, Los Angeles, CA (Chemistry)	Apr 2019
164.	Applied Materials, Santa Clara, CA	Sept 2019
165.	University of Illinois at Urbana-Champaign, IL (Chemical Science).	Nov 2019
166.	DuPont, Marlborough, MA	Dec 2019
167.	Rice University, Huston, TX (Electrical Engineering)	Jan 2020



168.	Honda Research Institute, Santa Clara, CA	Jan 2020
169.	AStar, Singapore	Sept 2020
170.	Arizona State University, Phoenix, AZ (Material Science)	Sept 2020
171.	University of Victoria, BC, Canada (Chemistry)	Sept 2020
172.	University of British Columbia, BC, Canada (Chemistry)	Sept 2020
173.	Simon Fraser University, BC, Canada (Chemistry)	Sept 2020
174.	Northern Arizona University, Flagstaff, AZ (Material Science)	Oct 2020
175.	Pohang Institute of Science and Technology (POSTECH), Korea (ChemE)	Oct 2020
176.	University of California at Berkeley, Berkeley, CA (Material Sci)	Oct 2020
177.	University of California at San Diego, San Diego, CA (Nano Eng).	Nov 2020
178.	University of Cambridge, Cambridge, UK (ChemE)	Nov 2020
179.	Clarkson University, NY (Chemistry)	Jan 2021
180.	University of California at Irvin, CA (ChemE)	Jan 2021
181.	Stevens Institute of Technology, Hoboken, NJ (Nanotechnology)	Feb 2021
182.	California Institute of Technology, Pasadena, CA (Kavli Institute)	Feb 2021
183.	University of Massachusetts at Amherst, MA (Polymer Science)	Feb 2021
184.	University of California at Berkeley, CA (Chemistry)	Feb 2021
185.	Texas A&M, TX (Material Science)	Mar 2021
186.	Rensselaer Polytechnic Institute (ChemE)	Mar 2021
187.	University of Pennsylvania (MSE)	Sept 2021
188.	Peking University (MSE)	Oct 2021
189.	University of Massachusetts, Amherst, MA (Chemistry)	Oct 2021
190.	Oregon State University, Portland, OR (ChemE)	Oct 2021
191.	Stanford University, Stanford, CA (Chemistry)	Oct 2021
192.	Massachusetts Institute of Technology, Boston, MA (ChemE)	Dec 2021
193.	VinUniversity, Hanoi, Vietnam	Jan 2022
194.	Kyungpook National University, Korea (Polymer Science)	Jan 2022
195.	Tianjing University, China (Chemistry)	Feb 2022
196.	University of Washington, Seattle, WA (Chemical Engineering)	Feb 2022
197.	Wuhai University, China (Material Science)	Mar 2022
198.	Massachusetts Institute of Technology, Boston, MA (Mech.E)	Apr 2022
199.	University of Connecticut, CT (Bio Eng)	Apr 2022
200.	National University of Singapore, online (Chemistry)	Apr 2022
201.	Northwestern University, Evanston, IL (MSE)	May 2022
202.	Massachusetts Institute of Technology, Boston, MA (Chem)	May 2022
203.	Max Planck Institute for Intelligent Systems, Stuttgart, Germany	Jul 2022
204.	George Town University, Washington, DC (Engineering)	Sept 2022
205.	Samsung Advanced Institute of Technology, Korea	Oct 2022
206.	Saint Gobain Co., Northborough, MA	Nov 2022
207.	Boston University, Boston, MA	Nov 2022
208.	University of North Carolina at Chapel Hill, NC (Chemistry)	Mar 2023
209.	Purdue University, West Lafayette, IN (ChemE)	Mar 2023
210.	Argonne National Laboratory, IL	Apr 2023
211.	University of Chicago, Chicago, IL (Chemistry)	Apr 2023
212.	Rutgers University, Newark, NJ (Chemistry)	Apr 2023

## **(B) Invited Conference Lectures**

1. ACS Biannual Meeting, Santa Barbara, CA Nov 1996
2. NSF Materials Chemistry Workshop, Pasadena, CA Oct 1997
3. European MRS, France June 1998
4. IEEE Summer Topical meeting, Monterey, CA July 1998
5. ACS, Dallas, TX Mar 1998
6. MRS, Boston, MA Nov 1998
7. SPIE Photonic West conference, San Jose, CA Jan 1999
8. APS, 80<sup>th</sup> Topical Symposium, Murray Hill, NJ Apr 1999
9. The Fifth IUMRS International Conference on Advance Materials, China June 1999
10. Gordon Research Conference on "Electronic Materials: Chemistry, Excitations, and Processing", VT July 1999
11. ACS, New Orleans, LA Aug 1999
12. "Materials in Heartland" Conference, Carbondale, IL Oct 1999
13. Sensitive Skin Workshop by NSF/DAPAR, Washington, DC Oct 1999
14. Flexible Electronics Workshop, Princeton, NJ Feb 2000
15. 33rd Middle Atlantic Regional Meeting of ACS, Wilmington, DE May 2000
16. European MRS, France May 2000
17. Gordon Conference on "Organic Structures and Properties", VT June 2000
18. Electronic Materials Conference (EMC), Denver, CO June 2000
19. Sixth US/Germany Polymer Symposium, Evanston, IL Aug 2000
20. ACS, Washington, DC Aug 2000
21. PolyMillennium, Hawaii Dec 2000
22. Pacific Chem'2000, Hawaii Dec 2000
23. ACS, San Diego, CA Apr 2001
24. AMLCD 2001, Japan July 2001
25. ACS, Nobel Symposium, Chicago, IL July 2001
26. International Conference on Digital Printing Technologies Ft. Lauderdale, FL Oct 2001
27. ICONO'6, Tucson, AZ Dec 2001
28. MRS, San Francisco, CA Apr 2002
29. ACS, Orlando, FL (2 invited talks) Apr 2002
31. Polymer Conference, Manchester, UK Apr 2002
32. ACS, Boston, MA (3 invited talks) Aug 2002
35. The 8<sup>th</sup> International Conference in Search of Electroactive Polymer, New York, NY Dec 2002
36. MRS, San Francisco, CA (3 invited talks) Apr 2003
39. IEEE Solid-State Circuits Society (SSCS) workshop on "Application and Implementation of Organic Electronic Systems", Boston, MA June 2003
40. Northeast Regional Meeting of ACS on "Nano Technology – From Current Perspectives to Future Applications", Saratoga Springs, NY June 2003
41. SPIE, San Diego, CA Aug 2003

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|---|-----------|
| 42. 7th PAT 2003 (Polymers for Advanced Technologies) meeting,<br>Fort Lauderdale, FL                                       | Sept 2003 |
| 43. Conference on "New Frontiers in Electronic Applications<br>for Organic Materials", Newark, DE                           | Oct 2003  |
| 44. AVS, Baltimore, MD  | Nov 2003  |
| 45. Workshop on Advances in Molecular Electronics: From Molecular<br>Materials To Single Molecule Devices, Dresden, Germany | Feb 2004  |
| 46. Fragrant Hill Symposium on Molecular and Plastic Electronics<br>and Photonics, Beijing, China                           | May 2004  |
| 47. International Symposium on Organic and Inorganic Electronic<br>Materials and Related Nanotechnologies, Niigata, Japan   | June 2004 |
| 49. Gordon Conference on Electronic Processes in Organic Materials<br>South Hadley, MA                                      | July 2004 |
| 50. ACS, Philadelphia, PA (2 invited talks)   | Aug 2004  |
| 52. SPIE, Denver, CO  | Aug 2004  |
| 53. Gordon Conference on Surface Chemistry, Ventura, CA   | Feb 2005  |
| 54. ACS, San Diego, CA (3 invited talks)  | Mar 2005  |
| 57. Electronic Materials Symposium (ECS), Santa Clara, CA   | Apr 2005  |
| 58. MIT Stanford Berkley Nanoforum, Stanford, CA  | Apr 2005  |
| 59. International Symposium on Organic Optoelectronic<br>Materials and Thin Film Devices, China                             | Aug 2005  |
| 60. Frontiers in Optics conference, Denver, CO  | Oct 2005  |
| 61. The International Symposium on Molecular Scale Electronics,<br>Tsukuba, Japan   | Dec 2005  |
| 62. International Workshop on Semiconducting Polymers,<br>Hsinchu, Taiwan   | Feb 2006  |
| 63. ACS, Atlanta, GA  | Mar 2006  |
| 64. 4th International Symposium on Organic Molecular Electronics,<br>Saitama, Japan   | May 2006  |
| 65. ACS, San Francisco, CA  | Sept 2006 |
| 66. Golden Gate Polymer Forum, Mountain View, CA  | Oct 2006  |
| 67. DARPA 3D Design of Organic Semiconductors Workshop  | Jan 2007  |
| 68. ACS, Chicago, IL (3 invited talks)  | Mar 2007  |
| 71. MRS, San Francisco, CA (2 invited talks)  | Apr 2007  |
| 73. International Conference on Materials for<br>Advanced Technologies, Singapore   | July 2007 |
| 74. Organic Microelectronics, Seattle, WA   | July 2007 |
| 75. Plastic Electronics Foundation Annual Summit,<br>Frankfurt, Germany   | Oct 2007  |
| 76. Opportunities for Nanostructured Polymeric Materials for<br>Device Fabrication Workshop by ACS POLY                     | Nov 2007  |
| 77. APS, New Orleans, LA  | Mar 2008  |
| 78. SPIE Defense and Security Conference  | Mar 2008  |
| 79. Sweden Royal Society of Chemistry Trends in Organic<br>Chemistry Workshop, Uppsala, Sweden                              | Apr 2008  |
| 80. International Workshop on Organic Inorganic Hybrid  | June 2008 |

Functional Materials, Hangzhou, China	
81. 42 <sup>nd</sup> IUPAC Polymer Congress MACRO 2008, Taipei, Taiwan	July 2008
82. SPIE, San Diego, CA	Aug 2008
83. ACS POLY US-Japan POLYMAT, Ventura, CA	Aug 2008
84. ECS, Honolulu, HI	Oct 2008
85. IntertechPira Thin film Transistor Conference, La Jolla, CA	Nov 2008
86. MRS, Boston, MA (2 invited talks)	Nov 2008
88. ACS, Salt Lake City, UT (2 invited talks)	Mar 2009
90. SID, San Antonio, TX	June 2009
91. IEEE/MRS/ACS Organic Microelectronics Workshop San Francisco, CA	July 2009
92. Gordon Research Conference on Thin Film Growth New London, NH	July 2009
93. Aquitaine Conference on Polymers, France	Oct 2009
94. ACS, San Francisco, CA (3 invited talks)	Mar 2010
97. MRS, San Francisco, CA (2 invited talks)	Apr 2010
99. MRS, Boston, MA	Dec 2010
100. MRS, San Francisco, CA (3 invited talks)	Apr 2011
103. ICMAT, Singapore (2 invited talks)	July 2011
105. ACS, Denver, CO	Aug 2011
106. International Workshop on Printed Electronics, Muju, Korea	Nov 2011
107. MRS, Boston MA	Dec 2011
108. ACS, San Diego, CA (2 invited talks)	Mar 2012
110. MRS, San Francisco, CA (3 invited talks)	Apr 2012
113. International Symposium on Graphene and Green Technologies Tianjing, China	Apr 2012
114. FlexTech Alliance Wearable Electronics Workshop San Jose, CA	Apr 2012
115. Workshop on Biomimetic Mechanical Systems Seoul National University, Seoul, Korea	July 2012
116. ENGE 2012 International Conference on Electronic Materials and Nanotechnology for Green Environment, Jeju Island, Korea	Sep 2012
117. MRS, Boston, MA	Nov 2012
118. MRS, San Francisco, CA (2 invited talks)	Apr 2013
120. ACS, New Orleans, LA (3 invited talks)	Apr 2013
123. International SPIE DSS13 Micro-Nanotechnology Sensors, Systems, and Applications Conference, Baltimore, ML	May 2013
124. Council for Chemical Research (CCR) Annual Forum on Chemical Research, Arlington, VA	May 2013
125. International Materials Research Congress, Cancun, Mexico	Aug 2013
126. ACS, Indianapolis, IN	Sept 2013
127. International Conference on Flexible and Printed Electronics, Jeju Island, Korea	Sept 2013
128. International Colloquium on Flexible Electronics, Thuwal, Saudi Arabia	Nov 2013
129. ACS, Dallas, TX	Mar 2014

130. MRS, San Francisco, CA (6 invited talks)	Apr 2014
136. Gordon Research Conference on Electronic Processes in Organic Materials, Luca, Italy	May 2014
137. Gordon Research Conference on Hybrid Electronic and Photonic Materials and Phenomena	June 2014
138. ACS, San Francisco, CA (5 invited talks)	Aug 2014
143. Bioelectronics Symposium, Nanyang Technology University, Singapore	Oct 2014
144. AIChE, Atlanta, GA	Nov 2014
145. MRS, Boston, MA (2 talks)	Dec 2014
147. LOPEC Printed Electronics, Munich, Germany	Mar 2015
148. ACS, Denver, CO (5 talks)	Mar 2015
153. OrgBIO's project training school, Bari, Italy	Mar 2015
154. MRS, San Francisco, CA	Apr 2015
155. SID, Santa Clara, CA	June 2015
156. International Conference on Self-healing Materials, Durham, NC	June 2015
157. Symposium on Bioelectrochemistry and more, Vienna, Austria	June 2015
158. F-pi conference on Conjugated Functional Materials, Seattle, WA	July 2015
159. MRS, Boston, MA (2 talks)	Nov 2015
161. Pacific Chem, Honolulu, HI (3 talks)	Dec 2015
164. Symposium on Supramolecular Chemistry & Functional Materials Tokyo, Japan	Jan 2016
165. International Symposium on Functional Materials Okinawa, Japan	Jan 2016
166. ACS, San Diego, CA (4 talks)	Mar 2016
170. MRS, Phoenix, AZ (2 talks)	Apr 2016
172. Medicine for the Future Summit, Hong Kong	Aug 2016
173. Orthotic and Prosthetic Innovation and Technology conference University of California at San Francisco, CA	Oct 2016
174. MRS, Boston, MA (2 talks)	Nov 2016
176. WearableTech+Digital Health+NeuroScience, Stanford, CA	Feb 2017
177. MRS, Phoenix, AZ (2 talks)	Apr 2017
179. iFlex Symposium, Singapore	May 2017
180. Stanford CNC Annual Symposium	May 2017
181. Stanford PHIND Center Symposium	May 2017
182. Stimulus Polymer Symposium by ACS POLY, CA	Oct 2017
183. IDTechEx Printed Electronics USA, Santa Clara, CA	Nov 2017
184. MRS, Boston, MA	Nov 2017
185. ACS, New Orleans, LA (3 talks)	Mar 2018
188. ACS, Boston, MA (3 talks)	Aug 2018
191. eWEAR Annual Symposium	Feb 2019
192. DOE BES Physical Behavior Program Meeting	Mar 2019
193. MRS, Phoenix, AZ	Apr 2019
194. Big Data Precision Health Conference, Stanford, CA	May 2019
195. DOE EERE Battery Program Review Meeting, Washington DC	Jun 2019
196. Symposium on Organic Electronics, Mons, Belgium	Jul 2019
197. MURI Organic Solar Cell Symposium, Washington DC	Sep 2019

198. Stanford Center for Arrhythmia Research symposium, Stanford, CA	Sep 2019
199. Stanford eWEAR Student Conference, Stanford, CA	Sep 2019
200. MRS, Boston, MA (2 talks)	Dec 2019
202. ACS, San Francisco, online	Aug 2020
203. SLAC Summer Energy School, Stanford, CA, online	Sep 2020
204. eWEAR bi-annual symposium, Stanford, CA, online	Sep 2020
205. KAIST Emerging Materials Symposium, Korea, online	Sep 2020
206. Wu Tsai Institute Big Idea Symposium, Stanford, CA, online	Sep 2020
207. ACS San Diego Section, CA, online	Nov 2020
208. SmartMat Journal Online Forum, China, online	Nov 2020
209. Ben Ferringa Symposium, Netherlands, online	Nov 2020
210. Stanford Storage-X International Symposium, Stanford, CA, online	Nov 2020
211. US Army Futures Command DEVCOM Soldier Center, PA, online	Jan 2021
212. eWEAR Biannual Symposium, Stanford, CA, online	Feb 2021
213. Freiburg Macromolecular Colloquium, Germany, online	Feb 2021
214. MIT China Innovation and Entrepreneurship Forum, MA, online	Mar 2021
215. DOE-BES Physical Behavior PI Meeting, Washington, online	Mar 2021
216. ACS Graduate Student Symposium entitled: Bridging Disciplines to Build Better. Materials, online	Mar 2021
217. Women in Tech Symposium, Berkeley, CA, online	Mar 2021
218. APS Symposium Honoring Sam Jenekhe for Polymer Prize, USA, online	Mar 2021
219. TMS Frontiers of Materials, USA, online	Mar 2021
220. SPIE Photonics West in San Francisco, online	Mar 2021
221. Chinese American Semiconductor Professional Association Symposium	Mar 2021
222. MRS Spring Meeting, USA, online (2 talks)	Apr 2021
224. IEEE EMBS Neural Engineering Conference, Italy, online	May 2021
225. Nature Conference on Technologies for Neuroengineering, online	May 2021
226. Society of Information Display, USA, online (2 talks)	May 2021
228. Canadian Chemistry Conference -IUPAC, online	Aug 2021
229. Wutong Forum, Chinese University of Hong Kong Shenzhen, China, online	Aug 2021
230. ACS (3 talks), Atlanta, GA, online	Aug 2021
233. Carnegie Mellon BME Forum, Pittsburg, PA, online	Sep 2021
234. NanoGe Symposium on Neural Interfaces and Artificial Senses, online	Sep 2021
235. 1st Anniversary of ACS Accounts of Materials Research, online	Oct 2021
236. Stanford Wearable Electronics Initiative Annual Meeting, Stanford, CA	Oct 2021
237. Korean Society of Industrial and Engineering Chemistry (KSIEC) Annual Meeting, Daegu, South Korea, online	Oct 2021
238. AIChE Chinese-American Chemical Society (CACs) 40th Anniversary Symposium, Boston, MA, online	Nov 2021
239. MRS Fall Meeting, Boston, MA, online (2 talks)	Nov 2021
241. ACS Akron Section, Akron, OH, online	Jan 2021
242. NanoGe Organic Bioelectronics, online	Feb 2022
243. eWEAR Biannual Symposium, Stanford, CA, online	Feb 2022
244. Korean Polymer Society Annual Conference, Korea, online	Apr 2022
245. Journal of Nanobiotechnology Monthly Webinar, online	Apr 2022

246. Symposium on Organic and Hybrid Optoelectronics, Boulder, CO	May 2022
247. Workshop on Bioelectronics, Army Research Office, Austin, TX	May 2022
248. Tosoh Polymer Conference, Los Angeles, CA	Jun 2022
249. DOE Battery Program Review meeting, Washington DC	Jun 2022
250. AFOSR Program Review meeting, Dayton, OH	Jun 2022
251. National Workshop on Human-like Robots, online	Jul 2022
252. ACS, Chicago, IL	Aug 2022
253. Stanford Wearable Electronics Initiative Annual Symposium	Sep 2022
254. Stanford 2 <sup>nd</sup> Annual Precision Mental Health and Wellness Symposium	Oct 2022
255. Stanford Precision Health and Integrated Diagnostics Symposium	Nov 2022
256. MRS (2 talks), Boston, MA	Nov 2022
257. Materials Today Symposium (online)	Jan 2023
258. MRS (2 talks), San Francisco, CA	Apr 2023
260. NIH Workshop on Brain Behavior Quantification and Synchronization, Bethesda, MD	May 2023
261. Office of Naval Research Annual Program Review, Chapel Hill, NC	May 2023
262. Stanford US-Asia Technology Management Center Annual Meeting	May 2023
263. Cell Press Symposia Express Online Webinar	May 2023
264. AFOSR Annual Program Review, Dayton, OH	June 2023

#### **INVITED PLENARY LECTURES AND KEYNOTE SPEECHES:**

1) Canada-France Conference on Molecular Photonics and Plastics Electronics, Canada “Electroactive Polymeric and Organic Materials for Thin-Film-Transistor Applications”	Oct 2001
2) The Fifth International Symposium on Functional $\pi$ -Electron Systems, Germany “Conjugated Oligomers and Polymers for Plastic Electronics”	May 2002
3) Symposium on Novel Materials, Piscatway, NJ “Organic Materials for Plastic and Molecular Electronics”	May 2002
4) International Conference on Synthetic Metals, Shanghai, China “Recent Progress in Plastic Electronics”	June 2002
5) Society of Vacuum Coaters Annual meeting, Denver, CO “Materials and Processing of Organic Materials for Thin Film Electronics”	Apr 2005
6) Opening ceremony of Taiwan Flexible Electronics Consortium, Taiwan “Organic Materials for Flexible Electronics”	June 2005
7) AM-LCD’05 Conference, Kanazawa, Japan	July 2005

- “Organic Thin Film Transistors”
- 8) SPIE Annual meeting, San Diego, CA Aug 2006  
“Organic Thin Film Electronics”
  - 9) 42<sup>nd</sup> IUPAC Polymer Congress MACRO 2008, Taiwan, July 2008  
Award address “Polymers for Flexible Electronics”
  - 10) AICHE Annual Conference, Plenary session on Nov 2009  
Nano Science and Engineering Forum, Nashville, TN.  
“Carbon Nanotube Networks”
  - 11) Kodak Weissberger/Williams/Farid Distinguished Apr 2010  
Seminar Series, Rochester, NY  
“Recent Progress in Organic Transistors”
  - 12) Functional  $\pi$ - Systems 9, Atlanta, GA May 2010  
“Organic Semiconductors”
  - 13) International Conference on Organic Electronics, Paris, France June 2010  
“Organic Electronic Materials”
  - 14) Yonsei University 125<sup>th</sup> Anniversary Workshop on Humantronics June 2010  
Yonsei, Korea  
“Organic Transistor Sensors for Flexible Electronic Skin Applications”
  - 15) Plastic Electronics Foundation Annual Conference, Dresden, Germany Oct 2010  
“Recent Progress in Organic Electronics”
  - 16) UNIST Annual Symposium on Next Generation Energy, Ulsan, Korea Nov 2010  
“Carbon Nanomaterial-Based Transparent Electrodes”
  - 17) AAAS conference symposium on Functional Organic Electronic Feb 2011  
and Photonic Materials, Washington DC.  
“Organic Transistor Sensors and Circuits for Flexible Electronic Skin”
  - 18) Symposium on Nanomaterials Based Sensors for Biomedical Mar 2011  
Applications, Sydney, Australia,  
“Organic Transistor Sensors and Circuits for Flexible Electronic Skin”
  - 19) Frontier of Polymer Sciences Symposium, Lyon, France May 2011  
“Polymers for Flexible Electronic Skin Applications”
  - 20) SPIE Annual meeting, San Diego, CA Aug 2011  
“Organic Transistors for Electronic Skin”
  - 21) ACS Annual Fall meeting, Denver, CO Aug 2011  
Cope Scholar Award address, “Integrated Organic Materials  
Design for Flexible Electronics”
  - 22) 11<sup>th</sup> European Conference on Molecular Electronics, Barcelona, Spain Sept 2011
  - 23) International Conference on Synthetic Metals, Atlanta, Georgia July 2012
  - 24) Electronic Process in Organic Solids, Materials Design, Processing Nov 2012  
and Applications, YangZhou, China
  - 25) ACS Annual Spring Meeting, New Orleans, LA Apr 2013  
Polymer Chemistry Division Carl Marvel Creative Polymer Chemistry Award address  
“Integrated Polymer Design for Flexible Electronics”
  - 26) International Conference on Molecular Electronics and Devices, Daejeon, South Korea  
“Material Design and Applications for Flexible Electronics” May 2013
  - 27) International Conference on Functional  $\pi$ - Systems, Arcachon, France  
“Skin-Inspired Electronics” June 2013



- 28) Center for Integrated Nanotechnologies Annual User Conference, Santa Fe, NM  
“Skin-Inspired Electronics” Sept 2013
- 29) Soochow Science and Technology Forum, Soochow, China  
“Materials and Processes for Skin-Inspired Electronics” Nov 2013
- 30) The Croucher Foundation Advanced Study Institute on Printed Electronics, Hong Kong  
“Skin-Inspired Electronics Based on Organic Materials” Dec 2013
- 31) Kent State University Annual Symposium on Organic Photovoltaics, Kent, OH  
“Molecular Design and Processing of Organic Semiconductors” April 2014
- 32) IUPAC MACRO Conference on Macromolecules, Chiangmai, Thailand  
“Skin-Inspired Electronics Based on Polymer Materials” July 2014
- 33) Samsung Forum, Suwon, Korea  
“Stretchable Electronics Based on Organic Materials” Nov 2014
- 34) 13th CSACS Annual Meeting, Montreal, Canada  
“Supramolecular Chemistry in Skin-Inspired Electronics” May 2015
- 35) Frontiers of Nanochemistry - 2015” (FNC-2015), Beijing, China  
“Carbon Nano Chemistry for Skin-Inspired Electronics” June 2015
- 36) 5<sup>th</sup> Molecular Materials Meeting (M3), Singapore  
“Skin-Inspired Electronics Based on Organic Materials” July 2015
- 37) Bayreuth Polymer Symposium (BPS 15), Bayreuth, Germany  
“Skin-Inspired Electronics Based on Polymer Materials” Sept 2015
- 38) European networking program on Smart Inorganic Polymers conference  
Uppsala, Sweden  
“Supramolecular Chemistry in Skin-Inspired Electronics” Sept 2015
- 39) CHInano Conference & Expo, Suzhou, China  
“Skin-Inspired Electronics Based on Nano Materials” Oct 2015
- 40) AIChE Annual Meeting Andreas Acrivos Award for Professional  
Progress in Chemical Engineering Award Address, Salt Lake City, Utah Oct 2015
- 41) Symposium on Flexible and Stretchable Electronics, Singapore  
“Stretchable Electronics Based on Polymer Materials” Nov 2015
- 42) MRS Symposium-X, Boston, Massachusetts  
“Skin-Inspired Electronics Based on Organic Materials” Nov 2015
- 43) 14<sup>th</sup> Pacific Polymer Conference, Kauai, Hawaii  
“Skin-Inspired Electronics Based on Polymer Materials” Nov 2015
- 44) Nature Conference on Flexible Electronics  
“Skin-Inspired Electronic Materials and Devices” June 2016
- 45) 11<sup>th</sup> Sino-US Nano Forum, Nanjing, China  
“Nano Materials in Skin-Inspired Electronic Materials and Devices” June 2016
- 46) International Conference on Synthetic Metals, Guangzhou, China  
“Skin-Inspired Electronic Materials and Devices” June 2016
- 47) 30<sup>th</sup> Chinese Chemical Society Annual Meeting  
“Chemistry in Skin-Inspired Electronic Materials and Devices” July 2016
- 48) SPIE annual meeting, San Diego, CA  
“Skin-Inspired Electronic Materials and Devices” Aug 2016
- 49) 9<sup>th</sup> Singapore International Chemical Conference (SICC-9), Singapore  
“Skin-Inspired Electronic Materials and Devices” Dec 2016
- 50) Naff Symposium, University of Kentucky, Lexington, Kentucky Mar 2017

- “Skin-Inspired Electronic Materials and Devices”
- 51) American Chemical Society (ACS), Applied Polymer Science Award Address      Apr 2017  
    “Skin-Inspired Electronic Materials and Devices”
  - 52) Symposium on Recent Advances in Organic Bioelectronics, Hong Kong      June 2017  
    “Skin-Inspired Electronic Materials and Devices”
  - 53) International Conference on Advanced Materials (ICMAT), Singapore      June 2017  
    “Skin-Inspired Electronic Materials and Devices”
  - 54) European Conference on Molecular Electronics, Dresden, Germany      Aug 2017  
    “Skin-Inspired Electronic Materials and Devices”
  - 55) Knut and Alice Wallenberg Foundation Jubilee Symposium on Materials and Technology for  
a Digital Future, Norkoping, Sweden      Sep 2017  
    “Skin-Inspired Electronic Materials and Devices”
  - 56) CHAINS: CHemistry As INnovating Science (CHAINS) 2017 by Netherlands Organisation  
for Scientific Research (NWO), Netherlands      Dec 2017  
    “Skin-Inspired Electronic Materials and Devices”
  - 57) Bowei Research Conference, Hsinchu, Taiwan      Jan 2018  
    “Skin-inspired Organic Electronic Materials and Devices”
  - 58) ACS POLY/PMSE Plenary Talk, New Orleans, LA      Apr 2018  
    “Skin-Inspired Polymer Materials”
  - 59) IUPAC MACRO, Cairns, Australia      July 2018  
    “Skin-Inspired Polymer Materials”
  - 60) KAIST International Workshop      Aug 2018  
    “Skin-Inspired Electronics”
  - 61) ACS JACS Symposium Nanoscience, Nanotechnology & Beyond      Aug 2018  
    “Chemistry and Nanoscience in Skin-Inspired Electronics”
  - 62) International Conference of Solid-State Devices and Materials (SSDM)      Sep 2018  
    “Skin-Inspired Devices”
  - 63) International Institute for Nanotechnology (IIN) Symposium, Chicago, IL      Sep 2018  
    “Skin-Inspired Materials”
  - 64) Wilhelm Exner Medal Award address, Vienna, Austria      Oct 2018  
    “Skin-Inspired Materials and Applications”
  - 65) Dreyfus Teacher-Scholar Symposium, New York City, NY      Oct 2018  
    [“Skin-Inspired Materials”](#)
  - 66) Future Science Prize symposium, Beijing, China      Nov 2018  
    “Skin-Inspired Electronics”
  - 67) WearabelTech+NeuroTech, Stanford, CA      Feb 2019  
    “Stretchable Material Design and Applications”
  - 68) Canadian Chemical Society Meeting, Quebec City, Canada      June 2019  
    “Skin-Inspired Material Design”
  - 69) IUPAC 47<sup>th</sup> World Chemistry Congress, Paris, France      July 2019  
    “Chemistry in Skin-Inspired Electronics”
  - 70) International conference on Interface Properties In Organic and Hybrid Electronics  
Paris, France      July 2019  
    “Charge Transport Issues in Stretchable Organic Electronics”
  - 71) ACS POLY Polymer Advanced Technology, College Station, TX      Aug 2019  
    “Design Polymers for Skin-Inspired Electronics”

- 72) Asilomar Bioelectronics Symposium, Asilomar, CA  
“Skin-Inspired Electronics for Biointerfaces” Sep 2019
- 73) International conference on Active Materials and Soft Mechatronics  
Incheon, Korea  
“Skin-Inspired Electronics for Robotics” Oct 2019
- 74) ACS Publications Symposium: Innovation in Materials Science &  
Technology, Singapore  
“Chemistry in Skin-Inspired Electronics” Nov 2019
- 75) ACS Central Science Innovator and Disruptor Award address, online  
“Skin-Inspired Organic Electronics” Aug 2020
- 76) International Conference on Wearable Electronics and  
Potential in Chinese Medicine, Hong Kong, online  
“Skin-Inspired Sensors” Sep 2020
- 77) MicroTAS 2020, online  
“Skin-Inspired Sensors and Devices” Oct 2020
- 78) Royal Netherland Chemical Society Meeting  
“Skin-Inspired Organic Electronics” Oct 2020
- 79) Tencent-Nature Science Forum, China, online  
“Skin-Inspired Electronics” Nov 2020
- 80) ACS Gibbs Medal Award address, Chicago, IL, online  
“Skin-Inspired Organic Electronics” Nov 2020
- 81) InnoLAE Conference, Cambridge, UK, online  
“Skin-Inspired Organic Electronics” Feb 2021
- 82) CCS-Chemistry Symposium Celebrating International Women’s Day, China, online  
“Skin-Inspired Organic Electronics” Mar 2021
- 83) NSF Future of Semiconductors and Beyond Workshop, Washington, online  
“Skin-Inspired Organic Electronics: Seamless Integration with Biological Systems” Mar 2021
- 84) World Nano Congress on Advanced Science and Technology” (WNCST-2021), India  
“Skin-Inspired Organic Electronics” Mar 2021
- 85) MRS Spring Meeting, award address for MRS Mid-Career Award  
“Skin-Inspired Organic Electronics” Apr 2021
- 86) NanoNeuro 2021 conference, Columbia University, NY, online  
“Skin-inspired Electronics for Neuro Interface” June 2021
- 87) International Society of Bionic Engineering, Hong Kong, online  
“Skin-inspired Organic Electronics” July 2021
- 88) International Conference on Molecular Electronics and Devices, Korea, online  
“Skin-Inspired Organic Electronics” July 2021
- 89) IEEE International Flexible Electronics Conference (IFETC), online  
“Skin-Inspired Organic Electronics” Aug 2021
- 90) AAAFM-UCLA International Conference on Advances in Functional Materials,  
Los Angeles, CA, online  
“Skin-Inspired Polymer Electronics” Aug 2021
- 91) 100-Year of Polymer Science, Gesellschaft Deutscher Chemiker (GDCh)  
Division of Macromolecular Chemistry, Jena, Germany, online  
“Skin-Inspired Polymer Electronics” Sep 2021
- 92) 47th International Conference on Micro- and Nano-Engineering (MNE2021)

- Torino, Italy  
 “Skin-Inspired Electronics” Sep 2021
- 93) Nano.IL 2021 Nanotechnology Conference in Israel, online  
 “Skin-Inspired Organic Electronics” Oct 2021
- 94) 10th International Conference on Advanced Fibers and  
 Polymer Materials (ICAFPM), Shanghai, China, online  
 “Skin-Inspired Organic Electronics” Oct 2021
- 95) 44th Annual Macromolecular Symposium, University of Michigan, Ann Arber, MI  
 “Skin-Inspired Polymer Electronics” Oct 2021
- 96) Nanoenergy and Nanosystems Conference (NENS2021), Beijing, China, online  
 “Skin-Inspired Electronics” Oct 2021
- 97) 6th International Conference of NanoTrends (ICNT), Suzhou, China, online  
 “Skin-Inspired Organic Electronics” Oct 2021
- 98) 7th Nano Today Conference, Guangzhou, China, online  
 “Skin-Inspired Electronics” Nov 2021
- 99) Nanomaterials & Electronics for Wearable, Implantable Devices  
 & Applications - NEWIDEA21, Queensland, Australia, online  
 “Skin-Inspired Organic Electronics” Dec 2021
- 100) Frontiers of Organic Semiconductors from Challenges to Opportunities  
 Croucher Foundation, Hong Kong, China  
 “Skin-Inspired Organic electronics” Dec 2021
- 101) International Conference on Advanced Materials and Devices 2021 (ICAMD2021)  
 Applied Physics Division of the Korean Physical Society (KPS), Jeju, Korea, online  
 “Skin-Inspired Organic Electronics” Dec 2021
- 102) 35th IEEE International Conference on Micro-Electro-Mechanical  
 Systems (MEMS), Tokyo, Japan, online  
 “Skin-Inspired Electronics” Jan 2022
- 103) Celebrating 100 Years of Polymer Science, Spotlight in Advanced Science  
 Wiley Publisher, online  
 “Skin-Inspired Polymer Electronics” Mar 2022
- 104) Symposium for ACS Award on Chemistry of Materials Honoring Zhenan Bao  
 San Diego, CA, “Skin-inspired Organic Electronics” Mar 2022
- 105) Anniversary Seminar for Wiley VCH- 100 Years of Growing Knowledge, online  
 “Skin-inspired Organic Electronics” May 2022
- 106) Poly-Char Polymer Conference, online  
 “Skin-inspired Polymer Electronics” May 2022
- 107) 4th iHealthtech Symposium to be organized by the Institute for Health  
 Innovation & Technology (iHealthtech), Singapore, online  
 “Skin-inspired Organic Electronics” June 2022
- 108) International Conference on Intelligent Wearable Systems (ICIWS 2022),  
 Hong Kong, online  
 “Skin-Inspired Organic Electronics for Health” June 2022
- 109) International Conference on Synthetic Metals, Glasgow, UK  
 “Skin-inspired Organic Electronics” July 2022
- 110) IUMRS-ICYRAM International Union of Material Research Societies, Fukuoka, Japan  
 “Skin-inspired Electronics” (virtual talk) Aug 2022

- 111) ACS Talented 12 Symposium, online Sep 2022  
 “From picking stones in sand to creating a new generation of skin-inspired electronics”
- 112) POSTECH Signature Conference, Pohang, South Korea Oct 2022  
 “Skin-Inspired Electronics”
- 113) International Conference on Flexible and Printed Electronics (ICFPE 2022) Oct 2022  
 Jeju Island, South Korea  
 “Skin-Inspired Electronics for Sensing, Displays and Computing”
- 114) AIChE Sensors Topical plenary, Phoenix, TX Nov 2022  
 “Skin-inspired Sensors and Applications”
- 115) 4<sup>th</sup> International Conference on Flexible Electronics (ICFE) (Virtual) Dec 2022  
 “Skin-inspired Electronics”
- 116) International Display Workshops (IDW’22), Sapporo, Japan Dec 2022  
 “Skin-inspired Organic Electronics” (online)
- 117) KAIST Emerging Materials Symposium (virtual) Dec 2022  
 “Skin-inspired Organic Electronics and Bioelectronics”
- 118) Taiwan Bowei Research Conference, Kenting, Taiwan Jan 2023  
 “Skin-inspired Organic Electronics”
- 119) National Academy of Sciences, Engineering, Medicine workshop on Jan 2023  
 Biohybrid Materials “Building soft neuromorphic e-skin” (virtual)
- 120) 7th International Frontier of Polymer Science Symposium by Elsevier, May 2023  
 Gothenburg, Sweden, “Skin-inspired Polymer Electronics”
- 121) International Conference on Advanced Materials (ICMAT), Singapore June 2023  
 “Skin-Inspired Electronic Materials and Devices”
- 122) 5th iHealthtech Symposium to be organized by the Institute for Health June 2022  
 Innovation & Technology (iHealthtech), Singapore, online  
 “Skin-inspired Organic Electronics”

## PUBLICATIONS:

Updated full list: <https://profiles.stanford.edu/zhenan-bao?tab=publications>

### 2023:

1. W. Wang, Y. Jiang, D. Zhong, Z. Zhang, S. Choudhury, J. C. Lai, H. Gong, S. Niu, X. Yan, Y. Zheng, C. C. Shih, R. Ning, Q. Lin, D. Li, Y. H. Kim, J. Kim, Y. X. Wang, C. Zhao, C. Xu, X. Ji, Y. Nishio, H. Lyu, J. B. Tok, Z. Bao, "Neuromorphic sensorimotor loop embodied by monolithically integrated, low-voltage, soft e-skin", **Science**, 380 (6646), 735-742, 2023.
2. C. B. Cooper, S. E. Root, L. Michalek, S. Wu, J. C. Lai, M. Khatib, S. T. Oyakhire, R. Zhao, J. Qin, Z. Bao, "Autonomous alignment and healing in multilayer soft electronics using immiscible dynamic polymers", **Science**, 2023.

3. A. Zhang, K. Y. Loh, C. S. Kadur, L. Michalek, J. Dou, C. Ramakrishnan, Z. Bao, K. Deisseroth, "Genetically targeted chemical assembly of polymers specifically localized extracellularly to surface membranes of living neurons", **Science Advances**, 9 (32), 2023.
4. Y. Jiang, S. Ji, J. Sun, H. Hung, Y. Li, G. Zou, T. Salim, C. Wang, W. Li, H. Jin, J. Xu, S. Wang, T. Lei, X. Yan, W. Y. Peh, S. C. Yen, Z. Liu, M. Yu, H. Zhao, Z. Lu, G. Li, H. Gao, Z. Liu, Z. Bao, X. Chen, "A universal interface for plug-and-play assembly of stretchable devices", **Nature**, 614 (7948), 456-462, 2023.
5. W. Zhou, Y. Jiang, Q. Xu, L. Chen, H. Qiao, Y. X. Wang, J. C. Lai, D. Zhong, Y. Zhang, W. Li, Y. Du, X. Wang, J. Lei, G. Dong, X. Guan, S. Ma, P. Kang, L. Yuan, M. Zhang, J. B. Tok, D. Li, Z. Bao, W. Jia, "Soft and stretchable organic bioelectronics for continuous intraoperative neurophysiological monitoring during microsurgery", **Nat Biomed Eng**, 2023.
6. K. Kim, Z. Bao, "A skin sensor that can rapidly recognize hand-based tasks with limited training", **Nature Electronics**, 6, 8-9, 2023.
7. Z. Huang, J. Lai, S. Liao, Z. Yu, Y. Chen, W. Yu, H. Gong, X. Gao, Y. Yang, J. Qin, Y. Cui, Z. Bao, "A salt-philic, solvent-phobic interfacial coating design for lithium metal electrodes", **Nature Energy**, 2023.
8. Y. Zheng, L. Michalek, Q. Liu, Y. Wu, H. Kim, P. Sayavong, W. Yu, D. Zhong, C. Zhao, Z. Yu, J. A. Chiong, H. Gong, X. Ji, D. Liu, S. Zhang, N. Prine, Z. Zhang, W. Wang, J. B. Tok, X. Gu, Y. Cui, J. Kang, Z. Bao, "Environmentally stable and stretchable polymer electronics enabled by surface-tethered nanostructured molecular-level protection", **Nature Nanotechnology**, 2023.
9. X. Gao, Z. Yu, J. Wang, X. Zheng, Y. Ye, H. Gong, X. Xiao, Y. Yang, Y. Chen, S. E. Bone, L. C. Greenburg, P. Zhang, H. Su, J. Affeld, Z. Bao, Y. Cui, "Electrolytes with moderate lithium polysulfide solubility for high-performance long-calendar-life lithium-sulfur batteries", **Proc. Natl. Acad. Sci. U.S.A.**, 120 (31), 2023.
10. S. Choudhury, Z. Huang, C. V. Amanchukwu, P. E. Rudnicki, Y. Chen, D. Boyle, J. Qin, Y. Cui, Z. Bao, "Ion Conducting Polymer Interfaces for Lithium Metal Anodes: Impact on the Electrodeposition Kinetics", **Adv. Energy Mater.**, 2023.
11. E. Zhang, Y. Chen, Z. Yu, Y. Cui, Z. Bao, "Monofluorinated Ether Electrolyte with Acetal Backbone for High-Performance Lithium Metal Batteries", **ChemRxiv**, 2023.
12. Y. Lin, Z. Yu, W. Yu, S. Liao, Z. Huang, Y. Chen, E. Zhang, J. Qin, Y. Cui, Z. Bao, "Impact of Fluorination Degree of Ether-Based Electrolyte Solvent on Li-metal Battery Performance", **ChemRxiv**, 2023.
13. S. Zhang, F. Talnack, T. Jouselin, V. Oba, Y. Bhat, Y. Wu, Y. Lei, H. Tomo, L. Gong, D. Michalek, C. Zhong, A. Wu, S. Yassar, C. Mannsfeld, M. Risko, Z. Frigoli, "Shear-aligned large-area organic semiconductor crystals through extended pi-pi interaction", **J. Mater. Chem. C**, 11 (26), 8992-9001, 2023.

14. P. Sayavong, W. Zhang, S. T. Oyakhire, D. T. Boyle, Y. Chen, S. C. Kim, R. A. Vil, S. E. Holmes, M. S. Kim, S. F. Bent, Z. Bao, Y. Cui, "Dissolution of the Solid Electrolyte Interphase and Its Effects on Lithium Metal Anode Cyclability", **J. Am. Chem. Soc.**, 145 (22), 12342–12350, 2023.
15. G. Chen, Z. Li, Z. Huang, H. Lu, G. Long, J. S. Lezama, J. B. Pacheco, T. Z. Tok, Y. Gao, J. Lei, Z. Zhou, "Effects of Transition Metals on Metal-Octaaminophthalocyanine-Based 2D Metal-Organic Frameworks", **ACS Nano**, 2023.
16. C. V. Amanchukwu, A. B. Gunnarsdottir, S. Choudhury, T. L. Newlove, P. M. Magusin, Z. Bao, C. P. Grey, "Understanding Lithium-Ion Dynamics in Single-Ion and Salt-in- Polymer Perfluoropolyethers and Polyethyleneglycol Electrolytes Using Solid-State NMR", **Macromolecules**, 56 (10), 3650–3659, 2023.
17. U. Kraft, M. Nikolka, G. Wang, Y. Kim, R. Pfatter, M. Alsufyani, I. McCulloch, B. Murmann, Z. Bao, "Low-voltage polymer transistors on hydrophobic dielectrics and surfaces", **J. Phys. Mater**, 6 (2), 2023.
18. I. Buyuker, B. Pei, H. Zhou, X. Cao, Z. Yu, S. Liu, W. Zhang, W. Xu, J. Zhang, Z. Bao, Y. Cui, C. Wang, M. Whittingham, "Voltage and Temperature Limits of Advanced Electrolytes for Lithium-Metal Batteries", **ACS Energy Lett**, 8 (4), 1735-1743, 2023.
19. Y. Luo, M. R. Abidian, J. H. Ahn, D. Akinwande, A. M. Andrews, M. Antonietti, Z. Bao, M. Berggren, C. A. Berkey, C. J. Bettinger, J. Chen, P. Chen, W. Cheng, X. Cheng, S. J. Choi, A. Chortos, C. Dagdeviren, R. H. Dauskardt, C. A. Di, M. D. Dickey, X. Duan, A. Facchetti, Z. Fan, Y. Fang, J. Feng, X. Feng, H. Gao, W. Gao, X. Gong, C. F. Guo, X. Guo, M. C. Hartel, Z. He, J. S. Ho, Y. Hu, Q. Huang, Y. Huang, F. Huo, M. M. Hussain, A. Javey, U. Jeong, C. Jiang, X. Jiang, J. Kang, D. Karnaushenko, A. Khademhosseini, D. H. Kim, I. D. Kim, D. Kireev, L. Kong, C. Lee, N. E. Lee, P. S. Lee, T. W. Lee, F. Li, J. Li, C. Liang, C. T. Lim, Y. Lin, D. J. Lipomi, J. Liu, K. Liu, N. Liu, R. Liu, Y. Liu, Y. Liu, Z. Liu, Z. Liu, X. J. Loh, N. Lu, Z. Lv, S. Magdassi, G. G. Malliaras, N. Matsuhisa, A. Nathan, S. Niu, J. Pan, C. Pang, Q. Pei, H. Peng, D. Qi, H. Ren, J. A. Rogers, A. Rowe, O. G. Schmidt, T. Sekitani, D. G. Seo, G. Shen, X. Sheng, Q. Shi, T. Someya, Y. Song, E. Stavriniidou, M. Su, X. Sun, K. Takei, X. M. Tao, B. C. Tee, A. V. Thean, T. Q. Trung, C. Wan, H. Wang, J. Wang, M. Wang, S. Wang, T. Wang, Z. L. Wang, P. S. Weiss, H. Wen, S. Xu, T. Xu, H. Yan, X. Yan, H. Yang, L. Yang, S. Yang, L. Yin, C. Yu, G. Yu, J. Yu, S. H. Yu, X. Yu, E. Zamburg, H. Zhang, X. Zhang, X. Zhang, X. Zhang, Y. Zhang, Y. Zhang, S. Zhao, X. Zhao, Y. Zhao, Y. Q. Zheng, Z. Zheng, T. Zhou, B. Zhu, M. Zhu, R. Zhu, Y. Zhu, Y. Zhu, G. Zou, X. Chen, "Technology Roadmap for Flexible Sensors", **ACS Nano**, 17 (6), 5211-5295, 2023.
20. S. C. Kim, S. T. Oyakhire, C. Athanitis, J. Wang, Z. Zhang, W. Zhang, D. T. Boyle, M. S. Kim, Z. Yu, X. Gao, T. Sogade, E. Wu, J. Qin, Z. Bao, S. F. Bent, Y. Cui, "Data-driven electrolyte design for lithium metal anodes", **Proc. Natl. Acad. Sci. U.S.A.**, 120 (10), 2023.
21. S. Santhanam, V. R. Feig, K. W. McConnell, S. Song, E. E. Gardner, J. J. Patel, D. Shan, Z. Bao, P. M. George, "Controlling the Stem Cell Environment Via Conducting Polymer Hydrogels to Enhance Therapeutic Potential", **Adv. Mater. Technol.**, 2201724, 2023.

22. M. S. Kim, Z. Zhang, Wang, J. Wang, S. T. Oyakhire, S. C. Kim, Z. Yu, Y. Chen, D. T. Boyle, Y. Ye, Z. Huang, W. Zhang, R. Xu, P. Sayavong, S. F. Bent, J. Qin, Z. Bao, Y. Cui, "Revealing the Multifunctions of Li<sub>3</sub>N in the Suspension Electrolyte for Lithium Metal Batteries", **ACS Nano**, 17 (3), 3168-3180, 2023.
23. A. Pena-Alcantara, S. Nikzad, L. Michalek, N. Prine, Y. Wang, H. Gong, E. Ponte, S. Schneider, Y. Wu, S. E. Root, M. He, J. Tok, X. Gu, Z. Bao, "Effect of Molecular Weight on the Morphology of a Polymer Semiconductor-Thermoplastic Elastomer Blend", **Adv. Electron. Mater.**, 2201055, 2023.
24. Z. Zhang, Z. Bao, "High luminescent polymers for stretchable displays", **National Science Review**, 10 (1), 2023.

### **2022:**

25. J. Li, Y. Liu, L. Yuan, B. Zhang, E.-S. Bishop, K. Wang, J. Tang, Y. Zheng, W. Xu, S. Niu, L. Beker, T.-L. Li, G. Chen, M. Diyaolu, A. Thomas, V. Mottini, J.-B. Tok, J.-C. Dunn, B. Cui, S.-P. Paşca, Y. Cui, A. Habtezion, X. Chen, Z. Bao, "A tissue-like neurotransmitter sensor for the brain and gut", **Nature**, 606 (7912), 94-101, 2022.
26. Y. Jiang, Z. Zhang, Y. X. Wang, D. Li, C.-T. Coen, E. Hwaun, G. Chen, H.-C. Wu, D. Zhong, S. Niu, W. Wang, J.-C. Lai, Y. Wu, Y. Wang, A. A. Trotsyuk, K. Y. Loh, C.-C. Shih, W. Xu, K. Liang, K. Zhang, Y. Bai, G. Gurusankar, W. Hu, W. Jia, Z. Cheng. R. Dauskardt, G. C. Gurtner, J. B.-H. Tok, K. Deisseroth, I. Soltesz, Z. Bao, "Topological supramolecular network enabled high-conductivity, stretchable organic bioelectronics", **Science**, 375, 1411-1417, 2022.
27. Z. Zhang, W. Wang, Y. Jiang, Y.-X. Wang, Y. Wu, J.-C. Lai, S. Niu, C. Xu, C.-C. Shih, C. Wang, H. Yan, L. Galuska, N. Prine, H.-C. Wu, D. Zhong, G. Chen, N. Matsuhisa, Y. Zheng, Z. Yu, Y. Wang, R. Dauskardt, X. Gu. J. B.-H. Tok, Z. Bao, "High-brightness all-polymer stretchable LED with charge-trapping dilution", **Nature**, 603 (7902), 624-630, 2022.
28. Z. Zhang, Y. Li, R. Xu, W. Zhou, Y. Li, S.T. Oyakhire, Y. Wu, J. Xu, H. Wang, Z. Yu, D.T. Boyle, W. Huang, Y. Ye, H. Chen, J. Wan, Z. Bao, W. Chiu, Y. Cui. "Capturing the swelling of solid-electrolyte interphase in lithium metal batteries", **Science**, 375, 6576, pg 66-70, 2022.
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**PATENTS ISSUED OR TO BE ISSUED:**

**Updated full list of US patent:**

<https://patents.google.com/?inventor=Bao+Zhenan&status=GRANT&page=7>

No.	Patent ID	Title	Inventor
1	US-10545058-B2	Pressure sensing apparatuses and methods	Zhenan Bao, Stefan Christian Bernhardt Mannsfeld, Jason Locklin, Chee-Keong Tee
2	US-9502152-B2	Method of selective separation of semiconducting carbon nanotubes, dispersion of semiconducting carbon nanotubes, and electronic device including carbon nanotubes separated by using the method	Young-Jun Park, Jong-min Kim, Hang-woo Lee, Zhenan Bao
3	US-9625330-B2	Methods and apparatus concerning multi-tactile sensitive (E-skin) pressure sensors	Steve J. Park, Zhenan Bao
4	US-10037098-B2	Methods and apparatus concerning sensitive force sensors	Zhenan Bao, Alex L. Chortos, Ho-Hsiu Chou
5	US-9848775-B2	Passive and wireless pressure sensor	Chee-Keong Tee, Lisa Yun Chen, Zhenan Bao, Darren Lipomi, Michael V. McConnell, H. S. Philip Wong
6	US-9490045-B2	Self-healing composites and applications thereof	Chee Keong Tee, Chao Wang, Hui Wu, Yi Cui, Zhenan Bao
7	US-9453774-B2	Surface area-based pressure sensing	Zhenan Bao, Alex Chortos, Lijia Pan
8	US-10601049-B2	High performance battery anodes with polymeric coatings including molecules cross-linked through dynamic bonds	Zhenan Bao, Yi Cui, Guangyuan Zheng, Chao Wang, Jeffrey Lopez, Allen Pei
9	EP-1464953-B1	Biosensor comprising an organic field effect transistor and method for the fabrication of the sensor	Zhenan Bao, Bernard Yurke
10	US-7189663-B2	Organic semiconductor device having an active dielectric layer comprising silsesquioxanes	Zhenan Bao, Valerie Jeanne Kuck, Mark Anthony Paczkowski
11	US-7910736-B2	Method for producing organic field-effect transistors	Martin Koenemann, Peter Erk, Zhenan Bao, Mang-Mang Ling

12	US-7704784-B2	Semiconductor devices having regions of induced high and low conductivity, and methods of making the same	Zhenan Bao, Howard Edan Katz, Jeffrey Scott Meth
13	US-8785763-B2	Joined nanostructures and methods therefor	Melburne C. Lemieux, Ajay Virkar, Zhenan Bao
14	US-9087995-B2	Fullerene-doped nanostructures and methods therefor	Ajay Virkar, Melburne C. Lemieux, Zhenan Bao
15	US-7338835-B2	OFETs with active channels formed of densified layers	Zhenan Bao
16	US-7795145-B2	Patterning crystalline compounds on surfaces	Marcos Gomez, Peter Erk, Frauke Richter, Zhenan Bao, Shuhong Liu
17	US-10722174-B2	Skin-conformal sensors	Changhyun Pang, Zhenan Bao
18	US-10431757-B2	Polar elastomers for high performance electronic and optoelectronic devices	Zhenan Bao, Chao Wang, Wen Ya Lee, Guillaume Schweicher, Desheng Kong
19	US-9133130-B2	n-Type doped organic materials and methods therefor	Peng Wei, Zhenan Bao
20	US-10395804-B2	Isolating semiconducting single-walled nanotubes or metallic single-walled nanotubes and approaches therefor	Zhenan Bao, Igor Pochorovski
21	US-7045814-B2	OFET structures with both n- and p-type channels	Zhenan Bao, Evert-Jan Borkent, Dawen Li
22	US-8866265-B2	Carbon-based semiconductors	Zhenan Bao, Marc RAMUZ, Michael Vosgueritchian
23	ES-2370857-T3	METHOD FOR PRODUCING ORGANIC FIELD EFFECT TRANSISTORS.	Martin KÖNEMANN, Peter Erk, Mang-Mang Ling, Zhenan Bao
24	US-10160835-B2	Self-healing polymers and applications thereof	Chao Wang, Cheng-Hui Li, Zhenan Bao
25	US-11053390-B2	Stretchable, tough, and self-healing elastomer and applications thereof	Zhenan Bao, Jiheong Kang, Donghee SON
26	US-10899908-B2	Self-healing composite and device including self-healing film	Youngjun YUN, Donghee SON, Jiheong Kang, Zhenan Bao, Orestis Vardoulis
27	US-9085458-B2	Selective nanotube formation and related devices	Zhenan Bao, Melburne Lemieux, Justin P. Opatkiewicz, Soumendra N. Barman

28	US-10978735-B2	Stretchable polymer electrolyte, stretchable electrode, stretchable polymer, electrochemical device, and method of preparing stretchable polymer	Minsang SONG, Yongming Sun, Jeffrey Lopez, Yi Cui, Zhenan Bao
29	US-7160754-B2	P-type OFET with fluorinated channels	Zhenan Bao, Evert-Jan Borkent
30	US-8513804-B2	Nanotube-based electrodes	Sondra Hellstrom, Zhenan Bao
31	US-10177326-B2	Polymeric dielectrics, methods of manufacturing the same, and electronic devices and thin film transistors including the same	Jong Won Chung, Sangyoon Lee, Ying-Li RAO, Zhenan Bao
32	US-11001695-B2	Fast and reversible thermoresponsive polymer switching materials	Zhenan Bao, Yi Cui, Zheng Chen
33	US-9725557-B2	Conjugated polymer-based apparatuses, articles and compounds	Zhenan Bao, Lei Fang, Jianguo Mei, Yan Zhou
34	US-10869392-B2	Flexible and self-healing elastomer-based modular electronics and applications thereof	Zhenan Bao, Jiheong Kang, Donghee SON, Orestis Vardoulis
35	US-9147845-B2	Single walled carbon nanotube-based planar photodetector	Young-Jun Park, Steve Park, Zhenan Bao
36	US-10672987-B2	Polymer and electronic device and organic thin film transistor including the same	Jong Won Chung, Sangyoon Lee, Zhenan Bao, Simon RONDEAU-GAGNE, Bob C. SCHROEDER, Jinyoung Oh, Yu-Cheng CHIU, Franziska LISSEL
37	US-9040400-B2	Air-stable n-channel organic electronic devices	Peng Wei, Zhenan Bao, Joon Hak Oh
38	US-9263524-B2	Semiconductor materials, apparatuses and methods	Peng Wei, Zhenan Bao, Benjamin D. Naab
39	US-10858522-B2	Electrically conductive hydrogels with tunable properties	Vivian R. Feig, Helen Tran, Zhenan Bao
40	US-10388881-B2	Sorting of carbon nanotubes	Zhenan Bao, Ting Lei, Ying-Chih LAI, Huiliang Wang, Pascal Hayoz, Thomas Weitz
41	US-10741766-B2	Organic semiconductor thin film and method of manufacturing the same and thin film transistor and electronic device	Jong Won Chung, Sangyoon Lee, Zhenan Bao, Jie Xu
42	US-9608221-B2	Solar cell having organic nanowires	Young-Jun Park, Zhenan Bao, Joon-Hak Oh

43	US-9212960-B2	Nanostructures with strain-induced resistance	Darren Lipomi, Michael Vosgueritchian, Chee-Keong Tee, Sondra Hellstrom, Zhenan Bao
44	US-8679984-B2	Method of manufacturing electric device, array of electric devices, and manufacturing method therefor	Jong Won Chung, Christopher J. Bettinger, Zhenan Bao, Do Hwan Kim, Bang Lin Lee, Jeong Il Park, Yong Wan JIN, Sang Yoon Lee
45	US-11048990-B2	Resonance-based inductive communication via frequency sweeping	Siavash Kananian, Ada Poon, Simiao NIU, Zhenan Bao, Naoji MATSUHISA, George Alexopoulos
46	US-9863057-B2	Coated substrate apparatus and method	Zhenan Bao, Ying Diao, Stefan Christian Bernhardt Mannsfeld, Chee-Keong Tee, Hector A. Becerril-Garcia, Yan Zhou
47	US-9155996-B2	Sorbents for carbon dioxide capture	Jennifer Wilcox, T. Daniel P. Stack, Zhenan Bao, Brannon Gary, Jiajun He, John To
48	US-9070881-B2	Method of manufacturing an organic semiconductor thin film	Zhenan Bao, Gaurav GIRI, Sang-yoon Lee, Stefan MANNSFELD
49	US-9520563-B2	Patterning of organic semiconductor materials	Stefan Christian Bernhardt Mannsfeld, Armon Sharei, Zhenan Bao
50	US-8119445-B2	Organic semiconductors and growth approaches therefor	Ajay A. Virkar, Stefan Christian Bernhardt Mannsfeld, Zhenan Bao
51	EP-3380541-B1	Degradable conjugated polymers	Zhenan Bao, Ting LEI
52	US-7569416-B2	Forming closely spaced electrodes	Zhenan Bao, Jie Zheng, James C. Sturm, Troy Graves-Abe
53	US-9130171-B2	High-mobility structures, apparatuses and methods therefor	Jianguo Mei, Zhenan Bao
54	US-9442087-B2	Organic thin-film transistor sensor arrangements	Zhenan Bao, Mark E. Roberts
55	US-10635868-B1	Sensor system using stretchable antenna	Youngjun YUN, Naoji MATSUHISA, Simiao



			NIU, Zhenan Bao, William Burnett
56	US-7855121-B2	Method of forming organic thin film and method of manufacturing semiconductor device using the same	Do Hwan Kim, Sangyoon Lee, Hector Alejandro Becerril Garcia, Mark Roberts, Zhenan Bao, Zihong Liu
57	US-8957406-B2	Organic material-based graphitic material	Anatoliy N. Sokolov, Fung Ling Yap, Zhenan Bao, Nan Liu
58	US-10155876-B2	Methods and apparatus concerning solution shearing a transparent and conductive polymer film	Zhenan Bao, Sean C. Andrews, Brian J. Worfolk, Stefan C. B. Mannsfeld
59	US-6107117-A	Method of making an organic thin film transistor	Zhenan Bao, Ananth Dodabalapur, Yi Feng, Venkataram Reddy Raju
60	US-6150668-A	Thin-film transistor monolithically integrated with an organic light-emitting diode	Zhenan Bao, Ananth Dodabalapur, Howard Edan Katz, Venkataram Reddy Raju, John A. Rogers
61	US-6033202-A	Mold for non - photolithographic fabrication of microstructures	Zhenan Bao, John A. Rogers
62	US-5969376-A	Organic thin film transistor having a phthalocyanine semiconductor layer	Zhenan Bao
63	US-6665127-B2	Method and apparatus for aligning a photo-tunable microlens	Zhenan Bao, Timofei Nikita Kroupenkine, Alan Michael Lyons, Mary Louise Mandich, Louis Thomas Manzione, Elsa Reichmanis, Shu Yang
64	US-6596569-B1	Thin film transistors	Zhenan Bao, Peter Kian-Hoon Ho, Yueh-Lin Loo, John A. Rodgers, Takao Someya
65	US-6579564-B2	Process for fabricating polarized organic photonics devices	Xiaochun Linda Chen, Zhenan Bao
66	US-6452207-B1	Organic semiconductor devices	Zhenan Bao
67	US-7439096-B2	Semiconductor device encapsulation	Kirk W. Baldwin, Zhenan Bao, Peter Mach, John A. Rogers
68	US-6372532-B2	Method of manufacturing a patterned light emitting diode devices	Zhenan Bao, John A. Rogers

69	US-6736985-B1	High-resolution method for patterning a substrate with micro-printing	Zhenan Bao, Anita Makhjita, John A. Rogers
70	US-6555411-B1	Thin film transistors	Zhenan Bao, Edwin Arthur Chandross, John A. Rodgers
71	EP-1235070-B1	Electronic odor sensor	Zhenan Bao, Brian Keith Crone, Ananth Dodabalapur, Alan Gelperin, Howard Edan Katz
72	US-6589629-B1	Process for fabricating patterned, functionalized particles and article formed from particles	Zhenan Bao, Edwin Arthur Chandross, Xiaochen Linda Chen, John A. Rogers, Marcus Weldon
73	US-6743988-B2	Optically controlled switches	Zhenan Bao, David John Bishop, Robert Albert Boie, Dustin W. Carr, Edwin Arthur Chandross, Peter Kian-Hoon Ho
74	US-6969634-B2	Semiconductor layers with roughness patterning	Zhenan Bao
75	US-6383665-B1	Polarizable photoactive and electroactive polymers and light emitting devices	Zhenan Bao, Karl R. Amundson, Xiaochen Linda Chen
76	US-7115900-B2	Devices having patterned regions of polycrystalline organic semiconductors, and methods of making the same	Joanna Aizenberg, Zhenan Bao, Alejandro L. Briseno, Yong-Jin Han, Hyunsik Moon
77	US-6429040-B1	Device comprising a bipolar semi-conducting film	Zhenan Bao, Xiaochen Linda Chen
78	US-11281874-B2	Flexible tag device and flexible sensing system comprising the same	Simiao NIU, Weichen Wang, Naoji MATSUHISA, Gae Hwang LEE, Zhenan Bao
79	US-11075348-B2	Thin film transistor and thin film transistor array and electronic device	Youngjun YUN, Xuzhou YAN, Jinyoung Oh, Zhenan Bao, Hung-Chin Wu
80	US-7045470-B2	Methods of making thin dielectric layers on substrates	Zhenan Bao, Howard Edan Katz
81	US-6885024-B2	Devices with organic crystallite active channels	Zhenan Bao, Howard Edan Katz, Christian Kloc

82	US-6770549-B2	Forming patterned thin film metal layers	Zhenan Bao, Peter Kian-Hoon Ho, Takao Someya
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**Start-up companies started from or licensing inventions from Bao Group:**

1. **C3 Nano**, co-founded by Bao, a performance leader in transparent conductive films, nano conductive material products incorporated into commercial foldable smartphones, smart watches and touch-screen TVs. [www.c3nano.com](http://www.c3nano.com)
2. **PyrAmes**, co-founded by Bao, products received FDA-designated breakthrough device for infant noninvasive continuous blood pressure monitoring, awarded first place in the Early Commercialization Innovation Track in Bear Institute's second annual Pediatric Accelerator Challenge for Kids. [www.pyrameshealth.com](http://www.pyrameshealth.com)
3. **PeroPure**, advisor, water purification using carbon electrocatalysts invented in Bao and Jaramillo Groups (by Zihua Chen and Shucheng Chen). [www.peropure.com](http://www.peropure.com)
4. **Tanovus**, battery material company commercializing carbon flower materials invented in Bao Group (by Shucheng Chen). [www.tanovus.com](http://www.tanovus.com)
5. **WearLinq**, advisor, multi-lead ECG patch company started from invention from Bao Group (by Yuxin Liu and Yasser Khan), received FDA approval. [www.wearlinq.com](http://www.wearlinq.com)
6. **Anthro Energy**, advisor, flexible batteries started from battery materials invented in Bao Group (by David Macknic). [www.anthroenergy.com](http://www.anthroenergy.com)
7. **eLyte**, advisor, commercializing electrolyte for lithium metal batteries invented in Bao and Cui Group (by Zhiao Yu and Yuelang Chen). [www.elyte.tech](http://www.elyte.tech)
8. **Aoxft**, flexible neuro probes, licensing soft electronics IP from Bao Group (by Jia Liu and Yuxin Liu). [www.aoxft.com](http://www.aoxft.com)