

BENJAMIN S. HSIAO

CURRENT POSITION:

Distinguished Professor, Stony Brook University
Co-founding Director, Innovative Global Energy Solutions Center, Stony Brook University
(www.igesc.org)
Director, Center for Integrated Electric Energy Systems, Stony Brook University
(www.sbuciees.org)

EDUCATION:

1987 Ph.D., Institute of Materials Science, University of Connecticut
1980 B.S., Chemical Engineering, National Taiwan University

EMPLOYMENT HISTORY:

2015- SUNY Distinguished Professor, Department of Chemistry, Stony Brook University
2015- Director, Center for Advanced Technology in Integrated Electric Energy Systems, Stony Brook University
2014- Co-founding Director, Innovative Global Energy Solutions Center, Stony Brook University
2012-2013 Vice President for Research and Chief Research Officer (1.5 years), Stony Brook University
2007-2012 Chair, Department of Chemistry, Stony Brook University
2002- Professor, Department of Chemistry, Stony Brook University
1998-2002 Associate Professor, Department of Chemistry, Stony Brook University
1997-1998 Assistant Professor, Department of Chemistry, Stony Brook University
1993-1997 Senior Staff Scientist, Materials Science and Engineering, Central Research & Development Department, DuPont Company
1989-1993 Staff Scientist, Pioneering Laboratory, Fibers Department, DuPont Company
1987-1989 Post-Doctoral Research Fellow, Departments of Chemistry and of Polymer Science & Engineering, University of Massachusetts

OTHER APPOINTMENTS:

Academic Appointments

2017- Affiliated Faculty, Department of Civil Engineering, Stony Brook University
2015- Honorary Professor, Australian Institute for Bioengineering and Nanotechnology, The University of Queensland
2015- Affiliated Faculty, Department of Technology and Society, Stony Brook University
2014- Affiliated Faculty, Department of Materials Science and Engineering, Stony Brook University
2008- Chang-Jiang Professor, Donghua University, Shanghai, China
2009- Visiting Professor, Beijing University of Chemical Technology, Beijing, China
2009- Consulting Professor, Tongji University, Shanghai, China
1998- Guest Professor, Changchun Institute of Applied Chem, Chinese Academic of Sciences, China
2000- Affiliated Faculty, Department of Biomedical Engineering, Stony Brook University
2009-2011 Founding Member of the Stony Brook Southampton Affiliate Faculty, Stony Brook University
1994-2000 Adjunct Associate Professor, Department of Materials Science and Engineering, University of Delaware

Photon Sciences

2011-2012 Co-Director (together with John Parise), Joint Photon Sciences Institute between Brookhaven National Laboratory and Stony Brook University
1997-2012 Spokesperson, Advanced Polymers PRT Beamline (X27C, Co-Spokesperson: Ben Chu), National Synchrotron Light Source (NSLS), Brookhaven National Laboratory (BNL)
2002-2004 Spokesperson, SUNY SAXS Beamline (X3A2), NSLS, BNL
1994-1997 Project Leader, Polymer Synchrotron Research Team; Member and Alternative Member of the Management Board, DND-CAT (DuPont-Northwestern-Dow Collaborative Access Team), Advanced Photon Source, Argonne National Laboratory

Entrepreneurial Activities

- 2020- Co-founder of Precision Technology Botswana, Inc. (based on electrospun nanofiber technology for water and air applications)
- 2019- Co-founder of SWF Technology, Inc. (based on nanocellulose technology for water applications)
- 2017- Co-founder of Sustainable Off-grid Solutions for African Economic Development (<http://www.sosaed.org/>)
- 2011- Co-founder of Aqua-Tech, Inc., Shanghai, China (www.jiesheng.cc, based on SBU nanofiber technology for ultrafiltration, nanofiltration and desalination applications)
- 2010- Co-founder of Liquidity Nanotechnology, LLC (www.liquico.com, based on SBU nanofiber microfiltration technology for drinking water purification), the winner of the "Next Generation Technology" award in Launch: Silicon Valley 2014 - World Cup Tech Challenge; the winner of the TechCrunch Disrupt NY 2015 Startup Battlefield.
- 2007- 2015 Co-founder of Wuxi Zhongkeguangyuan Biomaterials CO., LTD, China (based on SBU nanofiber technology for biomedical applications), antiadhesion membranes received the Registration Certificate for Medical Device from FDA of China.
- 2010-2012 Co-founder of Stony Brook Technology Group, LLC (a technical consulting company on nanofiber technology)
- 2010-2012 Co-founder of Whirl and Associates, Inc. (a technical consulting company on ink formulation)
- 2007-2010 Co-founder of Stonybrook Purification, Inc.
- 1999-2010 Co-founder of Stonybrook Technology and Applied Research (STAR), Inc.

HONORS AND AWARDS:

1. University of Connecticut Doctoral Fellowship, 1985
2. SPE/ANTEC Best Technical Papers, 1994 (two), 2002 (one)
3. DuPont Young Professor Award, 1998 – 2001
4. Mentor Awards, Research Institute at Stony Brook, 2000
5. Overseas Visiting Scholarship, National Science Council, Republic of China (Taiwan), 2002, 2006
6. Fellow, American Physical Society, 2002
7. Fellow, American Chemical Society, 2011
8. Fellow, American Association for the Advancement of Science (AAAS), 2011, citation reads “for his distinguished contributions to the fields of polymer sciences and water purification, as well as to chemical research and education at Stony Brook University.”
9. Journal of Controlled Release, Most Cited Paper 2004 Award, “Incorporation and Controlled Release of Hydrophilic Antibiotics Using Poly(lactide-co-glycolide) Based Electrospun Nanofibrous Membranes”, J. Controlled Release, 98(1) 47-56 (2004)
10. Licensed Innovation Award, Research Foundation of State University of New York, 2005
11. Special Creativity Award, Division of Materials Research, National Science Foundation, 2007-2009
12. Applied Chemistry Lecture Series, Key Laboratory of Polymer Ecomaterials, Chinese Academy of Sciences, 2010
13. Chang-Jiang Professor Scholarship (in Donghua University, Shanghai), Education Ministry of China, 2008-2013
14. ACS recognition for "service on the ACS PRF Research Fund Advisory Board", 2006-2012
15. Patent of the Year Award, Long Island Technology Hall of Fame, 2013
16. Molecular Science Frontier Lecture Professorship of Institute of Chemistry, Chinese Academy of Sciences, 2013
17. Fellow, National Academy of Inventors, 2013
18. “Dr R A Mashelkar Endowment Lecture on Advanced Materials” at the Council of Scientific and Industrial Research (CSIR) - National Chemical Laboratory (NCL), India, 2014
19. Distinguished Professional Achievement Award, Chinese American Academic and Professional Society (CAAPS), 2014
20. Tianfu Forum for Polymer Lecture Series, State Key Laboratory of Polymer Materials Engineering, Polymer Research Institute and College of Polymer Science & Engineering, Sichuan University, 2014
21. Fellow, Materials Research Society, 2015
22. Co-operative Research Award (shared with Andy Tsou), American Chemical Society, Division of Polymeric Materials: Science and Engineering, 2015
23. Distinguished Professor of State University of New York, Stony Brook University, 2015

24. Honorary Professor, Australian Institute for Bioengineering and Nanotechnology, The University of Queensland, 2015
25. Invention Ambassador, AAAS-Lemelson Foundation, 2016
26. Elected Member, University of Connecticut, Academy of Distinguished Engineers, 2019
27. The Prince Sultan bin Abdulaziz International Prize for Water (PSIPW) - The Creativity Prize., 2020

SYNERGISTIC ACTIVITIES

1. Sigma Xi, since 1985
2. Phi Kappa Phi, since 1985
3. Editor-in-Chief of the "Membrane Engineering and Applications" section in Membranes, since 2019
4. Member of Editorial Board for Membranes, since 2011
5. Member of Editorial Advisory Board for Macromolecules, 2010-2013
6. Member of Editorial Advisory Board for ACS Macro Letters, since 2012
7. Member of Editorial Advisory Board for Polymer, since 2003
8. Member of Editorial Advisory Board for J. Macromol. Sci. – Phys., since 1995
9. Member of Editorial Advisory Board for J. Polymer Research, since 1996
10. Member of Executive Editorial Board for High Performance Polymers, since 1996
11. Member of Editorial Advisory Board for Chinese Journal Applied Chemistry (Yingyong Huaxue), since 2001
12. Member of Editorial Board for Chinese Polymer Bulletin (China), since 2016
13. Guest Editor for J. Macromol. Sci. – Physics, B37(4), 1998
14. Guest Editor for J. Applied Crystallography, 33(3), 2000
15. Guest Editor for Journal of Materials Chemistry, a special issue on “Material for Water Treatment”, 2010
16. Guest Editor for Membrane, a special issue on “Membranes for Health and Environmental Applications”, 2011
17. Member, Ad-hoc Advisory Panel for Polymer Program, Division of Materials Research, National Science Foundation, 1997
18. Member, (Polymer) Career Award Panel, National Science Foundation, 1997, 2000
19. Member, IMR/MRI Panel, National Science Foundation, 2000
20. Member, NIRT Panel, National Science Foundation, 2004
21. Chair, Small-Angle Scattering Special Interest Group, American Crystallography Association, 1998
22. Guest Professor, Changchun Institute of Applied Chemistry, Chinese Academic of Sciences, 1998
23. Visiting Professor, Beijing University of Chemical Technology, Beijing, China, 2009
24. Consulting Professor, Tongji University, Shanghai, China, 2009
25. Discussion Leader, Gordon Research Conference, Polymer Physics, New London, 2000
26. Member, Proposal Study Panel, National Synchrotron Light Source, Brookhaven National Laboratory, 1998, 2000-2006; Chair, Proposal Review Panel, X-Ray Scattering: Soft Matter/Biomaterials, 2008-2012
27. Member, CHESS Synchrotron Facility, Cornell University, Proposal Review Panel, 2006-2012
28. Member, Committee for National Synchrotron Light Source II, Brookhaven National Laboratory, since 2005
29. Member, Advisory Board for the Center for Science and Mathematics Education, Stony Brook University, 2007-2012
30. Director, Innovation and Talents Introduction Base of Advanced Manufacture Technology and Science for Fiber Materials (111 Project), Donghua University, Shanghai, China, 2008-present
31. Member, Advisory Board, American Chemical Society, Petroleum Research Fund, 2007-2012
32. Member, Emerging Information and Technology Conference (EITC) Advisory Board, 2007-2011
33. Member, BSA Board of Directors of Science and Technology Steering Committee (STSC), Brookhaven National Laboratory (BNL), 2010-2012
34. Member, Globalization Committee, Stony Brook University, 2010-2014
35. Member, Beamline Advisory Team (BAT) for the Soft Matter Interfaces Beamline, NSLS-II, 2010-2012
36. Member, Internal Advisory Board for the Stony Brook University Cancer Center, Stony Brook University, 2012-2014
37. Member, Board of Directors, Long Island High Tech Incubator (LIHTI), 2012-2014
38. Member, Advisory Board, the Confucius Institute of Stony Brook University, 2013-2014
39. Member, International Advisory Board, University Excellence Care Project (UECP), Singapore, a non-profit, global effort to strengthen scientific research, teaching and development of individuals and universities, 2014-2015

40. Member, Academic Committee of International Joint Laboratory for Advanced Fiber and Low-Dimension Materials, Donghua University, Shanghai, China, 2016-present
41. Member, Scientific and Technical Advisory Panel (STAP), ForMAX beamline, MAX IV Laboratory, Sweden, 2017-present
42. Member, International Advisory Committee of State Key Laboratory for Modification of Chemical Fibers and Polymer Materials (SKLFMP), Donghua University, Shanghai, China, 2019-present
43. Member, SUNY Senior Vice Chancellor's Scientific Advisory Panel, State University of New York System, 2019-present
44. Member, International Advisory Board, Institute on Water Technology and Management, Amity University Noida, India, 2019-present

INDUSTRIAL CONSULTANTS:

Asahi Chemical (2005-2006), Bridgestone Rubber (2005-2007), Conoco (2001-2003), DuPont (1998-2002); Dow Chemical (1998-1999, 2002-2008), Ethicon Inc. - A Johnson and Johnson Company (1998-1999, 2005-2006), Eastman Chemicals (2003), ExxonMobil Chemicals (1999-present), Estee Lauder (2001), Hybrid Plastics (2000-2001), Invista (2005), Kimberly Clark (2001-2002), Kodak (2003), Milliken (2003), Pactiv Corp. (2006-2007), Roger Corporation (1999), Toray (2004-2006), Toyobo (2005-2007), Yokohama Rubber (2005-2007), Xerox (2007-2009), The Siam Cement Group (2015-)

ORGANIZATION ACTIVITIES FOR CONFERENCES

1. American Chemical Society Meetings
 - Symposium on "Scattering from Polymers", PMSE Session (Boston) 1998, (Chicago) 2001, (Washington DC) 2005
 - Symposium on "High-Energy Characterization of Rubber Compounds and Nanocomposites", 167th Spring Technical Meeting of the Rubber Division (San Antonio) 2005
 - Symposium on "Advances in Water Purification" (San Francisco) 2010
 - Symposium on "New Advances in Nanostructured Polymeric Membranes for Filtration, Separation and Purification" (Boston) 2015
2. American Physical Society Meeting
 - Workshop on "X-ray and Neutron Scattering from Polymers" (Pittsburgh) 1994
 - Symposium on "Crystallization, Morphology and Scattering Techniques" (Kansas City) 1997
3. Denver X-ray Conference
 - Symposium on "New Horizons in Polymer Diffraction" (Steamboat, Colorado) 1997
 - Symposium on "Polymer Diffraction" (Steamboat, Colorado) 1998
 - Symposium on "In-situ Diffraction Techniques for Polymer Study" (Steamboat, Colorado) 1999
4. NLS Users Meeting, Brookhaven National Laboratory
 - Workshop on "Polymer Scattering" 1996, 2000
 - Workshop on "Applications for X-Ray Microbeams and Parallel Detection in Soft Matter and Biomolecular Materials" 2006
 - Workshop on "Soft and Biomolecular Materials Strategic Planning" 2008
5. Society of Plastic Engineering ANTEC Meeting
 - Symposium on "Polymer Blends and Miscibility" (Detroit) 1992
6. Materials Research Society Meeting
 - Symposium on "Degradation Processes in Nanostructured Materials" (Boston) 2005
7. Polymer Processing Society Meeting
 - Technical Session: "Process Visualization and On-line Sensing" (Yamagata, Japan) 2006
 - Technical Session: "Process Monitoring, Control & Sensors" (Salerno, Italy) 2008
8. XI International Conferences on Small-Angle Scattering (SAS-99) in Brookhaven, 1999
9. Organizer for the Stony Brook Symposium of Complex Matter – in celebration of Ben Chu's 70th Birthday at Stony Brook University, December 13-14, 2001
10. International Advisory Committee member, International Symposia on Engineering Plastics, EP'2013, Xiamen, China, August 25-28, 2013
11. Conference Program Committee member, International Union of Materials Research Societies (IUMRS) - International Conference on advanced Materials (ICAM2013), Qingdao, China, September 22-28, 2013

12. International Advisory Broad member, Synchrotron Radiation in Polymer Science (SRPS) -V, San Francisco, US, March 30-April 2, 2012; Synchrotron Radiation in Polymer Science VI, Madrid, Spain, September 7-10, 2015

PROFESSIONAL SOCIETIES:

1. Society of Plastic Engineering (1983-1997, 2002-2005)
2. The North American Thermal Analysis Society (1985-1997)
3. American Institute of Chemical Engineering (1989-1997, 2007-)
4. American Chemical Society, Polymer Chemistry Divisions (since 1984), Polymer Materials Science and Engineering Division (since 1989), Rubber Division (2003-2006)
5. American Crystallographic Association (since 1991)
6. American Physical Society, High Polymer Physics Division (since 1985)
7. American Association for the Advancement of Science (since 1990)
8. Materials Research Society (since 1989)

PUBLICATIONS AND PRESENTATIONS

(Thomson Reuters (formerly ISI) Web of Science, total citation > 34,800, h-index: 99)

(Google Scholar, total citation > 46,900, h-index: 113)

Issued Patents (US and international)	56 (<i>US Patents - 32, Foreign Patents – 22</i>)
Published/Pending Patent Applications	30
Reviewed Scientific Papers:	529
Chapters in Books/Encyclopedias/Reviews:	54
Miscellaneous:	19 (<i>News, Tribute, Book Review, Profile, Opinion</i>)
Books (Edited):	2
Proceedings and preprints:	232
Student Thesis	23
Ph.D. Thesis	23
M.S. Thesis	20
Invited Lectures	341
Presentations in Scientific Meetings:	575 (<i>Domestic and International Meetings</i>)

PUBLICATIONS AND PRESENTATION LISTS

1. PATENTS AND PATENT APPLICATIONS

ISSUED PATENTS

1. Benjamin S. Hsiao, Benjamin Chu, Xuan Fu, Rusty L. Blanski and Sean Phillips “Blends of Organic Silicon Compounds with Ethylene-Based Polymers”, **U.S. Pat. 6569932 (2003)**.
2. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Collin Brathwaite, “Biodegradable and/or Bioabsorbable Fibrous Articles and Methods for Using the Articles for Medical Applications.” **U.S. Pat. 6685956 (2004)**.
3. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Collin Brathwaite, “Biodegradable and/or Bioabsorbable Fibrous Articles and Methods for Using the Articles for Medical Applications.” **U.S. Pat. 6689374 (2004)**.
4. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang “Apparatus and Methods for Electrospinning Polymeric Fibers and Membranes.” **U.S. Pat. 6713011 (2004)**; PCT Int. Appl. WO 0292888.
5. Benjamin Chu, Benjamin S. Hsiao, Michael Hadjiargyrou, Dufei Fang, Kwangsok S. Kim and Xinhua Zong “Cell Delivery System Comprising a Fibrous Matrix and Cells”, **U.S. Pat. 6790455 (2004)**.
6. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Collin Brathwaite, “Biodegradable and/or Bioabsorbable Fibrous Articles and Methods for Using the Articles for Medical Applications.” **U.S. Pat. 7172765 (2007)**.
7. Benjamin Chu, Benjamin S. Hsiao, Michael Hadjiargyrou, Dufei Fang, Kwangsok S. Kim and Xinhua Zong “Cell Delivery System Comprising a Fibrous Matrix and Cells”, **U.S. Pat. 7323190 (2008)**.
8. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Akio Okamoto, “Crosslinking of Hyaluronan Solutions and Nanofibrous Membranes Made Therefrom”, **U.S. Pat. 7323425 (2008)**.
9. John Ricotta, Benjamin S. Hsiao and Rajesh H. Somani, “Apparatus and Methods for Fixation of Vascular Grafts”, **U.S. Pat. 7351258 (2008)**.
10. Benjamin Chu and Benjamin S. Hsiao, “Nanocomposite Fibers and Films Containing Polyolefin and Surface-Modified Carbon Nanotubes” **U.S. Pat. 7652084 (2010)**; PCT Int. Appl. WO 2005084167 (2005).
11. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang, Akio Okamoto “Electro-Blowing Technology for Fabrication of Fibrous Articles and Its Applications of Hyaluronan”, **U.S. Pat. 7662332 (2010)**.
12. Benjamin Chu, Benjamin S. Hsiao and Dufei Fang, “Apparatus and Method for Electro-Blowing or Blowing-Assisted Electro-Spinning Technology”, **U.S. Pat. 7887311 (2011)**.
13. Benjamin Chu, Benjamin S. Hsiao, Michael Hadjiargyrou, Dufei Fang, Kwangsok S. Kim and Xinhua Zong, “Method of Cell Storage in a Delivery System Comprising a Fibrous Matrix”, **U.S. Pat. 8021869 (2011)**.
14. Benjamin Chu, Benjamin S. Hsiao and Dufei Fang, “Apparatus for Electro-Blowing or Blowing-Assisted Electro-Spinning Technology”, **U.S. Pat. 7934917 (2011)**.
15. Nobuyuki Taniguchi, Yasuo Ohta, Benjamin Chu and Benjamin S. Hsiao “Method for Producing High Strength Polyethylene Fiber and High Strength Polyethylene Fiber”, Japan Patent, JP4734556 (2011).
16. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma and Nobuyuki Taniguchi “Polyolefin Nanocomposites with Functional Ionic Liquids and Carbon Nanofillers” **U.S. Pat. 8211958 (2012)**; PCT Int. Appl., WO 2009108236 (2009).
17. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Kwangsok S. Kim, “High Flux and Low Fouling Filtration Media” (also known as “High Flux and Low Fouling Nanofibrous Ultrafiltration Membranes”) (R-7760) **U.S. Pat. 8222166 (2012)**; PCT/US2005/035738 (2005).
18. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Kwangsok S. Kim, “High Flux and Low Fouling Nanofibrous Ultrafiltration Membranes”, Indian Patent, 240572 (2010).
19. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Kwangsok S. Kim, “High Flux and Low Fouling Filtration Media”, Australian Patent, 2005333585 (2011).
20. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Kwangsok S. Kim, “High Flux and Low Fouling Filtration Media”, Hong Kong Patent, HK1108860 (2012).
21. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Kwangsok S. Kim, “High Flux and Low Fouling Filtration Media”, Korean Patent, 10-1228496 or 2007-7007719 (2012).
22. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Kwangsok S. Kim, “High Flux and Low Fouling Filtration Media”, Chinese Patent, 200580034193.1 (2012).
23. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Kwangsok S. Kim, “High Flux and Low Fouling Filtration Media”, Canadian Patent, CA 2583469 (2013).
24. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Kwangsok S. Kim, “High Flux and Low Fouling Filtration Media”, United Arab Emirates Patent, P295/07 (2013).

25. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Kwangsok S. Kim, "High Flux and Low Fouling Filtration Media", Japanese Patent, 2011-103306 (2013).
26. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang and Kwangsok S. Kim, "High Flux and Low Fouling Filtration Media", Israeli Patent, 182165 (2013).
27. Benjamin Chu, Benjamin S. Hsiao and Kyunghwan Yoon "Surface Coating on Nanofibrous Scaffolds by Interfacial Polymerization for Ultrafiltration and Desalination Applications", or "Articles Comprising a Fibrous Support", **U.S. Pat. 8231013 (2013)**. Long Island Technology Hall of Fame, Patent of the Year Award.
28. Benjamin Chu, Benjamin S. Hsiao and Hongyan Ma, "High Flux Fluid Separation Membranes Comprising A Cellulose or Cellulose Derivative Layer", Chinese Patent 200880022940.3 (2013).
29. Benjamin Chu, Benjamin S. Hsiao and Hongyan Ma, "High Flux Fluid Separation Membranes Comprising A Cellulose or Cellulose Derivative Layer", Indian Patent 271247, 2175/MUMNP/2009 (2013).
30. Benjamin Chu, Benjamin S. Hsiao and Hongyan Ma, "High Flux Fluid Separation Membranes Comprising A Cellulose or Cellulose Derivative Layer", Japanese Patent, 2010-509577 (2013).
31. Benjamin Chu, Benjamin S. Hsiao and Hongyan Ma, "High Flux Fluid Separation Membranes Comprising A Cellulose or Cellulose Derivative Layer", European Patent, 08827640.7 (2013).
32. Benjamin S. Hsiao, Benjamin Chu, Jie Wei, Hongyan Ma, Feng Zuo, "Ionic liquids, functionalized particulates, and fluoropolymer composites" (R-8037), PCT Int. Appl. WO 2009146146 (2009), **U.S. Pat. 8563657 (2013)**.
33. Benjamin Chu, Benjamin S. Hsiao and Hongyan Ma, "High flux fluid separation membranes comprising a cellulose or cellulose derivative layer" (R-7958), US Patent Application 12/126,732, PCT Int. Appl. WO 2009025900, PCT/US2008/064768 (2009), **U.S. Pat. 9010547 (2015)**.
34. Benjamin S. Hsiao, Benjamin Chu, Jie Wei, Hongyan Ma, Feng Zuo, "Ionic liquids, functionalized particulates, and fluoropolymer composites" **U.S. Pat. 9255195 (2016)**.
35. Benjamin Chu, Benjamin S. Hsiao, Devinder Mahajan and Tsung Ming Yeh, "Polymeric Nanofibrous Composite Membranes for Energy Efficient Ethanol Dehydration", Filed in SUNY-Stony Brook (R-8384), U.S. Provisional Patent Application No. 61/576537, December 16, 2011, U.S. Pat. Appl. US 20130175218 (2013), U.S. Pat. Appl. US 20150080616 (2015); or "Graphene oxide-based nanofibrous composite membranes" **U.S. Pat. 9353037 (2016)**.
36. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma, "High Flux High Efficiency Membranes and Methods of Production Thereof", Chinese Patent 200980146276.8 (2016).
37. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma, "High Flux High Efficiency Membranes and Methods of Production Thereof", **US Patent 9511329 (2016)**.
38. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma "Functionalization of Nanofibrous Microfiltration Membranes for Water Purification", Chinese Patent ZL2012800105515 (2016).
39. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma, "High Flux High Efficiency Membranes and Methods of Production Thereof", Chinese Patent ZL201510155521.9 (2017).
40. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma "Functionalization of Nanofibrous Microfiltration Membranes for Water Purification", Japan Patent 6130791 (2017).
41. Benjamin Chu, Benjamin S. Hsiao and Zhe Wang, "Modified Hydrophobic Sponges", Filed in SUNY-Stony Brook (R-8486), U.S. Provisional Patent Application 61/899,349, September 10, 2012, PCT Int. Appl., WO 2014127179, PCT/US14/63788 (2014); WO 2015066665 (2015), **US Patent 9724669 (2017)**.
42. Benjamin S. Hsiao, Benjamin Chu and Priyanka Sharma, "Production of carboxylated nanocelluloses", Canadian Patent, CA 3005140 (2017).
43. Benjamin Chu, Benjamin S. Hsiao, Devinder Mahajan and Tsung Ming Yeh, "Polymeric Nanofibrous Composite Membranes for Energy Efficient Ethanol Dehydration", **U.S. Pat. 9862665 (2018)**.
44. Benjamin Chu, Benjamin S. Hsiao and Zhe Wang, "Modified Hydrophobic Sponges", **US Patent 9931611 (2018)**.
45. Benjamin S. Hsiao, Benjamin Chu, Jie Wei, Hongyan Ma, Feng Zuo, "Novel Elastomeric Fluoropolymer Nanocomposite Containing Modified Carbon Nanofillers", European Patent 2361144 (2018).
46. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma "Functionalization of Nanofibrous Microfiltration Membranes for Water Purification", Filed in SUNY-Stony Brook (R-8327), December 22, 2010, PCT Int. Appl. WO 2012094407 (2012). PCT Patent Application No. PCT/US12/20206, U.S. Patent Application 14/362,028, **US Patent 9968892 (2018)**.
47. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma "Functionalization of Nanofibrous Microfiltration Membranes for Water Purification", Indian Patent Appln. No.: 2141/KOLNP/2013, Indian Patent Number 299753 (2018).

48. Benjamin S. Hsiao, Hongyang Ma, "High-flux thin-film nanocomposite reverse osmosis membrane for desalination", Canadian Patent, CA 3053898 (2018).
49. Benjamin Chu, Benjamin S. Hsiao, Hongyang Ma and Zhe Wang, "Porous Graphene Based Composite Membranes for Nanofiltration, Desalination, and Pervaporation", Filed in SUNY-Stony Brook (R-8628), U.S. Provisional Patent Application No. 62/025,549, July 17, 2014; PCT Int. Appl. (2016), WO 2016011124 A1 20160121, **US Patent 10112150** (2018).
50. Benjamin Chu, Benjamin S. Hsiao, Hongyang Ma and Zhe Wang, "Porous Graphene Based Composite Membranes for Nanofiltration, Desalination, and Pervaporation", Filed in SUNY-Stony Brook (R-8628), **US Patent 10272392** (2018).
51. Benjamin Chu, Benjamin S. Hsiao and Hongyang Ma, "Highly Porous Fibrous Network for Gas Filtration", Filed in SUNY-Stony Brook (R-8629), U.S. Provisional Appl. No.: 62/007,446, June 4, 2014; PCT Int. Appl. (2015), WO 2015187412 A1 20151210, **US Patent 10315155** (2019).
52. Benjamin Chu, Benjamin S. Hsiao, and Ying Su, "Elastic Membrane-based Membrane Bioreactor (MBR) with High-Efficiency for Fouling Control", Filed in SUNY-Stony Brook (R-8621), U.S. Provisional Patent Application No. 62/025,545, July 17, 2014; PCT Int. Appl. (2016), WO 2016011128 A1 20160121, **US Patent 10532322** (2020).
53. Robert B. Grubbs, Benjamin S. Hsiao, Benjamin Chu, "Nanofibrous Materials for Heavy Metal Adsorptions", Filed in SUNY-Stony Brook (R-8706) U.S. Provisional Patent No. 62/130,823, U.S. Pat. Appl. Publ. (2016), US 20160263554 A1 20160915, **US Patent 10556222** (2020).
54. Benjamin Chu and Benjamin S. Hsiao, "Nanostructured Fibrous Membranes For Membrane Distillation", Filed in SUNY-Stony Brook (R-8571), U.S. Patent Application No. 62/081,634, 2014; PCT Int. Appl. (2016), WO 2016081541 A1 20160526, **US Patent 10702815** (2020).

PUBLISHED/PENDING PATENT APPLICATIONS

55. Nobuyuki Taniguchi, Yasuo Ohta, Benjamin Chu and Benjamin S. Hsiao "High strength polyethylene fibers containing surface-modified carbon nanofibers and manufacture method", U.S. Pat. Appl. US 20110098406 (2011), PCT Int. Appl. WO 2010006011 (2010).
56. John Ricotta Benjamin S. Hsiao and Rajesh H. Somani, "A Novel Endovascular Graft, Applications for AAA and Thoraco-Abdominal AAA Graft Trimmer", U.S. Application (Ser. No. 60/333,920) PCT/US02/38361 (2003).
57. Benjamin Chu, Benjamin S. Hsiao, Dufei Fang, "Nanocomposite Coating for High Flux Ultrafiltration Applications", U.S. Provisional Patent Application No. 60/633,987 filed December 7, 2004.
58. Benjamin Chu, Benjamin S. Hsiao, Fen Wan, Jun Zhang, "Sustained Drug Release Particles Based on Biocompatible Polyelectrolyte Complexes, Thermally Gellable Blockcopolymers and Their Mixtures", Filed in SUNY-Stony Brook (R-7888), Feb 27, 2006.
59. Benjamin Chu and Benjamin S. Hsiao, "Nanostructured thermo-reversible smart gel comprising alginate or chitosan polyelectrolyte complex, for time release delivery of drugs such as lidocaine", Filed in SUNY-Stony Brook (R-7921 and R-7924, 788-74), July 26, 2006, U.S. Provisional Patent Application No. 60/844,575 filed, Sep. 14, 2006. PCT Int. Appl. WO 2008033497.
60. Benjamin Chu and Benjamin S. Hsiao, "Articles Comprising Directed Molecular Channels", Filed in SUNY-Stony Brook, March 18, 2008, US Patent Application 61/052,883.
61. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma "Ultra-Nanofibers for Air and Water Filtration", Filed in SUNY-Stony Brook (R-8073), U.S. Provisional Patent Application No. 61/103,479, May 20, 2008; "High Flux High Efficiency Membranes and Methods of Production Thereof", International Patent Application no.: PCT/US2009/059884; Docket: 788-131 PCT; PCT/US08/64768; Docket: 1339-13 PCT, US Patent Application No. 13/123097, 20150298065.
62. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma, "High Flux High Efficiency Membranes and Methods of Production Thereof", Chinese Patent Application 200980146276.8 (2013).
63. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma, "High Flux High Efficiency Membranes and Methods of Production Thereof", Indian Patent Application 3356/DELNP/2011 (2013).
64. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma "Polyolefin Nanocomposites Containing Modified Carbon Nanofillers with Functional Ionic Liquids", Filed in SUNY-Stony Brook (R-8090), June 30, 2008, U.S. Provisional Patent Application No. 61/146,939, Jan 23, 2009.

65. Nobuyuki Taniguchi, Yasuo Ohta, Benjamin Chu, Benjamin S. Hsiao, "High strength polyethylene fibers containing surface-modified carbon nanofibers and manufacture method", US Patent Application 12/169,300. US 2010010186 (2010); PCT Int. Appl. (2010), WO 2010006011.
66. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma and Changquan Qiu "Ultra-Nanofibers for Air and Water Filtration", Filed in SUNY-Stony Brook (R-8162), U.S. Provisional Patent Application No. 61/153,666, Feb 9, 2009.
67. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma "Cellulose Nano-Fibers for Liquid Separation", Filed in SUNY-Stony Brook (R-8161), U.S. Provisional Patent Application No. 61/153,669, Feb 9, 2009. "High flux high efficiency nonwoven polysaccharide nanofiber membranes and methods of production thereof", PCT Int. Appl. WO 2010042647 (2010).
68. Benjamin Chu, Benjamin S. Hsiao, Hongyan Ma and Ran Wang, "High Flux Microfiltration Membranes with Virus Adsorption Capability for Water Purification", Filed in SUNY-Stony Brook (R-8287), U.S. Provisional Patent Application No. 61/375,965, August 23, 2010, PCT Int. Appl. WO 20130180917 (2013).
69. Benjamin S. Hsiao, Benjamin Chu and Priyanka Sharma, "Cost-effective and environmental friendly method to prepare carboxycellulose nanofibers/nanowhiskers", Filed in SUNY-Stony Brook (R-8741), October 16, 2015; Production of carboxylated nanocelluloses", PCT Int. Appl. (2017), WO 2017082900 A1 20170518.
70. Ali Naderi, Tom Lindström, Benjamin S. Hsiao, "Highly functionalized lignocellulosic materials for removal of charged hazardous metallic ions", Filed in SUNY-Stony Brook (R-8887), December 5, 2016.
71. Benjamin S. Hsiao and Yanxiang Li, "A new strategy to modify nanocellulose substrates with Ag/TiO₂ nanoparticles for antibacterial applications", Filed in SUNY-Stony Brook (R-8888), December 5, 2016.
72. Benjamin S. Hsiao and Priyanka Sharma, "Water purifying agents derived from raw biomass", Filed in SUNY-Stony Brook (R-8889), December 5, 2016; U.S. Provisional Patent No. 62/567450.
73. Chuan-Jian Zong, Mark D. Poliks, Benjamin S. Hsiao, "A Nanocomposite Scaffold Consisting of Functionalized Gold Particles and Nanofibrous Membranes for Fabrication of Flexible Sensors", Filed in SUNY-Stony Brook (RB-8891), December 28, 2016.
74. Benjamin S. Hsiao, Hongyang Ma, "High-flux thin-film nanocomposite reverse osmosis membrane for desalination", Filed in SUNY-Stony Brook (050-8903), U.S. Provisional Application Serial No. 62/460,511 February 17, 2017, US Patent App. 16/485,510
75. Benjamin S. Hsiao, Priyanka Sharma, Sunil K. Sharma, Ken Johnson, "Nitrogen Removal and Nitrogen Salts Recovery using Carboxylated Cellulose Extracted by Nitro-Oxidation Method", Filed in SUNY-Stony Brook (050-9016), U.S. Provisional Application Serial No. 62/724,129, filed August 29, 2018.
76. Benjamin S. Hsiao, Priyanka Sharma, Sunil K. Sharma, Ken Johnson, "Removal of Negatively Charged Impurities Using Metal-Cellulose Fiber Composite", Filed in SUNY-Stony Brook (050-9037), U.S. Provisional Application Serial No. 62/752,465, filed October 30, 2018, US Application No. 62/967,101 on January 29, 2020.
77. Benjamin S. Hsiao, Sunil K. Sharma and Priyanka Sharma, "Nanocomposite Scaffolds Containing Cellulose Substrate and Metal Oxide Nanocrystals as Adsorbents for Removal of Toxic Impurities", Filed in SUNY-Stony Brook (050-9051), U.S. Provisional Application Serial No. 62/777,370, filed on December 10, 2018.
78. Benjamin S. Hsiao, Ritika Joshi and Tom Lindstrom, "A Composite Superhydrophobic Membrane for Membrane Distillation from Hydrophilic Lignocellulosic Materials." Filed in SUNY-Stony Brook (050-9153), filed on March 19, 2020.
79. Dufei Feng and Benjamin S. Hsiao, "A compartmental hollow fiber membrane distillation system", Filed in SUNY-Stony Brook (050-9061), U.S. Provisional Application Serial No. 62/809,127, filed on February 22, 2020.
80. Benjamin S. Hsiao, "Cellulose Nanofiber Apparatus and Method", Filed in SUNY-Stony Brook (050-9162), U.S. Provisional Application Serial No. 63/011,419, filed on April 17, 2020.

2. ARTICLES IN SCIENTIFIC JOURNALS

1. B. S. Hsiao, E. T. Samulski and M. T. Shaw, "High Pressure DTA/Dilatometric Apparatus Based on an Instron Capillary Rheometer", *Rev. Sci. Instrum.*, 58(6), 1009-1013 (1987).
2. B. S. Hsiao, E. T. Samulski and M. T. Shaw, "Pressure Induced Phases in a Thermotropic Polyester", *Macromolecules*, 21, 543-547 (1988).
3. B. S. Hsiao, E. T. Samulski and M. T. Shaw, "The Effects of Temperature and Pressure on the Dynamic Longitudinal Viscosity", *J. Rheology*, 32(5), 533-553 (1988).

4. B. S. Hsiao, E. T. Samulski and M. T. Shaw, "Study of a Thermotropic Liquid Crystalline Polyester at Elevated Pressures", *J. Polym. Sci. Polym. Phys. Ed.*, 28, 189-202 (1990).
5. B. S. Hsiao, R. S. Stein, K. Deustcher and H. H. Winter, "Optical Anisotropy of a Thermotropic Liquid Crystalline Polymer in Transient Flow", *J. Polym. Sci. Polym. Phys. Ed.*, 28, 1571 (1990).
6. B. B. Sauer, P. Avakian, H. Starkweather and B. S. Hsiao, "Thermal Stimulated Current and Dielectric Measurements of Poly(aryl ether ketone)", *Macromolecules*, 23, 5119-5126 (1990).
7. B. S. Hsiao, R. S. Stein, N. Weeks and R. Gaudiana, "Light Scattering Studies of Polymer Solutions Containing Semi-Stiff Polyester and Flexible Polysulfone", *Macromolecules*, 24, 1299-1305 (1991).
8. B. S. Hsiao, I. Y. Chang and B. B. Sauer, "Isothermal Crystallization Kinetics of Poly(aryl ether ketone ketone) and Its Carbon Fiber Reinforced Composites", *Polymer*, 32(15), 2799 (1991).
9. K. H. Gardner, B. S. Hsiao, R. R. Matheson and B. A. Wood, "Structure, Crystallization and Morphology of Poly(aryl ether ketone ketones)", *Polymer*, 33(12), 2483-2495 (1992).
10. E. J. H. Chen and B. S. Hsiao, "The Effects of Transcrystalline Interphase in Advanced Polymer Composites", *Polym. Eng. Sci.*, 32(4), 280-286 (1992).
11. B. S. Hsiao, "Some Comments on The Two-Stage Crystallization Kinetics Modeling", *J. Polym. Sci. Polym. Phys. Ed.*, 31(2), 237-240 (1993).
12. B. S. Hsiao and B. B. Sauer, "Glass Transition, Crystallization and Morphology Relationships in Miscible Poly(ether ether ketone) and Poly(ether imide) Blends", *J. Polym. Sci. Polym. Phys. Ed.*, 31(8), 901-915 (1993).
13. B. B. Sauer and B. S. Hsiao, "Broadening of the Glass Transition in Poly(ether ether ketones) Blended with Poly(ether imide) as Studied by Thermally Stimulated Currents", *J. Polym. Sci. Polym. Phys. Ed.*, 31(8), 917-932 (1993).
14. J. G. Van Alsten, S. R. Lustig and B. S. Hsiao, "Polymer Diffusion in Semicrystalline Materials - I: Poly(ether imide)/Poly(aryl ether ketone ketone)", *Macromolecules*, 26, 3885 (1993).
15. B. B. Sauer and B. S. Hsiao, "Miscibility of Three Different Poly(aryl ether ketones) with a High Melting Thermoplastic Polyimide", *Polymer*, 34(15), 3315-3318 (1993).
16. S. Z. D. Cheng, S. S. Wu, J. Chen, Q. Zhuo, R. P. Quirk, E. D. Von Meewall, B. S. Hsiao, A. Habenschuss and P. R. Zschack, "Isothermal Thickening and Thinning Process in Low Molecular Weight Poly(ethylene Oxide) Fractions. 4. End Group Dependence", *Macromolecules*, 26, 5105-5117 (1993).
17. B. S. Hsiao, K. H. Gardner, D. Q. Wu and B. Chu, "Time-Resolved x-ray Studies of Poly(aryl ether ether ketone) Crystallization and Melting Behavior, Part 1: Crystallization", *Polymer*, 34, 3986-3995 (1993).
18. B. S. Hsiao, K. H. Gardner, D. Q. Wu and B. Chu, "Time-Resolved x-ray Studies of Poly(aryl ether ether ketone) Crystallization and Melting Behavior, Part 2: Melting", *Polymer*, 34, 3996-4003 (1993).
19. H. Ade and B. S. Hsiao, "Polarization Dependent X-ray Microscopy", *Science*, 262, 1427-1429 (1993).
20. J. Liu, S. Z. D. Cheng, F. W. Harris, B. S. Hsiao and K. H. Gardner, "Crystal Structure, Morphology and Phase Transitions in Aromatic Polyimide Oligomers. 1. Poly(4,4'-Oxydiphenylene Pyromellitimide)", *Macromolecules*, 27, 989-996 (1994).
21. B. S. Hsiao, B. B. Sauer and A. Biswas, "Crystallization Study of A Thermoplastic Polyimide: New-TPI", *J. Polym. Sci. Polym. Phys. Ed.*, 32, 737-747 (1994).
22. R. M. Ho, S. Z. D. Cheng, B. S. Hsiao and K. H. Gardner, "Crystal Morphology and Phase Identification in Poly(aryl ether ketone)s and Their Copolymers 1. Polymorphism", *Macromolecules*, 27, 2136-2140 (1994).
23. K. H. Gardner, B. S. Hsiao and K. L. Faron, "Polymorphism in Poly(aryl ether ketones)", *Polymer*, 35(11), 2290-2295 (1994).
24. B. Chu, P. J. Harney, Y. Li, K. Linliu, F. Yeh and B. S. Hsiao, "A Laser-Aided Pre-Aligned Pinhole Collimator for Synchrotron X-rays", *Rev. Sci. Instrum.*, 65(3), 597-602 (1994).
25. M. Eashoo, Z. Wu, D. Shen, C. Tse, F. W. Harris, S. Z. D. Cheng, K. H. Gardner and B. S. Hsiao, "High Performance Aromatic Polyimide Fibers. 3. Fibers Synthesized from 3,3',4,4'-Biphenyltetracarboxylic Dianhydride (BPDA) and 2,2'-Dimethyl-4,4'-Diaminobiphenyl (DMB)", *Makromol. Chem. and Phys.*, 195, 2207-2225 (1994).
26. R. M. Ho, S. Z. D. Cheng, H. P. Fisher, R. K. Eby, B. S. Hsiao and K. H. Gardner, "Crystal Morphology and Phase Identification in Poly(aryl ether ketone)s and Their Copolymers, 2. Poly(Oxy-1,4-Phenylencarbonyl-1,3-Phenylencarbonyl-1,4-Phenylene)", *Macromolecules*, 27, 5787-5793 (1994).
27. T. A. Ezquerro, J. Majszczyk, F. J. Baltà-Calleja, E. López-Cabarcos, K. H. Gardner and B. S. Hsiao, "Molecular Dynamics of the α -Relaxation During Crystallization of Glassy Poly(aryl ether ketone ketone): a Real Time Dielectric Spectroscopy Study", *Phys. Rev. B.*, 50(9), 6023-6031 (1994).

28. B. S. Hsiao, K. H. Gardner and S. Z. D. Cheng "Crystallization of Poly(aryl ether ketone ketone) PEKK Copolymers Containing Terephthalate/Isophthalate Moieties", *J. Polym. Sci. Polym. Phys. Ed.*, 32(16), 2585-2594 (1994).
29. T. A. Ezquerro, J. Majszczyk, F. J. Baltà-Calleja, E. López-Cabarcos, K. H. Gardner and B. S. Hsiao, "Molecular Dynamics of Polymers During Crystallization as Revealed by Dielectric Spectroscopy", *Physica Scripta.*, T55, 212-215 (1994).
30. R. K. Verma, R. G. Kander and B. S. Hsiao, "Acoustic Emission Monitoring of Damage Using High Amplitude Gains in Carbon Fiber Reinforced Poly(aryl ether ketone ketone)", *J. Mater. Sci. Lett.*, 13, 438-442 (1994).
31. R. K. Verma, R. G. Kander, B. S. Hsiao and B. A. Wood "A Study of the Damage Process in Poly(aryl ether ketone ketone) and Its AS4 Carbon Fiber Reinforced Composites: 1 Mechanical Determination", *Sci. Eng. Composite Mater.*, 3(4), 227-242 (1994).
32. R. K. Verma, R. G. Kander and B. S. Hsiao, "A Study of the Damage Accumulation Process in Poly(aryl ether ketone ketone) and Its AS4 Carbon Fiber Reinforced Composites: 2 Acoustic Emission Monitoring of Damage", *Sci. Eng. Composite Mater.*, 3(4), 245-252 (1994).
33. R. M. Ho, S. Z. D. Cheng, B. S. Hsiao and K. H. Gardner, "Crystal Morphology and Phase Identification in Poly(aryl ether ketone)s and Their Copolymers 3. Polymorphism in an Alternating Copolymer Containing Terephthalic Acid and Isophthalic Acid Isomers", *Macromolecules*, 28, 1938-1945 (1995).
34. X. Lu, W. P. Stechle, Jr., B. Hsiao and R. A. Weiss, "Thermally Induced Microstructure Transitions in a Block Copolymer Ionomer", *Macromolecules*, 28, 2831-2839 (1995).
35. H. Ade, A. P. Smith, S. Cameron, R. Cieslinski, C. Costello, B. Hsiao, G. Mitchell and E. Rightor, "X-ray Microscopy in Polymer Science: Prospects of a New Image Technique", *Polymer*, 36(9), 1843-1848 (1995).
36. B. B. Sauer and B. S. Hsiao, "Effect of Heterogeneous Distribution of Lamellar Stacks on Amorphous Relaxations in Semicrystalline Polymers", *Polymer*, 36(13), 2553-2558 (1995).
37. J. G. Van Alsten, S. Lustig and B. S. Hsiao, "Polymer Diffusion in Semicrystalline Polymers, 2. Atactic Polystyrene-D Transport into Atactic and Isotactic Polystyrene", *Macromolecules*, 28, 3672-3680 (1995).
38. J. A. Kreuz, B. S. Hsiao, C. A. Renner and D. L. Goff "Crystalline Homopolyimides and Copolyimides Derived from 3,3',4,4'-Biphenyltetracarboxylic Dianhydride/1,12-Dodecandiamine/1,3-Bis(4-aminophenoxy) Benzene, Part I: Synthesis and Preparation", *Macromolecules*, 28, 6926-6930 (1995).
39. B. S. Hsiao, B. B. Sauer, R. Verma, B. Chu, P. Harney, H. G. Zachmann and S. Seifert, "New Insight of Isothermal Melt Crystallization Via Time-Resolved Simultaneous SAXS/WAXD Measurements", *Macromolecules*, 28, 6931-6936 (1995).
40. B. S. Hsiao, S. Z. D. Cheng and R. M. Ho, "Time-Resolved X-ray Study Of Crystalline Phase Transition In Poly(Aryl Ether Ketone Ketone) Containing Alternated Terephthalic/Isophthalic Moieties", *J. Polym. Sci. Polym. Phys.*, 33(17), 2439-2447 (1995).
41. R. M. Ho, S. Z. D. Cheng, B. S. Hsiao and K. H. Gardner, "Crystal Morphology and Phase Identification in Poly(aryl ether ketone)s and Their Copolymers, 4. Morphological Observations in PEKK with All Para-Phenylene Linkages", *Macromolecules*, 28, 8855-8861 (1995).
42. S. Z. D. Cheng, R. M. Ho, B. S. Hsiao and K. H. Gardner, "Polymorphism and Phase Identification in Poly(aryl ether ketone)s", *Macromol. Chem. Phys.*, 197, 185-213 (1996).
43. B. S. Hsiao, J. A. Kreuz and S. Z. D. Cheng, "Crystalline Homopolyimides and Copolyimides Derived from 3,3',4,4'-Biphenyltetracarboxylic Dianhydride/1,12-Dodecandiamine/1,3-Bis(4-aminophenoxy) Benzene, Part II: Crystallization, Melting and Morphology", *Macromolecules*, 29, 135-142 (1996).
44. B. B. Sauer, B. S. Hsiao and K. L. Faron, "Miscibility and Phase Properties of Poly(aryl Ether Ketones) with Three High Temperature All Aromatic Thermoplastic Polyimides", *Polymer*, 37(3), 445-453 (1996).
45. J. M. Stouffer, H. W. Starkweather, Jr., B. S. Hsiao, P. Avakian and G. Jones, "Modification of 66 Nylon with 2-Methyl Pentamethylene Diamine", *Polymer*, 37(7), 1217-1228 (1996).
46. K. Hongladarom, V. Ugaz, D. Cinader, W. R. Burghardt, J. P. Quintana, B. S. Hsiao, M. D. Dadmum, W. Hamilton and P. D. Butler, "Birefringence, X-ray Scattering and Neutron Scattering Measurements of Molecular Orientation in Shear Liquid Crystal Polymer Solutions", *Macromolecules*, 29(16), 5346-5355 (1996).
47. R. K. Verma and B. S. Hsiao, "New Insights into The Crystallization and Melting Behavior in Semicrystalline Semi-Stiff Polymers", *Trends in Polymer Science*, 4(9), 312-319 (1996).
48. T. A. Ezquerro, E. López-Cabarcos, B. S. Hsiao and F. J. Baltà-Calleja, "Precursors of Crystallization via Density Fluctuation in Stiff-Chain Polymers", *Phys. Rev. E.*, 54, 989-992 (1996).
49. M. F. Teasley and B. S. Hsiao, "Synthesis and Crystallization of Poly(oxy-1,3-phenylenecarbonyl-1,4-phenylene) and Related Polymers", *Macromolecules*, 29, 6432-6441 (1996).

50. R. K. Verma, H. Marand and B. S. Hsiao, "Morphological Changes During Secondary Crystallization and Subsequent Melting in Poly(ether ether ketone) as studied by Real Time Small Angle X-ray Scattering", *Macromolecules*, 29, 7767-7775 (1996).
51. B. S. Hsiao, R. Barton and J. Quintana, "Simple On-line X-ray Setup to Monitor Fiber Processing", *J. Appl. Poly. Sci.*, 62, 2061-2068 (1996).
52. W. Wang, J. M. Schultz and B. S. Hsiao "Anomalous Two-stage Spherulite Growth in Poly(aryl ether ketones) During Isothermal Crystallization", *J. Polym. Sci. Polym Phys. Ed.*, 34, 3095-3105 (1996).
53. R. K. Verma, R. G. Kander, V. Velikov, H. Marand, B. Chu and B. S. Hsiao, "SAXS Studies of Lamellar Level Morphological Changes During Crystallization and Melting in PEEK", *Polymer*, 37(24), 5357-5365 (1996).
54. S. Lee, E. Chen, A. Zhang, Y. Yoon, B. S. Moon, S. Lee, F. W. Harris, S. Z. D. Cheng, E. D. von Meerwall, B. S. Hsiao, R. Verma and J. B. Lando, "Isothermal Thickening and Thinning Processes in Low Molecular Weight Poly(ethylene oxide) Fractions Crystallized from Melt. 5. Effect of Chain Defects", *Macromolecules*, 29(27), 8816-8823 (1996).
55. B. B. Sauer, P. Avakian, E. A. Flexman, M. Keating, B. S. Hsiao and R. K. Verma "A.C. Dielectric and TSC Studies of Constrained Amorphous Motions in Flexible Polymers Including Poly(Oxy Methylene) and Miscible Blends", *J. Polym. Sci. Polym. Phys. Ed.*, 35, 2121-2132 (1997).
56. W. Wang, J. M. Schultz and B. S. Hsiao "Dynamic Study of Microstructures During Crystallization and Melting of PEEK/PEKK Blend", *Macromolecules*, 30(15), 4544-4550 (1997)
57. S. Stoppel, E. T. Samulski, J. Preston, B. S. Hsiao, K. H. Gardner and H. Shih, "A Thiophene-Based Liquid Crystalline Aromatic Polyamide", *High Perform. Polym.*, 9(3), 215-227 (1997).
58. F. C. Chiu, Q. Fu, M. Leland, S. Z. D. Cheng, E. T. Hsieh, C. C. Tso and B. S. Hsiao, "Melt Crystallization And Crystal Morphology Of Two Low Molecular Weight Linear Polyethylene Fractions" *J. Macromol. Sci., Phys.*, B36(5), 553-567 (1997).
59. Q. Fu, B. P. Livengood, C. C. Shen, F. L. Lin, W. Li, F. Harris, S. Z. D. Cheng, and B. S. Hsiao, "Solvent Induced Phase Separation in a Nylon 6-b-Polyimide-b-Nylon 6 Triblock Copolymer, *J. Polym. Research*, 4(1), 1-8 (1997).
60. R. M. Ho, P. Honigfort, H. M. Lin, S. Z. D. Cheng, B. S. Hsiao and K. H. Gardner, Crystal Morphological Investigation In Thin Films Of Poly(Aryl Ether Ketone Ketone) Having A Meta-Linkage. *Polymer*, 38(20), 5051-5058 (1997).
61. T. A. Ezquerra, F. Liu, R. H. Boyd and B. S. Hsiao, "Crystallization of Poly(aryl ether ketone) Polymers as Revealed by Time Domain Dielectric Spectroscopy", *Polymer*, 38(23), 5793-5800 (1997).
62. B. S. Hsiao, A. D. Kennedy, R. A. Leach, B. Chu and P. Harney, "Studies of Structure and Morphology Development During the Heat-Draw Process of Nylon 66 Fibers by Synchrotron X-ray Diffraction and Scattering Techniques", *J. Appl. Cryst.*, 30, 1084-1095 (1997).
63. B. S. Hsiao and R. K. Verma, "A Novel Approach to Extract Morphological Variables in Crystalline Polymers from Time-Resolved SAXS Measurements", *J. Synchrotron Radiation*, 5, 23-29 (1998).
64. B. S. Hsiao, R. K. Verma and B. B. Sauer, "Crystallization Study of Poly(ether ether ketone/Poly(ether imide) Blends by Real Time Small Angle X-ray Scattering", *J. Macromol. Sci. Phys.*, 37(3), 365-374 (1998).
65. M. J. van Eijndhoven-Reveria, N. J. Wagner and B. S. Hsiao, "Correlation of the Minor Phase Orientation to the Flow-Induced Morphological Transitions in Thermotropic Liquid Crystalline Polymer/PBT Blends", *J. Polym. Sci. Polym. Phys.*, 36, 1769-1780 (1998).
66. Q. Fu, B. P. Livengood, C. C. Shen, F. Lin, F. W. Harris, S. Z. D. Cheng, B. S. Hsiao and F. Yeh, "Crystallization and Phase Behavior in Nylon6/Aromatic Polyimide Triblock Copolymers", *Macromol. Chem. Phys.*, 199, 1107-1118 (1998).
67. W. Wang, J. M. Schultz and B. S. Hsiao, "Time-Resolved Simultaneous SAXS/WAXS Studies of Morphological and Structural Changes of PEEK During Isothermal Crystallization, Melting and Subsequent Cooling", *J. Macromol. Sci. - Phys.*, B37(5), 667-682 (1998).
68. D. M. Dean, R. A. Register, L. Rebenfeld and B. S. Hsiao, "Matrix Molecular Orientation in Fiber-Reinforced Polypropylene Composites Containing a Transcrystalline Layer", *J. Materials Science*, 33, 4797-4812 (1998).
69. Y. Akpalu, L. Kielhorn, B. S. Hsiao, R. S. Stein, T. P. Russell, J. van Egmond, M. Muthukumar, "An Investigation of the Early Stages of Structural Development During Isothermal Melt Crystallization of Homogeneous Copolymers of Ethane and 1-Octene: Time Resolved Synchrotron X-ray and SALS", *Macromolecules*, 32(3), 765-770, (1999).

70. B. S. Hsiao, Z. G. Wang, F. J. Yeh, Y. Gao and K. Sheth, "Time-Resolved X-ray Studies of Structure Development in Poly(butylene terephthalate) during Isothermal Crystallization", *Polymer*, 40, 3515-3523 (1999).
71. Z. G. Wang, B. S. Hsiao, B. B. Sauer, W. G. Kampert, "The Nature of Secondary Crystallization in Poly(ethylene terephthalate)", *Polymer*, 40, 4615 (1999).
72. J. M. Samon, J. M. Schultz, J. Wu, B. S. Hsiao, F. Yeh and R. Kolb, "Study of the Structure Development during the Melt-Spinning of Nylon 6 Fibers by On-line Wide-Angle Synchrotron X-ray Scattering Techniques", *J. Polym. Sci. Polym. Phys.* 37, 1277-1287 (1999).
73. E. Q. Chen, S.-W. Lee, A. Q. Zhang, B. S. Moon, P. S. Honigfort, I. Mann, H. M. Lin, F. W. Harris, S. Z. D. Cheng, B. S. Hsiao and F. Yeh, "Isothermal Thickening And Thinning Process In Low Molecular Weight Poly(Ethylene Oxide) Fractions Crystallized from Melt. 6. Configuration Defects in Molecules", *Polymer*, 40(16) 4543-4551 (1999).
74. E. Q. Chen, S. W. Lee, A. Zhang, B. S. Moon, I. Mann, F. W. Harris, S. Z. D. Cheng, B. S. Hsiao, F. Yeh, E. D. von Meerwall and D. Grubb "Isothermal Thickening and Thinning Processes In Low Molecular Weight Poly(Ethylene Oxide) Fractions Crystallized from The Melt. 8. Molecular Shape Dependence", *Macromolecules*, 32(15), 4784-4793 (1999).
75. N. S. Murthy, Z. G. Wang, B. S. Hsiao, "Interactions between Crystalline and Amorphous Domains in Semicrystalline Polymers: Small-Angle X-Ray Scattering Studies of the Brill Transition in Nylon 6,6", *Macromolecules*, 32(17), 5594-5599 (1999).
76. L. Zhu, Y. Chen, A. Zhang, B. H. Calhoun, M. Chun, R. P. Quirk, S. Z. D. Cheng, B. S. Hsiao F. J. Yeh and T. Hashimoto, "Phase Structures and Morphologies Determined by Competitions among Self-Organization, Crystallization and Vitrification in a Disordered Poly(Ethylene Oxide)-b-Polystyrene Diblock Copolymers", *Phys. Rev. B, Cond. Matter Mater. Phys.* 60(14), 10022-10031 (1999).
77. F. Yeh, B. S. Hsiao, B. Chu, B. B. Sauer and E. A. Flexman, "Effect of Miscible Diluent on the Lamellar Morphology of Poly(oxymethylene Blends)", *J. Polym. Sci. Polym. Phys.* 37, 3115-3122 (1999).
78. Z. G. Wang, B. S. Hsiao, J. Lopez and J. P. Armistead, "Crystal Structure Changes during Isothermal Crystallization, Cooling and Heating of Linear Polyethylene", *J. Polym. Research*, 6(3), 1-7 (1999).
79. Z. G. Wang, B. S. Hsiao, B. X. Fu, L. Liu, F. Yeh, H. White, B. B. Sauer, H. Chang and J. M. Schultz, "Correct Determination of Crystal Lamellar Thickness in Poly(ethylene terephthalate) by Small-Angle X-ray Scattering", *Polymer*, 41, 1791-1797 (1999).
80. B. B. Sauer, W. G. Kampert, E. N. Blanchard, S. A. Threefoot and B. S. Hsiao, "Temperature Modulated DSC Studies of Melting and Recrystallization in Polymers Exhibiting Multiple Endotherms", *Polymer*, 41, 1099-1108 (1999).
81. X. H. Zong, Z. G. Wang, B. S. Hsiao, B. Chu, J. J. Zhou, E. Dormier and D. D. Jamiolkowski, "Crystallization and Morphological Changes in Absorbable Poly(glycolide) and Poly(glycolide-co-lactide) During in-vitro Degradation", *Macromolecules*, 32, 8107-8114 (1999).
82. J. M. Samon, J. M. Schultz, B. S. Hsiao, S. Seifert, N. Stribeck, I. Gurke, C. Saw and G. Collins, "Structure Development during the Melt Spinning of Polyethylene and Poly(vinylidene) Fibers by in-situ Synchrotron Small- and Wide-Angle X-ray Scattering Techniques", *Macromolecules*, 32(24), 8121-8132 (1999).
83. Z. G. Wang, B. S. Hsiao, X. Zong, F. Yeh, J. Zhou and E. Dormier "Morphological Development in Biodegradable Poly(glycolide), Poly(glycolide-co-lactide) and Poly(glycolide-co-caprolactone) Copolymers During Isothermal Crystallization", *Polymer*, 41(2), 621-628 (2000).
84. J. M. Samon, J. M. Schultz and B. Hsiao, "Study of Cold Drawing of Nylon 6 Fiber by Simultaneous In-situ Small- and Wide-Angle X-ray Scattering Techniques", *Polymer*, 41, 2169-2182 (2000).
85. W. Liu, S. Kim, J. Lopez, B. S. Hsiao, M. Y. Keating, I. H. Lee, B. Landes and R. S. Stein, "Structural Development during Thermal Fractionation of Polyethylenes", *J. Thermal Analysis and Calorimetry*, 59, 245-255 (2000).
86. H. W. Starkweather, P. Avakian, K. Gardner, B. S. Hsiao, M. Y. Keating, H. Ng, "Thermal Properties of the Polyamide from 2-Methylpentamethylenediamine and Dodecanedioic Acid", *J. Thermal Analysis and Calorimetry*, 59, 519-530 (2000).
87. C. Park, S. Simmons, L. J. Fetters, B. Hsiao, F. Yeh and E. L. Thomas, "Spherical to Cylindrical Microdomain Transformation by Application of a Flow Field", *Polymer*, 41(8), 2971-2977 (2000).
88. Z. G. Wang, B. S. Hsiao, E. B. Sirota, P. Agarwal and S. Srinivas, "Probing the Early Stages of Polymer Crystallization by Simultaneous Small- and Wide-Angle X-ray Scattering", *Macromolecules*, 33(3), 978-989 (2000).

89. J. Wu, J. M. Schultz, B. Hsiao, F. Yeh and B. Chu, "In-situ Synchrotron Small- and Wide- Angle X-ray Scattering Measurement of Poly(vinylidene Fluoride) Fibers Under Deformation", *Macromolecules.*, 33(5), 1765-1777 (2000).
90. Z. G. Wang, N. S. Murthy and B. S. Hsiao "Comparison of Intensity Profile Analysis and Correlation Function Methods for Study the Lamellar Structures of Semicrystalline Polymers Using Small Angle X-ray Scattering", *J. Appl. Cryst.*, 33(3), 690-694 (2000).
91. B. X. Fu, B. S. Hsiao, H. White, M. Rafailovich, P. Mather, H. G. Joen, S. Phillips, J. Lichtenhan and J. Schwab, "Nanoscale Reinforcement of Polyhedral Oligomeric Silsesquioxane (POSS) in Polyurethane Elastomer", *Polymer International*, 49, 437-440 (2000).
92. J. M. Samon, J. M. Schultz, B. S. Hsiao, J. Wu and S. Khot, "Structure Development during the Melt Spinning and Subsequent Annealing of Polybutene-1 Fibers", *J. Polym. Sci. Polym. Phys.*, 38(14), 1872-1882 (2000).
93. F. C. Chiu, Q. Wang, Q. Fu, P. Honigfort, S. Z. D. Cheng, B. S. Hsiao, F. Yeh, M. Keating, E. T. Hsieh and C. C. Tso, "Structural and Morphological Inhomogeneity of Short-Chain Branched Polyethylenes in Multi-Step Crystallization", *J. Macromol. Sci. Phys.*, B39(3), 317-331 (2000).
94. L. Zhu, S. Z. D. Cheng, B. H. Calhoun, Q. Ge, R. P. Quirk, E. T. Thomas, B. S. Hsiao, F. J. Yeh and B. Lotz, "Crystallization Temperature-Dependent Crystal Orientations within Nanoscale Confined Lamellae of a Self-Assembled Crystalline-Amorphous Diblock Copolymer", *J. Am. Chem. Soc.*, 122(25), 5957-5967 (2000).
95. L. Zhu, S. Z. D. Cheng, B. H. Calhoun, Q. Ge, R. P. Quirk, B. S. Hsiao, F. J. Yeh, "Molecular and Supramolecular Ordering in Confined Environments", *Chin. J. Polym. Sci.*, 18(4), 287-300 (2000).
96. B. B. Sauer, R. McLean, D. Londono and B. S. Hsiao "Morphological Changes during Crystallization and Melting of Poly(oxy methylene) Studied by Synchrotron X-ray Scattering and Modulated Differential Scanning Calorimetry", *J. Macromol. Sci. - Phys.*, 39(4), 519-543 (2000).
97. M. S. Lisowski, Q. Liu, J. Cho, J. Runt, F. Yeh and B. S. Hsiao, "Crystallization Behavior of Poly(ethylene oxide) and Its Blends using Time-Resolved Wide- and Small-Angle X-ray Scattering ", *Macromolecules.*, 33(13), 4842-4849 (2000).
98. S. Ran, X. Zong, D. Fang, B. S. Hsiao and B. Chu, "Novel Image Analysis of Two-Dimensional X-ray Diffraction Patterns for Fiber Drawing Study", *J. Appl. Cryst.*, 33(4), 1031-1036 (2000).
99. S. Ran, S. Cruz, X. Zong, D. Fang, B. Chu, B. S. Hsiao, R. Ross, H. Chang and D. Londono, "Structure Development during the Heat-Draw Process of Nylon 66 Fiber by Synchrotron X-ray Diffraction", *Advances in X-ray Analysis*, 43, 344-349 (2000).
100. J. M. Schultz, B. S. Hsiao and J. M. Samon, " Structural Development During the Early Stages of Polymer Melt Spinning by In-Situ Synchrotron X-Ray Techniques", *Polymer*, 41(25), 8887-8895 (2000).
101. Z. G. Wang, B. S. Hsiao, E. B. Sirota and S. Srinivas, "A Simultaneous Small- and Wide-Angle X-Ray Scattering Study of the Early Stages of Melt Crystallization in Polyethylene", *Polymer*, 41(25), 8825-8832 (2000).
102. G. Kumaraswamy, R. K. Verma, A. M. Issaian, P. Wang, J. A. Kornfield, F. Yeh, B. S. Hsiao and R. H. Olley, "Shear-Enhanced Crystallization in Isotactic Polypropylene: 2. Analysis of the Formation of the Oriented Skin", *Polymer*, 41(25), 8931-8940 (2000).
103. Z. G. Wang, R. A. Phillips and B. S. Hsiao, "Morphology Development during Isothermal Crystallization in I. Isotactic and Atactic Polypropylene Blends ", *J. Polym. Sci. Polym Phys.*, 38(19), 2580-2590 (2000).
104. B. X. Fu, B. S. Hsiao, S. Pagola, P. Stephens, H. White, M. Rafailovich, J. Sokolov, P. Mather, H. G. Joen, S. Phillips, J. Lichtenhan and J. Schwab, "Structural Development during Deformation of Polyurethane Containing Polyhedral Oligomeric Silsesquioxanes (POSS) Nanocrystals", *Polymer*, 42(2), 599-611 (2000).
105. D. M. Lincoln, R. A. Vaia, Z.-G. Wang, B. S. Hsiao, "Secondary Structure and Elevated Temperature Crystallite Morphology of Nylon-6/Layered Silicate Nanocomposites", *Polymer*, 42(4), 1621-1631 (2000).
106. S. Ran, D. Fang, S. Zong, B. S. Hsiao, B. Chu, and P. M. Cunniff, " Structural Changes during Deformation of Kevlar Fibers via On-Line Synchrotron SAXS/WAXD Techniques", *Polymer*, 42(4), 1601-1612 (2000).
107. J. M. Samon, J. M. Schultz, B. S. Hsiao, S. Khot and H. R. Johnson, "Structure Development during the Melt Spinning of Poly(oxyethylene) Fiber", *Polymer*, 42(4), 1547-1559 (2000).
108. R. H. Somani, B. S. Hsiao, A. Nogales, S. Srinivas, A. H. Tsou, I. Sics, F. J. Balta-Calleja, and T. A. Ezquerra , "Structure Development during Shear Flow Induced Crystallization of i-PP: In-situ Small Angle X-ray Scattering Study", *Macromolecules*, 33(25), 9385-9394 (2000).
109. S. Andjelic, D. Jamiolkowski, James McDivitt, J. Fischer, J. Zhou, Z.-G. Wang, B. S. Hsiao, "Time-Resolved Crystallization Study of Absorbable Polymers by Synchrotron Small Angle X-ray Scattering ", *J. Polym. Sci. Polym. Phys.*, 39(1), 153-167 (2000).

110. B. X. Fu, W. Zhang, B. S. Hsiao, M. Rafailovich, J. Sokolov, G. Johansson, B. B. Sauer, S. Phillips and R. Blanski, "Synthesis and Characterization of Segmented Polyurethane Containing Polyhedral Oligomeric Silsesquioxane (POSS) Nanostructured Molecules", *High Performance Polymer*, 12(4), 565-571 (2001).
111. L. Zhu, B. H. Calhoun, Q. Ge, R. P. Quirk, S. Z. D. Cheng, E. L. Thomas, B. S. Hsiao, F. Yeh, L. Z. Liu and B. Lotz, "Initial-stage Growth Controlled Crystal Orientations in Nanoconfined Lamellae of A Self-Assembled Crystalline-Amorphous Diblock Copolymer", *Macromolecules*, 34(5), 1244-1251 (2001).
112. J. M. Samon, J. M. Schultz and B. S. Hsiao, "Morphological Changes during the Post-Spinning Annealing of Polybutene-1 Fiber ", *Macromolecules*, 34(6), 2008-2012 (2001).
113. D. M. Crawford, E. Napadensky, N. C. Beck Tan, D. A. Reuschle, D. A. Mountz, K. A. Mauritz, K. S. Laverdure, S. P. Gido, W. Liu and B. S. Hsiao, "Structure/Property Relationships in Polystyrene-Polyisobutylene-Polystyrene Block Copolymers", *Thermochimica Acta*, 367-368, 125-134 (2001).
114. S. Ran, X. Zong, D. Fang, B. S. Hsiao, B. Chu and R. A. Phillips, "Structural and Morphological Studies of Isotactic Polypropylene Fibers during Heat/Draw Deformation by *in-situ* Synchrotron SAXS/WAXD", *Macromolecules*, 34(8) 2569-2578 (2001).
115. A. Nogales, B. S. Hsiao, R. H. Somani, S. Srinivas, A. H. Tsou, F. J. Balta-Calleja, and T. A. Ezquerro, "Shear-Induced Crystallization in Blends of Isotactic Polypropylene with Different Molecular Weight: In-situ Synchrotron Small- and Wide-Angle X-ray Scattering Studies", *Polymer*, 42(12), 5247-5256 (2001).
116. L. Zhu, S. Z. D. Cheng, B. H. Calhoun, Q. Ge, R. P. Quirk, E. L. Thomas, B. S. Hsiao, F. Yeh, B. Lotz, "Phase Structures and Morphologies Determined by Self-organization, Vitrification, and Crystallization: Confined Crystallization in an Ordered Lamellar Phase of PEO-b-PS Diblock Copolymer. *Polymer*, 42(13), 5829-5839 (2001).
117. Zhi-Gang Wang, Benjamin S. Hsiao and Charles C. Han, "Evolution of Morphology and Structure during Crystallization and Melting in Syndiotactic Polypropylene", *Chinese J. App. Chem. (Yingyong Huaxue)*, 18(5), 280-288 (2001).
118. Z. Wang, B. S. Hsiao, S. Srinivas, G. M. Brown, A. Tsou, S. Z. D. Cheng, R. S. Stein, "Phase Transformation in Quenched Mesomorphic Isotactic Polypropylene", *Polymer*, 42(18), 7561-7566 (2001).
119. Zhu, Lei; Huang, Ping; Cheng, Stephen Z. D.; Ge, Qing; Quirk, Roderic P.; Thomas, Edwin L.; Lotz, Bernard; Wittmann, Jean-Claude; Hsiao, Benjamin S.; Yeh, Fengji; Liu, Lizhi. "Dislocation-Controlled Perforated Layer Phase in a PEO-b-PS Diblock Copolymer", *Phys. Rev. Lett.*, 86(26), 6030-6033 (2001).
120. Chen, Er-Qiang; Weng, Xing; Zhang, Anqiu; Mann, Ian; Harris, Frank W.; Cheng, Stephen Z. D.; Stein, Richard; Hsiao, Benjamin S.; Yeh, Fengji. "Primary Nucleation in Polymer Crystallization", *Macromol. Rapid Commun.*, 22(8), 611-615 (2001).
121. R. Somani, B. S. Hsiao, A. Nogales, H. Fruitwala, A. Tsou, "Structure Development during Shear Flow-Induced Crystallization of i-PP: In-Situ Wide-Angle X-ray Diffraction Study", *Macromolecules*, 34(17), 5902-5909 (2001).
122. S. Ran, X. Zong, D. Fang, B. S. Hsiao, B. Chu, P M. Cuniff and R. A. Phillips, "Study of the Mesophase in Polymeric Fibers during Deformation by Synchrotron SAXS/WAXD", *J. Materials Sci.*, 36 (13), 3071-3077 (2001).
123. Z. G. Wang, R. A. Phillips and B. S. Hsiao, "Morphology Development during Isothermal Crystallization in II. Isotactic and Syndiotactic Polypropylene Blends ", *J. Polym. Sci. Polym Phys.*, 39(16), 1876-1888 (2001).
124. L. Zhu, B. R. Mimnaugh, Q. Ge, R. P. Quirk, S. Z. D. Cheng, E. L. Thomas, B. Lotz, B. S. Hsiao, F. Yeh, L. Liu, "Hard and Soft Confinement Effects on Polymer Crystallization in Microphase Separated Cylinder-Forming PEO-b-PS/PS Blends", *Polymer*, 42(21), 9121-9131 (2001)
125. F. J. Medellin-Rodriguez, B. S. Hsiao, B. Chu, R. Vaia, S. Phillips and C. Burger, "Time-Resolved Shear Behavior of End-Thetered Nylon 6-Clay Hybrids Followed by Non-Isothermal Crystallization", *Polymer*, 42(21), 9015-9023 (2001).
126. Z. G. Wang, X. H. Wang, B. S. Hsiao, S. Andjelic, D. Jamiolkowski, J. McDivitt, J. Fischer, J. Zhou and C. C. Han, "Time-Resolved Isothermal Crystallization of Absorbable Co-polymer PGA-co-PLA by Synchrotron SAXS and WAXD", *Polymer*, 42(21), 8965-8973 (2001).
127. Nogales, T. A. Ezquerro, Z. Denchev, I. Sics, F. J. Baltá Calleja and Benjamin S. Hsiao, "Molecular Dynamics and Nanostructure Development During Cold Crystallisation in PEEK as Revealed by Real Time Methods", *J. Chem. Phys.*, 115(8), 3804-3813 (2001).
128. Ping Huang, Lei Zhu; Stephen Z. D. Cheng, Qing Ge, Roderic P. Quirk, Edwin L. Thomas, Bernard Lotz.; Benjamin S. Hsiao, Lizhi Liu, Fengji Yeh, "Crystal Orientation Changes in Two-Dimensionally Confined Nanocylinders in a Poly(ethylene oxide)-b-polystyrene/Polystyrene Blend", *Macromolecules*, 34(19), 6649-6657 (2001).

129. D. M. Lincoln, R. A. Vaia, Z.-G. Wang, B. S. Hsiao and R. Krishnamoorti, "Temperature Dependence of Polymer Crystalline Morphology in Nylon 6/Montmorillonite Nanocomposites", *Polymer*, 42(25), 9975-9985 (2001).
130. Bruce X. Fu, Ling Yang, Rajesh H. Somani, Steven X. Zong, Benjamin S. Hsiao, Shawn Phillips, Rusty Blanski and Patrick Ruth "Crystallization Studies of Isotactic Polypropylene Containing Nanostructured Polyhedral Oligomeric Silsesquioxanes (POSS) Molecules under Quiescent and Shear Conditions", *J. Polym. Sci. Polym. Phys.*, 39(22), 2727-2739 (2001).
131. Zhi-Gang Wang, Xuehui Wang, Benjamin S. Hsiao, Roger A. Phillips, Francisco J. Medellin-Rodriguez, Srivatsan Srinivas, Charles C. Han, "Structure and Morphology Development in Syndiotactic Polypropylene during Isothermal Crystallization and Subsequent Melting", *J. Polym. Sci. Polym. Phys.*, 39 (23), 2982-2995 (2001).
132. Zhiyong Xia, Hung-Jue Sue, Zhigang Wang, Carlos Avila-Orta and Benjamin S. Hsiao "Determination of the Crystalline Lamellar Thickness via Small-angle X-ray Scattering and Transmission Electron Microscopy", *J. Macro. Sci.-Phys*, B40(5), 625-638 (2001).
133. S. F. Ran, C. Burger, D. F. Fang, X. H. Zong, S. Cruz, B. S. Hsiao, B. Chu, R. A. Bubeck, K. Yabuki, Y. Teramoto, D. C. Martin, M. A. Johnson and P. M. Cunniff, "*In-situ* Structural Development during PBO Solution Spinning by Synchrotron WAXD/SAXS Studies", *Macromolecules*, 35(2), 433-439 (2002).
134. Howard Wang, Katsumi Shimizu, Erik K. Hobbie, George Z. G. Wang, J. Carson Meredith, Alamgir Karim, Eric J. Amis, Benjamin S. Hsiao, Eric T. Hsieh and Charles C. Han, "Phase Diagram of a Nearly Isorefractive Polyolefin Blend", *Macromolecules*, 35(3), 1072-1078 (2002).
135. Joshua M. Samon, Jerold M. Schultz and Benjamin S. Hsiao "The Development of Structure during the Early Stages of Melt Spinning", *Polymer*, 43(6), 1873-1875 (2002).
136. L. Zhu, S. Z. D. Cheng, P. Huang, Q. Ge, R. P. Quirk, E. L. Thomas, B. Lotz, B. S. Hsiao, F. Yeh, L. Liu, "Nanofined polymer crystallization in the hexagonally perforated layers of a self-assembled PS-b-PEO diblock copolymer." *Advanced Materials (Weinheim, Germany)* 14(1), 31-34 (2002).
137. Rajesh H. Somani, L. Yang, and Benjamin S. Hsiao, "Precursors of primary nucleation induced by shear in isotactic polypropylene", *Physica A, Statistical Mechanics and Its Applications (Amsterdam, Netherlands)* 304(1-2), 145-157 (2002).
138. Guruswamy Kumaraswamy, Julia A. Kornfield, Fengji Yeh and Benjamin S. Hsiao, "Shear-Enhanced Crystallization in Isotactic Polypropylene. 3. Evidence for a Kinetic Pathway to Nucleation", *Macromolecules*, 35(5), 1762-1769 (2002).
139. Zhi-Gang Wang, Benjamin S. Hsiao, Rainer Gurke and Norbert Striebeck, "Nanostructure Evolution of Isotropic High-Pressure Injection-Molded UHMWPE during Heating", *Macromolecules*, 35(6), 2200-2206 (2002).
140. Lei Zhu, Ping Huang, William Y. Chen, Qing Ge, Roderic P. Quirk, Stephen Z. D. Cheng, Edwin L. Thomas, Bernard Lotz, Benjamin S. Hsiao, Fengji Yeh, Lizhi Liu, "Nanotailored Crystalline Morphology in Hexagonally Perforated Layers of a Self-Assembled PS-b-PEO Diblock Copolymer" *Macromolecules*, 35(9), 3553-3562 (2002).
141. Xinhua Zong, Dufei Fang, Kwang-Sok Kim, Jeyoung Kim, Sharon Cruz, Benjamin S. Hsiao and Benjamin Chu, "Structure and Process Relationships in Bioabsorbable Nanofiber Membranes by Electrospinning", *Polymer*, 43(16), 4403-4412 (2002).
142. Shigeyuki Toki, Igors Sics, Shaofeng Ran, Lizui Liu and Benjamin S. Hsiao, "New Insights into Structural Developments in Natural Rubber during Uniaxial Deformation by *In-Situ* Synchrotron X-Ray Diffraction", *Macromolecules*, 35(17), 6578-6584 (2002).
143. R. H. Somani, L. Yang, I. Sics, B. S. Hsiao, N. Pogodina, H. H. Winter, P. Agarwal, H. Fruitwala, A. Tsou, "Orientation-Induced Crystallization in Isotactic Polypropylene Melt by Step-Shear Deformation", *Macromolecular Symposia*, 185, 105-117 (2002).
144. Bruce X. Fu, Benjamin S. Hsiao, Gavin Chen, Jack Zhou, Ilya Kozyfman, Dennis Jamiolkowski and Edward Dormier, "Structure and Property Studies of Biodegradable Poly(glycolide-co-lactide) Fiber during Processing and *In Vitro* Degradation", *Polymer*, 43(20), 5527-5534 (2002).
145. N. S. Murthy, Z. G. Wang, M. K. Akkapeddi and B. S. Hsiao, "Isothermal Crystallization Kinetics of Polyamide-6 Blends and Copolymers Using Simultaneous Small- and Wide-Angle X-ray Measurements", *Polymer*, 43(18), 4905-4913 (2002).
146. M. Gelfer, H. H. Song, L. Liu, C. Avila, L. Yang, M. Si, B. S. Hsiao, B. Chu, M. Rafailovich and A. Tsou, "Manipulating the Microstructure and Rheology in Polymer-Organoclay Composites", *Polymer Engineering and Science*, 42(9), 1841-1852 (2002).
147. Wenhua Zhang, B. Fu, Y. Seo, E. Schrag, B. Hsiao, Patrick Mather, Nan-Loh Yang, Dayi Xu, Harald Ade, Miriam Rafailovich and Jonathan Sokolov, "The Effect of Random Copolymer of Methyl Methacrylate with

- Polyhedral Oligomeric Silsesquioxane in Compatibilization of Polystyrene and Poly(methyl methacrylate) Blend" *Macromolecules*, 35(21) 8029-8038 (2002).
148. Rajesh H. Somani, Ling Yang, Benjamin S. Hsiao, Pawan Agarwal, Hitesh Fruitwala, Andy H. Tsou, "Shear-Induced Precursor Structures in Isotactic Polypropylene Melt by In-Situ Rheo-SAXS and -WAXD Studies", *Macromolecules*, 35(24), 9096-9104 (2002).
 149. Michael Y. Gelfer, Hyun H. Song, Lizhi Liu, Benjamin S. Hsiao, Benjamin Chu, Miriam Rafailovich, M. Si and Vladimir Zaitsev, "Effects of Organoclays on Morphology, Thermal and Rheological Properties in Polystyrene and Poly(methylmethacrylate) Blends", *J. Polym. Sci. Poly. Phys*, 41, 44-54 (2003).
 150. Shaofeng Ran, Dufei Fang, Xinhua Zong, Christian Burger, Benjamin Chu, Benjamin S. Hsiao, Kazuyuki Yabuki, Yoshihiko Teramoto and Philip M. Cunniff, "A Synchrotron WAXD Study on the Early Stages of Coagulation Process during PBO Fiber Spinning", *Macromolecules*, 35(27), 9851-9853 (2002).
 151. Shaofeng Ran, Zhigang Wang, Christian Burger, Benjamin Chu and Benjamin S. Hsiao, "Mesophase as Precursor for Strain-Induced Crystallization in Amorphous Poly(ethylene terephthalate) Film", *Macromolecules*, 35(27), 10102-10107 (2002).
 152. Lizhi Liu, Quan Wan, Tianbo Liu, Benjamin S. Hsiao and Benjamin Chu, "Salt-Induced Polymer Gelation and Formation of Nanocrystals in Polymer Salt Complexes", *Langmuir*, 18(26), 10402-10406 (2002).
 153. Jaedong Cho, Stephen Baratian, Jangsoon Kim, Fengji Yeh, Benjamin S. Hsiao and James Runt, "Crystallization and Structure Formation of Poly(L-lactide-co-meso-lactide) Random Copolymers: A Time-Resolved Wide- and Small-Angle X-ray Scattering Study", *Polymer*, 44(3), 711-717 (2002).
 154. Toki, Shigeyuki; Sics, Igors; Ran, Shaofeng; Liu, Lizhi; Hsiao, Benjamin S. "Structural Developments in Natural and Synthetic Poly-isoprene Rubbers during Uniaxial Deformation by In-situ Synchrotron X-ray Diffraction." *Technical Papers - American Chemical Society, Rubber Division*, 1488-1503 (2002).
 155. Hu, Xuesong; Zhang, Wenhua; Si, Mayu; Gelfer, Michael; Hsiao, Benjamin; Rafailovich, Miriam; Sokolov, Jonathan; Zaitsev, Vladimir; Schwarz, Steven. "Dynamics of Polymers in Organosilicate Nanocomposites", *Macromolecules*, 36(3), 823-829. (2003).
 156. Bruce X. Fu, Michael Y. Gelfer, Benjamin S. Hsiao, Shawn Phillips, Brent Viers, Rusty Blanski and Patrick Ruth, "Physical Gelation of Ethylene-Propylene Copolymer Melts Induced by Polyhedral Oligomeric Silsesquioxane (POSS) Incorporation", *Polymer*, 44 (5), 1499-1506 (2003).
 157. Carlos A. Avila-Orta, Francisco J. Medellin-Rodriguez, Zhigang Wang, D. Navarro-Rodriguez, Fengji Yeh and Benjamin S. Hsiao, "On the Nature of Multiple Melting in Poly(ethylene terephthalate) (PET) and Cyclohexylene Dimethylene (PET/CT) Copolymer", *Polymer*, 44(5), 1527-1535 (2003).
 158. Azzurri, F.; Flores, A.; Alfonso, G. C.; Sics, I.; Hsiao, B. S.; Balta Calleja, F. J. "Polymorphism of isotactic polybutene-1 as revealed by microindentation hardness. Part II: correlations to microstructure", *Polymer*, 44(5), 1641-1645 (2003).
 159. Lizhi Liu, Benjamin S. Hsiao, Xuan Fu, Shaofeng Ran, Shigeyuki Toki, Benjamin Chu, Andy H. Tsou and Pawan Agarwal, "Structure Changes during Mechanical Deformation of Ethylene Based Semi-Crystalline Ethylene-Propylene Copolymer, Part I: SAXS Study", *Macromolecules*, 36(6), 1920-1929 (2003).
 160. Fengji Yeh, Benjamin S. Hsiao, Byran B. Sauer, Samuel Michel, Heinz W. Siesler, "Structure Studies of a Polyurethaneurea Elastomer under Deformation", *Macromolecules*, 36(6), 1940-1954 (2003).
 161. Francisco J. Medellin-Rodriguez, Benjamin S. Hsiao, Benjamin Chu and Bruce X. Fu, "Uniaxial Deformation Of Nylon 6-Clay Nanocomposites By In-Situ Synchrotron X-Ray Measurements", *J. Macromol. Sci. Phys.*, 42(1) 201-214 (2003).
 162. Xinhua Zong, Kwangsok Kim, Shaofeng Ran, Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, "Structure and Morphology Changes during *In Vitro* Degradation in Electrospun Poly(glycolide-co-lactide) Bioabsorbable Nanofiber Membranes", *Biomacromolecules*, 4(2), 416-423 (2003).
 163. Shaofeng Ran and Benjamin S. Hsiao, Pawan Agarwal and Manika Varma-Nair "Structure and Morphology Development during Deformation of Propylene Based Ethylene-Propylene Copolymer and Its Blends with Isotactic Polypropylene", *Polymer*, 44, 2385-2392 (2003).
 164. Zhu, Lei; Huang, Ping; Chen, William Y.; Weng, Xin; Cheng, Stephen Z. D.; Ge, Qing; Quirk, Roderic P.; Senador, Tony; Shaw, Montgomery T.; Thomas, Edwin L.; Lotz, Bernard; Hsiao, Benjamin S.; Yeh, Fengji; Liu, Lizhi. "'Plastic Deformation' Mechanism and Phase Transformation in a Shear-Induced Metastable Hexagonally Perforated Layer Phase of a Polystyrene-b-poly(ethylene oxide) Diblock Copolymer." *Macromolecules*, 36(9), 3180-3188 (2003).
 165. Y. K. Luu, K. Kim, B. S. Hsiao, B. Chu, M. Hadjiargyrou, "Development of a Nanostructured DNA Delivery Scaffold via Electrospinning of PLGA and Block Copolymers", *J. Controlled Release*, 89, 341-353 (2003).
 166. Bruce X. Fu, Benjamin S. Hsiao, Gavin Chen, Jack Zhou, Susan Lin, Jenny Yuan, Ilya Koyfman, Dennis D. Jamiolkowski, Edward Dormier, "A Study of Structure and Property Changes of Biodegradable Polyglycolide

- and Poly(glycolide-*co*-lactide) Fibers during Processing and In Vitro Degradation”, Chinese Journal of Polymer Science, 21(2), 159-167 (2003).
167. Shaofeng Ran, Dufei Fang, Shigeyuki Toki, Benjamin S. Hsiao and Benjamin Chu, “Combined Techniques of Raman Spectroscopy and Synchrotron X-ray for In-situ Studies of Polypropylene Fibers during Tensile Deformation”, Review of Scientific Instruments, 74(6), 3087-3092 (2003).
 168. Nogales, I. Sics, T. A. Ezquerro, Z. Denchev, F. J. Balta Calleja, B. S. Hsiao, “In-situ Simultaneous Small- and Wide Angle X-ray Scattering Study of Poly(ether ester) during Cold Drawing”, Macromolecules, 36(13), 4827-4832 (2003).
 169. Rajesh H. Somani, Ling Yang, Benjamin S. Hsiao, Roger Phillips and Hitesh Fruitwala, “Nature of Shear-Induced Primary Nuclei in Isotactic Polypropylene Melt”, J. Macro. Sci. Phys., B42(3 & 4), 515-531 (2003).
 170. Mariya, Shinzo; Murakami, Shozo; Noborisaka, Masatoshi; Poombradub, S.; Tosa, Shigeyuki; Hsiao, B. S.. “Elongation crystallization by natural rubber”, Kyoto Daigaku Nippon Kagaku Sen'i Kenkyusho Koenshu (written in Japanese) 60, 43-48, (2003).
 171. Shigeyuki Toki and Benjamin S. Hsiao, “On the Nature of Strain-Induced Structures in Natural and Synthetic Rubbers under Stretching”, Macromolecules, 36(16), 5915-5917 (2003).
 172. Xinhua Zong, Shaofeng Ran, Benjamin S. Hsiao and Benjamin Chu, “Control of Structure/Morphology and Property of Poly(glycolide-*co*-lactide) Nanofiber Membranes *via* Electrospinning and Post-treatments”, Polymer, 44(17), 4959-4967, (2003).
 173. Pawan K. Agarwal, Rajesh H. Somani, Weiqing Weng, Aspy Mehta, Ling Yang, Shaofeng Ran, Lizhi Liu, Benjamin S. Hsiao, “Shear-Induced Crystallization in Novel Long Chain Branched Polypropylene by *in-situ* Rheo-SAXS and -WAXD”, Macromolecules, 36(14), 5226-5235 (2003).
 174. Er-Qiang Chen, Alexander J. Jing, Xing Weng, Ping Huang, Seung-Wook Lee, Stephen Z. D. Cheng, Benjamin S. Hsiao and Fengji Yeh, “In situ observation of low molecular weight poly(ethylene oxide) crystal melting, recrystallization” Polymer, 44(19), 6051-6058 (2003).
 175. Shigeyuki Toki, Igors Sics, Shaofeng Ran, Lizhi Liu and Benjamin S. Hsiao “Molecular Orientation and Structural Development in Vulcanized Polyisoprene Rubbers during Uniaxial Deformation by *In-Situ* Synchrotron X-Ray Diffraction”, Polymer, 44(19), 6003-6011 (2003).
 176. Christian Burger, Shaofeng Ran, Dufei Fang, David Cookson, Kazuyuki Yabuki, Yoshihiko Teramoto, Philip M. Cunniff, P. James Viccaro, Benjamin S. Hsiao and Benjamin Chu, “Time-Resolved Structural Studies in Fiber Processing,” Macromol. Symposia, 195, 297-302 (2003).
 177. Li-Ming Zhang, Christopher Jahns, Benjamin S. Hsiao and Benjamin Chu, “Synchrotron SAXS / WAXD and Rheological Studies of Clay Suspensions in Silicone Fluid”, J. Colloid Interface Science, 266(2), 339-345 (2003).
 178. Cho, Jaedong; Xu, Ruijian; Yeh, Fengji; Hsiao, Benjamin S.; Runt, James. “Crystallization and structure formation in polymer blends with strong intermolecular interactions: Blends of poly(ethylene oxide) and styrene-hydroxystyrene copolymers”, Macromolecular Symposia, 198 (7th European Symposium on Polymer Blends, 2002), 29-40 (2003).
 179. Kwangsok Kim, Meiki Yu, Steven X. Zong, Jonathan Chiu, Dufei Fang, Young Soo Seo, Benjamin S. Hsiao, Benjamin Chu and Michael Hadjiargyrou, “Control of Degradation Rate and Hydrophilicity in Electrospun Poly(DL-lactide) Membranes for Cell Scaffolding”, Biomaterials, 24, 4977-4985 (2003).
 180. Daisuke Kawakami, Shaofeng Ran, Christian Burger, Bruce Fu, Igors Sics and Benjamin S. Hsiao, “Mechanism of Structural Formation by Uniaxial Deformation in Amorphous Poly(ethylene terephthalate) above Glass Temperature”, Macromolecules, 36(25), 9275-9280 (2003).
 181. Daisuke Kawakami, Shaofeng Ran, Christian Burger, Bruce Fu, Igors Sics, Benjamin S. Hsiao and Takeshi Kikutani, “Structural formation of amorphous poly (ethylene terephthalate) during uniaxial deformation above the glass temperature”, Polymer, 45(3), 905-918 (2004).
 182. Hongliang Jiang, Dufei Fang, Benjamin S. Hsiao, Benjamin Chu and Weiliam Chen, “Optimization and Characterization of Dextran Membranes Prepared by Electrospinning”, Biomacromolecules, 5(2), 326-333 (2004).
 183. Shigeyuki Toki, Igors Sics, and Benjamin S. Hsiao, Syozo Murakami, Masatoshi Tosaka, Sirilux Poompradub Shinzo Kohjiya and Yuko Ikeda, “In-Situ Synchrotron X-Ray Diffraction Study of Structural Evolution in Synthetic Rubbers Induced by Uniaxial Deformation”, J. Polym. Sci. Polym. Phys., 42(6), 956-964 (2004).
 184. Christopher Y. Li, Kishore K. Tenneti, Dong Zhang, Hailiang Zhang, Xinhua Wan, Er-Qiang Chen, Qi-Feng Zhou, Avila-Orta Carlos, Igors Sics; Benjamin S. Hsiao, “al Assembly of a Series of Rod-Coil Block Copolymers: Supramolecular LC Phase in Nanoenvironment”, Macromolecules, 37(8), 2854-2860 (2004)

185. Sirilux Poompradub, Masatoshi Tosaka, Shinzo Kohjiya, Yuko Ikeda, Shigeyuki Toki, Igors Sics and Benjamin S. Hsiao, "Lattice Deformation of Strain-Induced Crystallites in Carbon-Filled Natural Rubber", *Chemical Lett.*, 33(3), 220-221 (2004).
186. Lu Sun, Lei Zhu, Qing Ge, Roderic P. Quirk, Benjamin S. Hsiao, Carlos A. Avila-Orta, Igors Sics and Marie E. Cantino, "Comparison of Crystallization Kinetics in Various Nanoconfined Geometries", *Polymer*, 45(9), 2931-2939 (2004).
187. M. Gelfer, C. Burger, A. Fadeev, I. Sics, B. Chu, B. S. Hsiao, A. Heintz, K. Kojo, S-L. Hsu, M. Si and M. Rafailovich, "Thermally Induced Phase Transitions and Morphological Changes in Organoclays", *Langmuir*, 20(9), 3746-3758 (2004).
188. Masatoshi Tosaka, Syozo Murakami, Sirilux Poompradub, Shinzo Kohjiya, Yuko Ikeda, Shigeyuki Toki, Igors Sics, Benjamin S. Hsiao, "Orientation and crystallization of natural rubber network as revealed by WAXD using synchrotron radiation", *Macromolecules*, 37(9), 3299-3309 (2004).
189. Hongliang Jiang, Dufei Fang, Benjamin S. Hsiao, Benjamin Chu and Weilam Chen, "Preparation and characterization of ibuprofen-loaded poly(lactide-co-glycolide)/poly(ethylene glycol)-g-chitosan electrospun membranes", *J. Biomater. Sci. Polymer Edn*, 15(3), 279-296 (2004).
190. Zhizong Liu, Sruti Chattopadhyay, Montgomery T. Shaw and Benjamin S. Hsiao, "Anomalous Rheology in a Nanostructured Diblock Copolymer/Hydrocarbon System and Its Kinetic Origin", *J. Polym. Sci. Polym. Phys.*, 42(8), 1496-1505 (2004).
191. Huang, Ping; Zhu, Lei; Guo, Ya; Ge, Qing; Jing, Alexander J.; Chen, William Y.; Quirk, Roderic P.; Cheng, Stephen Z. D.; Thomas, Edwin L.; Lotz, Bernard; Hsiao, Benjamin S.; Avila-Orta, Carlos A.; Sics, Igors. "Confinement Size Effect on Crystal Orientation Changes of Poly(ethylene oxide) Blocks in Poly(ethylene oxide)-b-polystyrene Diblock Copolymers", *Macromolecules*, 37(10), 3689-3698 (2004).
192. In Chul Um, Dufei Fang, Benjamin S. Hsiao, Akio Okamoto and Benjamin Chu, "Electro-Spinning and Electro-Blowing of Hyaluronic Acid", *Biomacromolecules*, 5(4), 1428-1436 (2004).
193. Ling Yang, Rajesh H. Somani, Igors Sics, Benjamin S. Hsiao, Rainer Kolb, Hitesh Fruitwala and Christine Ong, "Shear-Induced Crystallization Precursor Studies in Model Polyethylene Blends by In-Situ Rheo-SAXS and Rheo-WAXD", *Macromolecules*, 37(13), 4845-4859 (2004).
194. Lu Sun, Yuxiu Liu, Lei Zhu, Benjamin S. Hsiao and Carlos A. Avila-Orta, "Pathway-Dependent Melting in a Low Molecular Weight Polyethylene-block-Poly(ethylene oxide) Diblock Copolymer", *Macromolecule Rapid Communication*, 25(8), 853-857 (2004).
195. Shaofeng Ran, Christian Burger, Igors Sics, Kyunghwan Yoon, Dufei Fang, Kwangsok Kim, Carlos Avila-Orta, Jongkakh Keum, Benjamin Chu, Benjamin S. Hsiao, David Cookson, Dave Shultz, Myungae Lee, Jim Viccaro and Yasuo Ohta, "In-Situ Synchrotron SAXS/WAXD Studies during Melt Spinning of Modified Carbon Nanofiber and Isotactic Polypropylene Nanocomposite", *Colloid and Polymer Science (on the occasion of E W Fischer's 75th birthday)*, 282(8), 802-809 (2004).
196. Kwangsok Kim, Yen K. Luu, Charles Chang, Dufei Fang, Benjamin S. Hsiao, Benjamin Chu and Michael Hadjiargyrou, "Incorporation and Controlled Release of Hydrophilic Antibiotics Using Poly(lactide-co-glycolide) Based Electrospun Nanofibrous Membranes", *J. Controlled Release*, 98(1) 47-56 (2004).
197. Rong-Ming Ho, Tsai-Ming Chung, J.-C. Tsai, Benjamin S. Hsiao and Igors Sics, "Crystallization of Block Copolymers from Hard to Soft Confinement", *Macromolecules*, 37(16), 5985-5994 (2004).
198. Nogales, A.; Broza, G.; Roslaniec, Z.; Schulte, K.; Sics, I.; Hsiao, B. S.; Sanz, A.; Garcia-Gutierrez, M. C.; Rueda, D. R.; Domingo, C.; Ezquerro, T. A. "Low Percolation Threshold in Nanocomposites Based on Oxidized Single Wall Carbon Nanotubes and Poly(butylene terephthalate)", *Macromolecules*, 37(20), 7669-7672 (2004).
199. Tianbo Liu, Kwangsok Kim, Benjamin S. Hsiao and Benjamin Chu, "Regular and irregular micelles formed by A LEL triblock copolymer in aqueous solution", *Polymer*, 45(23), 7989-7993 (2004).
200. Shigeyuki Toki, Igors Sics, Shaofeng Ran, Lizhi Li, Benjamin S. Hsiao, Syozo Murakami, Masatoshi Tosaka, Shinzo Kohjiya, Sirilux Poompradub, Yuko Ikeda and Andy H. Tsou, "Strain-induced molecular orientation and crystallization in natural and synthetic rubbers under uniaxial deformation by in-situ synchrotron X-ray study", *Rubber Chemistry and Technology*, 77(2), 317-335. (2004).
201. Lu Sun, Yuxiu Liu, Lei Zhu, Carlos A. Avila-Orta, and Benjamin S. Hsiao, "Self-assembly and Crystallization of a Low Molecular Weight Double Crystalline Polyethylene-block-Poly(ethylene oxide) Diblock Copolymer", *Polymer*, 45, 8181-8193 (2004).
202. Kumaraswamy, Guruswamy; Verma, Ravi K.; Kornfield, Julia A.; Yeh, Fengji; Hsiao, Benjamin S. "Shear-Enhanced Crystallization in Isotactic Polypropylene. In-Situ Synchrotron SAXS and WAXD", *Macromolecules*, 37(24), 9005-9017 (2004).

203. Zhizhong Liu, Montgomery Shaw, Benjamin S. Hsiao, "Ordering kinetics of body-centered-cubic morphology in diblock copolymer solutions at low temperatures", *Journal of Rheology*, 48(6), 1389-1405(2004).
204. Tosaka, Masatoshi; Kohjiya, Shinzo; Murakami, Syozo; Poompradub, Sirilux; Ikeda, Yuko; Toki, Shigeyuki; Sics, Igors; Hsiao, Benjamin S. "Effect of network-chain length on strain-induced crystallization of NR and IR vulcanizates", *Rubber Chemistry and Technology*, 77(4), 711-723 (2004).
205. Xinhua Zong, Sean Li, Elliot Chen, Barbara Garlick, Kwangsok Kim Dufei Fang, Jonathan Chiu, Thomas Zimmerman, Collin Brathwaite, Benjamin S Hsiao, and Benjamin Chu, "Prevention of Post-Surgery Induced Abdominal Adhesions by Novel Electrospun Bioabsorbable Nanofiber Membranes of Poly(lactide-co-glycolide)", *Annals of Surgery*, 240, 910-915 (2004).
206. Zhizhong Liu, Montgomery Shaw, Benjamin S. Hsiao, "Ordering Kinetics of the BCC Morphology in Diblock Copolymer Solutions over a Wide Temperature Range", *Macromolecules*, 37(26), 9880-9888 (2004).
207. Daisuke Kawakami, Benjamin S. Hsiao, Shaofeng Ran, Christian Burger, Carlos Avila-Orta, Igors Sics, Takeshi Kikutani, Karl Jacob, and Benjamin Chu, "Deformation Induced Phase Transition and Superstructure Formation in Poly(ethylene Terephthalate)", *Macromolecules*, 38(1), 91-103 (2005).
208. Rong-Ming Ho, Tsai-Ming Chung, Jing-Cherng Tsai and Jing-Chang Kuo, Benjamin S. Hsiao and Igors Sics, "Crystallization of Poly(styrene)-b-syndiotactic Poly(propylene) Block Copolymers from Confinement to Breakout", *Macromolecular Rapid Communication*, 26, 107-111 (2005).
209. Jinlu Chen, Christian Burger, Chirakkal V. Krishnan, Benjamin Chu, Benjamin S. Hsiao and Melvin J. Glimcher, "Biomimetic Mineralization of Collagen in a Template of Demineralized Bone Matrix", *Macromolecular Chemistry and Physics (on the occasion of Gerhard Wegner's 65th birthday)*, 206(1), 43-51 (2005).
210. Rajesh H. Somani, Ling Yang, Benjamin S. Hsiao, Thomas Sun, Natalia V. Pogodina and Arnold Lustiger, "Shear-Induced Molecular Orientation and Crystallization in Isotactic Polypropylene - Effects of Deformation Rate and Strain", *Macromolecules*, 38(4), 1244-1255 (2005)
211. Zhi-Gang Wang, Howard Wang, Katsumi Shimizu, Jin-Yong Dong, Benjamin S. Hsiao, and Charles C. Han, "Structural and morphological development in poly(ethylene-co-hexene) and poly(ethylene-co-butylene) blends due to the competition between liquid-liquid phase separation and crystallization", *Polymer*, 46(8), 2675-2684 (2005)
212. Jong Kahk Keum, Christian Burger, Benjamin S. Hsiao, Rajesh Somani, Ling Yang, Rainer Kolb, Hongyu Chen and Ching-Tai Lue, "Synchrotron X-ray scattering studies of the nature of shear-induced shish-kebab structure in polyethylene melt", *Progress in Colloid and Polymer Science (on the occasion of Wilhelm Ruland's 80th birthday)*, 130, 114-126 (2005).
213. Benjamin S. Hsiao, Ling Yang, Rajesh H. Somani, Carlos A. Avila-Orta and Lei Zhu "Unexpected Shish-Kebab Structure with Multiple Shish in Shear-Induced Polyethylene Melt", *Physical Rev. Lett*, 94(11) 117802,1-4 (2005).
214. Daniel Dikovskiy, Gad Marom, Carlos Avila-Orta, Rajesh H. Somani and Benjamin S. Hsiao, "Shear-Induced Crystallization in Isotactic Polypropylene Containing Ultra-High Molecular Weight Polyethylene Oriented Precursor Domains", *Polymer*, 46, 3096-3104 (2005).
215. Xinhua Zong, Harold Bien, Chung-Chin Chung, Lihong Yin, Dufei. Fang, Benjamin S. Hsiao, Benjamin Chu and Emilia Entchev, "Electrospun Fine-Textured Scaffolds for Heart Tissue Constructs", *Biomaterials*, 26(26), 5330-5338 (2005).
216. Li Cui, Jianjun Miao, Lei Zhu, Igors Sics and Benjamin S. Hsiao, "Confined Discotic Liquid Crystalline Self-Assembly in a Novel Coil-Coil-Disk Triblock Oligomer", *Macromolecules*, 38(8), 3386-3394 (2005).
217. Xuming Chen, Kyunghwan Yoon, Christian Burger, Igors Sics, Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, "In-situ X-Ray Scattering Studies of Super-Tough Performance in Surface Modified Carbon Nanofiber/UHMWPE Nanocomposite Films", *Macromolecules*, 38(9), 3883-3893 (2005).
218. Mikhail Y. Gelfer, Christian Burger, Benjamin Chu, Benjamin S. Hsiao, Aleksey D. Drozdov, Mayo Si, Miriam Rafailovich, Bryan B. Sauer and Jeffrey W. Gilman, "Relationships between Structure and Rheology of Model Nanocomposites Comprising Ethylene-Vinyl Based Copolymers and Organoclays", *Macromolecules*, 38(9), 3765-3775 (2005).
219. A. Zapata-Espinosa, F. J. Medellín-Rodríguez, N. Stribeck, A. Almendarez-Camarillo, B.S. Hsiao and S. Vega-Díaz "Complex Isothermal Crystallization and Melting Behavior of Nylon 6 Nanoclay-Hybrids", *Macromolecules*, 38(10), 4246-4253 (2005).
220. Jong Kahk Keum, Rajesh H. Somani, Feng Zuo, Christian Burger, Igors Sics, Benjamin S. Hsiao, Hongyu Chen, Rainer Kolb and Ching-Tai Lue, "Probing Flow-Induced Precursor Structures in Polyethylene Blown Films by Synchrotron X-rays during Restrained Melting", *Macromolecules*, 38(12), 5128-5136 (2005).

221. Xue Feng Wang, In Chul Um, Dufei Fang, Akio Okamoto, Benjamin S. Hsiao and Benjamin Chu, "Formation of Water-Insoluble Hyaluronic Acid Nanofibers by Electro-Blowing and Non-Toxic Post Treatments", *Polymer*, 46(13), 4853-4867 (2005).
222. Yueh-Lin Loo, Katsuyuki Wakabayashi, Y. Evelyn Huang, Richard A. Register and Benjamin S. Hsiao, "Thin Crystal Melting Produces the Low-Temperature Endotherm in Ethylene/Methacrylic Acid Ionomers", *Polymer*, 46, 5118-5124 (2005).
223. Lu Sun, Ethan A. Ertel, Lei Zhu, Benjamin S. Hsiao, Carlos A. Avila-Orta and Igors Sics, "Reversible De-intercalation and Intercalation Induced by Polymer Crystallization and Melting in Poly(ethylene oxide)/Organoclay Nanocomposites", *Langmuir*, 21(13), 5672-5676 (2005).
224. Antonis Kelarakis, Kyunghwan Yoon, Igors Sics, Rajesh H. Somani, Benjamin S. Hsiao and Benjamin Chu, "Uniaxial Deformation of an Elastomer Nanocomposite Containing Modified Carbon Nanofibers by In-Situ Synchrotron X-Ray Diffraction", *Polymer*, 46(14), 5103-5117 (2005).
225. Poompradub, Sirilux; Tosaka, Masatoshi; Kohjiya, Shinzo; Ikeda, Yuko; Toki, Shigeyuki; Sics, Igors; Hsiao, Benjamin S. "Mechanism of strain-induced crystallization in filled and unfilled natural rubber vulcanizates." *Journal of Applied Physics*, 97(10), 103529/1-103529/9 (2005).
226. Shigeyuki Toki, Igors Sics, Benjamin S. Hsiao, Masatoshi Tosaka, Sirilux Poompradub, Yuko Ikeda and Shinzo Kohjiya, "Probing the Nature of Strain-Induced Crystallization in Poly-Isoprene Rubber by Combined Thermo-Mechanical and In-Situ X-ray Diffraction Techniques", *Macromolecules*, 38(16), 7064-7073. (2005).
227. Miao, Jianjun; Xu, Guoqiang; Zhu, Lei; Tian, Lu; Uhrich, Kathryn E.; Avila-Orta, Carlos A.; Hsiao, Benjamin S.; Utz, Marcel. "Chain-Folding and Overall Molecular Conformation in a Novel Amphiphilic Starlike Macromolecule" *Macromolecules*, 38(16), 7074-7082 (2005).
228. Carlos A. Avila-Orta, Christian Burger, Rajesh Somani, Ling Yang, Gad Marom, Francisco J. Medellin-Rodriguez and Benjamin S. Hsiao, "Shear Induced Crystallization in Isotactic Polypropylene within the Oriented Scaffold of Non-crystalline Ultra High Molecular Weight Polyethylene", *Polymer* (a special issue in the memory of Prof. John D. Hoffman), 46, 8859-8871 (2005).
229. Rajesh H. Somani, Ling Yang, Lei Zhu and Benjamin S. Hsiao, "Flow-Induced Shish Kebab Precursor Structures in Entangled Polymer Melts", *Polymer* (feature article), 46, 8587-8623 (2005).
230. Xuefen Wang, Xuming Chen, Kyunghwan Yoon, Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, "High Flux Ultrafiltration Media Based on Nanofibrous Substrate with Hydrophilic Nanocomposite Coating", *Environmental Science and Technology*, 39(19), 7684-7691 (2005).
231. Boris Larin, Gad Marom, Carlos Avila-Orta, Rajesh H. Somani and Benjamin S. Hsiao, "Orientation-Induced Crystallization in Discontinuous Aramid Fiber/Isotactic Polypropylene Composites under Shear Flow Conditions", *J. Appl. Polym. Sci.*, 98(3), 1113-1118 (2005).
232. Dehai Liang, Yen K. Luu, Kwangsok Kim, Benjamin S. Hsiao, Michael Hadjiargyrou and Benjamin Chu "In Vitro Non-Viral Gene Delivery with Nanofibrous Scaffolds", *Nucleic Acids Research*, 33(19), e170. (2005).
233. Kishore K. Tenneti, Xiaofang Chen, Christopher Y. Li, Yingfeng Tu, Xinhua Wan, Qi-Feng Zhou, Igors Sics, and Benjamin S. Hsiao, "Perforated layer structures in liquid crystalline rod-coil block copolymers", *J. Am. Chem. Soc.*, 127(44), 15481-90 (2005).
234. Antonis Kelarakis, Kyunghwan Yoon, Rajesh H. Somani, Benjamin S. Hsiao and Benjamin Chu, "Carbon Nanofiber Induced Physical Gelation in a Polyolefin Nanocomposite Melt by Rheological Study", *Polymer*, 46 11591-11599 (2005).
235. Vaia, Richard; Mirau, Peter; Alexander, Max; Koerner, Hilmar; Hsiao, Benjamin S.; Sics, Igors. "Morphology-Deformation Correlations in Nanocomposites", *Rubber World*, 233(1), 43-45 (2005).
236. Junxing Li, Aihua He, Charles C. Han, Dufei Fang, Benjamin S. Hsiao, Benjamin Chu, "Electrospinning of Hyaluronic Acid and HA/Gelatin Blends", *Macromolecular Rapid Communications*, 27, 114-120 (2006).
237. Mikhail Y. Gelfer, Christian Burger, Benjamin S. Hsiao, Susan D'Andrea and Alexander Y. Fadeev, "Highly-Ordered Layered Organo-Mineral Materials Prepared via Reactions of n-Alkylphosphonic Acids with Apatite", *J. Colloid Interface Science*, 295(2), 388-92 (2006).
238. Douglas R. Dillon, Kishore K. Tenneti, Christopher Y. Li, Frank K. Ko, Igors Sics, Benjamin S. Hsiao, "On the structure and morphology of polyvinylidene fluoride-nanoclay nanocomposites", *Polymer*, 47(5), 1678-1688 (2006).
239. Feng Zuo, Jong Kahk Keum, Ling Yang, Rajesh H. Somani and Benjamin S. Hsiao, "Thermal Stability of Shear-Induced Shish-Kebab Precursor Structure from High Molecular Weight Polyethylene Chains", *Macromolecules*, 39(6), 2209-2218 (2006).
240. Ngan F. Huang, Shyam Patel, Rahul G. Thakar, Jun Wu, Benjamin S. Hsiao, Benjamin Chu, Randall J. Lee and Song Li "Myotube Assembly on Nanofibrous and Micropatterned Polymers", *Nano Letters*, 6(3), 537-542 (2006).

241. Kyunghwan Yoon, Xuefen Wang, Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, "High Flux Ultrafiltration Membranes Based on Electrospun Nanofibrous Scaffolds", *Polymer*, 47, 2434–2441 (2006).
242. Antonis Kelarakis, Kyunghwan Yoon, Igors Sics, Rajesh H. Somani, Xuming Chen, Benjamin S. Hsiao and Benjamin Chu, "Shear-Induced Orientation and Structure Development in Isotactic Polypropylene Melt Containing Modified Carbon Nanofibers", *J. Macromolecular Sci., Phys.*, 45, 247–261 (2006).
243. Xuming Chen, Christian Burger, Dufei Fang, Dong Ruan, Lina Zhang, Benjamin S. Hsiao and Benjamin Chu, "X-Ray Studies of Regenerated Cellulose Fibers Wet Spun from Cotton Linter in NaOH/Thiourea Aqueous Solutions", *Polymer*, 47, 2839–2848 (2006).
244. Li-Zhi Liu, Benjamin Hsiao, Shaofeng Ran, Bruce, X. Fu, Shigeyuki Toki, Andy H. Tsou, and Benjamin Chu, "Strain-Induced Crystal Structure Changes during Uniaxial Deformation of Ethylene Based Ethylene-Propylene Copolymer", *Polymer*, 47, 2884–2893 (2006).
245. Daisuke Kawakami, Shaofeng Ran, Christian Burger, Carlos Avila-Orta, Igors Sics, Benjamin Chu, Benjamin S. Hsiao and Takeshi Kikutani, "Superstructure Evolution in Poly(ethylene terephthalate) during Uniaxial Deformation above Glass Transition Temperature", *Macromolecules*, 39(8), 2909-2920 (2006).
246. Tsai-Ming Chung, Rong-Ming Ho, Jing-Chung Kuo, Jing-Cherng Tsai, Benjamin S. Hsiao and Igors Sics, "Trilayer Crystalline Lamellar Morphology under Confinement", *Macromolecules*, 39(8), 2739-2742 (2006).
247. Zhi-Gang Wang, Zhi-Yong Xia, Zhen-Qiang Yu, Er-Qiang Chen, Hung-Jue Sue, Charles C. Han and Benjamin S. Hsiao "Lamellar Formation and Relaxation in Simple Sheared Poly(ethylene terephthalate) by Small-Angle X-Ray Scattering", *Macromolecules*, 39(8), 2930-2939 (2006).
248. Lingyu Li, Yao Yang, Guoliang Yang, Xuming Chen, Benjamin S. Hsiao, Benjamin Chu, Jonathan E. Spanier, Christopher Y. Li, "Patterning polyethylene oligomers on carbon nanotubes using physical vapor deposition", *Nano Letters*, 6(5), 1007-1012. (2006).
249. Shigeyuki Toki, Igors Sics, Christian Burger, Dufei Fang, Lizhi Liu, Benjamin S. Hsiao, Sudhin Datta and Andy H. Tsou, "Structure Evolution during Cyclic Deformation of an Elastic Propylene-Based Ethylene-Propylene Copolymer", *Macromolecules*, 39(10), 3588-3597 (2006).
250. Xuefen Wang, Dufei Fang, Kyunghwan Yoon, Benjamin S. Hsiao and Benjamin Chu, "High Flux Ultrafiltration Membranes Based on Poly(vinyl alcohol) Electrospun Scaffold and Poly(vinyl alcohol) Hydrogel Coating", *J. Membrane Sci.*, 278, 261-268 (2006).
251. Tosaka, Masatoshi; Kawakami, Daisuke; Senoo, Kazunobu; Kohjiya, Shinzo; Ikeda, Yuko; Toki, Shigeyuki; Hsiao, Benjamin S. "Crystallization and Stress Relaxation in Highly Stretched Samples of Natural Rubber and Its Synthetic Analogue", *Macromolecules*, 39(15), 5100-5105 (2006).
252. Xuming Chen, Christian Burger, Xuefen Wang, Weidong Hei, Kyunghwan Yoon, Rajesh H. Somani, Dufei Dang, Igors Sics, Lixia Rong, Benjamin S. Hsiao and Benjamin Chu, "In-Situ X-Ray Deformation Study of Fluorinated Multi-Walled Carbon Nanotube and Fluorinated Ethylene-Propylene Nanocomposite Fibers", *Macromolecules*, 39(16), 5427-5437 (2006).
253. Rajesh H. Somani, Ling Yang and Benjamin S. Hsiao "Effects of High Molecular Weight Species on Shear-Induced Orientation and Crystallization of Isotactic Polypropylene", *Polymer (a special issue for Prof. David Bassett)*, 47(15), 5657-5668 (2006).
254. Ping Huang, Ya Guo, Roderic P. Quirk, Jrjeng Ruan, Bernard Lotz, Edwin L. Thomas, Benjamin S. Hsiao, Carlos A. Avila-Orta, Igors Sics and Stephen Z. D. Cheng, "Comparison of poly(ethylene oxide) crystal orientations and crystallization behaviors in nano-confined cylinders constructed by a poly(ethylene oxide)-b-polystyrene diblock copolymer and a blend of poly(ethylene oxide)-b-polystyrene and polystyrene", *Polymer (a special issue for Prof. David Bassett)*, 47(15), 5457-5466 (2006).
255. Benjamin Chu, Dehai Liang, Michael Hadjiargyrou and Benjamin S. Hsiao, "A new pathway to develop in-vitro nanostructured non-viral gene carriers", *J. Phys.: Condens. Matter (in celebration of Professor Sow-Hsin Chen's 70th Birthday)*, 18, S2513–S2525 (2006).
256. Ling Yang, Rajesh H. Somani, Igors Sics, Benjamin S. Hsiao, Rainer Kolb and David Lohse, "The Role of High Molecular Weight Chains in Flow-Induced Crystallization Precursor Structures", *J. Phys.: Condens. Matter (in celebration of Professor Sow-Hsin Chen's 70th Birthday)*, 18, S2421–S2436 (2006).
257. Antonis Kelarakis, Kyunghwan Yoon, Rajesh Somani, Igors Sics, Xuming Chen, Benjamin S. Hsiao and Benjamin Chu, "Relationship between Structure and Dynamic Mechanical Properties of a Carbon Nanofiber Reinforced Elastomeric Nanocomposite", *Polymer*, 47(19), 6797-6807 (2006).
258. Lu Sun, Lei Zhu, Lixia Rong and Benjamin S. Hsiao, "Tailor-Made Onion-Like Stereocomplex Crystals in Incompatible Enantiomeric Polylactide Block Copolymer Blends", *Angew. Chem. Int. Ed.*, 45(44), 7373-7376 (2006).

259. Shigeyuki Toki, Benjamin S. Hsiao, Shinzo Kohjiya, Masatoshi Tosaka, Andy H. Tsou and Sudhin Datta, "Synchrotron X-Ray Studies of Vulcanized Rubbers and Thermoplastic Elastomers", *Rubber Chemistry & Technology*, 79, 460 (2006).
260. Jinglu Chen, Benjamin Chu and Benjamin S. Hsiao, "Mineralization of Hydroxyapatite in Electrospun Nanofibrous Poly(L-lactic acid) Scaffolds", *J. Biomedical Materials Research, Part A.*, 79A(2), 307-317 (2006).
261. Dehai Liang, Benjamin S. Hsiao, Michael Hadjiargyrou and Benjamin Chu, "Scaffolds with encapsulated DNA for non-viral gene delivery", *Journal of Non-Crystalline Solids*, 352(42-49), 4394-4399 (2006).
262. Rajesh H. Somani, Igors Sics and Benjamin S. Hsiao, "Thermal Stability of Shear-Induced Precursor Structures in Isotactic Polypropylene by Rheo-X-Ray Techniques Utilizing Couette Flow Geometry", *J. Polym. Sci. Polym. Phys.*, 44, 3553-3570 (2006).
263. Lu Sun, Jorge E. Ginorio, Lei Zhu, Igors Sics, Lixia Rong, and Benjamin S. Hsiao, "Phase Transitions and Honeycomb Morphology in an Incompatible Blend of Enantiomeric Polylactide Block Copolymers", *Macromolecules*, 39(24), 8203-8206 (2006).
264. C. V. Krishnan, M. Garnett, B. Hsiao and B. Chu, "Electrochemical Measurements of Isopolyoxomolybdates: 1. pH Dependent Behavior of Sodium Molybdate", *Int. J. Electrochem. Sci.*, 2(1), 29-51 (2007)
265. Huang, Ping; Zheng, Joseph X.; Leng, Siwei; Van Horn, Ryan M.; Jeong, Kwang-Un; Guo, Ya; Quirk, Roderic P.; Cheng, Stephen Z. D.; Lotz, Bernard; Thomas, Edwin L.; Hsiao, Benjamin S. "Poly(ethylene oxide) Crystal Orientation Changes in an Inverse Hexagonal Cylindrical Phase Morphology Constructed by a Poly(ethylene oxide)-block-polystyrene Diblock Copolymer", *Macromolecules*, 40(3), 526-534 (2007).
266. Pranav Nawani, Priya Desai, Matt Lundwall, Mikhail Y. Gelfer, Benjamin S. Hsiao, Miriam Rafailovich, Anatoly Frenkel, Andy H. Tsou, Jeffrey W. Gilman, Syed Khalid, "Polymer Nanocomposites Based on Transition Metal Ion Modified Organoclays", *Polymer*, 48(3), 827-840 (2007).
267. Xiaofang Chen, Kishore K. Tenneti, Christopher Y. Li, Yaowen Bai, Xinhua Wan, Xinghe Fan, Qi-Feng Zhou, Lixia Rong and Benjamin S. Hsiao, "Side-Chain Liquid Crystalline Poly(meth)acrylates with Bent-Core Mesogens", *Macromolecules*, 40(4), 840-848 (2007).
268. Jun Wu, Xuefen Wang, Jong Kahk Keum, Hongwen Zhou, Michael Gelfer, Carlos-Alberto Avila-Orta, Hui Pan, Weiliang Chen, Shu-Min Chiao, Benjamin S. Hsiao and Benjamin Chu, "Preparation and Characterization of Water Soluble Complexes of Chitosan-g-MPEG and Hyaluronic Acid", *J. Biomedical Research, Part A.*, 80(4), 800-12 (2007).
269. Jong Kahk Keum, Feng Zuo and Benjamin S. Hsiao, "Probing the Flow-Induced Shish-Kebab Structure in Entangled Polyethylene Melts by Synchrotron X-ray Scattering", *J. Appl. Crystallography*, 40, s48-s51 (2007).
270. Hongwen Zhou, Christian Burger, Igors Sics, Benjamin S. Hsiao Benjamin Chu, Lila Graham and Melvin J. Glimcher, "Small-angle X-ray Study of Three-dimensional (3D) Collagen/Mineral Superstructure in Intramuscular Fish Bone", *J. Appl. Crystallography*, 40, s666-s668 (2007).
271. J. J. Hernández, M. C. García-Gutiérrez, A. Nogales, D.R. Rueda, A. Sanz, I. Sics, B. S. Hsiao, Z. Roslaniec, G. Broza, T.A. Ezquerro, "Deformation behaviour during cold drawing of nanocomposites based on single wall carbon nanotubes and poly(ether ester) copolymers", *Polymer*, 48(11), 3286-3293 (2007).
272. Lingyu Li, Christopher Y. Li, Chaoying Ni, Lixia Rong and Benjamin Hsiao, "Structure and crystallization behavior of Nylon 66/multi-walled carbon nanotube nanocomposites at low carbon nanotube contents", *Polymer* 48(12), 3452-3460, 2007.
273. Xuming Chen, Christian Burger, Fen Wan, Jun Zhang, Lixia Rong, Benjamin S. Hsiao, Benjamin Chu, Jie Cai, Lina Zhang, "A Structure Study of Cellulose Fibers Wet Spun from Environmentally Friendly NaOH/Urea Aqueous Solution", *Biomacromolecules*, 8(6), 1918-1926 (2007).
274. Shinzo Kohjiya, Masatoshi Tosaka, Masahiro Furutani, Yuko Ikeda, Shigeyuki Toki and Benjamin S. Hsiao, "Role of Stearic Acid in the Strain-Induced Crystallization of Crosslinked Natural Rubber and Synthetic cis-1,4-Polyisoprene", *Polymer*, 48(13), 3801-3808 (2007).
275. Mikhail Y. Gelfer, Christian Burger, Pranav Nawani, Benjamin S. Hsiao, Benjamin Chu, Mayu Si, Miriam Rafailovich, Grazyna Panek, Gunnar Jeschke, Alexander Y. Fadeev and Jeffrey W. Gilman, "Lamellar Nanostructure in Somasif-Based Organoclays", *Clays and Clay Minerals*, 55(2), 140-150 (2007).
276. Tenneti, Kishore K.; Chen, Xiaofang; Li, Christopher Y.; Wan, Xinhua; Fan, Xinhe; Zhou, Qi-Feng; Rong, Lixia; Hsiao, Benjamin S. "Hierarchical Nanostructures of Bent-Core Molecules Blended with Poly(styrene-*b*-4-vinylpyridine) Block Copolymer", *Macromolecules*, 40(14), 5095-5102 (2007).
277. Patel, Shyam; Kurpinski, Kyle; Quigley, Ryan; Gao, Hongfeng; Hsiao, Benjamin S.; Poo, Mu-Ming; Li, Song. "Bioactive Nanofibers: Synergistic Effects of Nanotopography and Chemical Signaling on Cell Guidance", *Nano Letters*, 7(7), 2122-2128 (2007).

278. Jong Kahk Keum, Christian Burger, Feng Zuo and Benjamin S. Hsiao, "Probing the Growth Behavior of Twisted Kebabs in Sheared Entangled Polyethylene Melts by In-Situ X-Ray Studies", *Polymer*, 48(15), 4511-4519 (2007).
279. Yuko Ikeda, Atushi Kato, Junichi Shimanuki, Shinzo Kohjiya, Masatoshi Tosaka, Sirilux Poompradub, Shigeyuki Toki, and Benjamin S. Hsiao, "Nano-structural elucidation in carbon black loaded NR vulcanizate by 3D-TEM and in situ WAXD measurements", *Rubber Chemistry and Technology*, 80(2), 251-264 (2007).
280. Craig K. Hashi, Yi-Qian Zhu, Guo-Yuan Yang, William L. Young, Benjamin S. Hsiao, Karin Wang, Benjamin Chu, and Song Li, "Anti-thrombogenic Property of Bone Marrow Mesenchymal Stem Cells in Nanofibrous Vascular Grafts", *Proceed. Nat. Acad. Sci.*, 104(29), 11915-20 (2007).
281. Pranav Nawani, Mikhail Y. Gelfer, Benjamin S. Hsiao, Anatoly Frenkel, Jeffrey W. Gilman and Syed Khalid "Surface Modification of Nanoclays by Catalytically Active Transition Metal Ions", *Langmuir*, 23(19), 9808-9815 (2007).
282. Carlos A. Avila-Orta, Mario V. Dávila-Rodríguez, Yrayda A. Aguirre-Figueroa, Francisco J. Medellín-Rodríguez, Kyunghwan Yoon and Benjamin S. Hsiao, "A Study of Morphology and Melting Behavior of Well Dispersed Nanocomposites Based on Isotactic Polypropylene/MWCNT", *J. Appl. Polym. Sci.*, 106(4), 2640-2647 (2007).
283. Niu, Yanhua; Wang, Zhigang; Orta, Carlos Avila; Xu, Donghua; Wang, Howard; Shimizu, Katsumi; Hsiao, Benjamin S.; Han, Charles C. "Acceleration or retardation to crystallization if liquid-liquid phase separation occurs: Studies on a polyolefin blend by SAXS/WAXD, DSC and TEM." *Polymer*, 48(22), 6668-6680 (2007).
284. Feng Zuo, Jong Kahk Keum, Xuming Chen, Benjamin S. Hsiao, Hongyu Chen, Shih-Yaw Lai, Ronald Wevers, Jing Li, "The Role of Interlamellar Chain Entanglement in Deformation-Induced Structure Changes during Uniaxial Stretching of Isotactic Polypropylene", *Polymer*, 48, 6867-6880 (2007).
285. Jie Qiu, Zhigang Wang, Ling Yang, Junchai Zhao, Yanhua Niu and Benjamin S. Hsiao, "Deformation-induced highly oriented and stable mesomorphic phase in quenched isotactic polypropylene", *Polymer*, 48, 6934-6947 (2007).
286. F. J. Medellín-Rodríguez, J. M. Mata-Padilla, B. S. Hsiao, M. A. Waldo-Mendoza, E. Ramírez-Vargas and S. Sánchez-Valdes, "The effect of nanoclays on the nucleation, crystallization, and melting mechanisms of isotactic polypropylene", *Polymer Engineering and Science*, 47(11), 1889-1897 (2007).
287. Jonathan B. Chiu, Cheng Liu, Benjamin S. Hsiao, Benjamin Chu and Michael Hadjiargyrou, "Functionalization of Poly(L-lactide) Nanofibrous Scaffolds with Bioactive Collagen Molecules", *Journal of Biomedical Materials Research*, 83A(4), 1117-27 (2007).
288. Jaseung Koo, Kwanwoo Shin, Young-Soo Seo, Tadanori Koga, Seongchan Park, Sushil Satija, Xuming Chen, Kyunghwan Yoon, Benjamin S. Hsiao, Jonathan C. Sokolov, and Miriam H. Rafailovich, "Stabilizing Thin Film Polymer Bilayers against Dewetting using Multi-Walled Carbon Nanotubes", *Macromolecules*, 40(26), 9510-9516 (2007).
289. Boris Larin, Carlos A. Avila-Orta, Rajesh H. Somani, Benjamin S. Hsiao and Gad Marom, "Combined Effect of Shear and Fibrous Fillers on Orientation Induced Crystallization in Discontinuous Aramid Fiber/Isotactic Polypropylene Composites", *Polymer*, 49, 295-302 (2008)
290. Xuming Chen, Christian Burger, Dufei Fang, Benjamin S. Hsiao, Benjamin Chu, Haisong Qi and Lina Zhang, "Structure Development in Regenerated Cellulose Fibers Wet-Spun from Environmentally Friendly NaOH/Urea Aqueous Solutions Containing Cellulose I_b Crystals" *Journal of Biobased Materials and Bioenergy*, 1(2), 266-273, (2007).
291. Kishore K. Tenneti, Xiaofang Chen, Christopher Y. Li, Xinhua Wan, Xinhe Fan, Qi-Feng Zhou, Lixia Rong, and Benjamin S. Hsiao, "Competition Between Liquid Crystallinity and Block Copolymer Self Assembly in Core-Shell Rod-Coil Block Copolymers", *Soft Matter*, 4(3), 458-46 (2008).
292. Christian Burger, Hong-wen Zhou, Igors Scis, Benjamin Hsiao, Benjamin Chu, Lila Graham and Melvin Glimcher, "SAXS study of intramuscular fish bone: Collagen fibril superstructure determined from equidistant meridional reflections", *J. Appl. Crystal.*, 41, 252-261 (2008).
293. Carretero-Gonzalez, Javier; Verdejo, Raquel; Toki, Shigeyuki; Hsiao, Benjamin S.; Giannelis, Emmanuel P.; Lopez-Manchado, Miguel A. "Real-Time Crystallization of Organoclay Nanoparticle Filled Natural Rubber under Stretching", *Macromolecules*, 41(7), 2295-2298 (2008).
294. Daisuke Kawakami, Christian Burger, Shaofeng Ran, Carlos Avila-Orta, Igors Sics, Benjamin Chu, Shu-Min Chiao, Benjamin S. Hsiao and Takeshi Kikutani, "New Insights into Lamellar Evolution and SAXS/WAXD Sequence Appearance during Uniaxial Stretching of Amorphous Poly(ethylene terephthalate) above Glass Transition Temperature", *Macromolecules*, 41(8), 2859-2867 (2008).

295. Shigeyuki Toki, Norio Minouchi, Igors Sics, Benjamin S. Hsiao and Shinzo Kohjiya “Tensile strength and strain-induced crystallization in carbon black filled natural rubber by synchrotron X-ray scattering”, *Kautschuk Gummi Kunstbuch* (Germany Rubber Technology), 3(08), 85-91 (2008)
296. Yuan-Qiao Rao, Jehuda Greener, Carlos A. Avila-Orta, Benjamin S. Hsiao, Thomas N. Blanton, “The Relationship Between Microstructure and Toughness of Biaxially-Oriented Semi-Crystalline Polyester Films”, *Polymer*, 49(10), 2507-2514 (2008).
297. Wang, Xuefen; Zhang, Kai; Zhu, Meifang; Yu, Hao; Zhou, Zhe; Chen, Yanmo; Hsiao, Benjamin S., “Continuous polymer nanofiber yarns prepared by self-bundling electrospinning method”, *Polymer*, 49(11), 2755-2761 (2008).
298. Jong Kahk Keum, Feng Zuo and Benjamin S. Hsiao, “Formation and Stability of Shear-Induced Shish-Kebab Structure in Highly Entangled Melts of UHMWPE/HDPE Blends”, *Macromolecules*, 41, 4766-4776 (2008).
299. Wang, Xuefen; Zhang, Kai; Zhu, Meifang; Hsiao, Benjamin S.; Chu, Benjamin. “Enhanced mechanical performance of self-bundled electrospun fiber yarns via post-treatments.” *Macromolecular Rapid Communications*, 29(10), 826-831 (2008).
300. Christian Burger, Hong-wen Zhou, Hao Wang, Igors Sics, Benjamin S. Hsiao, Benjamin Chu, Lila Graham and Melvin J. Glimcher “Lateral Packing of Mineral Crystals in Bone Collagen Fibrils”, *Biophysical Journal*, 95, 1-8 (2008).
301. Javier Carretero-González, Haris Retsos, Raquel Verdejo, Shigeyuki Toki, Benjamin S. Hsiao, Emmanuel P. Giannelis and Miguel A. López-Manchado, “Effect of Nanoclay on Natural Rubber Microstructure”, *Macromolecules*, 41(18), 6763-6772 (2008).
302. Shigeyuki Toki, Christian Burger, Benjamin S. Hsiao, Sureerut Amnuaypornsi, Jitladda Sakdapipanich and Yasuyuki Tanaka “Multi-scaled microstructures in natural rubber characterized by synchrotron X-ray scattering and optical microscopy”, *J. Polym. Sci. Polym. Phys.*, 46, 2456-2464 (2008).
303. Ming-Siao Hsiao, Joseph X. Zheng, Siwei Leng, Ryan M. Van Horn, Roderic P. Quirk, Edwin L. Thomas, Hsin-Lung Chen, Benjamin S. Hsiao, Lixia Rong, Bernard Lotz, and Stephen Z. D. Cheng, “Crystal Orientation Change and Its Origin in One-Dimensional Nano-Confinement Constructed by Polystyrene-block-Poly(ethylene oxide) Single Crystal Mats”, *Macromolecules*, 41(21), 8114-8123 (2008).
304. Kyunghwan Yoon, Benjamin S. Hsiao and Benjamin Chu “High flux nanofiltration membranes based on interfacially polymerized polyamide barrier layer on polyacrylonitrile nanofibrous scaffolds”, *Journal of Membrane Science*, 326, 484-492 (2008).
305. Sureerut Amnuaypornsi, Shigeyuki Toki, Benjamin S. Hsiao, Jitladda Sakdapipanich and Yasuyuki Tanaka, “Strain-Induced Crystallization of Natural Rubber: Effect of Proteins and Phospholipids”, *Rubber Chemistry and Technology*, 81(5), 753-766 (2008).
306. Zhaohui Tang, Jie Wei, Lewis Yung, Bowei Ji, Hongyang Ma, Changquan Qiu, Kyunghwan Yoon, Fen Wan, Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, “UV-cured poly(vinyl alcohol) ultrafiltration nanofibrous membrane based on electrospun nanofiber scaffolds”. *J. Membrane Science*, 328, 1-5 (2009).
307. Yeo-Wan Chiang, Rong-Ming Ho, Edwin L. Thomas, Christian Burger and Benjamin S. Hsiao, “A Springlike Behavior of Chiral Block Copolymer with Helical Nanostructure Driven by Crystallization”, *Advanced Functional Materials*, 19(3), 448-459 (2009).
308. Shigeyuki Toki, Igors Sics, Benjamin S. Hsiao, Sureerut Amnuaypornsi and Jitladda Sakdapipanich, “New insights into the relationship between naturally occurring network structure and strain-induced crystallization in natural rubber by synchrotron X-ray diffraction”, *Polymer*, 50(9), 2142-2148 (2009).
309. Tenneti, Kishore K.; Chen, Xiaofang; Li, Christopher Y.; Shen, Zhihao; Wan, Xinhua; Fan, Xinghe; Zhou, Qi-Feng; Rong, Lixia; Hsiao, Benjamin S., “Influence of LC Content on the Phase Structures of Side-Chain Liquid Crystalline Block Copolymers with Bent-Core Mesogens”, *Macromolecules*, 42(10), 3510-3517 (2009).
310. Kyunghwan Yoon, Benjamin S. Hsiao and Benjamin Chu, “High flux ultrafiltration nanofibrous membranes based on poly(acrylonitrile) electrospun scaffolds and crosslinked poly(vinyl alcohol) coating”, *J. Membrane Science*, 338, 145-152 (2009).
311. Kyunghwan Yoon, Benjamin S. Hsiao and Benjamin Chu, “Formation of functional polyethersulfone electrospun membrane for water purification by mixed solvent and oxidation processes”, *Polymer*, 50(13), 2893-2899 (2009).
312. Jiali Cai, Richard A. Gross, Benjamin S. Hsiao, “Polypentadecalactone prepared by lipase-catalysis: crystallization kinetics and morphology”, *Polymer International*, 58(8), 944-953 (2009).
313. Shanshan Xu, Junxing Li, Aihua He, Wenwen Liu, Xingyu Jiang, Jianfen Zheng, Charles C. Han, Dufei Fang, Benjamin S. Hsiao, Benjamin Chu, “Chemical crosslinking and biophysical properties of electrospun hyaluronic acid based ultra-thin fibrous membranes”, *Polymer*, 50(15), 3762-3769 (2009).

314. C.A. Go'mez-Aldapa, E. Herna'ndez-Herna' ndez, C.A. Avila-Orta, B.S. Hsiao, J. Castro Rosas, A.J. Gordillo-Marti'nez and C.A. Gonza' lez-Rami'rez, "Influence of L- α -lisophosphatidylcholine on thermal and structural properties of corn starch" (in Spanish), *CyTA – Journal of Food*, Vol. 7, No. 1, 37–43 (2009).
315. C. V. Krishnan, M. Garnett, B. S. Hsiao and B. Chu "Solute-Solvent Interactions from Impedance Measurements: ' π -way' Conduction and Water Structure-Enforced Ion Pair Formation in Aqueous Lidocaine Hydrochloride" *International Journal of Electrochemical Science*, 4, 1085 - 1099 (2009)
316. Zhaohui Tang, Changquan Qiu, Jeffrey R. McCutcheon, Kyunghwan Yoon, Hongyang Ma, Dufei Fang, Eric Lee, Clint Kopp, Benjamin S. Hsiao and Benjamin Chu, "Design and Fabrication of Electrospun Polyethersulfone Nanofibrous Scaffold for High Flux Nanofiltration Membranes", *J Polym Sci. Polym Phys*, 47(22), 2288-2300 (2009).
317. Ho, Rong-Ming; Chiang, Yeo-Wan; Chen, Chun-Ku; Wang, Hsin-Wei; Hasegawa, Hirokazu; Akasaka, Satoshi; Thomas, Edwin; Burger, Christian; Hsiao, Benjamin "Block Copolymers with a Twist", *J. Am. Chem. Soc.*, in press (2009).
318. Rossana Iervolino, Elvira Somma, Maria Rossella Nobile, X. Chen, Benjamin S. Hsiao, "The role of multi-walled carbon nanotubes in shear enhanced crystallization of isotactic poly(1-butene)", *Journal of Thermal Analysis and Calorimetry*, 98(3), 611-622 (2009).
319. Feng Zuo, Xuming Chen, Christian Burger, Yimin Mao, Benjamin S. Hsiao, Hongyu Chen, Debbie Chiu, Shih-Yaw Lai "An In-Situ X-ray Structural Study of Olefin Block and Random Copolymers under Uniaxial Deformation", *Macromolecules*, 43(4), 1922-1929 (2009).
320. Yimin Mao, Feng Zuo, Jong Kahk Keum, Benjamin S. Hsiao, Derek W. Thurman and Andy H. Tsou, "Crystallization Behavior of Isotactic Propylene-1-Hexene Random Copolymer Investigated by Time-Resolved SAXS/WAXD Techniques", *J Polym Sci. Polym Phys*, 48(1), 26-32. (2010).
321. Jiali Cai, Chen Liu, Minmin Cai, Jie Zhu, Feng Zuo, Benjamin S. Hsiao and Richard A Gross, "Effects of molecular weight on poly(ω -pentadecalactone) mechanical and thermal properties", *Polymer*, 51(5), 1088-1099 (2010).
322. Zhang, Kai; Wang, Xuefen; Yang, Yin; Wang, Lili; Zhu, Meifang; Hsiao, Benjamin S.; Chu, Benjamin. "Aligned and molecularly oriented semihollow ultrafine polymer fiber yarns by a facile method", *Journal of Polymer Science, Part B: Polymer Physics*, 48(10), 1118-1125 (2010).
323. Liming Cai, Yong-Cheng Shi, Lixia Rong, and Benjamin S. Hsiao, "Debranching and crystallization of waxy maize starch in relation to enzyme digestibility", *Carbohydrate Polymers*, 81(2), 385-393 (2010).
324. Wang, Xuefen; Zhang, Kai; Yang, Yin; Wang, Lili; Zhou, Zhe; Zhu, Meifang; Hsiao, Benjamin S.; Chu, Benjamin. "Development of hydrophilic barrier layer on nanofibrous substrate as composite membrane via a facile route", *Journal of Membrane Science*, 356(1-2), 110-116 (2010).
325. Yan Wang, Ji-Lin Pan, Yan-Hui Chen, Gan-Ji Zhong, Yimin Mao, Zhong-Ming Li, Liangbin Li and Benjamin S. Hsiao, "Spatial Distribution of g-Crystals in Metallocene-Made Isotactic Polypropylene Crystallized under Combined Thermal and Flow Fields", *Journal of Physical Chemistry B*, 114(20), 6806-6816 (2010).
326. Xu, Jia-Zhuang; Chen, Tao; Yang, Chuan-Lu; Li, Zhong-Ming; Mao, Yi-Min; Zeng, Bao-Qing; Hsiao, Benjamin S. "Isothermal Crystallization of Poly(L-lactide) Induced by Graphene Nanosheets and Carbon Nanotubes: A Comparative Study", *Macromolecules*, 43(11), 5000-5008 (2010).
327. Masatoshi Tosaka, Shinzo Kohjiya, Yuko Ikeda, Shigeyuki Toki, Benjamin S. Hsiao, "Molecular Orientation and Stress Relaxation during Strain-Induced Crystallization of Vulcanized Natural Rubber", *Polymer Journal*, 42(6), 474-481 (2010).
328. Fanny Deplace, Zhigang Wang, Nathaniel A. Lynd, Atsushi Hotta, Anna E. Cherian, Jeffrey M. Rose, Geoffrey W. Coates, Fumihiko Shimizu, K Hirokane, Hisashi Ohtaki, F Yamada, Yong-Woo Shin, Lixia Rong, Jie Zhu, Shigeyuki Toki, Benjamin S. Hsiao, Glenn H. Fredrickson, Edward J. Kramer, "Processing-Structure-Mechanical Property Relationships of Semicrystalline Polyolefin based Block Copolymers", *J. Polym Sci. Polym Phys*, 48(13), 1428-1437 (2010).
329. Hongyang Ma, Kyunghwan Yoon, Lixia Rong, Yimin Mao, Zhirui Mo, Dufei Fang, Zachary Hollander, Joseph Gaiteri, Benjamin S. Hsiao and Benjamin Chu, "High Flux Thin-Film Nanofibrous Composite Ultrafiltration Membranes Containing Cellulose Barrier Layer", *Journal of Materials Chemistry (theme issue on Advanced Materials in Water Treatments)*, 20(22), 4692-4704 (2010).
330. S. Bouhelal, M. E. Cagiao, D. Benachour, B. Djellouli, L. Rong, B. S. Hsiao, F. J. Baltá-Calleja, "SAXS study of reversibly crosslinked isotactic polypropylene/clay nanocomposites", *J. Appl. Polym. Sci.*, 117(6), 3262-3270 (2010).
331. Javier Carretero-González, Tiberio A. Ezquerro, Sureerut Amnuaypornsi, Shigeyuki Toki, Raquel Verdejo, A. Sanz, Jitladda Sakdapipanch, Benjamin S. Hsiao, and Miguel A. López-Manchado, "Molecular Dynamics of

- Natural Rubber as Revealed by Dielectric Spectroscopy: The Role of Natural Cross-linking”, *Soft Matter*, 6, 3636–3642 (2010).
332. Zhigang Wang, Yanhua Niu, Glenn H. Fredrickson, Edward J. Kramer, Yong-Woo Shin, Fumihiko Shimizu, Feng Zuo, Lixia Rong, Benjamin S. Hsiao, “Step-Cycle Mechanical Processing of Gels of sPP-b-EPR-b-sPP Triblock Copolymer and Mineral Oil”, *Macromolecules*, 43(16), 6782-6788 (2010).
 333. Yan-Hui Chen, Yi-Min Mao, Zhong-Ming Li and Benjamin S. Hsiao, “Competitive Growth of α - and β -Crystals in β -Nucleated Isotactic Polypropylene under Shear Flow Field”, *Macromolecules*, 43(16), 6760-6771 (2010).
 334. Pranav Nawani, Christian Burger, Mikhail Y. Gelfer, Lixia Rong, Benjamin Chu, Benjamin S. Hsiao, Andy H. Tsou and Weiqing Weng, “Characterization of Nanoclay Orientation in Polymer Nanocomposite Film by Small-Angle X-Ray Scattering”, *Polymer*, 51, 5255-5266 (2010).
 335. Ma, Hongyang; Yoon, Kyunghwan; Rong, Lixia; Shokralla, Mina; Kopot, Andrey; Wang, Xiao; Fang, Dufei; Hsiao, Benjamin S.; Chu, Benjamin. “Thin-Film Nanofibrous Composite Ultrafiltration Membranes Based on Polyvinyl Alcohol Barrier Layer Containing Directional Water Channels” *Industrial & Engineering Chemistry Research*, 49(23), 11978-11984 (2010).
 336. Lewis Yung, Hongyang Ma, Xiao Wang, Ran Wang, Benjamin S. Hsiao and Benjamin Chu, “Fabrication of Thin-Film Nanofibrous Composite Membranes by Interfacial Polymerization using Ionic Liquids as Additives”, *J. Membrane Science*, 365(1-2), 52-58 (2010).
 337. Maëva S. Tureau, Lixia Rong, Benjamin S. Hsiao, Thomas H. Epps, III, “Phase Behavior of Neat Triblock Copolymers and Copolymer/Homopolymer Blends Near Network Phase Windows”, *Macromolecules*, 43(21), 9039-9048 (2010).
 338. Gan-Ji Zhong, Zhan-Chun Chen, Zhong-Ming Li, Kai-Zhi Shen, Liangbin Li, and Benjamin S. Hsiao, “Shear Enhanced Crystallization and Tensile Behaviors of Oscillation Shear Injection Molded Poly(ethyleneterephthalate)”, *J. Macromolecular Sci. – Phys.*, 50(2), 383-397 (2011).
 339. Yimin Mao, Christian Burger, Feng Zuo, Benjamin S. Hsiao, Aspy Mehta, Cynthia Mitchell and Andy H. Tsou, “Shear-Induced Crystallization of Propylene-1-Butylene Random Copolymer Revealed by Time-Resolved Wide-Angle X-Ray Scattering”, *Macromolecules*, 44, 558–565 (2011).
 340. Hongyang Ma, Christian Burger, Benjamin S. Hsiao and Benjamin Chu “Ultra-fine Polysaccharide Nanofibrous Membranes for Water Purification”, *Biomacromolecules*, 12, 970-976 (2011).
 341. Jia-Zhuang Xu, Chen Chen, Yan Wang, Hu Tang, Zhong-Ming Li and Benjamin S. Hsiao, “Graphene nanosheets and shear flow induced crystallization in isotactic polypropylene nanocomposites”, *Macromolecules*, 44(8), 2808-2818 (2011).
 342. Feng Zuo, Yimin Mao, Xiaowei Li, Benjamin S. Hsiao, Hongyu Chen, and Gary R. Marchand, “Effects of Block Architecture on Structure and Mechanical Properties of Olefin Block Copolymers under Uniaxial Deformation”, *Macromolecules*, 44(9), 3670-3673 (2011).
 343. Shigeyuki Toki, Ryuichi Takagi, Masayoshi Ito, Benjamin S. Hsiao, “Rupture, orientation and strain-induced crystallization of polymer chain and network in vulcanized polyisoprene during uniaxial deformation by in situ Electron Spin Resonance (ESR) and synchrotron X-ray analysis”, *Polymer*, 52(11), 2453-2459 (2011).
 344. Jiali Caia, Benjamin S Hsiao, Richard A Gross, “Real-time structure changes during uniaxial stretching of poly(ω -pentadecalactone) by in-situ synchrotron WAXD/SAXS techniques”, *Macromolecules*, 44(10), 3874-3883 (2011).
 345. Hongyang Ma, Christian Burger, Benjamin S. Hsiao and Benjamin Chu “Ultra-Fine Cellulose Nanofibers: New Nano-Scale Materials for Water Purification”, *Journal of Materials Chemistry*, 21 (21), 7507 - 7510 (2011).
 346. Hongyang Ma, Benjamin S. Hsiao and Benjamin Chu “Thin-Film Nanofibrous Composite Membranes Containing Cellulose or Chitin Barrier Layers Fabricated by Ionic Liquids”, *Polymer*, 52(12), 2594-2599 (2011).
 347. Yi, Xin; Chen, Chen; Zhong, Gan-Ji; Xu, Ling; Tang, Jian-Hua; Ji, Xu; Hsiao, Benjamin S.; Li, Zhong-Ming. “Suppressing the Skin-Core Structure of Injection-Molded Isotactic Polypropylene via Combination of an in situ Microfibrillar Network and an Interfacial Compatibilizer” *Journal of Physical Chemistry B*, 115(23), 7497-7504. (2011).
 348. Anna. Sato, Ran Wang, Hongyang Ma, Benjamin S. Hsiao, Benjamin Chu, “Novel Nanofibrous Scaffolds for Water Filtration with Bacteria and Virus Removal Capability”, *Journal of Electron Microscopy*, 60(3), 201–209 (2011). Editor’s Choice Article.

349. Masatoshi Tosaka, Shigeyuki Toki, Justin Che, Lixia Rong and Benjamin S. Hsiao, "Development of Internal Fine Structure in Stretched Rubber Vulcanizates", *Journal of Polymer Science: Polymer Physics*, 49(16), 1157-1162 (2011).
350. Wang, Xuefen; Min, Minghua; Liu, Zongyuan; Yang, Yin; Zhou, Zhe; Zhu, Meifang; Chen, Yanmo; Hsiao, Benjamin S., "Poly(ethyleneimine) nanofibrous affinity membrane fabricated via one step wet-electrospinning from poly(vinyl alcohol)-doped poly(ethyleneimine) solution system and its application" *Journal of Membrane Science*, 379(1-2), 191-199 (2011).
351. Ernesto Hernández-Hernández, Carlos A. Ávila-Orta, Benjamin S. Hsiao, Javier Castro-Rosas, José A. Gallegos-Infante, Juliana Morales-Castro, L. Araceli Ochoa-Martínez, Carlos A. Gómez-Aldapa, "Synchrotron X-ray scattering analysis of the interaction between corn starch and an exogenous lipid during hydrothermal treatment", *Journal of Cereal Science*, 54, 69-75 (2011).
352. Xiaowei Li, Yimin Mao, Hongyang Ma, Benjamin S. Hsiao, "An In-Situ X-ray Scattering Study during Uniaxial Stretching of Ionic liquid/Ultra-High Molecular Weight Polyethylene Blend", *Polymer*, 52, 4610-4618 (2011).
353. Yan-Hui Chen, Gan-Ji Zhong, Jun Lei, Zhong-Ming Li and Benjamin S. Hsiao, "In-situ Synchrotron X-ray Scattering Study on Isotactic Polypropylene Crystallization under the Coexistence of Shear Flow and Carbon Nanotubes", *Macromolecules*, 44(20), 8080-8092 (2011).
354. Douglas M. Fox, Richard H. Harris Jr., Severine Bellayer, Jeffrey W. Gilman, Mikhail Y. Gelfer, Benjamin S. Hsiao, Paul H. Maupin, Paul C. Trulove, Hugh C. De Long, "The pillaring effect of the 1,2-dimethyl-3(benzyl ethyl iso-butyl POSS) imidazolium cation in polymer/montmorillonite nanocomposites", *Polymer*, 52, 5335-5343 (2011).
355. Min, Minghua; Wang, Xuefen; Yang, Yin; Liu, Zongyuan; Zhou, Zhe; Zhu, Meifang; Chen, Yanmo; Hsiao, Benjamin S., "Fabrication of micro-nano structure nanofibers by solvent etching", *Journal of Nanoscience and Nanotechnology*, 11(8), 6919-6925 (2011).
356. F. Ania, F.J. Baltá-Calleja, A. Flores, G.H. Michler, S. Scholtyssek, D. Khariwala, A. Hiltner, E. Baer, L. Rong, B. S. Hsiao, "Nanostructure and crystallization phenomena in multilayered films of alternating iPP and PA6 semicrystalline polymers.", *European Polymer J.*, 48(1), 86-96 (2012).
357. Hongyang Ma, Christian Burger, Benjamin S. Hsiao, and Benjamin Chu, "Nanofibrous Microfiltration Membrane Based on Cellulose Nanowhiskers", *Biomacromolecules*, 13(1), 180-186 (2012).
358. Zhao, Junchai; Wang, Zhigang; Niu, Yanhua; Hsiao, Benjamin; Piccarolo, Stefano, "Phase Transitions in Prequenched Mesomorphic Isotactic Polypropylene during Heating and Annealing Processes as Revealed by Simultaneous Synchrotron SAXS and WAXD Technique", *The Journal of Physical Chemistry*, 116(1), 147-153 (2012).
359. Hongyang Ma, Benjamin S. Hsiao and Benjamin Chu, "Ultra-fine Cellulose Nanofibers as Efficient Adsorbents for Removal of UO_2^{2+} in Water", *ACS Macro Letters*, 1(1), 213-216 (2012).
360. Yimin Mao, Christian Burger, Xiaowei Li, Benjamin S. Hsiao, Aspy K. Mehta and Andy H Tsou, "Time-Resolved Synchrotron X-ray Scattering Study on Propylene-1-Butylene Random Copolymer Subjected to Uniaxial Stretching at High Temperatures", *Macromolecules*, 45(2), 951-961 (2012).
361. Ran Wang, Yang Liu, Brandon Li, Anna Saito, Hongyang Ma, Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, "Electrospun Nanofibrous Membranes for High Flux Microfiltration", *J. Membrane Science*, 392-393, 167-174 (2012).
362. You, Hao; Yang, Yin; Li, Xiong; Zhang, Kai; Wang, Xuefen; Zhu, Meifang; Hsiao, Benjamin S., "Low pressure high flux thin film nanofibrous composite membranes prepared by electrospaying technique combined with solution treatment", *Journal of Membrane Science*, 394-395, 241-247 (2012).
363. Ling Xu, Chen Chen, Gan-Ji Zhong, Jun Lei, Jia-Zhuang Xu, Benjamin S. Hsiao and Zhong-Ming Li, "Tuning the superstructure of ultrahigh molecular weight polyethylene/low molecular weight polyethylene blend for artificial joint application", *ACS Applied Materials and Interfaces*, 4(3), 1521-1529 (2012).
364. Bulent Ozbas, Shigeyuki Toki, Benjamin S. Hsiao, Benjamin Chu, Richard A. Register, Ilhan A. Aksay, Robert K. Prud'homme and Douglas H. Adamson, "Strain-Induced Crystallization and Mechanical Properties of Functionalized Graphene Sheet Filled Natural Rubber", *Journal of Polymer Science: Polymer Physics*, 50, 718-723 (2012).
365. Wei-Fan Kuan, Raghunath Roy, Lixia Rong, Benjamin S. Hsiao and Thomas H. Epps, "Design and Synthesis of Network-Forming Triblock copolymers using Tapered Block Interfaces", *ACS Macro Letters*, 1 (4), 519-523 (2012).

366. Yan Wang, Chen Chen, Jia-Zhuang Xu, Jun Lei, Yimin Mao, Zhong-Ming Li and Benjamin S. Hsiao, "Suppressing of γ -Crystal Formation in Metallocene-Made Isotactic Polypropylene during Isothermal Crystallization under Shear Flow", *The Journal of Physical Chemistry*, 116(16), 5056-5063 (2012).
367. Tureau, Maeva; Kuan, Wei-Fan; Rong, Lixia; Hsiao, Benjamin; Epps, III, Thomas, "Inducing Order from Disordered Copolymers - On Demand Generation of Triblock Morphologies Including Networks", *Macromolecules*, 45(11), 4599-4605 (2012).
368. Hongyang Ma, Christian Burger, Benjamin S. Hsiao and Benjamin Chu, "Highly Permeable Polymer Membranes containing Directed Channels for Water Purification", *ACS Macro Letters*, 1(6), 723-726 (2012).
369. Sureerut Amnuaypornsi, Shigeyuki Toki, Benjamin S. Hsiao and Jitladda Sakdapipanich, "The Effects of Endlinking Network and Entanglement to Stress-Strain Relation and Strain-Induced Crystallization of Unvulcanized and Vulcanized Natural Rubber", *Polymer*, 53(15), 3325-3330 (2012).
370. Chen, Yan-Hui; Zhang, Zheng-Chi; Hsiao, Benjamin S.; Tang, Jian-Hua; Li, Zhong-Ming "Microstructure and mechanical properties of isotactic polypropylene composite with two-scale reinforcement", *Polymers for Advanced Technologies*, 23(12), 1580-1589 (2012).
371. Fanny Deplace, Arthur K. Scholz, Glenn H. Fredrickson and Edward J. Kramer, Yong-Woo Shin, Fumihiko Shimizu, Feng Zuo, Lixia Rong and Benjamin S. Hsiao, Geoffrey W. Coates, "Tough and elastic thermoplastic organogels and elastomers made of semi-crystalline polyolefin-based block copolymers", *Macromolecules*, 45(13), 5604-5618 (2012).
372. Min, Minghua; Shen, Lingdi; Hong, Guishan; Zhu, Meifang; Zhang, Yu; Wang, Xuefen; Chen, Yanmo; Hsiao, Benjamin S., "Micro-nano structure poly(ether sulfones)/poly(ethyleneimine) nanofibrous affinity membranes for adsorption of anionic dyes and heavy metal ions in aqueous solution", *Chemical Engineering Journal (Amsterdam, Netherlands)*, 197, 88-100, (2012).
373. Xu, Huan; Liu, Chun-Yan; Chen, Chen; Hsiao, Benjamin S.; Zhong, Gan-Ji; Li, Zhong-Ming, "Easy alignment and effective nucleation activity of ramie fibers in injection-molded poly(lactic acid) biocomposites", *Biopolymers*, 97(10), 825-839 (2012).
374. Justin Che, Shigeyuki Toki, Juan L. Valentin, Justo Brasero, Adun Nimpaiboon, Lixia Rong and Benjamin S. Hsiao, "Chain Dynamics and Strain-Induced Crystallization of Pre- and Postvulcanized Natural Rubber Latex Using Proton Multiple Quantum NMR and Uniaxial Deformation by in Situ Synchrotron X-ray Diffraction", *Macromolecules*, 45(16), 6491-6503 (2012).
375. Yimin Mao, Christian Burger, Xiaowei Li and Benjamin S. Hsiao, Aspy K. Mehta, Andy H. Tsou, "Structure Development during Stretching and Heating of Propylene-1-Butylene Random Copolymer: A Combined 2D WAXD/SAXS Study", *Macromolecules*, 45(17), 7061-7071 (2012).
376. Tsung-Ming Yeh, Liu Yang, Xiao Wang, Devinder Mahajan, Benjamin S. Hsiao and Benjamin Chu, "Polymeric Nanofibrous Composite Membranes for Energy Efficient Ethanol Dehydration", *Journal of Renewable and Sustainable Energy, the Special volume: Pathways To A Low Carbon Society, Volume II*, 4(4), 041406/1-041406/9 (2012).
377. Tang, Hu; Chen, Jing-Bin; Wang, Yan; Xu, Jia-Zhuang; Hsiao, Benjamin S.; Zhong, Gan-Ji; Li, Zhong-Ming, "Shear flow and carbon nanotubes synergistically induced non-isothermal crystallization of poly(lactic acid) and its application in injection molding", *Biomacromolecules*, 13(11), 3858-3867 (2012).
378. Amnuaypornsi, S.; Kawahara, S.; Toki, S.; Hsiao, B. S.; Hikosaka, M.; Sakdapipanich, J.; Tanaka, Yasuyuki, "Strain-included crystallization of un-vulcanized natural rubber measured by synchrotron X-ray diffraction", *Kautschuk Gummi Kunststoffe* (2012), 65(6), 46-50
379. Xu, Huan; Zhong, Gan-Ji; Fu, Qiang; Lei, Jun; Jiang, Wei; Hsiao, Benjamin; Li, Zhong-Ming, "Formation of Shish-kebabs in Injection-Molded Poly(L-lactic acid) by Application of an Intense Flow Field", *ACS Applied Materials & Interfaces*, 4(12), 6774-6784 (2012).
380. Xu, Jia-Zhuang; Li, Zhong-Ming; Hsiao, Benjamin S., "Crystallization Properties of Isotactic Polypropylene-Graphene Nanocomposites", *RSC Nanoscience & Nanotechnology*, 26 (Polymer-Graphene Nanocomposites), 227-251 (2012).
381. Yang Liu, Ran Wang, Hongyang Ma, Benjamin S. Hsiao and Benjamin Chu, "High-Flux Microfiltration Filters Based on Electrospun Polyvinylalcohol Nanofibrous Membranes", *Polymer*, 54(2), 548-556 (2013).
382. Espinoza-Martinez, Adriana Berenice; Ramirez-Vargas, Eduardo; Sanchez-Valdes, Saul; Ramos de Valle, Luis Francisco; Medellin-Rodriguez, Francisco J.; Hsiao, Benjamin S.; Rong, Lixia; Zaragoza, Mario Valera, "Morphology and mechanical properties of heterophasic PP-EP/EVA/organoclay nanocomposites", *Journal of Applied Polymer Science*, 128(5), 3473-3479 (2013).

383. Jong Kahk Keum, Yimin Mao, Feng Zuo and Benjamin S. Hsiao “Flow-Induced Crystallization Precursor Structure in High Molecular Weight Isotactic Polypropylene (HMW-IPP) /Low Molecular Weight Linear Low Density Polyethylene (LMW-LLDPE) Binary Blends”, *Polymer*, 54(4), 1425-1431 (2013).
384. Mao, Yimin; Li, Xiaowei; Burger, Christian; Hsiao, Benjamin S.; Tsou, Andy H. “2D WAXS/SAXS Study on Isotactic Propylene-1-Butylene Random Copolymer Subjected to Uniaxial Stretching: The Influence of Temperature”, *Polymer*, 54(4), 1432-1439 (2013).
385. Mahati Elluru, Hongyang Ma, Michael Hadjiargyrou, Benjamin S. Hsiao and Benjamin Chu, “Synthesis And Characterization of Biocompatible Hydrogel Using Pluronic-Based Block Copolymers”, *Polymers*, 54(8), 2088-2095 (2013).
386. You, Hao; Li, Xiong; Yang, Yin; Wang, Baoyi; Li, Zhuoxi; Wang, Xuefen; Zhu, Meifang; Hsiao, Benjamin S., “High flux low pressure thin film nanocomposite ultrafiltration membranes based on nanofibrous substrates”, *Separation and Purification Technology*, 108, 143-151 (2013).
387. Carlos Avila-Orta, Cristina Raudry-López, Mario Dávila-Rodríguez, Yrayda Aguirre-Figueroa, Maria Neira-Velázquez, Francisco Medellín-Rodríguez and Benjamin Hsiao, “Morphology, thermal stability and electrical conductivity of polymer nanocomposites of isotactic polypropylene/multi-walled carbon nanotubes”, *International Journal of Polymeric Materials and Polymeric Biomaterials*, 62(12), 635-641 (2013).
388. Che, Justin; Burger, Christian; Toki, Shigeyuki; Rong, Lixia; Hsiao, Benjamin S.; Amnuayporn Sri, Sureerut; Sakdapipanch, Jitladda, “Crystal and Crystallites Structure of Natural Rubber and Synthetic cis-1,4-Polyisoprene by a New Two Dimensional Wide Angle X-ray Diffraction Simulation Method. I. Strain-Induced Crystallization”, *Macromolecules*, 46(11), 4520-4528 (2013).
389. Wang, Yan; Xu, Jia-Zhuang; Chen, Yan-Hui; Qiao, Kai; Xu, Ling; Li, Zhong-Ming; Hsiao, Benjamin S., “Crystalline Structure Changes in Pre-Oriented Metallocene-Based Isotactic Polypropylene upon Annealing”, *Journal of Physical Chemistry B*, 117(23), 7113-7122 (2013).
390. Toki, Shigeyuki; Che, Justin; Rong, Lixia; Hsiao, Benjamin S.; Amnuayporn Sri, Sureerut; Nimpai boon, Adul; Sakdapipanch, Jitladda “Entanglements and Networks to Strain-Induced Crystallization and Stress-Strain Relations in Natural Rubber and Synthetic Polyisoprene at Various Temperatures”, *Macromolecules*, 46(13), 5238-5248 (2013).
391. Che, Justin; Locker, C. Rebecca; Lee, Sanghun; Rutledge, Gregory C.; Hsiao, Benjamin S.; Tsou, Andy H. “Plastic Deformation of Semicrystalline Polyethylene by X-ray Scattering: Comparison with Atomistic Simulations”, *Macromolecules*, 46(13), 5279-5289 (2013).
392. Li, Xiaowei; Mao, Yimin; Burger, Christian; Che, Justin; Hsiao, Benjamin S.; Kulkarni, Rahul R.; Tsou, Andy H. “The effect of comonomer content on structure and property relationship of propylene-1-octene copolymer during uniaxial stretching”, *Polymer*, 54(17), 4545-4554 (2013).
393. Zhang, Jin; Yin, Hua-Mo; Chen, Chen; Hsiao, Benjamin S.; Yuan, Gui-Ping; Li, Zhong-Ming “High-pressure crystallization of poly(lactic acid) with and without N₂ atmosphere protection”, *Journal of Materials Science*, 48(21), 7374-7383 (2013).
394. Wang, Ran; Guan, Sihui; Sato, Anna; Wang, Xiao; Wang, Zhe; Yang, Rui; Hsiao, Benjamin S.; Chu, Benjamin “Nanofibrous microfiltration membranes capable of removing bacteria, viruses and heavy metal ions”, *Journal of Membrane Science*, 446, 376-382 (2013).
395. Zhang, Jin; Yan, Ding-Xiang; Lei, Jun; Xu, Jia-Zhuang; Hsiao, Benjamin S.; Li, Zhong-Ming “Ultraporous poly(lactic acid) scaffolds with improved mechanical performance using high-pressure molding and salt leaching”, *Journal of Applied Polymer Science*, 130(5), 3509-3520 (2013).
396. Yoon, Kyunghwan; Lee, Ha Ni; Ki, Chang Seok; Fang, Dufei; Hsiao, Benjamin S.; Chu, Benjamin; Um, In Chul, “Effects of degumming conditions on electro-spinning rate of regenerated silk”, *International Journal of Biological Macromolecules* (2013), 61, 50-57.
397. Liu, Zongyuan; Li, Xiong; Yang, Yin; Zhang, Kai; Wang, Xuefen; Zhu, Meifang; Hsiao, Benjamin S., “Control of structure and morphology of highly aligned PLLA ultrafine fibers via linear-jet electrospinning”, *Polymer*, 54(21), 6045-6051 (2013).
398. Tsung-Ming Yeh, Zhe Wang, Devinder Mahajan, Benjamin S. Hsiao and Benjamin Chu “High Flux Ethanol Dehydration using Nanofibrous Membranes Containing Graphene Oxide Barrier Layer”, *J. Mater. Chem. A*, 1(41), 12998 – 13003 (2013).
399. Chen, Yanhui; Zhong, Ganji; Hsiao, Benjamin S.; Li, Zhongming “Structure evolution upon uniaxial drawing skin- and core-layers of injection-molded isotactic polypropylene by in situ synchrotron X-ray scattering”, *Journal of Polymer Science, Part B: Polymer Physics*, 51(22), 1618-1632 (2013).

400. Zhang, Yumei; Wang, Huaping; Chen, Shenghui; Wang, Xiaofeng; Fang, Dufei; Burger, Christian; Che, Justin; Li, Xiaowei; Hsiao, Benjamin S., "Determination of Poly(4,4'-diphenylsulfonyl terephthalamide) Crystalline Structure Via WAXD and Molecular Simulations", *Macromolecular Chemistry and Physics*, 214(21), 2432-2438 (2013).
401. Xu, Huan; Xie, Lan; Chen, Yan-Hui; Huang, Hua-Dong; Xu, Jia-Zhuang; Zhong, Gan-Ji; Hsiao, Benjamin S.; Li, Zhong-Ming "Strong Shear Flow-Driven Simultaneous Formation of Classic Shish-Kebab, Hybrid Shish-Kebab and Transcrystallinity in Poly(lactic acid)/Natural Fiber Biocomposites", *ACS Sustainable Chemistry & Engineering*, 1(12), 1619-1629 (2013).
402. Che, Justin; Burger, Christian; Toki, Shigeyuki; Rong, Lixia; Hsiao, Benjamin S.; Amnuayporn Sri, Sureerut; Sakdapipanch, Jitladda, "Crystal and Crystallites Structure of Natural Rubber and Peroxide-Vulcanized Natural Rubber by a Two-Dimensional Wide-Angle X-ray Diffraction Simulation Method. II. Strain-Induced Crystallization versus Temperature-Induced Crystallization", *Macromolecules*, 46(24), 9712-9721 (2013).
403. Wang, Zhe; Ma, Hongyang; Hsiao, Benjamin S.; Chu, Benjamin "Nanofibrous ultrafiltration membranes containing cross-linked poly(ethylene glycol) and cellulose nanofiber composite barrier layer", *Polymer*, 55(1), 366-372 (2014).
404. Zhang, Jin; Yin, Hua-Mo; Hsiao, Benjamin S.; Zhong, Gan-Ji; Li, Zhong-Ming "Biodegradable poly(lactic acid)/hydroxyl apatite 3D porous scaffolds using high-pressure molding and salt leaching", *Journal of Materials Science*, 49(4), 1648-1658 (2014).
405. Hongyang Ma, Benjamin S. Hsiao and Benjamin Chu "Functionalized Electrospun Nanofibrous Microfiltration Membranes for Removal of Bacteria and Viruses", *J. Membrane Science*, 452, 446-452 (2014).
406. Ma, Hongyang; Chen, Xuming; Hsiao, Benjamin S.; Chu, Benjamin, "Improving toughness of ultra-high molecular weight polyethylene with ionic liquid modified carbon nanofibers", *Polymer*, 55(1), 160-165 (2014).
407. Cruz-Delgado, Victor J.; Avila-Orta, Carlos A.; Espinoza-Martinez, Adriana B.; Mata-Padilla, Jose M.; Solis-Rosales, Silvia G.; Jalbout, Abraham F.; Medellin-Rodriguez, Francisco J.; Hsiao, Benjamin S., "Carbon nanotube surface-induced crystallization of polyethylene terephthalate (PET)", *Polymer*, 55(2), 642-650. (2014).
408. Liu, Yanping; Hong, Zhihua; Bai, Liangui; Tian, Nan; Ma, Zhe; Li, Xiangyang; Chen, Liang; Hsiao, Benjamin S.; Li, Liangbin, "A novel way to monitor the sequential destruction of parent-daughter crystals in isotactic polypropylene under uniaxial tension", *Journal of Materials Science*, 49(8), 3016-3024 (2014).
409. Huang, Yan-Fei; Xu, Jia-Zhuang; Xu, Jun-Yi; Zhang, Zheng-Chi; Hsiao, Benjamin S.; Xu, Ling; Li, Zhong-Ming "Self-reinforced polyethylene blend for artificial joint application", *Journal of Materials Chemistry B: Materials for Biology and Medicine*, 2(8), 971-980 (2014).
410. Ma, Hongyang; Burger, Christian; Hsiao, Benjamin S.; Chu, Benjamin, "Fabrication and characterization of cellulose nanofiber based thin-film nanofibrous composite membranes", *Journal of Membrane Science*, 454, 272-282 (2014).
411. Li, Xiong; Wang, Ce; Yang, Yin; Wang, X. F.; Zhu, Meifang; Hsiao, Benjamin S., "Dual-biomimetic Superhydrophobic Electrospun Polystyrene Nanofibrous Membranes for Membrane Distillation", *ACS Applied Materials & Interfaces*, 6(4), 2412-2419 (2014).
412. Rui Yang; Katherine B Aubrecht.; Hongyna Ma.; Ran Wang; Robert B Grubbs.; Benjamin S. Hsiao; Benjamin Chu, "Thiol-Modified Cellulose Nanofibrous Composite Membranes for Chromium (VI) and Lead (II) Adsorption", *Polymer*, 55(5), 1167-1176 (2014).
413. Wang, Xiao; Yeh, Tsung-Ming; Wang, Zhe; Yang, Rui; Wang, Ran; Ma, Hongyang; Hsiao, Benjamin S.; Chu, Benjamin "Nanofiltration membranes prepared by interfacial polymerization on thin-film nanofibrous composite scaffold", *Polymer*, 55, 1358-1366 (2014).
414. Hong, Guishan; Shen, Lingdi; Wang, Min; Yang, Yin; Wang, Xuefen; Zhu, Meifang; Hsiao, Benjamin S., "Nanofibrous polydopamine complex membranes for adsorption of Lanthanum (III) ions", *Chemical Engineering Journal (Amsterdam, Netherlands)*, 244, 307-316 (2014).
415. Chen, Yan-Hui; Huang, Zhang-Yong; Li, Zhong-Ming; Tang, Jian-Hua; Hsiao, Benjamin S., "Simultaneous improvement of strength and toughness in fiber reinforced isotactic polypropylene composites by shear flow and a β -nucleating agent", *RSC Advances*, 4(28), 14766-14776 (2014).
416. Su, Ying; Burger, Christian; Hsiao, Benjamin S.; Chu, Benjamin, "Characterization of TEMPO-oxidized cellulose nanofibers in aqueous suspension by small-angle X-ray scattering", *Journal of Applied Crystallography*, 47(2), 788-798 (2014).
417. Dong, Xue-Hui; Lu, Xiaocun; Ni, Bo; Chen, Ziran; Yue, Kan; Li, Yiwen; Rong, Lixia; Koga, Tadanori; Hsiao, Benjamin S.; Newkome, George R.; Zhang, Wen-Bin; Cheng, Stephen Z. D. "Effects of molecular geometry on

- the self-assembly of giant polymer-dendron conjugates in condensed state”, *Soft Matter*, 10(18), 3200-3208 (2014).
418. Leonardo A. Baldeño Perez, Damaso Navarro Rodríguez, Francisco J. Medellín Rodríguez, Benjamin Hsiao, Carlos A. Avila Orta, Igers Sics, “Molecular Weight and Crystallization Temperature Effects on PET Homopolymers, An Isothermal Crystallization Analysis”, *Polymers*, 6(2), 583-600 (2014).
 419. Huang, Hua-Dong; Ren, Peng-Gang; Xu, Jia-Zhuang; Xu, Ling; Zhong, Gan-Ji; Hsiao, Benjamin S.; Li, Zhong-Ming, “Improved barrier properties of poly(lactic acid) with randomly dispersed graphene oxide nanosheets”, *Journal of Membrane Science*, 464, 110-118 (2014).
 420. Zhiyong Xia, Xiomara Calderón-Colón; Jeffrey Maranchi; Russell McCally; Morgana Trexler; Benjamin Hsiao; Lixia Rong; Jennifer Elisseff, “Banded Structures in Collagen Vitrified Gels for Corneal Injury Repair”, *Acta Biomaterialia*, 10(8), 3615-3619 (2014).
 421. Xu, Huan; Xie, Lan; Chen, Jing-Bin; Jiang, Xin; Hsiao, Benjamin S.; Zhong, Gan-Ji; Fu, Qiang; Li, Zhong-Ming, “Strong and tough micro/nanostructured poly(lactic acid) by mimicking multifunctional hierarchy of shell”, *Materials Horizons*, 1(5), 546-552 (2014).
 422. Xiao Wang, Dufei Fang, Benjamin S. Hsiao, Benjamin Chu, “Nanofiltration membranes based on thin-film nanofibrous composites”, *Journal of Membrane Science*, 469, 188–197 (2014).
 423. M. L. Shao, Q. Yang, J. He, B. S. Hsiao, “Preparation and Biological Characterization of Electrospun Aligned Poly (Butylene Carbonate) Nano-Fibers”, *Materials Science Forum*, 789, 122-129 (2014).
 424. Niu, Lin; Yan, JingJing; Yang, XuYan; Burger, Christian; Rong, LiXia; Hsiao, Benjamin; Liang, DeHai, “Complexation of DNA with cationic surfactants as studied by small-angle X-ray scattering”, *Science China: Chemistry*, 1-8 (2014).
 425. Xie, Lan; Xu, Huan; Niu, Ben; Ji, Xu; Chen, Jun; Li, Zhong-Ming; Hsiao, Benjamin S.; Zhong, Gan-Ji, “Unprecedented Access to Strong and Ductile Poly(lactic acid) by Introducing In Situ Nanofibrillar Poly(butylene succinate) for Green Packaging”, *Biomacromolecules*, 15(11), 4054-4064 (2014).
 426. L. Shen, L. Yu, M. Wang, X. Wang, M. Zhu, B. S. Hsiao “Green Fabrication of Ag Coated Polyacrylonitrile Nanofibrous Composite Membrane with High Catalytic Efficiency”, *Journal of Nanoscience and Nanotechnology*, 15 (7), 5004-5012 (2015)
 427. Yang, Rui; Su, Ying; Aubrecht, Katherine B.; Wang, Xiao; Ma, Hongyang; Grubbs, Robert B.; Hsiao, Benjamin S.; Chu, Benjamin “Thiol-functionalized chitin nanofibers for As (III) adsorption”, *Polymer*, 60, 9-17, (2015).
 428. Chen, Yanhui; Fang, Dufei; Hsiao, Benjamin S.; Li, Zhongming “Insight into unique deformation behavior of oriented isotactic polypropylene with branched shish-kebabs”, *Polymer*, 60, 274-283 (2015).
 429. Hong, Guishan; Wang, Min; Li, Xiong; Shen, Lingdi; Wang, Xuefen; Zhu, Meifang; Hsiao, Benjamin “Micro-nano structure nanofibrous p-sulfonatocalix[8]arene complex membranes for highly efficient and selective adsorption of Lanthanum (III) ions in aqueous solution”, *RSC Advances*, 5 (27), 21178-21188 (2015).
 430. Nawani, Pranav; Burger, Christian; Rong, Lixia; Hsiao, Benjamin S.; Tsou, Andy H. “Structure and Permeability Relationships in Polymer Nanocomposites Containing Carbon Black and Organoclay”, *Polymer*, 64, 19-28 (2015).
 431. Su, Ying; Burger, Christian; Ma, Hongyang; Chu, Benjamin; Hsiao, Benjamin S. “Exploring the Nature of Cellulose Microfibrils”, *Biomacromolecules*, 16(4), 1201-1209 (2015).
 432. Xie, Lan; Xu, Huan; Chen, Jing-Bin; Zhang, Zi-Jing; Hsiao, Benjamin S.; Zhong, Gan-Ji; Chen, Jun; Li, Zhong-Ming, “From Nanofibrillar to Nanolaminar Poly(butylene succinate): Paving the Way to Robust Barrier and Mechanical Properties for Full-Biodegradable Poly(lactic acid) Films”, *ACS Applied Materials & Interfaces*, 7(15), 8023-8032 (2015).
 433. Chen, Yanhui; Fang, Dufei; Lei, Jun; Li, Liangbin; Hsiao, Benjamin S.; Li, Zhong-Ming “Shear-Induced Precursor Relaxation-Dependent Growth Dynamics and Lamellar Orientation of β -crystals in β -nucleated Isotactic Polypropylene” *Journal of Physical Chemistry B*, 119(17), 5716-5727 (2015).
 434. Yang Liu, Hongyang Ma, Brendan Liu, Benjamin S Hsiao and Benjamin Chu, “High-performance nanofibrous membrane for removal of Cr(VI) from contaminated water”, *Journal of Plastic Film & Sheeting*, 31(4), 379-400 (2015).
 435. Ying Su, Christian Burger, Hongyang Ma, Benjamin Chu and Benjamin S. Hsiao, “Morphological and Property Investigations of Carboxylated Cellulose Nanofibers Extracted from Different Biological Species”, *Cellulose*, 22(5), 3127-3135 (2015).

436. Dong Zhou, Shu-Gui Yang, Jun Lei, Benjamin S Hsiao, Zhong-Ming Li, "Role of Stably Entangled Chain Network Density in Shish-Kebab Formation in Polyethylene under an Intense Flow Field", *Macromolecules*, 48(18), 6652-6661 (2015).
437. Shao, Mei-ling; Yang, Qing; Shen, Xin-yuan; Hsiao, Benjamin S., "Preparation and properties of PBC nanofibers reinforced by chitin whiskers", *Donghua Daxue Xuebao, Ziran Kexueban*, 41(5), 572-578, 614 (2015).
438. L Shen, X Yu, C Cheng, C Song, X Wang, M Zhu, BS Hsiao, "High Filtration Performance Thin Film Nanofibrous Composite Membrane Prepared by Electrospinning Technique and Hot-Pressing Treatment", *Journal of Membrane Science*, 499, 470-479 (2016).
439. P. Posadas, M. A. Malmierca, A. Gonzalez-Jimenez, L. Ibarra, A. Rodriguez, J. L. Valentin, T. Nagaoka, H. Yajima, S. Toki, J. Che, L. Rong, B. S. Hsiao "ESR investigation of NR and IR rubber vulcanized with different cross-link agents", *Express Polymer Letter*, 10(1), 2-14 (2016).
440. Y. Chen, S. Yang, H. Yang, G. Zhong, D. Fang, B. S. Hsiao, Z. Li, "Deformation behavior of oriented β -crystals in injection-molded isotactic polypropylene by in situ X-ray scattering", *Polymer*, 84, 254-266 (2016).
441. Mao, Yimin; Su, Ying; Hsiao, Benjamin S., "Probing structure and orientation in polymers using synchrotron small- and wide-angle X-ray scattering techniques", *European Polymer Journal*, 81, 433-446 (2016).
442. S. Y. Zhou, H. D. Huang, X. Ji, D. Yan, G. J. Zhong, B. S. Hsiao, Z. M. Li, "Super-robust Poly(lactide) Barrier Films by Building Densely Oriented Lamellae Incorporated with Ductile In-situ Nanofibrils of Poly (butylene adipate-co-terephthalate)", *ACS applied materials & interfaces*, 8 (12), 8096-8109 (2016).
443. S. Y. Zhou, H. D. Huang, L. Xu, Z. Yan, G. J. Zhong, B. S. Hsiao, Z. M. Li, "In Situ Nanofibrillar Networks Composed of Densely Oriented Poly(lactide) Crystals as Efficient Reinforcement and Promising Barrier Wall for Fully Biodegradable Poly (butylene succinate) Composite Films", *ACS Sustainable Chemistry & Engineering*, 4 (5), 2887-2897 (2016).
444. Huizhen Ke, Emma Feldman, Plinio Guzman, Jesse Cole, Qufu Wei, Benjamin Chu, Abdullah Alkudhiri, Radwan Alrasheed, Benjamin S Hsiao, "Electrospun polystyrene nanofibrous membranes for direct contact membrane distillation", *Journal of Membrane Science*, 515, 86-97 (2016).
445. Y. Yang, X. Wang, B. S. Hsiao "Preparation of thin film nanofibrous composite NF membrane based on EDC/NHS modified PAN-AA nanofibrous substrate", *IOP Conference Series: Materials Science and Engineering* 137 (1), 012047 (2016).
446. Ning Kang, Fang Lin, Wei Zhao, Jack P Lombardi, Mihdhar Almihdhar, Kai Liu, Shan Yan, Juhee Kim, Jin Luo, Benjamin S Hsiao, Mark Poliks, Chuan-Jian Zhong, "Nanoparticle-Nanofibrous Membranes as Scaffolds for Flexible Sweat Sensors", *ACS Sensors*, 1(8), 1060-1069 (2016).
447. H.-W. Zhou, C. Burger, H. Wang, B. S. Hsiao, B. Chu and L. Graham, "The supramolecular structure of bone: X-ray scattering analysis and lateral structure modeling", *Acta Crystallographica Section D: Structural Biology* 72 (9), 986-996 (2016).
448. Shen, Lingdi; Cheng, Cheng; Yu, Xufeng; Yang, Yin; Wang, Xuefen; Zhu, Meifang; Hsiao, Benjamin S., "Low pressure UV-cured CS-PEO-PTEGDMA/PAN thin film nanofibrous composite nanofiltration membranes for anionic dyes separation", *Journal of Materials Chemistry A: Materials for Energy and Sustainability*, 4, 15575-15588 (2016).
449. L. Xie, H. Xu, L. B. Li, B. S. Hsiao, G. J. Zhong, Z. M. Li, "Biomimetic Nanofibrillation in Two-Component Biopolymer Blends with Structural Analogs to Spider Silk", *Scientific Reports* 6, 34572 (2016).
450. K. Hou, H. Wang, Y. Lin, S. Chen, S. Yang, Y. Cheng, B. S. Hsiao, M. Zhu "Large Scale Production of Continuous Hydrogel Fibers with Anisotropic Swelling Behavior by Dynamic-Crosslinking-Spinning", *Macromolecular Rapid Communications*, 37(22), 1795-1801 (2016).
451. Yang Liu, Hongyang Ma, Benjamin S. Hsiao, Benjamin Chu and Andy H. Tsou, "Improvement of Meltdown Temperature of Lithium-Ion Battery Separator using Electrospun Polyethersulfone Membranes", *Polymer*, 107, 163-169 (2016).
452. Xufeng Yu, Yadong Zhu, Cheng Cheng, Tonghui Zhang, Xuefen Wang, Benjamin S Hsiao, "High performance thin-film nanofibrous composite hemodialysis membranes with efficient middle-molecule uremic toxin removal", *Journal of Membrane Science*, 523, 173-184 (2017).
453. Zhe Wang, Hongyang Ma, Benjamin Chu & Benjamin S. Hsiao, "Super-hydrophobic Polyurethane Sponges for Oil Absorption", *Separation Science and Technology*, 52(2), 221-227 (2017).
454. Wang, Zhe; Ma, Hongyang; Chu, Benjamin; Hsiao, Benjamin S., "Fabrication of cellulose nanofiber-based ultrafiltration membranes by spray coating approach", *Journal of Applied Polymer Science*, 134(11), 44583 (2017).

455. Hongyang Ma, Benjamin Chu, Benjamin S. Hsiao, "Modification of Carbon Nanotubes with Fluorinated Ionic Liquid for Improving Processability of Fluoro-Ethylene-Propylene", *European Polymer Journal*, 87, 398-405 (2017).
456. Andy H Tsou, Alexander I Norman, Yonglai Lu, Joseph A Throckmorton, Benjamin S Hsiao, "Sequence distribution and elastic properties of propylene-based elastomers", *Polymer*, 111, 115-122 (2017).
457. Mao, Yimin; Liu, Kai; Zhan, Chengbo; Geng, Lihong; Chu, Benjamin; Hsiao, Benjamin S., "Characterization of Nanocellulose Using Small-Angle Neutron, X-ray, and Dynamic Light Scattering Techniques", *Journal of Physical Chemistry B*, 121(6), 1340-1351 (2017).
458. Y. Yang, X. Li, L. Shen, X. Wang, B. S. Hsiao, "Ionic Cross-Linked Poly (acrylonitrile-co-acrylic acid)/Polyacrylonitrile Thin Film Nanofibrous Composite Membrane with High Ultrafiltration Performance", *Industrial & Engineering Chemistry Research*, 56 (11), 3077-3090 (2017).
459. S. Y. Zhou, B. Niu, X. L. Xie, X. Ji, G. J. Zhong, B. S. Hsiao, Z. M. Li, "Interfacial Shish-Kebabs Lengthened by Coupling Effect of In Situ Flexible Nanofibrils and Intense Shear Flow: Achieving Hierarchy To Conquer the Conflicts between Strength and Toughness of Polylactide", *ACS Applied Materials & Interfaces*, 9(11), 10148-10159 (2017).
460. Yang, Yin; Li, Xiong; Shen, Lingdi; Wang, Xuefen; Hsiao, Benjamin S., "A durable thin-film nanofibrous composite nanofiltration membrane prepared by interfacial polymerization on a double-layer nanofibrous scaffold", *RSC Advances*, 7 (29), 18001-18013 (2017).
461. Li-Hong Geng, Lengwan Li, Hao-Yang Mi, Bin-Yi Chen, Priyanka Sharma, Hongyang Ma, Benjamin S Hsiao, Xiang-Fang Peng, Tairong Kuang, "Superior Impact Toughness and Excellent Storage Modulus of Poly (lactic acid) Foams Reinforced by Shish-Kebab Nanoporous Structure", *ACS Applied Materials & Interfaces*, 9(25), 21071-21076 (2017).
462. Yonglai Lu, Alexander I Norman, Andy H Tsou, John R Hagadorn, Benjamin S Hsiao, "Deformation X-ray study of propylene-based elastomers with controlled sequence distributions", *Polymer*, 122, 208-221 (2017).
463. Shuquan Sun, Yonglai Lu, Benjamin S. Hsiao, Dong Wang & Liqun Zhang "Comprehensive study on temperature-induced crystallisation and strain-induced crystallisation behaviours of natural rubber/isoprene rubber blends", *Plastics, Rubber and Composites*, 46 (7), 290-300 (2017).
464. Kai Hou, Yan Li, Yao Liu, Ruihui Zhang, Benjamin S Hsiao, Meifang Zhu, "Continuous fabrication of cellulose nanocrystal/poly (ethylene glycol) diacrylate hydrogel fiber from nanocomposite dispersion: Rheology, preparation and characterization", *Polymer*, 123, 55-64 (2017).
465. Xiao Wang, Hongyang Ma, Benjamin Chu, Benjamin S Hsiao, "Thin-film nanofibrous composite reverse osmosis membranes for desalination" *Desalination*, 420, 91-98 (2017)
466. Priyanka R Sharma, Ritika Joshi, Sunil K. Sharma, Benjamin S Hsiao, "A Simple Approach to Prepare Carboxycellulose Nanofibers from Untreated Biomass", *Biomacromolecules*, 18(8), 2333-2342 (2017).
467. K Hou, Y. Y. Lin, B. S. Hsiao, M. F. Zhu, "Continuous Production of Hollow Hydrogel Fibers with Graphene Inner Wall", *Materials Science Forum*, 898, 2197-2204 (2017)
468. Zhe Wang, Hongyang Ma, Benjamin Chu and Benjamin S. Hsiao, "Super-hydrophobic modification of porous natural polymer "luffa sponge" for oil absorption", *Polymer*, 126, 470-476 (2017).
469. Priyanka R. Sharma, Aurnov Chattopadhyay, Sunil K Sharma, and Benjamin S. Hsiao, "Efficient Removal of UO_2^{2+} from Water using Carboxycellulose Nanofibers Prepared by the Nitro-Oxidation Method", *Industrial & Engineering Chemistry Research*, 56(46), 13885-13893 (2017).
470. Lihong Geng, Xiangfang Peng, Chengbo Zhan, Ali Naderi, Priyanka R Sharma, Yimin Mao, Benjamin S Hsiao, "Structure characterization of cellulose nanofiber hydrogel as functions of concentration and ionic strength", *Cellulose*, 24(12), 5417-5429 (2017).
471. Watcharin Sainumsai, Shigeyuki Toki, Sureerut Amnuaypornsrri, Adun Nimpai boon, Jitladda Sakdapipanich, Lixia Rong, Benjamin S Hsiao, Krisda Suchiva, "Dependence of the onset of strain-induced crystallization of natural rubber and its synthetic analogue on crosslink and entanglement by using synchrotron X-ray", *Rubber Chemistry and Technology*, 90(4), 728-742 (2017).
472. Shan Yan, Xin Liu, Zakiya Skeete, Ning He, Zhi-Hui Xie, Wei Zhao, Jack P Lombardi, Kai Liu, Ning Kang, Jin Luo, Benjamin S Hsiao, Mark Poliks, Ivan Gitsov, Chuan-Jian Zhong, "Decoration of Nanofibrous Paper Chemiresistors with Dendronized Nanoparticles toward Structurally Tunable Negative-Going Response Characteristics to Human Breathing and Sweating", *Advanced Materials Interfaces*, 4(22), 1700380 (2017).
473. Shu-Gui Yang, Zhe Ma, Jun Lei, Liangbin Li, Benjamin S. Hsiao, and Zhong-Ming Li, "A Criterion for Flow-Induced Oriented Crystals in Isotactic Polypropylene under Pressure", *Macromol. Rapid Commun.*, 38(23), 1700407 (2017).

474. Yan Wang, Jian Zhao, Minjie Qu, Jing Guo, Shu-Gui Yang, Jun Lei, Jia-Zhuang Xu, Yan-Hui Chen, Zhong-Ming Li, Benjamin S Hsiao, "An unusual promotion of γ -crystals in metallocene-made isotactic polypropylene from orientational relaxation and favorable temperature window induced by shear", *Polymer*, 134, 196–203 (2018).
475. Wu, Tianyuan; Cai, Yu; Zhao, Xia; Ngai, Chai K.; Chu, Benjamin; Hsiao, Benjamin; Hadjiargyrou, Michael; Grubbs, Robert B. "Synthesis and characterization of poly(ethylene oxide)/polylactide/polylysine tri-arm star copolymers for gene delivery", *Journal of Polymer Science, Part A: Polymer Chemistry*, 56(6), 635-644 (2018).
476. Zoe V Quiñones-Jurado, Carlos A Ávila-Orta, Blanca E Castillo-Reyes, José M Mata-Padilla, Benjamin S Hsiao, Francisco J Medellín-Rodríguez, Miguel A Waldo-Mendoza, "Effect of Sorbitol Templates on the Preferential Crystallographic Growth of Isotactic Polypropylene Wax", *Crystals* 8(2), 59 (2018).
477. Lihong Geng, Nitesh Mittal, Chengbo Zhan, Farhan Ansari, Priyanka R. Sharma, Xiangfang Peng, Benjamin S. Hsiao and L. Daniel Söderberg, "Understanding the Mechanistic Behavior of Highly Charged Cellulose Nanofibers in Aqueous Systems", *Macromolecules*, 51(4), 1498-1506 (2018).
478. Priyanka R. Sharma, Aurnov Chattopadhyay, Sunil K Sharma, Li-Hong Geng, Nasim Amiralian, Darren J. Martin, and Benjamin S. Hsiao, "Nanocellulose from Spinifex as an Effective Adsorbent to Remove Cadmium(II) from Water, *ACS Sustainable Chem. Eng.*, 6 (3), 3279–3290 (2018).
479. C. Cheng, P. Li, K. Shen, T. Zhang, X. Cao, B. Wang, X. Wang, B. S. Hsiao, "Integrated Polyamide Thin-film Nanofibrous Composite Membrane Regulated by Functionalized Interlayer for Efficient Water/Isopropanol Separation", *Journal of Membrane Science*, 553, 70-81 (2018).
480. Hongyang Ma and Benjamin S. Hsiao "Nanocellulose Extracted from Defoliation of Ginkgo Leaves", *MRS Advances*, 2, 1-12 (2018).
481. Priyanka R. Sharma, Aurnov Chattopadhyay, Chengbo Zhan, Sunil K. Sharma, Lihong Geng and Benjamin S. Hsiao, "Lead Removal from Water using Carboxycellulose Nanofibers Prepared by Nitro-Oxidation Method", *Cellulose*, 25(3), 1961-1973 (2018).
482. Zongbao Wang, Yimin Mao, Chatchai Jarumanceroj, Boonyakeat Thitisak, Piyawan Tiyaipiboonchaiya, Wonchalem Rungswang, Benjamin S. Hsiao, "The Influence of Short Chain Branch on Formation of Shish-Kebab Crystals in Bimodal Polyethylene under Shear at High Temperatures", *Journal of Polymer Science, Part B: Polymer Physics*, 56(10), 786-794 (2018).
483. Hua, Weikang; Wang, Min; Li, Peiyun; Shen, Ke; Wang, Xuefen; Hsiao, Benjamin S., "Sulfonylcalix[4]arene functionalized nanofiber membranes for effective removal and selective fluorescence recognition of terbium(III) ions", *New Journal of Chemistry*, 42, 6191-6202 (2018).
484. Li Deng, Haohui Ye, Xiong Li, Peiyun Li, Jiawei Zhang, Xuefen Wang, Meifang Zhu, Benjamin S. Hsiao, "Self-roughened omniphobic coatings on nanofibrous membrane for membrane distillation", *Separation and Purification Technology*, 206, 14-25 (2018).
485. Libin Jiang, Minfang An, Feng Wu, Weijun Miao, Zongbao Wang, Yaopeng Zhang, Benjamin S Hsiao, "The Influence of Short Chain Branch on Formation of Shear Induced Crystals in Bimodal Polyethylene at High Shear Temperatures", *European Polymer Journal*, 105, 359-369 (2018).
486. Priyanka R Sharma, Bingqian Zheng, Sunil K Sharma, Chengbo Zhan, Ruifu Wang, Surita Rani Bhatia, Benjamin S. Hsiao, "High Aspect Ratio Carboxycellulose Nanofibers Prepared by Nitro-Oxidation Method and Their Nanopaper Properties", *ACS Applied Nano Materials*, 1 (8), 3969–3980 (2018)
487. Tong Liu, An Huang, Li-Hong Geng, Xing-Han Lian, Binyi Chen, Benjamin S. Hsiao, Tai-Rong Kuang, Xiang-Fang Peng, "Ultra-strong, tough and high wear resistance high-density polyethylene for structural engineering application: A facile strategy towards using the combination of extensional dynamic oscillatory shear flow and ultra-high-molecular-weight polyethylene", *Composites Science and Technology*, 167, 301-312 (2018).
488. Yatao Liu, Sumin Gao, Benjamin S. Hsiao, Alexander Norman, Andy H Tsou, Joseph Throckmorton, Antonios Doufas, Yaopeng Zhang, "Shear induced crystallization of bimodal and unimodal high density polyethylene", *Polymer*, 153(26), 223-231 (2018).
489. Min Wang, Xiong Li, Tonghui Zhang, Li Deng, Peiyun Li, Xuefen Wang, Benjamin S. Hsiao, "Eco-friendly poly (acrylic acid)-sodium alginate nanofibrous hydrogel: A multifunctional platform for superior removal of Cu (II) and sustainable catalytic applications", *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 558(5), 228-241 (2018).
490. Yanxiang Li, Jessica Tian, Chuanfang Yang and Benjamin S. Hsiao, "Nanocomposite Film Containing Fibrous Cellulose Scaffold and Ag/TiO₂ Nanoparticles and Its Antibacterial Activity", *Polymers*, 10, 1052 (2018).
491. Xiong Li, Ce Wang, Xiaohua Huang, Tonghui Zhang, Xuefen Wang, Minghua Min, Lumin Wang, Hongliang Huang, Benjamin S. Hsiao, "Anionic Surfactant Triggered Steiner Geometrical Poly (vinylidene fluoride)

- Nano-Fiber/Nets Air Filter for Efficient Particulate Matter Removal”, *ACS applied materials & interfaces*, 10(49), 42891–42904 (2018).
492. Qianqian Niu, Qingfa Peng, Li Lu, Suna Fan, Huili Shao, Huihui Zhang, Rongliang Wu, Benjamin S. Hsiao, Yaopeng Zhang, “Single Molecular Layer of Silk Nanoribbon as Potential Basic Building Block of Silk Materials”, *ACS Nano*, 12 (12), 11860-11870 (2018).
 493. Cheng Cheng, Peiyun Li, Tonghui Zhang, Xuefen Wang, Benjamin S. Hsiao, “Enhanced pervaporation performance of polyamide membrane with synergistic effect of porous nanofibrous support and trace graphene oxide lamellae”, *Chemical Engineering Science*, 196, 265-276 (2019).
 494. Haohui Ye, Xiong Li, Li Deng, Peiyun Li, Tonghui Zhang, Xuefen Wang, Benjamin S. Hsiao “Silver nanoparticles-enabled photothermal nanofibrous membrane for light-driven membrane distillation”, *Industrial & Engineering Chemistry Research*, 58 (8), 3269–3281 (2019).
 495. Priyanka R. Sharma, Sunil K. Sharma, Richard Antoine and Benjamin S. Hsiao, “Efficient Removal of Arsenic Using Zinc Oxide Nanocrystals Decorated Regenerated Microfibrillated Cellulose Scaffolds”, *ACS Sustainable Chemistry & Engineering*, 7(6), 6140-6151 (2019).
 496. Pejman Hadi, Mengying Yang, Hongyang Ma, Xiangyu Huang, Harold Walker, Benjamin S. Hsiao, “Biofouling-resistant nanocellulose layer in hierarchical polymeric membranes: Synthesis, characterization and performance”, *Journal of Membrane Science*, 579, 162–171 (2019).
 497. Qinyi Fu, Nisha Verma, Hongyang Ma, Francisco J. Medellin-Rodriguez, Ruipeng Li, Masafumi Fukuto, Christopher M. Stafford, Benjamin S. Hsiao, and Benjamin M. Ocko “Molecular Structure of Aromatic Reverse Osmosis Polyamide Barrier Layers”, *ACS Macro Lett.* 8, 352–356 (2019).
 498. Wonchalem Rungswang, Chatchai Jarumaneeroj, Supanan Patthamasang, Phairat Phiriyawirut, Prapasinee Jirasukho, Siriwat Soontaranon, Supagorn Rugmai, Benjamin S. Hsiao, “Influences of tacticity and molecular weight on crystallization kinetic and crystal morphology under isothermal crystallization: Evidence of tapering in lamellar width”, *Polymer*, 172, 41-51 (2019).
 499. Xufeng Yu, Yadong Zhu, Cheng Cheng, Tonghui Zhang, Xuefen Wang, Benjamin S. Hsiao “Novel thin-film nanofibrous composite membranes containing directional toxin transport nanochannels for efficient and safe hemodialysis application”, *Journal of Membrane Science*, 582, 151-163 (2019).
 500. Li Deng, Peiyun Li, Kang Liu, Xuefen Wang, Benjamin S. Hsiao, “Robust superhydrophobic dual layer nanofibrous composite membrane with hierarchically structured amorphous polypropylene skin for membrane distillation”, *Journal of Materials Chemistry A*, 7, 11282-11297 (2019).
 501. Guilherme Dognani, Pejman Hadi, Hongyang Ma, Flavio C. Cabrera, Aldo E. Job, Deuber L. S. Agostini, Benjamin S. Hsiao, “Effective chromium removal from water by polyaniline-coated electrospun adsorbent membrane”, *Chemical Engineering Journal*, 372, 341-351 (2019).
 502. Chengbo Zhan, Priyanka R. Sharma, Lihong Geng, Sunil K. Sharma, Ruifu Wang, Ritika Joshi and Benjamin S. Hsiao, “Structural Characterization of Carboxylcellulose Nanofibers Extracted from Underutilized Sources”, *Science China Technological Sciences*, 62 (6), 971-981 (2019).
 503. Xiangxiang Liu, Hongyang Ma, Benjamin S Hsiao, “Interpenetrating Nanofibrous Composite Membranes for Water Purification” *ACS Applied Nano Materials*, 2(6), 3606-3614 (2019).
 504. Nancy Li, Jackie Zheng, Pejman Hadi, Mengying Yang, Xiangyu Huang, Hongyang Ma, Harold W Walker, Benjamin S Hsiao, “Synthesis and Characterization of a High Flux Nanocellulose–Cellulose Acetate Nanocomposite Membrane”, *Membranes*, 9(6), 70 (2019).
 505. Libin Jiang, Mengjie Zhu, Minfang An, Yiguo Li, Weijun Miao, Zongbao Wang and Benjamin S. Hsiao, “The influence of short chain branch on formation of shear-induced crystals in bimodal polyethylene at low shear temperatures”, *Polymer*, 179(28), 121625 (2019).
 506. Ruifu Wang, Tomas Rosen, Chengbo Zhan, Shirish Chodankar, Jiahui Chen, Priyanka R Sharma, Sunil K Sharma, Tianbo Liu, Benjamin S. Hsiao, “Morphology and Flow Behavior of Cellulose Nanofibers Dispersed in Glycols”, *Macromolecules*, 52(15) 5499-5509 (2019).
 507. Peiyun Li, Cheng Cheng, Ke Shen, Tonghui Zhang, Xuefen Wang, Benjamin S. Hsiao, “Enhancing Dehydration Performance of Isopropanol by Introducing Intermediate Layer into Sodium Alginate Nanofibrous Composite Pervaporation Membrane”, *Advanced Fiber Materials*, 1(2), 137–151 (2019).
 508. Likun Wang, Xianghao Zuo, Aniket Raut, Rebecca Isseroff, Yuan Xue, Yuchen Zhou, Bhawan Sandhu, Tzipora Schein, Tatiana Zaliznyak, Priyanka Sharma, Sunil Sharma, Benjamin S. Hsiao, Miriam H Rafailovich, “Operation of Proton Exchange Membrane (PEM) Fuel Cells using Natural Cellulose Fiber Membranes”, *Sustainable Energy & Fuels*, 3, 2725-2732 (2019).

509. Li Lu, Suna Fan, Qianqian Niu, Qingfa Peng, Lihong Geng, Gesheng Yang, Huili Shao, Benjamin S. Hsiao, Yaopeng Zhang, “Strong silk fibers containing cellulose nanofibers generated by a bioinspired microfluidic chip”, *ACS Sustainable Chemistry & Engineering*, 7(17), 14765-14774 (2019).
510. Xiangxiang Liu, Xuan Wang, Hongyang Ma, Shyam Venkateswaran, Benjamin S. Hsiao, “Colorful nanofibrous composite membranes by two-nozzle electrospinning”, *Materials Today Communications*, 21, 100643 (2019).
511. Chengbo Zhan, Yanxiang Li, Priyanka R. Sharma, Hongrui He, Sunil K. Sharma, Ruifu Wang and Benjamin S. Hsiao, “A Study of TiO₂ Nanocrystal Growth and Environmental Remediation Capability of TiO₂/CNC Nanocomposites”, *RSC Adv.*, 9, 40565–40576 (2019).
512. Hui Chen, Sunil K Sharma, Priyanka R Sharma, Heidi Yeh, Ken Johnson, Benjamin S. Hsiao, “Arsenic (III) Removal by Nanostructured Dialdehyde Cellulose–Cysteine Microscale and Nanoscale Fibers”, *ACS Omega*, 4, 26, 22008-22020 (2019).
513. Cong Li, Hongyang Ma, Shyam Venkateswaran, Benjamin S. Hsiao, “Highly efficient and sustainable carboxylated cellulose filters for removal of cationic dyes/heavy metals ions”, *Chemical Engineering Journal*, 389, 123458 (2020).
514. Weiping Zheng, Dalin Du, Aihua He, Yaping Ma, Huafeng Shao, Chenguang Liu, Benjamin S. Hsiao “Temperature rising elution fractionation and fraction compositional analysis of Polybutene-1/Polypropylene in-reactor alloys”, *Materials Today Communications*, 23, 100868 (2020).
515. Xufeng Yu, Yadong Zhu, Tonghui Zhang, Li Deng, Peiyun Li, Xuefen Wang, Benjamin S. Hsiao “Heparinized thin-film composite membranes with sub-micron ridge structure for efficient hemodialysis” *Journal of Membrane Science*, 599, 117706 (2020).
516. Guoyin Chen, Yulu Ai, Innocent Tendo Mugaanire, Wujun Ma, Benjamin S. Hsiao, Kai Hou, Meifang Zhu, “A simple inorganic hybrids strategy for graphene fibers fabrication with excellent electrochemical performance”, *Journal of Power Sources* 450, 227637 (2020).
517. Xiangxiang Liu, Bingyin Jiang, Xing Yin, Hongyang Ma, Benjamin S. Hsiao, “Highly permeable nanofibrous composite microfiltration membranes for removal of nanoparticles and heavy metal ions”, *Separation and Purification Technology*, 233, 115976 (2020).
518. Li Deng, Kang Liu, Peiyun Li, Ding Sun, Siping Ding, Xuefen Wang, Benjamin S. Hsiao, “Engineering construction of robust superhydrophobic two-tier composite membrane with interlocked structure for membrane distillation”, *Journal of Membrane Science*, 598, 117813 (2020).
519. Yanxiang Li, Jinju Zhang, Chengbo Zhan, Fangong Kong, Wangliang Li, Chuanfang Yang, Benjamin S. Hsiao “Facile Synthesis of TiO₂/CNC Nanocomposites for Enhanced Cr (VI) Photoreduction: Synergistic Roles of Cellulose Nanocrystals”, *Carbohydrate Polymers*, 233, 115838 (2020).
520. Xiangyu Huang, Guilherme Dognani, Pejman Hadi, Mengying Yang, Aldo Eloizo Job, Benjamin S. Hsiao, “Cationic Dialdehyde Nanocellulose from Sugarcane Bagasse for Efficient Chromium (VI) Removal”, *ACS Sustainable Chemistry & Engineering*, 8(12), 4734-4744 (2020).
521. Xing Yin, Zhaoju Zhang, Hongyang Ma, Shyam Venkateswaran, Benjamin S. Hsiao, “Ultra-fine electrospun nanofibrous membranes for multicomponent wastewater treatment: Filtration and adsorption”, *Separation and Purification Technology*, 242, 116794 (2020).
522. Tomas Rosén, Ruifu Wang, Chengbo Zhan, Hongrui He, Shirish Chodankar, and Benjamin S. Hsiao, “Cellulose nanofibrils and nanocrystals in confined flow: Single-particle dynamics to collective alignment revealed through scanning small-angle x-ray scattering and numerical simulations”, *Phys. Rev. E* 101, 032610 (2020).
523. Sunil K. Sharma, Priyanka R. Sharma, Simon Lin, Hui Chen, Ken Johnson, Ruifu Wang, William Borges, Chengbo Zhan and Benjamin S. Hsiao, “Reinforcement of Natural Rubber Latex Using Jute Carboxycellulose Nanofibers Extracted Using Nitro-Oxidation Method”, *Nanomaterials*, 10(4), 706 (2020).
524. Li Deng, Kang Liu, Peiyun Li, Ding Sun, Siping Ding, Xuefen Wang, Benjamin S. Hsiao, “Engineering construction of robust superhydrophobic two-tier composite membrane with interlocked structure for membrane distillation”, *Journal of Membrane Science*, 598, 117813 (2020).
525. Cong Li, Hongyang Ma, Shyam Venkateswaran, Benjamin S. Hsiao, “Sustainable carboxylated cellulose filters for efficient removal and recovery of lanthanum”, *Environmental Research*, 188, 109685 (2020).
526. Lijun Quan, Xiaodong Zhang, Weilong Xia, Yanhui Chen, Lei Gong, Zhenguo Liu, Qiuyu Zhang, Ganji Zhong, Zhongming Li, Benjamin Hsiao, “In situ synchrotron X-ray scattering studies on the temperature dependence of oriented β -crystal growth in isotactic polypropylene”, *Polymer Testing*, 90, 106660 (2020).
527. Yuhua Cai, Lihong Geng, Song Chen, Shuo Shi, Benjamin S Hsiao, and Xiangfang Peng “Hierarchical Assembly of Nanocellulose into Filaments by Flow-Assisted Alignment and Interfacial Complexation:

- Conquering the Conflicts between Strength and Toughness”, *ACS Appl. Mater. Interfaces*, 12(28), 32090-32098 (2020).
528. Yan Liang, Hongyang Ma, Ahmed Aboueloyoun Taha, Benjamin S Hsiao, “High-flux anti-fouling nanofibrous composite ultrafiltration membranes containing negatively charged water channels”, *Journal of Membrane Science*, 612, 118382 (2020).
529. Shan Yan, Shiyao Shan, Jianguo Wen, Jing Li, Ning Kang, Zhipeng Wu, Jack Lombardi, Han-Wen Cheng, Jie Wang, Jin Luo, Ning He, Derrick Mott, Lichang Wang, Qingfeng Ge, Benjamin S Hsiao, Mark Poliks, Chuan-Jian Zhong, “Surface-Mediated Interconnections of Nanoparticles in Cellulosic Fibrous Materials toward 3D Sensors”, *Advanced Materials*, 2002171 (2020).
530. Mengying Yang, Pejman Hadi, Xuechen Yin, Jason Yu, Xiangyu Huang, Hongyang Ma, Harold Walker, Benjamin S. Hsiao, “Antifouling nanocellulose membranes: How subtle adjustment of surface charge lead to self-cleaning property”, *Journal of Membrane Science*, 118739 (2020).

3. ARTICLES IN BOOKS, ENCYCLOPEDIAS AND REVIEWS

1. B. S. Hsiao, R. S. Stein, S. Cohen-Addad, N. Weeks and R. Gaudiana, "Light Scattering Studies of the State of Dispersion in Molecular Composites", *MRS Symp. Proc.*, Vol. 171, *Polymer Based Molecular Composites* (ed. D. Schaefer et al.), 125-130 (1989).
2. B. S. Hsiao and E. J. H. Chen, "Study of Trans-Crystallization in Polymer Composites". *MRS Symp. Proc.*, Vol. 170, *Interfaces in Composites* (ed. C. Pantano et al.), 117-123 (1989).
3. B. S. Hsiao and M. T. Shaw, "Longitudinal Volume Viscosity Measurements in Polymers", in *Encyclopedia of Fluid Mechanics* (ed. N. P. Chermisinoff), Vol. 9, *Polymer Engineering*, Chapter 18, Gulf, Houston, 561-588 (1990).
4. B. S. Hsiao and E. J. H. Chen, "Transcrystalline Interphase in Advanced Polymer Composites", in *Controlled Interphases in Composite Materials* (ed. H. Ishida), Elsevier, New York, 613-623 (1990).
5. B. S. Hsiao and K. H. Gardner, "Time-Resolved X-ray Studies of Crystallization and Melting in Poly(aryl ether ketone)", in *Crystallization of Polymers* (ed. M. Dosière), NATO ASI Series, Vol. 405, Kluwer Academic, Dordrecht, 415-420 (1993).
6. K. H. Gardner, B. S. Hsiao and K. L. Faron, "Diffraction Studies of Polymorphism in Poly(aryl ether ketones)", in *Crystallization of Polymers* (ed. M. Dosière), NATO ASI Series, Vol. 405, Kluwer Academic, Dordrecht, 443-448 (1993).
7. H. Ade, B. S. Hsiao, G. Mitchell, E. Rightor, A. P. Smith and R. Cieslinski, "X-ray Microscopy of Polymeric Materials", *MRS Symp. Proc.*, Application of Synchrotron Radiation Techniques to Materials Science II, Vol. 375, 293-302 (1995).
8. S. Z. D. Cheng, R. M. Ho and B. S. Hsiao, "Poly(aryl ether ketone)s and Copolymers (Synthesis, Structure, Morphology and Properties)", *Polymeric Materials Encyclopedia* (ed. J. Salamone), CRC Press, Vol. 7, 5532-5544 (1996).
9. P. Cebe and B. S. Hsiao, "Polyimide, New-TPI (Semicrystalline Thermoplastic)", *Polymeric Materials Encyclopedia* (ed. J. Salamone), CRC Press, Vol. 8, 6185-6198 (1996).
10. W. Wang, J. M. Schultz and B. S. Hsiao, "Microstructure and Phase Separation of PEEK, PEKK and Their Belnds", *MRS Symp. Proc.*, Morphological Control in Multiphase Polymer Mixtures (ed. R. Briber et al.), Vol. 461, 33-38 (1997).
11. E. Q. Chen, S. W. Lee, A. Zhang, B. S. Moon, I. Mann, F. W. Harris, S. Z. D. Cheng, B. S. Hsiao, F. Yeh and E. D. von Meerwall, "Isothermal Thickening and Thinning Processes in Low Molecular Weight Poly(ethylene oxide) Fractions Crystallized from the Melt. 7. Effects of Molecular Configurational Defects on Crystallization, Melting and Annealing" in *Scattering from Polymers* (P. Cebe, B. Hsiao and D. Lohse eds.), ACS Symposium Series, Oxford Press, 739, 118-139 (1999).
12. W. Liu, H. Yang, B. S. Hsiao, S. S. Liu, B. T. Huang, R. S. Stein, "Real Time Crystallization and Melting Study of Ethylene Based Copolymers by X-rays and DSC Techniques", in *Scattering from Polymers* (P. Cebe, B. Hsiao and D. Lohse eds.), ACS Symposium Series, Oxford Press, 739, 187-201 (1999).
13. B. Chu, D. Fang and B. S. Hsiao, "Hair Test Results at the Advanced Polymers Beamline (X27C) at the NSLS", *Synchrotron Radiation News*, 12, 36 (1999).
14. S. Phillips, R. Blankowski, S. A. Srejda, T. S. Haddad, A. Lee, J. O. Lichtenhan, F. Feher, P. Mather, B. Hsiao, "New Insight into the Structure-Property Relationships of Hybrid (Inorganic/Organic) POSS Thermoplastics", *Mater. Res. Soc. Symp. Proc.* (2001), 628 (*Organic/Inorganic Hybrid Materials*), CC4.6.1-CC4.6.10.

15. B. Chu and B. S. Hsiao, "Small Angle X-ray Scattering of Polymers" in *Chemical Reviews* (Ed. J. Michl), 101(6), 1727-1761 (2001).
16. B. S. Hsiao and B. Chu, "Scattering: Light, Neutrons and X-rays" in *Encyclopedia of Chemical Physics and Physical Chemistry* (Eds. J. H. Moore. N. D. Spencer), Institute of Physics Publishing, London, B1.9, Vol. 12, 1197-1225 (2001).
17. B. S. Hsiao and B. Chu, "Chemical Applications of Small Angle Scattering" (Ed. T. K. Sham) *Chemical Applications of Synchrotron Radiation, Part II, X-ray Applications, Advanced Series, in Physical Chemistry*, World Scientific Publishing Company, Singapore, Vol. 12B, Chap. 17, 799- 849 (2002).
18. B. S. Hsiao, "Semicrystalline Polymers: Lamellar Morphology by SAXS", in *Encyclopedia of Materials: Science and Technology*, Chapter 5.1.6, Elsevier Science, New York (2002).
19. Benjamin S. Hsiao, Benjamin Chu and Christian Burger, "Synchrotron X-ray Scattering of Polymer Nanocomposites", *Synchrotron Radiation News*, 15(5), 20-34 (2002).
20. B. S. Hsiao, "Nanostructure Development in Semicrystalline Polymers by X-ray Scattering Techniques using Synchrotron Radiations", in *Mechanical Properties of Polymers relating to Nano-Structure and Morphology* (ed. F. J. Balta Calleja and G.H. Michler), Chap 2, pp 27-79, CRC Press LLC (2005).
21. Lei Zhu, Lu Sun, Jianjun Miao, Li Cui, Qing Ge, Roderic P. Quirk, Chenchen Xue, Stephen Z. D. Cheng, Benjamin S. Hsiao, Carlos A. Avila-Orta, Igors Sics, and Marie E. Cantino, "Epitaxial Phase Transformation between Cylindrical and Double Gyroid Mesophases", *MRS Symp. Proc.*, in *Multicomponent Polymer Systems-Phase Behavior, Dynamics, and Applications* (ed. K. I. Winey et al.), Vol. 856E, BB2.3.1-6 (2005).
22. Jonathan Chiu, Y. Kim Luu, Benjamin S. Hsiao, Benjamin Chu, Michael Hadjiargyrou, "Electrospun Nanofibrous Scaffolds for Biomedical Applications", *J. Biomedical Nanotechnology*, 1, 115-132 (2005).
23. Dufei Fang, Charles Chang, Benjamin S. Hsiao and Benjamin Chu, "Development of Multiple-Jet Electrospinning Technology", in *Polymeric Nanofibers* (D. Reneker and H. Fong eds.), ACS Symposium Series (918), Chapter 7, 91-105 (2006).
24. Christian Burger, Benjamin S. Hsiao and Benjamin Chu, "Nanofibrous Materials and Their Applications", *Annual Review of Materials Research*, 36, 333-368 (2006).
25. Benjamin S. Hsiao, "Role of Chain Entanglement Network on Formation of Flow-Induced Crystallization Precursor Structure", *Progress in Understanding of Polymer Crystallization* (Ed. G. Reiter and G. Strobl) in *Lecture Notes in Physics*, Springer-Verlag, 133-149 (2006).
26. Shigeyuki Toki and Benjamin S. Hsiao, "Morphology, Structure and Mechanical Properties of Nanostructured Polyolefin Elastomers", *Polyolefin Blends* (ed. D. Nwabunma and T. Kyu), Wiley Interscience, Chapter 8, 198-223 (2006).
27. Dehai Liang, Benjamin S. Hsiao and Benjamin Chu, "Functional Electrospun Nanofibrous Scaffolds for Biomedical Applications", *Advanced Drug Delivery Reviews*, 59, 1392-1412 (2007).
28. Benjamin Chu, Benjamin S. Hsiao and Kyunghwan Yoon, "Nanofiber and Nanocomposite-Fiber Technology for Environmental Applications" *American Association of Textile Chemists and Colorists (AATCC) Review*, 8, 31-33 (2007).
29. Kyunghwan Yoon, Xuming Chen, Benjamin S. Hsiao and Benjamin Chu, "Functional Nanofibers for Environmental Applications", *Journal of Materials Chemistry*, 18(44), 5326-5334 (2008).
30. Pranav Nawani, Hongwen Zhou, Benjamin Chu, Christian Burger and Benjamin S. Hsiao, "Structural analysis of biological and technical nanocomposites by X-ray scattering", *Applications of Synchrotron Light to Non-Crystalline Diffraction in Materials and Life Sciences* (Ed. T. Ezquerro) in *Lecture Notes in Physics*, Springer-Verlag, 183-198 (2009).
31. Benjamin Chu and Benjamin S. Hsiao, "The Role of Polymers in Breakthrough Technologies for Water Purification", *J. Polym. Sci. Polym. Phys.*, as a Viewpoint 47(24), 2431-2435 (2009).
32. Christian Burger, Benjamin S. Hsiao, and Benjamin Chu, "Preferred Orientation in Polymer Fiber Scattering" *Polymer Reviews*, 50, 91-111 (2010).
33. Burger, C.; Hsiao, B. S.; Chu, B. "Preferred Orientation in Polymer Fibers" *Powder Diffraction*, 25(2), 212 (2010).
34. Christian Burger, Benjamin S. Hsiao, and Benjamin Chu, X-ray Scattering. In: Matyjaszewski K and Möller M (eds.) *Polymer Science: A Comprehensive Reference*, Vol 2, pp. 363-380. Amsterdam: Elsevier BV. (2012).
35. Shigeyuki Toki and Benjamin S. Hsiao, "Deformation-induced structure changes in elastomeric nanocomposites", Chapter 8, in *Advances in Elastomeric Nanocomposites*, Springer, Germany (2012).

36. Hongyang Ma, Benjamin Chu and Benjamin S. Hsiao, "Functional Nanofibers for Water Purification", Chapter 15, *Functional Nanofibers and Applications* (ed. Qufu Wei), Woodhead Publishing Series in Textiles, 134, 331-370 (2012).
37. Jia-Zhuang Xu, Zhong-Ming Li and Benjamin S. Hsiao, "Crystallization Properties of Isotactic Polypropylene–Graphene Nanocomposites", Chapter 10, *Polymer-Graphene Nanocomposites*, (ed. V. Mittal), Royal Society of Chemistry, Cambridge, UK, 227-263 (2012).
38. Benjamin S. Hsiao, Feng Zuo and Yimin Mao and Christoph Schick, Chapter 2: Experimental Techniques in *Handbook of Polymer Crystallization* (eds. Greg Rutledge and Ewa Piorkowska), 1-29 (2013).
39. Hongyang Ma, Benjamin S. Hsiao and Benjamin Chu, "Electrospun Nanofibrous Membrane for Heavy Metal Ion Adsorption", *Current Organic Chemistry*, 17 (13), 1361-1370 (2013).
40. Jia-Zhuang Xu, Gan-Ji Zhong, Benjamin S. Hsiao and Zhong-Ming Li, "Low-dimensional Carbonaceous Nanofiller Induced Polymer Crystallization", *Prog. Polym. Sci.*, 39(3), 555-593 (2014).
41. Ran Wang, Benjamin S. Hsiao and Benjamin Chu, "Electrospun Nanofibers for Environmental Applications", Chapter 13 Liquid Filtration, *Electrospun Nanofibers for Energy and Environmental Applications* (ed. Bin Ding and Jianyong Yu), Springer Publishing, 325-354 (2014).
42. X. Wang, B. S. Hsiao, "Electrospun Nanofiber Membranes", *Current Opinion In Chemical Engineering* 12, 62-81 (2016).
43. Zhaohui Tang, Chaoliang He, Huayu Tian, Jianxun Ding, Benjamin S. Hsiao, Benjamin Chu and Xuesi Chen, "Polymeric Nanostructured Materials for Biomedical Applications", *Progress in Polymer Science*, 60, 86-128 (2016).
44. B. S. Hsiao, "Nanostructure Development in Semicrystalline Polymers by X-ray Scattering Techniques using Synchrotron Radiations", in *Mechanical Properties of Polymers relating to Nano-Structure and Morphology*, 91, 27-79, CRC Press (2016).
45. Lihong Geng, Ali Naderi, Yimin Mao, Chengbo Zhan, Priyanka Sharma, Xiangfang Peng and Benjamin S. Hsiao "Rheological Properties of Jute-Based Cellulose Nanofibers under Different Ionic Conditions" in *Nanocelluloses: Their Preparation, Properties, and Applications*, ACS Symposium Series, Vol. 1251, Chapter 6, pp 113-132 (2017).
46. Hongyang Ma and Benjamin S. Hsiao, "Current Advances on Nanofiber Membranes for Water Purification Applications", *Filtering Media by Electrospinning* (Focarete M., Gualandi C., Ramakrishna S. eds), 24-46, Springer (2018).
47. Yimin Mao, Benjamin S. Hsiao, Benjamin Chu "Static and Dynamic Light Scattering", in *Methodologies and Protocols For Nanomaterials: A Comprehensive Reference* (ed. Yu Han) in a Book Series entitled "Nanoscience And Nanotechnology", by World Scientific Publishing (Wsp) and Imperial College Press, Vol. 4, Chapter 8, 335-374, (2018).
48. Hongyang Ma and Benjamin S. Hsiao, "Electrospun Nanofibrous Membranes for Desalination", in *Current Trends and Future Developments on (Bio-) Membranes: Membrane Desalination Systems: The Next Generation*, (Editors: Efreem Curcio, Inamuddin, Angelo Basile), Chapter 4, 81-104, Elsevier (2018).
49. Hongyang Ma, Christian Burger, Benjamin Chu and Benjamin S. Hsiao, "Electrospun Nanofibers for Environmental Protection: Water Purification", in *Handbook of Fibrous Materials Vol 2* (ed. Jinlian Hu), Chapter 28, WILEY-VCH, Weinheim (2020).
50. Priyanka R. Sharma, Sunil K. Sharma, Tom Lindström and Benjamin S. Hsiao, "Nanocellulose-Enabled Membranes for Water Purification: Perspectives", *Advanced Sustainable Systems*, 4(5), 1900114 (2020).
51. Xinwei Mao, Pejman Hadi Myavagh, Sarah Lotfikatouli, Benjamin S. Hsiao, and Harold W. Walker, "Membrane Bioreactors for Nitrogen Removal from Wastewater: A Review", *J. Environmental Engineering*, 146(5), 03120002 (2020).
52. Sunil K. Sharma, Priyanka R. Sharma, Hui Chen, Ken Johnson, Chengbo Zhan, Ruifu Wang and Benjamin Hsiao, "Cellulose-Supported Nanosized Zinc Oxide: Highly Efficient Bionanomaterial for Removal of Arsenic From Water", *Contaminants in Our Water: Identification and Remediation Methods*, ACS Symposium Series Vol. 1352, Chapter 12, 253-267 (2020).
53. Priyanka R Sharma, Sunil K Sharma, William Borges, Hui Chen, Benjamin S Hsiao, "Remediation of UO_2^{2+} from Water by Nitro-Oxidized Carboxycellulose Nanofibers: Performance and Mechanism", *Contaminants in Our Water: Identification and Remediation Methods*, ACS Symposium Series Vol. 1352, Chapter 13, 269-283 (2020).
54. Tomas Rosén, Benjamin S. Hsiao, and L. Daniel Söderberg, "Elucidating the Opportunities and Challenges for Nanocellulose Spinning", *Adv. Mater.*, 2001238 (2020).

55. Q. Fu, N. Verma, B. S. Hsiao, F. Medellin-Rodriguez, P. A. Beaucage, C. M. Stafford & B. M. Ocko, "X-ray Scattering Studies of Reverse Osmosis Materials", *Synchrotron Radiation News*, 33(4), 40-45 (2020).
56. Guoyin Chen, Gang Wang, Xinrong Tan, Kai Hou, Qingshuo Meng, Peng Zhao, Shun Wang, Jiayi Zhang, Zhan Zhou, Tao Chen, Yanhua Cheng, Benjamin S Hsiao, Elsa Reichmanis, Zhu Meifang, "Integrated dynamic wet spinning of core-sheath hydrogel fibers for optical-to-brain/tissue communications", *National Science Review*, in press (2020).

4. STUDENT THESIS

Ph.D. THESIS

1. Wang, Wu. "Crystallization, morphologies and microstructures of poly(aryl ether ether ketone), poly(aryl ether ketone ketone) and their blends." University of Delaware, Newark, DE, (1996).
2. Joshua M. Samon "In-situ Structural and Morphological Development during Processing of Polymer Fiber Studies by Synchrotron X-ray Scattering Techniques", University of Delaware, Newark, DE, (2000).
3. Steven X. Zong, "Nanofiber Membrane of PLGA via Electrospinning and Its Biomedical Applications", Stony Brook University, Stony Brook (2002).
4. Bruce X. Fu, "Polymer Nanocomposites Based on Polyhedral Oligomeric Silsesquioxanes", Stony Brook University, Stony Brook (2002).
5. Jonathan Chiu, "Cell Behavior in PLLA-based, Nanofibrous Electrospun Scaffolds for Tissue Engineering", Stony Brook University, Stony Brook (2005).
6. Ling Yang, "Flow-Induced Shish-Kebab Precursor Structure in Entangled Polyethylene Melt", Stony Brook University, Stony Brook (2005).
7. Xuming Chen, "Advanced Polymer Fibers/Films Based on Synthetic Nanocomposites and Regenerated Cellulose", Stony Brook University, Stony Brook (2006).
8. Jong Kahk Keum "Probing Flow-induced Crystallization Precursor Structure in Polyolefin Melts by Means of Synchrotron X-rays", Stony Brook University, Stony Brook (2007).
9. Pranav Nawani "Polymer Layered Silicate Nanocomposites: Structure, Morphology, and Properties", Stony Brook University, Stony Brook (2008).
10. Kyunghwan Yoon, "High flux nanofibrous composite membranes for water purifications", Stony Brook University, Stony Brook (2008).
11. Hongwen Zhou, "The Three-Dimensional Structural Evolution of Bone Collagen Maturation and Mineralization", Stony Brook University, Stony Brook (2008).
12. Feng Zuo, "Structure-Property Relationships in Polyolefin Blends and Copolymers", Stony Brook University, Stony Brook, NY (2006).
13. Yimin Mao, "Polymorphism, preferred orientation and morphology of propylene-based random copolymer subjected to external force fields", Stony Brook University, Stony Brook, NY (2011).
14. Ran Wang, "Novel Nanofibrous Membranes for Water Purification", Stony Brook University, Stony Brook, NY (2012).
15. Yang Liu, "Electrospun Nanofibrous Membrane: Studies on Processing Parameters, Pore Sizes and Applications", Stony Brook University, Stony Brook, NY (2012).
16. Xiaowei Li, "Crystallization and structure-properties relationship of polyolefin based polymer under static and flow conditions", Stony Brook University, Stony Brook, NY (2013).
17. Tsung-Ming "Mason" Yeh, "Energy Efficient Ethanol Dehydration Using Nanofibrous Based Membranes", Stony Brook University, Stony Brook, NY (2013).
18. Justin Che, "Synchrotron X-ray Scattering Characterization of Soft Matter Materials: Plastic and Rubber", Stony Brook University, Stony Brook, NY (2013).
19. Xiao Wang, "Thin-film Nanofibrous Composite Membranes by Interfacial Polymerization for Water Purification", Stony Brook University, Stony Brook, NY (2013).
20. Zhe Wang, "Environmental Applications of Porous Polymeric Materials", Stony Brook University, Stony Brook, NY (2014).
21. Rui Yang, "Functionalized Nanofibrous Materials for Water Purification", Stony Brook University, Stony Brook, NY (2014).
22. Ying Su, "Structure Characterization of Cellulose Nanofibers/Microfibrils", Stony Brook University, Stony Brook, NY (2014).
23. Chengbo Zhan, "Structural Characterization of Nanocellulose-Based Composite Materials and Their Water Purification Applications", Stony Brook University, Stony Brook, NY (2019).

M.S. THESIS

1. Bruce X. Fu “Nanoscale Reinforcement of Polyhedral Oligomeric Silsequioxane (POSS) in Polyurethane Elastomer”, Stony Brook University, Stony Brook, NY (2000).
2. Meiki Yu, “Biodegradable Amphiphilic Block Copolymers for Medical Applications”, Stony Brook University, Stony Brook, NY (2001).
3. Charles Chang, “Study of PLGA Based Electrospun Nanofibrous Membranes and Its Medical Applications”, Stony Brook University, Stony Brook, NY (2004).
4. Jong-Khak Keum, “Synchrotron X-ray scattering studies on the nature of flow-induced shish-kebab structure in polyethylene (PE) melt”, Stony Brook University, Stony Brook, NY (2004).
5. Pranav Nawani, “Effects of Transition Metal Ions on Thermal Stability of Organoclays and Polymer Nanocomposites”, Stony Brook University, Stony Brook, NY (2004).
6. Jun Wu, “Biomedical Applications of Poly(ethylene glycol) Derivatives”, Stony Brook University, Stony Brook, NY (2004).
7. Priya Desai, “Investigation of the Thermal Properties of Organically Modified Layered Silicates for Use in Polymer-Clay Nanocomposites”, Stony Brook University, Stony Brook, NY (2006).
8. Lewis Yung, “High performance nanofibrous membranes for nanofiltration prepared by interfacial polymerization with the aid of ionic liquid” Stony Brook University, Stony Brook, NY (2009).
9. Shifeng Han, “Fabrication and Application of Electrospun Core-sheath Fibers”, Stony Brook University, Stony Brook, NY (2009).
10. Yang Liu, “High-Flux Microfiltration Filters Based on Electrospun PVA Nanofibrous Mats”, Stony Brook University, Stony Brook, NY (2009).
11. Mahati Elluru, “Nanostructured Hydrogel Implants for Post Lumpectomy Patients”, Stony Brook University, Stony Brook, NY (2011).
12. Si Hui Guan “Polymers for Novel Applications: I. Hydrogel Implants for Post-Lumpectomy Patients and II. Cellulose Nanofibrous Composite Membrane for Heavy Metal Adsorption”, Stony Brook University, Stony Brook, NY (2012).
13. Zhi Rui Mo, “Interfacial Polymerization on Cellulose Nanofiber-Based Membrane as a New Pathway for Fabrication of Thin Film Nanocomposite Membrane”, Stony Brook University, Stony Brook, NY (2012).
14. Si Hui Guan, “Polymers for Novel Applications: I. Hydrogel Implants for Post-Lumpectomy Patients and II. Cellulose Nanofibrous Composite Membrane for Heavy Metal Adsorption”, Stony Brook University, Stony Brook, NY (2012).
15. Edward Lu “Development of a super-hydrophobic microfiltration filter”, Stony Brook University, Stony Brook, NY (2013).
16. Ritika Joshi, “Extraction of Nanocellulose from a Unique Grass- Spinifex and its Characterization”, Stony Brook University, Stony Brook, NY (2016).
17. Eoghan Connors, “Hollow Fiber Membranes based on Cellulose Nanomaterials for Water Filtration”, Stony Brook University, Stony Brook, NY (2017).
18. Qinyi Fu, “Study of Polyamide Barrier Layers in Reverse Osmosis Membranes”, Stony Brook University, Stony Brook, NY (2017).
19. Acacia Leakey, “Solar-Powered Membrane Distillation for Desalination of Brackish Water: Robust System Design through Thermodynamic Analysis”, Stony Brook University, Stony Brook, NY (2017).
20. Marc Nolan, “Sequential Oxidation of Raw Wood for Increased Carboxylate Concentration with a Study of Adsorption Capabilities”, Stony Brook University, Stony Brook, NY (2019).

5. BOOKS EDITED

1. P. Cebe, B. S. Hsiao and D. Lohse, “Scattering from Polymers: Characterization by X-rays, Neutrons and Light”, ACS Symposium Series Volume 739, Oxford Univ. Press (1999).
2. M. Cipara, O. Puglisi, R. Skomski, F. Jones and B. S. Hsiao, “Degradation Processes in Nanostructured Materials”, MRS Symposium Proceedings, Volume 887 (2005).

6. MISCELLANEOUS (NEWSLETTERS, TRIBUTE AND BOOK REVIEW)

1. B. S. Hsiao, B. Chu and Fengji Yeh, “Advanced Polymers PRT Beamline at X27C”, NSLS July Newsletter, 1-4 (1997).

2. F. Balta-Calleja, B. S. Hsiao and W. Wu, "Dedication to the Memory of Prof. H. Gerhard Zachmann – Preface", *J. Macromol. Sci. – Phys.* B37(4), v-vi (1998).
3. D. K. Schneider, S. H. Chen, M. S. Capel, B. S. Hsiao, G. Kostorz, J. S. Pedersen, P. Timmins, & G. Wignall, "XIth International Conference on Small-Angle Scattering", *J. Appl. Cryst.*, 33, (2000).
4. B. S. Hsiao, S. Z. D. Cheng, C. C. Han and C. Wu, "Tribute for Benjamin Chu", *Macromolecules*, 35, 585-586 (2002).
5. B. S. Hsiao, *Journal of American Chemical Society Book Review on "Polymer Crystallization, The Development of Crystalline Order in Thermoplastic Polymers" by Jerold M. Schultz (University of Delaware)*, 124(24), 7251-7252 (2002).
6. S. Ran, C. Burger, D. Fang, D. Cookson, K. Yabuki, Y. Teramoto, P. M. Cunniff, P. J. Viccaro, B. S. Hsiao, B. Chu, "Structure Formation in High Performance PBO Fibers", *NSLS Activity Report, Science Highlights*, 2, 147-152 (2001).
7. Lei Zhu, Ping Huang, William Y. Chen, Qing Ge, Roderic P. Quirk, and Stephen Z. D. Cheng; Edwin L. Thomas; Bernard Lotz; Benjamin S. Hsiao, Fengji Yeh, and Lizhi Liu "Tailoring Polymer Crystallization in Nanospaces", *NSLS Science Highlights*, July 10 (2002).
8. Shaofeng Ran, Christian Burger, Dufei Fang, Xinhua Zong, Benjamin Chu, Benjamin S. Hsiao, Yasuo Ohta, Kazuyuki Yabuki and Philip M. Cunniff, "A Synchrotron WAXD Study on the Early Stages of Coagulation during PBO Fiber Spinning", *NSLS Science Highlights*, July 23 (2003).
9. Masatoshi Tosaka, Syozo Murakami, Sirilux Poompradub, Shinzo Kohjiya, Yuko Ikeda, Shigeyuki Toki, Igors Sics, Benjamin S. Hsiao, "Orientation and crystallization of natural rubber network as revealed by WAXD using synchrotron radiation", *NSLS Science Highlights*, August 13 (2004).
10. Ling Yang, Rajesh H. Somani, Igors Sics, Benjamin S. Hsiao, Rainer Kolb, Hitesh Fruitwala and Christine Ong, "Shear-Induced Crystallization Precursor Studies in Model Polyethylene Blends by In-Situ Rheo-SAXS and Rheo-WAXD", *NSLS Science Highlights*, October 1 (2004).
11. Benjamin S. Hsiao, Lin Yang, Elaine DiMasi and Ron Pindak, "Workshop on Soft Matter and Biomolecular Materials: X-ray Scattering Enabled by High Brightness Beamlines", *Synchrotron Radiation News*, 19(6), 43 (2006).
12. D. Y. Zhao, M. Jaroniec and B. S. Hsiao, "Editorial for themed issue on Advanced Materials in Water Treatments", *Journal of Materials Chemistry*, 20(22), 4476-4477 (2010).
13. Benjamin S. Hsiao, Samuel Chigome and Nelson Torto, "Materials Research in Africa: A Thirst for Advancement", *News and Views, Nature Materials*, 17, 213-215 (2018).
14. "Sustainable water purification using biomass", *Research Outreach*, 107, 34-37 (2019), <https://researchoutreach.org/articles/sustainable-water-purification/>
15. "Illuminating Water Filtration Could Reduce The Energy Cost Of Desalination", *Forbes*, April 11, 2019, <https://www.forbes.com/sites/natalieparletta/2019/04/11/illuminating-water-filtration-could-reduce-the-energy-cost-of-desalination/#2ed2a8bf2984>
16. "Illuminating Water Filtration", Brookhaven National Laboratory, News Release, March 27, 2019, <https://www.bnl.gov/newsroom/news.php?a=114420>
17. "Efficient Removal of Arsenic Using Zinc Oxide Nanocrystal Decorated Regenerated Microfibrillated Cellulose Scaffolds", *Advances in Engineering*, <https://advanceseng.com/efficient-removal-arsenic-using-zinc-oxide-nanocrystal-regenerated-microfibrillated-cellulose/>
18. "Chemistry: Sustainable water purification solutions from underutilised biomass", October issue of *Open Access Government*, 249-251 (2019), <http://edition.pagesuite-professional.co.uk/html5/reader/production/default.aspx?pubname=&edid=0d5ad7a6-fb33-40ea-b275-9a1234b94ddb>
19. "Making nanocellulose filters for water purification with underutilised biomass", January issue of *Open Access Government*, 250-251 (2020), <https://edition.pagesuite-professional.co.uk/html5/reader/production/default.aspx?pubname=&edid=e7e65f16-14bb-415e-a4a7-84c443d8db40>

7. NON-REFEREED ARTICLES IN CONFERENCE PROCEEDINGS

1. B. S. Hsiao, E. T. Samulski and M. T. Shaw, "A High Pressure Apparatus Based on an Instron Capillary Rheometer", *SPE ANTEC Proc.*, 32, 424-427 (1986).
2. B. S. Hsiao, M. T. Shaw and E. T. Samulski, "Characterization of a High Pressure Phase of a Liquid Crystal Polymer", *SPE RETEC Proc.*, 35-42 (1987).
3. S. Rojstaczer, B. S. Hsiao and R. S. Stein, "Texture Formation in Thermotropic Liquid Crystalline Polymers", *ACS Polym. Prep.*, 29(1), 486-487 (1988).

4. B. S. Hsiao, R. S. Stein and H. H. Winter, "Rheo-Optical Studies of A Thermotropic Liquid Crystalline Polyester", ACS Polym. Prep., 30(2), 526-527 (1989).
5. B. B. Sauer, P. Avakian, H. Starkweather and B. S. Hsiao, "Thermally Stimulated Current Studies of Poly(aryl ether ketone) and Polycarbonate", ACS Polym. Prep., 31(2), 623-624 (1990).
6. E. J. H. Chen and B. S. Hsiao, "The Effects of Transcrystalline Interphase in Advanced Polymer Composites", The Textile Institute Annual World Conf. Proc., 185-197 (1990).
7. B. S. Hsiao, I. Y. Chang and B. B. Sauer, "Novel Crystallization Kinetics Modeling of Advanced Polymer Composites", SPE ANTEC Proc., 2084-2087 (1991).
8. I. Y. Chang and B. S. Hsiao, "Thermal Properties of High Performance Thermoplastic Composites Based on Poly(ether ketone ketone) (PEKK)", 36th SAMPE Symp. Proc., 26, 1587-1601 (1991).
9. B. S. Hsiao and I. Y. Chang, "Thermal Behavior of High Performance Poly(aryl ether ketone ketone), PEKK", ACS Polym. Prep., 32(2), 264-266 (1991).
10. B. S. Hsiao, "Crystallization Induced Gelation in Poly(aryl ether ketones)", ACS Polym. Prep., 32(3), 471-472 (1991).
11. K. H. Gardner, B. S. Hsiao and R. R. Matheson, "Structure, Crystallization and Melting of Poly(aryl ether ketone ketone) (PEKK). Part I: Structure", ACS Polym. Prep., 32(3), 255-257 (1991).
12. B. S. Hsiao, K. H. Gardner and R. R. Matheson, "Structure, Crystallization and Melting of Poly(aryl ether ketone ketone) (PEKK). Part II: Crystallization and Melting", ACS Polym. Prep., 32(3), 258-260 (1991).
13. B. B. Sauer, P. Avakian, H. W. Starkweather and B. S. Hsiao, "Interpretation of Relaxation Spectra Obtained From Thermal Stimulated Currents", NATAS Proc. (ed. M. Y. Keating), 17-22 (1991).
14. B. S. Hsiao and B. B. Sauer, "Crystallization Effect on Miscibility and Morphology of Poly(aryl ether ketone) and Poly(ether imide) Blends", SPE ANTEC Proc., 578 (1992).
15. R. G. Kander, R. K. Verma and B. S. Hsiao, "A Study of the Processing Structure Property Relationship in Poly(aryl ether ketone ketone)", SPE ANTEC Proc., 769 (1992).
16. B. S. Hsiao, K. H. Gardner, D. Q. Wu, B. Liang and B. Chu, "Time-Resolved X-ray Study of Crystallization and Melting in Poly(aryl ether ether Ketone)", ACS Polym. Prep., 33(1), 265 (1992).
17. D. Q. Wu, B. Liang, B. S. Hsiao, Y. Li and B. Chu, "Synchrotron SAXS Studies of NAFION Morphology", ACS Polym. Prep., 33(1), 350 (1992).
18. K. H. Gardner, B. S. Hsiao and K. L. Faron, "Diffraction Studies of Polymorphism in Poly(aryl ether ketones)", ACS Polym. Prep., 33(1), 307 (1992).
19. K. H. Gardner, B. S. Hsiao and K. L. Faron, "Neutron Study of Selectively Deuterated Poly(aryl ether ketone ketone)", ACS PMSE Proc., 67, 216 (1992).
20. B. S. Hsiao, B. B. Sauer and J. G. Van Alsten, "Crystallization and Morphology Relationship in Miscible Poly(aryl ether ketones)/ Poly(ether imide) Blends", ACS Polym. Prep., 33(2), 434 (1992).
21. X. Lu, R. A. Weiss, B. S. Hsiao, D. Q. Wu, Y. J. Li and B. Chu, "Microstructure of Blends of Block Copolymer Ionomers and Poly(caprolactone) and Poly(styrene-co-4-vinyl pyridene)", ACS Polym. Prep., 33(2), 598 (1992).
22. B. S. Hsiao, K. H. Gardner, W. Wang and J. M. Schultz, "Crystallization and Morphology Studies of Poly(aryl ether ketone) Blends", SPE ANTEC Proc., 1004 (1993).
23. R. K. Verma, R. G. Kander, B. S. Hsiao and R. B. Croman, "A New Damage Evaluation Model for Composite Materials", SPE ANTEC Proc., 5266 (1993).
24. B. B. Sauer and B. S. Hsiao, "Effects of Heterogeneous Distribution of Lamellar Stacks in Semi-Crystalline Polymers on Amorphous Relaxations", ACS PMSE Proc., 69 (1993).
25. H. Ade, B. S. Hsiao, G. Mitchell, S. Cameron and S. Cosstellio, "X-ray Microscopy in of Polymer Science: Prospects of a New Imaging Technique", Proc. 51st Annual Meeting of Microscopy Society of America, 902 (1993).
26. B. S. Hsiao and K. H. Gardner, "Crystallization Behavior of Poly(aryl ether ketone ketone) Copolymers", NATAS Proc., 394-403 (1993).
27. B. S. Hsiao, A. D. Kennedy, R. A. Leach, R. Barton, Jr., S. Seifert and H. G. Zachmann, "Structure Development During Fiber Processing Via Synchrotron X-ray Measurements", IUPAC, International Symp. of Functional and High Performance Polymers, Polym. Symp. Prep., 399-400 (1994).
28. H. Ade, A. P. Smith, B. Wood, I. Plotzker, B. Hsiao, and Subramoney, "X-ray Microscopy of Polymeric Materials and Sample Preparation Issues", Microbeam Anal., Proc. Annu. Conf. Microbeam Anal. Soc., 141-142 (1995),

29. P. Harney, B. S. Hsiao, A. D. Kennedy, B. Chu, "Synchrotron SAXS Studies of Glassy PET Fiber During Deformation", ACS Polym. Prep., 36(1), 308 (1995).
30. B. Sauer, B. S. Hsiao, "Restricted Motions in Semi-Crystalline Polymers and Blends", ACS Polym. Prep., 36(1), 261 (1995).
31. B. S. Hsiao, A. D. Kennedy, R. A. Leach, R. Barton, Jr., R. Harlow, R. Ross, S. Seifert and H. G. Zachmann, "In-Situ Structural Characterization During Fiber Melt Spinning Via Synchrotron X-ray Diffraction Measurement", ACS Polym. Prep., 36(1), 340 (1995).
32. B. S. Hsiao, B. B. Sauer, R. A. Leach, B. Chu, P. Harney, H. G. Zachmann and S. Seifert, "New Insight Of Isothermal Melt Crystallization Via Time-Resolved Simultaneous SAXS/WAXD Measurements", ACS Polym. Prep., 36(1), 342 (1995).
33. B. S. Hsiao, R. A. Leach, A. D. Kennedy, K. H. Gardner, C. Gochanour, A. Biswas, S. Seifert and H. G. Zachmann "Structural Study of Semi-Crystalline Fibers During Deformation Via Synchrotron SAXS Technique", ACS Polym. Prep., 36(1), 321 (1995).
34. R. Verma, A. Biswas and B. S. Hsiao, "Small Angle X-ray Scattering for Lamellar Semi-Crystalline Systems: Some Novel Data Analysis Techniques", ACS Polym. Prep., 36(1), 348 (1995).
35. R. Verma, B. Chu, B. S. Hsiao and H. Marand, "Real Time SAXS Studies of Lamellar Level Morphological Development in PEEK", ACS Polym. Prep., 36(1), 346 (1995).
36. S. Z. D. Cheng, S. W. Lee, E. Von Meerwall and B. S. Hsiao, "Molecular Shape Effects on the Crystallization, Melting and Morphology of Star Poly(ethylene oxide) Fractions", ACS Polym. Prep., 36(1), 259 (1995).
37. R. M. Ho, S. Z. D. Cheng, B. S. Hsiao and K. H. Gardner, "Crystal Morphology and Phase Identifications in Poly(aryl ether ketone)s and Their Copolymers", ACS Polym. Prep., 36(1), 338 (1995).
38. R. Verma, B. S. Hsiao and A. Biswas, "Analysis of SAXS Data from Semicrystalline Ionomeric Systems", ACS Polym. Prep., 37(1), 415-417 (1996).
39. W. Wang, J. M. Schultz and B. S. Hsiao, "Crystallization Induced Phase Separation in PEEK/PEKK Blends", Proceeding of Composites'96 and Oriented Polymers Symposium, Boucherville, Quebec, Canada, 452-456 (1996)
40. D. Dean, R. Register, L. Rebenfeld and B. Hsiao, "Investigation of Transcrystalline Interface in Fiber Reinforced Polypropylene Composites", AICHE/PPS Topical Conference on "Processing, Structure and Properties of Polymeric Materials" Preprint,, 203-205 (1996).
41. B. S. Hsiao, A. D. Kennedy and R. A. Leach, "Structure and Morphology Changes During Fiber Deformation via On-line X-ray Scattering Techniques", AICHE/PPS Topical Conference on "Processing, Structure and Properties of Polymeric Materials" Preprint, 249-251 (1996).
42. D. Dean, R. Register, L. Rebenfeld and B. Hsiao, "Quantification of Matrix Molecular Orientation in Fiber-Reinforced Polypropylene Composites Containing a Transcrystalline Layer", ACS POLY Preprint,, 38(2), 48-49 (1997).
43. F. Yeh, B. S. Hsiao, B. Chu and B. Sauer, "Synchrotron X-Ray Scattering Applications in Crystallization and Deformation of Polymers", SPE ANTEC Proc. 2052-2055 (1998).
44. W. D. Liu, H. L. Yang, B. S. Hsiao and R. S. Stein, "Real Time Crystallization and Melting Study of Ethylene Based Copolymers", ACS PMSE Preprint, 350-351 (1998).
45. F. Yeh, B. Hsiao, B. Sauer, "Deformation-Induced Structural Changes in Poly(urethaneurea) Film", ACS PMSE Preprint, 332-333 (1998).
46. S. Kim, Z. Wang, R. A. Phillips, F. Yeh and B. S. Hsiao, "Morphology Development in Polypropylene Homopolymer Tacticity Mixtures: Isotactic/Syndiotactic Blends", ACS PMSE Preprint, 324-325 (1998).
47. B. S. Hsiao, X. Fu, H. White, M. Rafailovich, P. T. Mather, K. P. Chaffee, H. Jeon, J. D. Lichtenhen and J. Schwab, "Structural Development during Deformation of a Nano-Reinforced Poly(urethane) with Polyhedral Oligomeric Silsesquioxane (POSS)" ACS PMSE Preprint, 389-390 (1998).
48. R. A. Phillips, Z. G. Wang and B. S. Hsiao, "Morphology Development in Polypropylene Homopolymer Tacticity Mixtures: Isotactic/Atactic Blends", ACS PMSE Preprint, 295-296 (1998).
49. Z. G. Wang, B. S. Hsiao, B. B. Sauer and W. G. Kampert, "The Nature of Secondary Crystallization in Poly(ethyleneterephthalate)" ACS PMSE Preprint, 320-321 (1998).
50. J. Lopez, Z. G. Wang, B. Hsiao and P. Armistead, "Dynamic Structure Development during Isothermal Crystallization and Melting of Linear Polyethylenes", ACS PMSE Preprint, 340-341 (1998).
51. S. Z. D. Cheng, E. Chen, G. Xue, S. Lee, A. Zhang, B. Moon, H. Lin, F. Harris, B. S. Hsiao and F. J. Yeh, "Effect of Conformational Defect in Low Molecular Weight PEO fraction on Crystallization and Phase Behavior", ACS PMSE Preprint, 348-349 (1998).

52. E. Chen, B. S. Moon, F. W. Harris, S. Z. D. Cheng, B. S. Hsiao and F. Yeh, "Melting and Annealing Behavior of Non-Integral Folding Chain Crystals of Low Molecular Weight Two-Arm Poly(Ethylene Oxide) Fractions Crystallized from Melt", Proceedings of the Twenty-Sixth Conference of the North American Thermal Analysis Society, 169-174 (1998).
53. J. M. Samon, J. M. Schultz, B. S. Hsiao, "Study of the Cold Drawing of Nylon 6 Fiber by Simultaneous In-Situ Small- and Wide-Angle X-ray Scattering Techniques", AIChE Preprint, in press (1998).
54. H. Yang, B. Hsiao, B. Landes, R. Bubeck and Y. B. Huang, "Crystallization Study of Syndiotactic Polystyrene via Time-Resolved X-ray Scattering and Diffraction Methods", ACS PMSE Proc., 285-286 (1999).
55. Z. G. Wang, B. S. Hsiao, C. Kopp, E. B. Sirota, P. Agarwal and S. Srinivas, "Probing the Early Stages of Polymer Crystallization by Simultaneous Small- and Wide-Angle X-ray Scattering and Laser Light Scattering", ACS PMSE Proc, 355-356 (1999).
56. Y. L. Loo, R. A. Register and B. S. Hsiao, "The Melting of Secondary Polyethylene Crystals in a Slow Cooled Ethylene-Methacrylic Acid Ionomer" ACS PMSE Proc, 294-295 (1999).
57. W. Liu, B. S. Hsiao, R. S. Stein, "Real Time Crystallization and Melting Study of Metallocene-Based Polyethylene Copolymers by SAXS, WAXD and DSC Techniques", ACS PMSE Proc, 363-364 (1999).
58. Z. G. Wang, B. S. Hsiao, B. B. Sauer, H. Chang and J. M. Schultz, "Correct Determination of Crystal Lamellar Parameters in Poly(ethylene terephthalate) by Small-Angle X-ray Scattering", ACS PMSE Proc, 283-284 (1999).
59. J. A. Kornfield, G. Kumaraswamy, P. Wang, R. K. Verma, F. Yeh and B. S. Hsiao, "Effect of Shear History on Crystallization of Isotactic Polypropylene", ACS PMSE Proc, 326-327 (1999).
60. B. B. Sauer, B. S. Hsiao and Z. G. Wang, "Morphological Changes During Crystallization and Melting of Polymers Studied by Synchrotron X-ray and Modulated DSC", ACS PMSE Proc, 361-362 (1999).
61. B. S. Hsiao, J. M. Samon, J. M. Schultz, N. Stribeck and I. Gurke, "Effect of Orientation On Polymer Crystallization - A Study of Melt Spinning Of Poly(Vinylidene fluoride) By In-Situ Synchrotron X-Ray Scattering", EPS '99, European Conference on Macromolecular Physics, Conference Proceedings, 23H, 12-15 (1999).
62. R. A. Vaia, D. Lincoln, Z.-G. Wang, B. S. Hsiao and R. Krishnamoorti, "Characterization of Mesoscopic Structure of Polymer-Layered Silicate Nanocomposites and Impact on Polymer Crystallinity", ACS PMSE Proc, 82, 257-258 (2000).
63. B. X. Fu, W. Zhang, B. S. Hsiao, G. Johansson, B. B. Sauer, S. Phillips, R. Blanski, M. Rafailovich and J. Sokolov, "Synthesis and Characterization of Novel Segmented Poly(urethanes) containing Polyhedral Oligomeric Silsesquioxanes (POSS) Nanostructured Molecules", ACS Polym. Prep., 384-385 (2000).
64. S. Phillips, R. I. Gonzalez, K. P. Chaffee, T. S. Haddad, G. B. Hoflund, B. S. Hsiao and B. X. Fu, "Remarkable AO Resistance of POSS Inorganic/Organic Polymers", 45th International SAMPE Symposium, 35, 1921-1932 (2000).
65. D. Crawford, N. Beck Tan, J. Sloan, G. Napadensky, D. A. Mountz, K. A. Mauritz, K. S. Laverdure, S. P. Gido, W. Liu and B. S. Hsiao, "Morphology of Novel Tri-block Copolymers for Membrane Applications", ACS PMSE, 83, 473-474 (2000).
66. G. Kumaraswamy, J. A. Kornfield, F. Yeh and B. S. Hsiao, "The Role of Melt Dynamics in the Crystallization of Isotactic Polypropylene", ACS PMSE, 83, 555-556 (2000).
67. L. Zhu, S. Z. D. Cheng, Q. Ge, R. P. Quirk, B. S. Hsiao and F. J. Yeh, "Molecular Ordering within Ordered Supramolecular Structure", ACS Polym. Prep. 41(2), 1159-1160 (2000).
68. Derek M. Lincoln, Richard A. Vaia, Zhi-Gang Wang, Benjamin S. Hsiao and Ramanan Krishnamoort, "Structure Model for Nylon 6/Montmorillonite Nanocomposites", ACS Polym Prep. 42(2), 55-56 (2001).
69. Rajesh H. Somani, Christian Burger, Benjamin S. Hsiao and Richard S. Stein "Scattering from precursors of primary nucleation in sheared isotactic polypropylene melt", ACS PMSE Preprint, 85, 429-430 (2001).
70. X. Fu, L. Z. Liu and B. S. Hsiao, "Synchrotron X-ray Study of Ethylene-Propylene Copolymer under Deformation", ACS PMSE Preprint, 85, 326-327 (2001).
71. George Z.G. Wang, Howard Wang, K Shimizu, Charles C Han and Benjamin S Hsiao "Early stage crystallization in poly (ethylene-co-hexene) by SAXS/WAXD, DSC, OM and AFM", ACS PMSE Preprint, 85, 435-436 (2001).
72. Jaedong Cho, James T. Garrett, Ruijian Xu, Fengji Yeh, Benjamin S. Hsiao, J. S. Lin, and James Runt, "Crystallization and Structure Formation of Strongly-Interacting Polymer Mixtures: Poly(ethylene oxide) and Styrene-Hydroxystyrene Random Copolymers", ACS PMSE Preprint, 85, 431-432 (2001).

73. Mikhail Y. Gelfer, Cristian Burger, Benjamin S. Hsiao, Benjamin Chu, Hyun Hoon Song, Carlos A. Avila-Orta, Mayu Si, Miriam H. Rafailovich, and Lizhi Liu, "Phase Transition in Organoclays", ACS PMSE Preprint, 85, 16-17 (2001).
74. Christian Burger, Li-Zhi Liu, Benjamin S. Hsiao, Benjamin Chu, Jonathan Hanson, Tatsu-yuki Hori, and Melvin J. Glimcher. "Synchrotron SAXS/WAXS study of the composite nature of bone", ACS PMSE Preprint, 85, 169-170 (2001).
75. Shaofeng Ran, Zhigang Wang, Christian Burger, Benjamin Chu and Benjamin S. Hsiao, "Strain-induced crystallization from glassy state of PET film: in-situ X-ray diffraction studies", ACS PMSE Preprint, 85, 656-666 (2001).
76. Howard Wang, George Z. G. Wang, Charles C. Han, and Benjamin S. Hsiao. "Simultaneous SAXS and WAXS study of the isothermal crystallization in polyolefin blends", ACS PMSE Preprint (2001), 85, 427-428.
77. M. Y. Gelfer, C. Burger, B. S. Hsiao, B. Chu, H. H. Song, C. A. Avila-Orta, L. Liu, F. Yeh, M. Si, M. Rafailovich and A. H. Tsou, "Manipulating the microstructure and rheology in polymer-organoclay composites", ACS Polym. Preprint, 42(2), 79-80 (2001).
78. Stephen Z. D. Cheng, Lei Zhu, Qing Ge, Roderic P. Quirk, Benjamin S. Hsiao, "Confinement of a Caged Structure on Polymer Crystallization in a PEO-b-PS Diblock Copolymer having Hexagonal Perforated Layers", Proceedings of the NATAS Annual Conference on Thermal Analysis and Applications, 29th, 138-149 (2001).
79. Rajesh H. Somani, Aurora Nogales, Srivatsan Srinivas, Hitesh Fruitwala, Andy H. Tsou and Benjamin S. Hsiao, "Orientation-induced crystallization in polymers - a case study of isotactic polypropylene in shear", International Conference on flow Induced Crystallization of Polymers Proceedings, Salerno, Italy, 21-26 (2001).
80. M. Gelfer, H. H. Song, L. Liu, C. Avila, L. Yang, M. Si, B. Hsiao, B. Chu, M. Rafailovich, A. Tsou, "Structural and Rheological Investigation of Nanocomposites Prepared by Melt-Blending of Ethylene Co-Polymers with Organoclays" Nanocomposite Preprint, Montreal, Canada (2001).
81. Shaofeng Ran, Benjamin S. Hsiao and Benjamin Chu, "A Novel Diffraction Analysis for Estimate of Mesophase in Crystalline Polymer Fibers", ACS POLY Preprint (2002), 34(1), 244-245.
82. Lei Zhu, Ping Huang, Yan Chen, Stephen Z. D. Cheng, Qing Ge, Roderic P. Quirk, Benjamin S. Hsiao, Fengji Yeh, and Lizhi Liu, "Dislocation-controlled hexagonally perforated layer phase in a PEO-b-PS diblock copolymer", ACS POLY Preprint (2002), 43(1), 226-227.
83. Lei Zhu, Stephen Z. D. Cheng, Yan Chen, Ping Huang, Qing Ge, Roderic P. Quirk, Benjamin S. Hsiao, Fengji Yeh, and Lizhi Liu, "Nano-tailored polymer crystallization in the HPL phase of a PS-b-PEO diblock copolymer", ACS POLY Preprint (2002), 43(1) 221-222.
84. Li-Zhi Liu, Benjamin S. Hsiao, Xuan Fu, Shaofeng Ran, Andy H. Tsou, Shigeyuki Toki and Benjamin Chu, "Crystalline Morphology and Elastic Recovery of Semi-crystalline Ethylene-Propylene Elastomer", ACS PMSE Preprint (2002), 86, 390-391.
85. George Zhigang Wang, Edward Balizer, Benjamin S. Hsiao and Charles H. Han, "Structure Evolution during Ferroelectric Phase Transition In A Vinylidene Fluoride/Trifluoroethylene Copolymer", ACS POLY Preprint (2002), 43(1) 203-204.
86. Zhigang Wang, Howard Wang, Charles C. Han, Dilip Gersappe and Benjamin S. Hsiao, "An In-Situ Small-Angle X-Ray Scattering Study of Crystallization in Poly(Ethylene/Hexene) Copolymer Subjected to Step Shear", ACS POLY Preprint (2002), 43(1), 271-272.
87. Christian Burger, Shaofeng Ran, Dufei Fang, David Cookson, Yoshihiko Teramoto, Philip M. Cunniff, P. James Viccaro, Benjamin S. Hsiao and Benjamin Chu, "Structure Formation in PBO Fibers and the SAXS Four-Point Pattern", ACS POLY Preprint (2002), 43(1), 250-251.
88. M. Y. Gelfer, B. S. Hsiao, Z. Wang, C. Burger, B. Chu, I. Sics, W-J. Choi "Control of Structure and Property in Nanocomposites Comprising Semicrystalline Polymer Matrix and Clay", ACS PMSE Preprint (2002), 86, 427-428.
89. Benjamin S. Hsiao, Rajesh H. Somani, Ling Yang, Richard S. Stein, Hitesh Fruitwala, Pawan Agarwal and Andy H. Tsou, "Orientation-Induced Crystallization In Isotactic Polypropylene", SPE ANTEC Proceeding, 60(2), 1926-1930 (2002).
90. Zhiyong Xia and Hung-Jue Sue, Zhigang Wang and Benjamin S. Hsiao, "Application of Small-Angle X-Ray Scattering to the Lamellar Thickness Analysis in Semicrystalline Polymers", SPE ANTEC Proceeding, 60(2), 1941-1944 (2002).

91. Benjamin S. Hsiao, Rajesh H. Somani, Ling Yang, "Shear-Induced Crystallization Precursor Structures in Polymer Melt", Proceedings of International Symposium on Polymer Crystallization, Mishima, Shizuoka, Japan, 50-53 (2002).
92. S. Toki, I. Sics, S. Ran, L. Liu and B. S. Hsiao, Syozo Murakami, Kazunobu Senoo and Shinzo Kohjiya, "New Insights into Structural Developments in Natural Rubber during Uniaxial Deformation by *In-Situ* Synchrotron X-Ray Diffraction", ACS Rubber Division Preprint, Paper No.47, 693-701 (2002).
93. Shashi K. Gupta, Joseph J. Schwab, Andre Lee, Bruce X. Fu and Benjamin S. Hsiao, "POSSTM Reinforced Fire Retarding Epoxy Resins", International SAMPE Proceedings, 47, 1517-1526 (2002).
94. Xinhua Zong, Dufei Fang, Kwangsok Kim, Shaofeng Ran, Benjamin S. Hsiao, Benjamin Chu, Collin Brathwaite, Sean Li and Elliot Chen "Nonwoven Nanofiber Membranes of Poly(lactide) and Poly(glycolide-co-lactide) via Electrospinning and Their Applications for Anti-Adhesions", ACS POLY Preprint, 43(2) 659-660 (2002).
95. Y. K. Luu, K. Kim, B. S. Hsiao, B. Chu and M. Hadjiargyrou, "Characterization of an Electrospun Poly(lactide-co-glycolide) and Block Copolymer-based, Nanostructured Matrix for DNA Delivery", 2002 EMBS/BMES Final Program and Abstract Book, Track 3.2.4, p.171
96. J. Chiu, K. Kim, S. Zhong, B. S. Hsiao, B. Chu, M. Hadjiargyrou "Development of a Cell-Delivery Vehicle Derived from Electrospun Non-Woven Nanostructured Membranes" 2002 EMBS/BMES Final Program and Abstract Book, Track 4.3.2, p.196.
97. Shigeyuki Toki, Igors Sics, Shaofeng Ran, Lizhi Liu and Benjamin S. Hsiao, "Structural Developments in Natural and Synthetic Poly-isoprene Rubbers during Uniaxial Deformation by *In-Situ* Synchrotron X-Ray Diffraction", ACS Rubber Division Preprint, Paper No.85, 1488-1503 (2002).
98. Huang, Ping; Zhu, Lei; Jing, Jiaokai; Chen, Yan; Cheng, Stephen Z. D.; Guo, Ya; Ge, Qing; Quirk, Roderic P.; Hsiao, Benjamin S.; Yeh, Fengji; Liu, Lizhi. "Phase morphology and crystal orientation changes in nano-confined lamellae of PEO-b-PS block copolymer", Proceedings of the NATAS Annual Conference on Thermal Analysis and Applications (2002), 30th, 225-230.
99. Zhu, Lei; Mimnaugh, Brion R.; Huang, Ping; Chen, William Y.; Ge, Qing; Quirk, Roderic P.; Cheng, Stephen Z. D.; Thomas, Edwin L.; Lotz, Bernard; Hsiao, Benjamin S.; Yeh, Fengji; Liu, Lizhi. "Hard and soft confinement effects on nano-confined polymer crystallization in cylindrical mesophases", Proceedings of the NATAS Annual Conference on Thermal Analysis and Applications (2002), 30th, 77-81.
100. Shigeyuki Toki, Igors Sics, Benjamin S. Hsiao, Syozo Murakami, Masatoshi Tosaka, Shinzo Kohjiya, Sirilux Poompradub and Yuko Ikeda "Structural Developments in Synthetic Rubbers during Uniaxial Deformation by *In-Situ* Synchrotron X-Ray Diffraction", On International Seminar on Elastomer (ISE), (2003)
101. Shigeyuki Toki, Igors Sics, Shaofeng Ran, Lizhi Liu, Benjamin S. Hsiao, Syozo Murakami, Masatoshi Tosaka, Shinzo Kohjiya, Sirilux Poompradub and Yuko Ikeda, "Strain-induced molecular orientation and crystallization in natural and synthetic rubbers under uniaxial deformation by in-situ synchrotron X-ray study", ACS Rubber Division Preprint, Paper No.25 (2003).
102. Shaofeng Ran, Dufei Fang, Shigeyuki Toki, Benjamin S. Hsiao and Benjamin Chu, "Combination of Raman Spectroscopy and Synchrotron X-ray Diffraction for in-situ Studies of iPP Fibers under Deformation", ACS PMSE Preprints, 88, 322 (2003).
103. Daisuke Kawakami, Bruce X. Fu, Shaofeng Ran, Igors Sics and Benjamin S. Hsiao, "Structural Study of Amorphous Poly (Ethylene Terephthalate) Under Uniaxial Deformation via Synchrotron X-Ray Diffraction Technique", ACS POLY Preprints, 44(1), 1043-1044 (2003).
104. Daniel Dikovskiy, Gad Marom, Carlos Avila-Orta, Rajesh Somani, Ling Yang and Benjamin Hsiao, "Orientation of Shear Flow Induced Crystallinity in Short UHMWPE and Aramid Fiber Reinforced iPP Composites", International Conference on Science and Technology of Composite Materials (COMAT) Conference Proceeding (2003).
105. Shigeyuki Toki, Igors Sics, Benjamin S. Hsiao, Syozo Murakami, Masatoshi Tosaka, Sirilux Poompradub and Shinzo Kohjiya, "Structural Developments in Synthetic Rubbers during Uniaxial Deformation by In-Situ Synchrotron X-Ray Diffraction", International Seminar on Elastomer, Conference Proceeding (2003).
106. Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, "Multiple-Jet Electrospinning of Non-Woven Nanofiber Articles", ACS POLY Preprints, 44(2), 59-60 (2003).
107. Rajesh H. Somani, Ling Yang, Benjamin S. Hsiao, Pawan K. Agarwal, Aspy Mehta, Weiquing Weng, "Effects of long chain branching in polypropylene on shear-induced crystallization", ACS POLY Preprints, 44(2), 18-19 (2003).

108. Xinhua Zong, Kwangsok Kim, Jonathan Chiu, Benjamin S. Hsiao, Benjamin Chu, Sean Li, Barbara Garlick, Collin Brathwaite, Thomas Zimmerman and Dufei Fang, "Prevention of post-surgical adhesions using electrospun bioabsorbable non-woven nanofiber membranes", ACS POLY Preprints, 44(2), 89-90 (2003).
109. X. Zong, H. Bien, C.Y. Chung, L. Yin, K. Kim, D.F. Fang, B. Chu, B. S. Hsiao and E. Entcheva, "Electrospun Non-Woven Membranes as Scaffolds for Heart Tissue Constructs", ACS POLY Preprints, 44(2), 96-97 (2003).
110. Kwangsok Kim, Charles Chang, Xinhua Zong, Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, "The incorporation of an antibiotic drug in electrospun poly(lactide-co-glycolide) non-woven nanofiber scaffolds", ACS POLY Preprints, 44(2), 98-99 (2003).
111. Chang Seoul, Igors Sics, Benjamin Chu and Benjamin S. Hsiao, "Deformation Study of Melt-Pressed Ultrahigh Molar Mass Polyethylene Films", ACS POLY Preprints, 44(2), 914-915 (2003).
112. Lei Zhu, Lu Sun, Qing Ge, Roderic P. Quirk, Benjamin S. Hsiao, Carlos A. Avila-Orta, and Igors Sics, "Comparison of crystallization kinetics in nanoconfined cylinder and double gyroid phases", ACS POLY Preprints, 44(2), 729-730 (2003).
113. Daisuke Kawakami, Shaofeng Ran, Igors Sics, Carlos Avila-Orta, Benjamin Chu and Benjamin S. Hsiao "A Structural Study Of Amorphous Poly(Ethylene Terephthalate) Under Extensional Deformation By X-ray Diffraction And Raman Spectroscopy", ACS PMSE Preprints, 89, 712-713 (2003).
114. Igors Sics, Carlos Avila-Orta, Jong Kahk Keum, Ling Yang, Rajesh Somani, Christian Burger, Shaofeng Ran, Benjamin Chu, Benjamin Hsiao, David Cookson, Dave Schultz, Lee Myungae and P. James Viccaro, "Elongation-induced crystalline microstructures in iPP and iPP/UHMWPE blend during fiber spinning" ACS PMSE, 89, 592-593 (2003).
115. Shaofeng Ran, Christian Burger, Igors Sics, Kyunghwan Yoon, Dufei Fang, Kwangsok Kim, Jong Kahk Keum, Benjamin Hsiao, Benjamin Chu, David Cookson, Dave Shultz, Myungae Lee, Jim Viccaro and Yasuo Ohta "In-Situ Synchrotron SAXS/WAXD of Melt Spinning of Modified Carbon Nanofiber and Polypropylene Nanocomposite" ACS PMSE, 89, 735,736 (2003).
116. Alexander Fadeev, Sue D'Andrea, Mikhail Y. Benjamin Hsiao and Andy H. Tsou, "Highly-Ordered Thermally Stable Nano-Layered Materials Manufactured From Apatite Mineral", ACS PMSE Preprints, 89, 269-270 (2003).
117. H. L. Jiang, D. F. Fang, B. Hsiao, B. Chu and W. Chen, "Hydrophobic/Hydrophilic Electrospun Membranes for Biomedical Applications", ACS PMSE Preprints, 89, 350 (2003)
118. Shigeyuki Toki, Li-Zhi Liu, Igors Sics, Benjamin S. Hsiao and Andy H. Tsou, "Structure Changes During Uniaxial Deformation of Ethylene-Propylene Elastomer by *In-Situ* Synchrotron X-Ray Studies", International SAMPE Symposium Proceeding, 341 (2003).
119. M. Gelfer, C. Burger, C. Avila, L. Yang, I. Sics, B. S. Hsiao, B. Chu, M. Si, M. Rafailovich, B. Saur "Structural and Rheological Investigation of Nanocomposites Prepared by Melt-Blending of Ethylene-Vinyl Based Copolymers with Organoclays" Nanocomposite Preprint, Montreal, Canada (2003)
120. Shigeyuki Toki, Igors Sics, Li-Zhi Liu, Benjamin S. Hsiao, Andy H. Tsou and Sudhin Datta, "Structure Changes during Uniaxial Deformation of Ethylene-Propylene Elastomer by In-Situ Synchrotron Wide-Angle X-Ray Diffraction Studies", ACS Rubber Division Preprint, 2055-2074 (2003).
121. Tosaka, M.; Kohjiya, S.; Murakami, S.; Poompradub, S.; Ikeda, Y.; Toki, S.; Sics, I.; Hsiao, B. "Effect of network-chain length on strain-induced crystallization of NR and IR vulcanizates.", American Chemical Society Rubber Division Preprint, 1171-1189 (2003).
122. Daisuke Kawakami, Benjamin S. Hsiao, Shaofeng Ran, Christian Burger and Igors Sic, "Structural formation of amorphous poly(ethylene terephthalate) during uniaxial deformation above and below glass temperature", SPE ANTEC Proc., 62nd(Vol. 2), 1974-1978 (2004).
123. Shigeyuki Toki, Igors Sics, Chris Burger, Dufei Fang, Benjamin S. Hsiao, Andy H. Tsou and Sudhin Datta, "Structural Evolution and Mechanical Properties in New TPE during Uniaxial Deformation by in-situ Synchrotron X-Ray Scattering", ACS Rubber Division Preprint, Paper 10, 54-69 (2004).
124. Shigeyuki Toki, Igors Sics, Christian Burger, Dufey Fang, Benjamin S. Hsiao, Andy H. Tsou and Sudhin Datta, "Structure changes and Stress-build up during Uniaxial Deformation in Propylene based TPE by In-situ Synchrotron WAXD and SAXS studies", Polymer Processing Society Proceeding, PPS-20 # 343 (2004).
125. Lu Sun, Ethan A. Ertel, Jianjun Miao, Lei Zhu, Benjamin S. Hsiao, and Carlos A. Avila-Ort, "Two-step De-intercalation and Intercalation Induced by Polymer Crystallization and Melting in Poly(ethylene oxide)/Organoclay Nanocomposites", ACS PMSE Preprint, 91, 449-450 (2004).
126. Sun, Lu; Liu, Yuxiu; Zhu, Lei; Hsiao, Benjamin S.; Avila-Orta, Carlos A. "Self-assembly and crystalline morphology in polyethylene and poly(ethylene oxide) copolymers" ACS PMSE Preprint, 91, 956-957 (2004).

127. Jianjun Miao, Lei Zhu, Lu Tian, Kathryn E. Uhrich, Carlos A. Avila-Orta and Benjamin S. Hsiao, "Forced Polymer Chain Folding in Amphiphilic Unimolecular Micelles", ACS PMSE Preprint, 91, 451-452 (2004).
128. Huang, Ping; Zhu, Lei; Guo, Ya; Ge, Qing; Quirk, Roderic P.; Thomas, Edwin L.; Lotz, Bernard; Hsiao, Benjamin S.; Avila-Orta, Carlos A.; Sics, Igors; Cheng, Stephen Z. D. "Comparison of poly(ethylene oxide) crystal orientation changes in two-dimensionally nano-confined cylinders constructed by a poly(ethylene oxide)-b-polystyrene diblock copolymer and a blend of poly(ethylene oxide)-b-polystyrene and polystyrene.", ACS PMSE Preprint, 91, 679-680 (2004).
129. Rajesh H. Somani, Ling Yang, Benjamin S. Hsiao, Rainer Kolb and Hitesh Fruitwala, "Shear rate effect of flow-induced oriented precursor structure in polypropylene melt", ACS PMSE Preprint, 91, 314-315 (2004).
130. Carlos A. Avila-Orta, Christian Burger, Rajesh Somani, Ling Yang, Benjamin S. Hsiao and Gad Marom, "Shear-Induced Crystallization Precursor Structures in iPP/UHMWPE Blends by In-Situ Small- and Wide-Angle X-ray Scattering", ACS PMSE Preprint, 91, 469-470 (2004).
131. Jong Kahk Keum, Christian Burger, Rajesh Somani, Ling Yang, Hongyu Chen, Rainer Kolb, Ching-Tai Liu and Benjamin S. Hsiao, "Synchrotron X-ray scattering studies on the nature of flow-induced shish-kebab structure in polyethylene blends", ACS PMSE Preprint, 91, 467-468 (2004).
132. Ling Yang, Rajesh H. Somani, Igors Scis, Carlos A. Avila-Orta, Benjamin S. Hsiao, "Flow-induced Crystallization Precursor Structures in Model Polyethylene Blend", ACS PMSE Preprint, 91, 304-305 (2004).
133. Mikhail Y Gelfer, Alex Drozdov, Christian Burger, Benjamin Hsiao, Benjamin Chu, Mayu Si, Miriam Rafailovich, "Effects of temperature and matrix composition on the structure and rheology relationship in polymer-organoclay nanocomposites", Proceedings of the XIVth International Congress on Rheology, Seoul, August 2004, manuscript # S011 (2004).
134. Tenneti, Kishore K.; Li, Christopher Y.; Zhang, Dong; Zhang, Hailiang; Wan, Xinhua; Chen, Er-Qiang; Zhou, Qi-Feng; Avila-Orta, Carlos; Igors, Sics; Hsiao, Benjamin S. "Nanoscale hierarchical structures of a series of liquid crystalline "rod-coil" block copolymers." ACS POLY Preprints, 45(2), 764-765 (2004).
135. Chen, Xuming; Yoon, Kyunghwan; Burger, Christian; Sics, Igors; Hsiao, Benjamin S.; Chu, Benjamin. "Super-tough performance of modified carbon nanofiber (MCNF)/UHMWPE nanocomposite films.", ACS POLY Preprints, 45(2), 122-123 (2004).
136. Shigeyuki Toki, Igors Sics, Benjamin S. Hsiao, Masatoshi Tosaka, Sirilux Poompradub, Shinzo Kohjiya and Yuko Ikeda, "Nature of Strain-Induced Crystallization in Synthetic Poly-isoprene by In-Situ Synchrotron X-ray Study", ACS Rubber Division Preprint, Paper No.20, 706-724 (2004).
137. Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, "Development of Multiple-Jet Electrospinning Technology for Mass Production of Nanofibers", 14th TANDEC International Nonwovens Conference Proceeding, The University of Tennessee, Knoxville, Nov. 9-11 (2004).
138. Zhu, Lei; Sun, Lu; Miao, Jianjun; Hsiao, Benjamin S.; Avila-Orta, Carlos A.; Sics, Igors. Structure and morphology of crystalline polymer/clay nanocomposites. Proceedings of the NATAS Annual Conference on Thermal Analysis and Applications, 32nd 101.10.727/1-101.10.727/5 (2004).
139. M. Y. Gelfer, C. Burger, G. Panek, G. Jeschke, A. Fadeev, M. Si and M. Rafailovich, P. Nawani, J. W. Gilman, B. Chu, B. S. Hsiao, "Investigation of thermally induced phase transitions and degradation of organoclays based on synthetic Somasif clays using in-situ X-ray scattering", ACS, PMSE Preprints, 92 441-442 (2005).
140. Shigeyuki Toki, Benjamin S. Hsiao, Shinzo Kohjiya, Masatoshi Tosaka, Andy H. Tsou and Sudhin Datta, "Synchrotron X-Ray Studies of Vulcanized Rubbers and Thermoplastic Elastomers" American Chemical Society Rubber Division Preprint, Paper 32 (2005).
141. S. Kohjiya, M. Tosaka and S. Poompradub, A. Kato, J. Shimanuki, Y. Ikeda, S. Toki and B. S. Hsiao "Nano-structural Elucidation in Carbon Black Loaded NR Vulcanizate by 3D-TEM and in situ WAXD Measurements" American Chemical Society Rubber Division Preprint, Paper 33 (2005).
142. Richard Vaia, Hilmar Koerner, Benjamin S. Hsiao and Igors Sics "Morphology -- Deformation Correlations in Nanocomposite Elastomers" American Chemical Society Rubber Division Preprint, Paper 63 (2005).
143. Benjamin S. Hsiao and Mikhail Y. Gelfer "Synchrotron X-ray Techniques for the Study of Clay-Based Polymer Nanocomposites" American Chemical Society Rubber Division Preprint, Paper 66 (2005).
144. Feng Zuo, Hongyu Chen, Jing Li, Ronald Wevers, Greg Meyers, Jongkhak Keum, Xuming Chen and Benjamin S. Hsiao, "In-situ Synchrotron SAXS/WAXD Studies on Stretching of Isotactic Polypropylene", ACS, PMSE Preprints, 93, 761-762 (2005).
145. Xuming Chen, Christian Burger, Xuefen Wang, Weidong He, Kyunghwan Yoon, Rajesh H. Somani, Dufei Fang, Igors Sics, Lixia Rong, Benjamin S. Hsiao and Benjamin Chu, "In-Situ X-Ray Scattering Studies of

- Fluorinated Multi-Wall Carbon Nanotube (FMWNT)/Fluorinated Ethylene Propylene (FEP) Composite Fiber during Stretching”, ACS, PMSE Preprints, 93, 751-752 (2005).
146. Jong Kahk Keum, Christian Burger,, Feng Zuo,, Igors Sics,, Benjamin Hsiao,, Thomas Sun,, Arnold Lustiger, “Synchrotron X-ray diffraction/scattering studies on the nucleation and growth habits of flow-induced shish-kebab structure in linear polyethylene (HDPE) melts”, ACS, PMSE Preprints, 93, 759-760 (2005).
 147. Igors Šics, Lixia Rong, Benjamin. S. Hsiao and Benjamin. Chu, “Advanced Polymers Beamline (X27C) at National Synchrotron Light Source, BNL”, ACS, PMSE Preprints, 93, 120 (2005).
 148. Pranav Nawani, Mikhail Y. Gelfer, Benjamin S. Hsiao, “Investigations of morphology and thermal behavior of transition metal ions modified clays using in-situ X-ray scattering”, ACS, PMSE Preprints, 93, 757-758 (2005).
 149. Hong-wen Zhou, Christian Burger, Jinglu Chen, Benjamin S. Hsiao, Benjamin Chu, Lila Graham and Melvin J. Glimcher, “Interpretation of 2D Small-Angle X-Ray Diffraction Patterns from Mineralized Collagen Fibrils in Fish Bone”, ACS, PMSE Preprints, 93-755-756 (2005).
 150. P. Huang, S. Z. D. Cheng, R. Van Horn, Y. Guo, R. P. Quirk, B. Lotz, E. L. Thomas, B. Hsiao, C. A. Avila-Orta, I. Sics, “PEO crystal orientation changes within an inversed cylindrical morphology constructed by a PEO-b-PS block copolymer”, ACS, PMSE Preprints, 93, 284-285 (2005).
 151. L. Cui, J. Miao, L. Zhu, I. Sics, B. S. Hsiao, “Confined discotic liquid crystalline self-assembly in a novel coil-coil-disk triblock oligomer”, ACS, PMSE Preprints, 93, 286-287 (2005).
 152. K. K. Tenneti, X. Chen, C. Y. Li, X. Wan, Q -F. Zhou, I. Sics, B. S. Hsiao, “Asymmetric Liquid Crystalline Rod-Coil Block Copolymer System”, ACS, PMSE Preprints, 93, 364-365 (2005).
 153. Andy H. Tsou, Matthew B. Measmer, Mikhail Y. Gelfer, Pranav Nawani and Benjamin S. Hsiao, “Evaluation of Organosilicate Dispersion in Polymer Nanocomposites by Permeability”, International Rubber Conference Proceeding (2005).
 154. Benjamin S. Hsiao and Benjamin Chu, “Functional Nanofibers for Biomedical Applications”, Proceedings of 2005 International Conference on Advanced Fibers and Polymer Materials (ICAFPM 2005), Vol 1 and 2: 924-927 (2005).
 155. Benjamin Chu and Benjamin S. Hsiao, “Molecular Designs in Nanocomposite Fibers and Nanofibrous Scaffolds”, Proceeding of 2005 International Conference on Advanced Fibers and Polymer Materials (2005).
 156. C. A. Avila-Orta, M. V. Davila-Rodriguez, Y. A. Aguirre-Figueroa, F. J. Medellín-Rodrigue, B. S. Hsiao, “Thermal And Electrical Properties of iPP/MWCNT Nanocomposites”, International Congress of Composites (COMAT) Proceeding (2005).
 157. Shigeyuki Toki, Igors Sics, Benjamin S. Hsiao, Sureerut Amnuaypornsi and Seiichi Kawahara, “Strain-Induced Crystallization in Un-Vulcanized Natural Rubbers by Synchrotron X-Ray Study”, American Chemical Society Rubber Division Preprint, 75/1-75/13 (2005).
 158. Feng Zuo, Jong Kahk Keum, Ling Yang, Rajesh H. Somani and Benjamin S. Hsiao, “Thermal Stability of Shear-Induced Shish-Kebab Precursor Structure from High Molecular Weight Polyethylene Chains”, ACS PMSE Preprint, 94, 815-816 (2006).
 159. Benjamin S. Hsiao, “On-Line Nanostructure Characterization by Synchrotron X-ray Scattering and Diffraction Techniques” Polymer Processing Society 22nd Meeting Proceeding, SP5K1 (2006).
 160. Benjamin S. Hsiao and Benjamin Chu, “Synchrotron X-Ray Scattering of Polymer Nanocomposites”, Synchrotron Radiation in Polymer Science III (SRPS3) Proceeding, Spring-8, p. 42 (2006).
 161. Benjamin S. Hsiao and Benjamin Chu, “Status and Prospects on NSLS X27C Beamline”, Synchrotron Radiation in Polymer Science III (SRPS3) Proceeding, Spring-8, p. 11 (2006).
 162. Benjamin S. Hsiao, Rajesh H. Somani, Ling Yang, Feng Zuo and Jong-Khak Keum, “Probing Shear-Induced Crystallization Precursor Structure in Entangled Polymer Melts by In-Situ Rheo-SAXS and Rheo-WAXD”, XIII International Conference on Small-Angle Scattering Symposium Preprint, p. 108 (2006).
 163. H.-W. Zhou, C. Burger, L. Graham, M. J. Glimcher, I. Sics, B. S. Hsiao, and B. Chu, “Biom mineralization of Type-I Collagen Fibrils in Intramuscular Herring Bone”, XIII International Conference on Small-Angle Scattering Symposium Preprint, p. 213 (2006).
 164. Dehai Liang, Jun Zhang, Weidong He , Benjamin Hsiao, Benjamin Chu, “Laser light scattering study on DNA/poly(ethylene glycol)-b-poly(L-lysine) complexes in aqueous and non-aqueous solutions”, 4th East-Asian Polymer Conference (EAPC-4) Proceeding, (2006).
 165. Xuming Chen, Benjamin Hsiao and Benjamin Chu “Super-Tough Nano-Composites with Modified Carbon Nano-Fibers”, Polymer Physics 2006 Conference Proceeding, (2006).

166. Dehai Liang, Christine Falabella, Michael Hadjiargyrou, Benjamin Hsiao, Benjamin Chu, "Controlled Release of Plasmid DNA from Electrospun Nanofibrous Scaffolds in Tissue Engineering", Polymer Physics 2006 Conference Proceeding, (2006).
167. Xuming Chen, Christian Burger, Jie Cai, Lina Zhang, Benjamin Hsiao and Benjamin Chu, "X-ray studies of regenerated cellulose fibers wet spun from environmental friendly NaOH/urea aqueous solution", ACS POLY Preprint, 47(2) 362-363 (2006).
168. Kyunghwan Yoon, Benjamin S. Hsiao and Benjamin Chu, "High flux ultrafiltration membranes based on poly(acrylonitrile) nanofibrous scaffolds and crosslinked poly(vinyl alcohol) coating", ACS PMSE Preprint, 51, 583-584 (2006).
169. Antonis Kalarakis, Kyunghwan Yoon, Rajesh Somani, Igors Sics, Benjamin S. Hsiao and Benjamin Chu, "Polymer Chain Dynamics and Melting Behavior in a Carbon Nanofiber Reinforced Elastomeric Composite", ACS PMSE Preprint, 51, 715-716 (2006).
170. Tsai-Ming Chung, Rong-Ming Ho, Jing Chung Kuo, Jing-Cherng Tsai, Benjamin S. Hsiao and Igors Sics, "Trilayer Crystalline Lamellar Morphology under Confinement", ACS PMSE Preprint, 51, 798-799 (2006).
171. Christopher Y. Li, Kishore K. Tenneti, Xiaofang Chen, Xinhua Wan, Qi-Feng Zhou and Benjamin S. Hsiao, "Phase structures of mesogen jacketed liquid crystalline "rod-coil" block copolymers", ACS PMSE Preprint, 51, 235-236 (2006).
172. Kishore K. Tenneti, Christopher Y. Li, Xiaofang Chen, Xinhua Wan, Qi-Feng Zhou and Benjamin S. Hsiao, "Phase structures of block copolymer complexes with bent-core mesogens", ACS PMSE Preprint, 51, 312-313 (2006).
173. Shigeyuki Toki, Igors Sics, Benjamin S. Hsiao, Sureerut Amnuayporn Sri, Jitladda Sakdapipanich, Seiichi Kawahara, Masanori Tosaka, Shinzo Kohjiya, Sirilux Poompradub and Yuko Ikeda, "Network Structures and Strain-Induced Crystallization in Natural Rubber and Synthetic Polyisoprene by In-Situ Synchrotron X-Ray Study", American Chemical Society, Rubber Division Preprint, 34/1-34/15 (2006).
174. Feng Zuo, Xuming Chen, Jong Kahk Keum, Yiming Mao, Benjamin S. Hsiao, Hongyu Chen and Debbie Chiu, "Structure, Property and Processing Relationship of Olefin Block Copolymers via In-Situ Synchrotron X-ray Studies", ACS POLY Preprint, 48(1), 847-848 (2007).
175. Sudipto Das, Derek B. Klinedinst, Iskender Yilgor, Frederick L. Beyer, Shigeyuki Toki, Benjamin S. Hsiao and G.L. Wilkes, "Structure-property relationships of segmented polyurethanes and polyureas based on single molecule hard segments", ACS POLY Preprint, 48(1), 849-850 (2007).
176. Zhu, Y; Hashi, C; Li, S; Hsiao, BS; Chu, B; Young, WL, et al. "Mesenchymal stem cells reduce thrombosis and increase matrix remodeling for small-diameter vascular grafts in cerebrovascular bypass surgery", STROKE, 38 (2): 566-566 (2007)
177. Junchai Zhao, Zhigang Wang and Benjamin S Hsiao "Reorganization and Crystallization of Quenched Mesomorphic Isotactic Polypropylene During Thermal Annealing", ACS POLY Preprint, 48(1), 198-199 (2007).
178. Pranav Nawani, Christian Burger, Mikhail Gelfer, Benjamin Chu, Benjamin S. Hsiao, Andy H. Tsou and Weiqing Weng, "Preferred Orientation of Organoclay in Nanocomposites by 3D TEM and SAXS Study", ACS POLY Preprint, 96, 64-66 (2007).
179. Mun F. Tse, Benjamin S. Hsiao, and Pranav Nawani, "Characterization of Nanoclays in Solvents", ACS PMSE Preprint, 96, 611-613 (2007).
180. Benjamin Chu, Benjamin S. Hsiao, Kyunghwan Yoon, "Nanofiber and Nanocomposite-Fiber Technology for Environmental Applications", American Association of Textile Chemists and Colorists (AATCC) International Conference, Innovations in Nanotechnologies, Composites, and Sports/Military Materials Symposium, Conference Proceeding, (2007)
181. Yimin Mao, Feng Zuo, Rajesh H. Somani, Jong Kahk Keum, Benjamin S. Hsiao, "Influence of Strain on Shear-Induced Crystallization of Poly(ethylene oxide)", ACS PMSE Preprint, 97, 399-400 (2007).
182. Feng Zuo, Yiming Mao, Jong Kahk Keum, Benjamin S. Hsiao, Hongyu Chen, Debbie Chiu, and Shih-Yaw Lai, "Shear-induced Crystallization of Olefin Block Copolymer via In-Situ Synchrotron X-ray Studies", ACS PMSE Preprint, 97, 765-766 (2007).
183. Hongyang Ma, Lixia Rong, Kyunghwan Yoon, Benjamin S. Hsiao and Benjamin Chu, "Structure and Property of High Flux Cellulose Membranes Fabricated by Ionic Liquid", ACS PMSE Preprint, 97, 636-637 (2007).
184. Jong Kahk Keum, Feng Zuo, Yimin Mao and Benjamin S. Hsiao "Flow-induced crystallization precursor structure in high molecular weight isotactic polypropylene/low molecular weight linear low density polyethylene blends" ACS PMSE Preprint, 97, 388-389 (2007).

185. Benjamin S Hsiao, Jong Kahk Keum, and Feng Zuo “Dynamic formation of shear-induced shish-kebab structure in highly entangled melts of UHMWPE/HDPE blends” ACS PMSE Preprint, 97, 294-295 (2007).
186. Kyunghwan Yoon, Christopher Pang, Benjamin S Hsiao, and Benjamin Chu “High flux nanofiltration membranes based on interfacially polymerized polyamide on nanofibrous scaffolds”, ACS PMSE Preprint, 97, 746-747 (2007).
187. Lu Sun, Lixia Rong, Benjamin S. Hsiao and Lei Zhu, “Tailoring onion-like morphology in polylactide-containing block copolymers”, ACS PMSE Preprint, 97, 172-173 (2007).
188. Kishore K. Tenneti, Xiaofang Chen, Christopher Y. Li, Xinhua Wan, Qi-Feng Zhou, Lixia Rong, and Benjamin S. Hsiao “al nanostructures of mesogen jacketed bent-core liquid crystalline block copolymers” ACS POLY Preprint, 48(2), 752-753 (2007).
189. Pranav Nawani, Priya Desai, Mikhail Y. Gelfer, Jeffrey W. Gilman and Benjamin S. Hsiao, “Transition Metal Ion Modified Organoclays as Fire Retardant Fillers for Polymer Nanocomposites”, Proceedings of the Conference on Recent Advances in Flame Retardancy of Polymeric Materials, 18, 196-204 (2007).
190. Nawani, P.; Burger, C.; Chen, X.; Chu, B.; Hsiao, B. S. “Structure characterization of nanocomposites by synchrotron X-ray rays.” NSTI Nanotech 2007, Nanotechnology Conference and Trade Show, Santa Clara, CA, United States, May 20-24, 1, 654-657 (2007).
191. Shigeyuki Toki, Norio Minouchi, Igors Sics, Benjamin S. Hsiao and Shinzo Kohjiya, “Strain-Induced Crystallization And Tensile Strength i Carbon Black Filled Natural Rubber Compounds b Synchrotron X-Ray Study”, Proceeding of 11th International Seminar on Elastomers (2007).
192. Amnuayporn Sri, Sureerut; Toki, Shigeyuki; Hsiao, Benjamin S.; Sakdapipanich, Jitladda; Tanaka, Yasuyuki. “Strain-induced crystallization of natural rubber: effect of proteins and phospholipids.” Technical Meeting - American Chemical Society, Rubber Division, 172nd, amnuay1/1-amnuay1/17 (2007).
193. Toki, Shigeyuki; Burger, Christian; Hsiao, Benjamin S.; Amnuayporn Sri, Sureerut; Sakdapipanich, Jitladda. “Hierarchic nano-structures in natural rubber by synchrotron X-ray and optical microscopy.” Technical Meeting - American Chemical Society, Rubber Division, 174th, Louisville, KY, United States, Oct. 14-16, 2008 (2008), 51/1-51/21.
194. Zhao, X; Hsiao, B; Chu, B; Hadjiargyrou, M, “Functionalization of a PLGA/PEG-PLA Composite Electrospun Scaffold with rhBMP-2 Plasmid DNA for Bone Regeneration”, 30th Annual Meeting of the American-Society-for-Bone-and-Mineral-Research, Journal of Bone and Mineral Research 23: S158-S158 (2008)
195. Rossana Iervolino, Franco Cocchini, Maria Rossella Nobile, Xuming Chen, Feng Zuo, Rajesh H. Somani, Benjamin S. Hsiao and Benjamin Chu, “Rheological properties and shear induced crystallization of model polyethylene blends”, Proceeding of Polymer Processing Society, PPS-24, S09-1288 (2008).
196. Carretero-Gonzalez, J.; Verdejo, R.; Giannelis, E. P.; Toki, S.; Hsiao, B. S.; Lopez-Manchado, M. A. “Real-time crystallization of organoclay nanoparticle filled natural rubber under stretching.” NSTI Nanotech, Nanotechnology Conference and Trade Show, Technical Proceedings, Boston, MA, United States, June 1-5, 1, 838-839 (2008).
197. Benjamin S. Hsiao, “Advanced Nanostructure Characterization of Polymeric Materials by Synchrotron X-ray Scattering/Diffraction Techniques”, Proceeding of Polymer Processing Society, PPS-24, S17-279 (2008).
198. Shifeng Han, Fen Wan, Benjamin Hsiao and Benjamin Chu, “Controlled release of drugs in electrospun polycaprolactone membranes”, ACS POLY Preprint, submitted (2008).
199. Jonathan B. Chiu, Karin C. Wan², Randy Ramcharitar, Fen Wan, Chirakkal V. Krishnan, Benjamin S. Hsiao, and Benjamin Chu, “Thermo-sensitive gels polymers for tunable, therapeutic delivery”, ACS POLY Preprint, 49(2), 1105 (2008).
200. Jianjun Miao, Lixia Rong, Benjamin S. Hsiao and Lei Zhu, “Synthesis and Self-assembly of Asymmetric Amphiphilic Discotic Oligomer Based on Protoporphyrin”, ACS PMSE Preprint, 99, 673-674 (2008).
201. Weiqiang Cao, Lu Sun, Lixia Rong, Benjamin Hsiao, and Lei Zhu “Chirality effect on interaction parameters in poly(ethylene-co-1-butene)-b-poly(lactide) diblock copolymers”, ACS PMSE Preprint, 99, 378-390 (2008).
202. Robert K. Prud’homme, Ilhan A. Aksay, Richard A. Register, Doug H. Adamson, Bulent Osbas, Michael McCallister, Hannes Schneipp, Benjamin Chu, Shigeyuki Toki and Benjamin Hsiao, “Functionalized Graphene nano sheets (FGS) as a new material for polymer and elastomer composites and barrier films”, 173rd ACS Rubber Technical Meeting Proceeding, (2008).
203. Yimin Mao, Christian Burger, Feng Zuo, Xiaowei Li, Benjamin S. Hsiao, Derek W. Thurman and Andy H. Tsou “2-D WAXD study of crystallization of propylene-1-butene random copolymer: Experiment and simulation”, ACS PMSE Preprint, 263 (2009).

204. Xiaowei Li, Jong Kahk Keum, Feng Zuo, Yimin Mao and Benjamin S. Hsiao, "Extensional Flow-Induced Crystallization in Multi-Component Polyolefin Melts", ACS PMSE Preprints, 100, 580-581 (2009).
205. Feng Zuo, Yiming Mao, Benjamin S. Hsiao, Hongyu Chen, Debbie Chiu and Shih-Yaw Lai "Evolution of Monoclinic and Orthorhombic Phases during the Deformation of Olefin Block Copolymers", ACS PMSE Preprints, 100, 578-579 (2009).
206. Hongyang Ma, Kyunghwan Yoon, Lixia Rong, Benjamin S. Hsiao and Benjamin Chu, "High flux nanofibrous membranes based on cellulose barrier processed by ionic liquids", ACS PMSE Preprints, 100, 543-544 (2009).
207. Cruz-Delgado, Víctor J.; Hernández-Hernández, Ernesto; Esparza-Juárez, M. Elena; Méndez-Padilla M. Guadalupe; Rodríguez-Hernández M. Teresa; Huerta-Martínez, Blanca M.; Medellín-Rodríguez, Francisco J.; Hsiao, Benjamin S.; Ávila-Orta, Carlos A. "In situ-polymerization route for the preparation of PET/MWCNT polymer nanocomposites", Preprint for Macromex, a joint meeting of the Polymer Society of Mexico and the ACS-Division of Polymer Chemistry (2009).
208. Benjamin S. Hsiao, Benjamin Chu "Breakthrough polymer nanofiber technology for water purification", 2009 International Conference on Advanced Fibers and Polymer Materials (ICAFPM 2009), (2009).
209. Benjamin Chu, Dehai Liang, Benjamin S. Hsiao, "Gene Delivery with Nanofibrous Scaffolds" 2009 International Conference on Advanced Fibers and Polymer Materials (ICAFPM 2009), (2009).
210. Shigeyuki Toki, Benjamin S. Hsiao, Sureerut Amnuaypornsi and Jitladda Sakdapipanich, "Hierarchic Multi-Scaled Structures in Natural Rubber", Technical Meeting - American Chemical Society, Rubber Division, 176th, Pittsburgh, PA, 9/1-9/14 (2009).
211. Wang, Ran; Liu, Yang; Ma, Hongyang; Fang, Dufei; Hsiao, Benjamin S.; Chu, Benjamin. "Polyacrylonitrile electrospun membrane for microfiltration", ACS PMSE Preprints (2010).
212. Ran Wang, Hongyang Ma, Benjamin S. Hsiao and Benjamin Chu, "High-Flux Functional Nanofibrous Membrane for Removal of Bacteria and Viruses", ACS POLY Preprints, 52(1) (2011).
213. Yang Liu, Ran Wang, Hongyang Ma, Benjamin S. Hsiao and Benjamin Chu, "High-Flux Microfiltration Filters Based on Electrospun PVA Nanofibrous Mats", ACS POLY Preprints, 52(1) (2011).
214. Hongyang Ma, Benjamin S. Hsiao and Benjamin Chu, "Thin-Film Nanofibrous Composite Ultrafiltration Membranes Based on Polyvinyl Alcohol Barrier Layer Containing Ultra-Fine Cellulose Nanofibers", ACS POLY Preprints, 52(1) (2011).
215. Mahati Elluru, Benjamin Chu, Benjamin S. Hsiao, Michael Hadjiargyrou, "Nanostructured Hydrogel Implants for Post Lumpectomy Patients", ACS PMSE Preprints, (2011).
216. Deplace, F.; Wang, Z.; Coates, G. W.; Rose, J. M.; Shin, Yong-Woo; Shimizu, F.; Toki, S.; Rong, L.; Zhu, J.; Hsiao, B. S.; Fredrickson, G. H.; Kramer, E. J., "Tough organogels and elastomers from block copolymers with semicrystalline polypropylene blocks", ACS PMSE Preprints, (2011).
217. Anna Sato, Ran Wang, Hongyang Ma, Benjamin S. Hsiao, Benjamin Chu and Yimei Zhu, "Novel Nanofibrous Scaffolds for Water Filtration with Bacteria and Virus Removal Capability", Proceedings of Microscopy Society of America, Microsc. & Microanal. 17(2), 354-355 (2011).
218. Shigeyuki Toki, Justin Che, Lixia Rong, Benjamin S. Hsiao, Adul Nimpaiboon, Jitladda Sakdapipanich, "The origin of strength of natural rubber studied by synchrotron X-ray: network in raw rubber and vulcanized rubber", Technical Meeting - American Chemical Society, Rubber Division, 180th, Cleveland, OH, 1, 149-160. (2011).
219. Justin Che, Shigeyuki Toki, Lixia Rong, Benjamin S. Hsiao, Juan Valentin and Justo Brasero, "Strain-Induced Crystallization of Pre- and Post-Vulcanized Natural Rubber Latex During Uniaxial Deformation by In-Situ Synchrotron X-Ray Diffraction", Technical Meeting - American Chemical Society, Rubber Division, 180th, Cleveland, OH, 1, 161-185 (2011).
220. Fanny Deplace, Glenn H. Fredrickson, Edward J. Kramer, Geoffrey W. Coates, Hisashi Ohtaki, Yong-Woo Shin, Fumihiko Shimizu, Lixia Rong, Benjamin S. Hsiao, "Tough polyolefin elastomers from copolymers with semicrystalline sPP grafts", The 15th international conference on Deformation, Yield and Fracture of Polymers (DYFP2012), Conference Proceedings (2012).
221. Yeh, Tsung-Ming; Mahajan, Devinder; Hsiao, Benjamin S.; Chu, Benjamin "Polymeric nanofibrous composite membranes for energy efficient ethanol dehydration", Preprints - American Chemical Society, Division of Petroleum Chemistry 57(1), 110-113 (2012).
222. Wang, Xiao; Fang, Dufei; Hsiao, Benjamin; Chu, Benjamin "Trade-off between rejection and flux for thin film nano-composite (TFNC) nano-filtration (NF) membrane", PMSE Preprints (2012).
223. Ma, Hongyang; Hsiao, Benjamin S.; Chu, Benjamin "Highly permeable nanofibrous membranes for energy efficient water purification", PMSE Preprints (2013).

224. Toki, Shigeyuki; Che, Justin; Rong, Lixia; Hsiao, Benjamin S.; Amnuayporn Sri, Sureerut; Nimpai boon, Adul; Sakdapipanich, Jitladda "Entanglement and end linking network on stress-strain relation and strain-induced crystallization of un-vulcanized and vulcanized natural and synthetic rubbers", Technical Meeting of the Rubber Division, American Chemical Society, 2, 1025-1038 (2012)
225. Che, Justin; Burger, Christian; Toki, Shigeyuki; Rong, Lixia; Hsiao, Benjamin S.; Amnuayporn Sri, Sureerut; Sakdapipanich, Jitladda "Two-dimensional wide-angle X-ray diffraction simulation study on strain-induced crystallization and temperature-induced crystallization of un-vulcanized natural and synthetic rubber", Technical Meeting of the Rubber Division, American Chemical Society, 2, 996-1024 (2012).
226. Toki, S.; Che, J.; Burger, C.; Hsiao, B. S.; Amnuayporn Sri, S.; Sakdapipanich, J., "Strain-induced crystallites and temperature-induced crystallites in poly-isoprene by 2D WAXD simulating analysis", Constitutive Models for Rubber VIII, Proceedings of the European Conference on Constitutive Models for Rubber, 8th (Edited by Gil-Negrete, Nere; Alonso, Asier), San Sebastian, Spain, June 25-28, 485-489 (2013).
227. Che, Justin; Burger, Christian; Toki, Shigeyuki; Rong, Lixia; Hsiao, Benjamin S.; Amnuayporn Sri, Sureerut; Sakdapipanich, Jitladda, "New insights into strain-induced crystallization and temperature-induced crystallization of un-vulcanized and peroxide-vulcanized natural rubber", Fall Technical Meeting of the Rubber Division, American Chemical Society, 2, 1701-1726 (2013).
228. Hristo A. Hristov, Thomas P. Oommen, Tami Mace, Benjamin S. Hsiao "In-Situ SAXS Study of Phase Segregation and Morphology of Styrenic Block Copolymers", SPE ANTEC Proc., (2015).
229. Toki, S.; Sainumsai, W.; Suchiva, K.; Rong, L.; Hsiao, B. S., "Crosslink, entanglement and strain-induced crystallization of NR" (Edited by Marvalova, Bohdana; Petrikova, Iva), Constitutive Models for Rubber IX, Proceedings of the European Conference on Constitutive Models for Rubbers, 9th, Prague, Czech Republic, Sept. 1-4, 515-520 (2015).
230. Yang, Y.; Wang, X.; Hsiao, B. S., "Preparation of thin film nanofibrous composite NF membrane based on EDC/NHS modified PAN-AA nanofibrous substrate", IOP Conference Series: Materials Science and Engineering 137(2016 Global Conference on Polymer and Composite Materials), 012047/1-012047/5 (2016).
231. Jack Lombardi, Mark D Poliks, Wei Zhao, Shan Yan, Ning Kang, Jing Li, Jin Luo, Chuan-Jian Zhong, Ziang Pan, Mihdhar Almihdhar, Benjamin S Hsiao, Madina L Zabran, Sandeep S Mittal, Kanad Ghose, "Nanoparticle Based Printed Sensors on Paper for Detecting Chemical Species", Electronic Components and Technology Conference (ECTC), IEEE 67th, 764-771 (2017).
232. Tomas Rosen Ruifu Wang Chengbo Zhan Hongrui He Shirish Chodankar Benjamin S. Hsiao, "Orientation Distributions of Cellulose Nanofibrils and Nanocrystals in Confined Flow", ChemRxiv (2019)

8. INVITED LECTURES

1. "Time-Resolved X-ray Study of Poly(aryl ether ether ketone)" Materials Science and Engineering Department, University of Pennsylvania, Philadelphia, PA., March 3, 1992
2. "Crystalline Phase Transition of Poly(aryl ether ether ketone)", Institute of Polymer Science, University of Akron, Akron, OH., May 13, 1992
3. "PEKK/ULtem Blends; Morphology and Wetting", DuPont TECHON 92, Pocono, PA., June 24, 1992
4. "Miscibility and Crystallization Morphology Relations in Polyetherketone/ Polyetherimide Blends", in Second Annual UConn Symposium on Polymer Blends/Compatibilization, Institute of Materials Science, University of Connecticut, Storrs, CT., June 9, 1992
5. "Polymorphism and Crystalline Transitions in Poly(aryl ether ketones)" Institute für Polymere, ETH Zentrum, Zurich, Switzerland, September 2, 1992
6. "Time-Resolved Synchrotron Studies of Poly(aryl ether ketones) Phase Transitions", Institute für Technische und Mskromolekulare Chemie, University of Hamburg, Hamburg, Germany, September 3, 1992
7. "Diffraction Study of Phase Transition and Polymorphism in Poly(aryl ether ketones)" BioPhysics Department, Polytechnic University of Catalonia, Barcelona, Spain, September 15, 1992
8. "Time-Resolved Studies of Poly(aryl ether ketones) by Synchrotron Radiations", Instituto de Estructura de la Materia, CSIC, Madrid, Spain, September 16, 1992
9. "The Origin of Double Melting Behavior in Poly(aryl ether ketones) by Synchrotron Study", Materials Science Program, University of Delaware, Newark, DE., November 2, 1992
10. "Phase Transition and Polymorphism of Poly(aryl ether ketones)", Department of Materials Science and Engineering, Virginia Polytechnic Institute and State University, Blacksburg, VA., December 9, 1992

11. "Effect of Crystallization on the Morphology of PEEK/PEI and PEEK/PEKK Blends", Symposium on Engineered Polymer Blends IV: Theory and Practice, Polymer Research Institute, Polytechnic University, Brooklyn, NY., January 22, 1993
12. "Miscibility of High-Temperature Thermoplastic Polyimides and Poly(ether Ketones)", 3rd Uconn Symposium on Polymer Blends/Compatibilization, Storrs, CT., June, 1993
13. "Crystallization Behavior of Poly(aryl ether ketone ketone) Copolymers", NATAS Conference, September, Denver, CO., September 21, 1993
14. "Scattering Studies in Poly(aryl ether ketones)" APS Meeting, Short Course on "X-ray and Neutron Scattering from Polymers", Pittsburgh, PA., March 19-20, 1994
15. "Structure Development During Fiber Processing Via Synchrotron Time-Resolved X-ray Measurements" (Invited Oral), CHESS Users Meeting, Ithaca, NY., June 22, 1994
16. "Crystallization and Melting Behavior in Poly(aryl ether ketones)", Department of Chemistry, University of North Carolina at Chapel Hill, Chapel Hill, NC., April 22, 1994
17. "Time-Resolved SAXS/WAXD Techniques for Poly(aryl ether ketone) Study", Department of Materials Science and Engineering, University of Cincinnati, Cincinnati, OH., May 10, 1994
18. "Time-Resolved X-ray Measurements for Polymer Fiber Processing", 43 Annual Denver X-ray Conference, Steamboat Springs, CO., August 3, 1994
19. "Chemical and Orientational Imaging of Polymeric Samples", MSA Meeting, New Orleans, LA., August 17, 1994
20. "Automated Data Analysis of Time Resolved X-ray Measurements", Institute für Technische und Mskromolekulare Chemie, University of Hamburg, Hamburg, Germany, September 8, 1994
21. "Synchrotron Research for Polymer Science: Overview and Opportunity", National Institute of Standards and Technology, Gaithersburg, MD., September 16, 1994
22. "Workshop on X-ray Scattering from Polymers: I. Scattering Theory for Oriented and Unoriented Polymers; II. Applications of Scattering for Phase Transition Study of Poly(aryl ether ketones); III. Synchrotron Scattering Applications to Polymer Science", Polymer Science Group, Chemical Engineering Department, University of Delaware, Newark, DE., October 18-20, 1994
23. "Application of Synchrotron Research to Polymer Science", Synchrotron Radiation Research Center, Hsinchu, Taiwan, November 22, 1994
24. "Crystal Structure Development in Nylon 66 Fiber Drawing and Spinning", Institute für Technische und Mskromolekulare Chemie, University of Hamburg, Hamburg, Germany, February 8, 1995
25. "Probing In-Situ Structural Changes in Polymers Using High Brilliance Synchrotron X-rays", Department of Polymer Science and Engineering, University of Massachusetts, Amherst, MA., March 13, 1995
26. "Probing Structure/Morphology Changes in Real Time Using High Brilliance Synchrotron X-rays", Institute of Polymers Science, University of Akron, Akron, OH., May 12, 1995
27. "Probing Structural Changes in Polymers Using High Brilliance Synchrotron X-rays", Department of Materials Science and Engineering, Massachusetts Institute of Technology, Cambridge, MA., September 13, 1995
28. "Probing Polymer Structural Changes in Real Time Via High Brilliance Synchrotron X-rays", Institute of Materials Science, University of Connecticut, Storrs, CT., December 15, 1995
29. "Probing Structure and Morphology Changes During Polymer Crystallization and Melting Via Simultaneous SAXS/WAXD Methods", X International Conference on Small-Angle Scattering, Campinas, Brazil, July 21, 1996
30. "On-line X-ray Scattering Characterization of Structure and Morphology During Fiber Processing", X International Conference on Small-Angle Scattering, Campinas, Brazil, July 25, 1996
31. "New Insights Into Crystallization and Melting Behavior of Polymers and Fibers Via Synchrotron X-ray Scattering Methods", University of Tennessee, Knoxville, TN., August 22, 1996
32. "New Insights Into Crystallization and Melting Mechanism of Polymers and Fibers Via Synchrotron X-ray Scattering Methods", State University of New York at Stony Brook, Stony Brook, NY., October 3, 1996
33. "New Insights Into Crystallization and Melting Behavior of Polymers Via Synchrotron Time-Resolved X-ray Scattering Methods", University of Illinois, Urbana Champaign, IL., October 28, 1996
34. "New Insight Into Polymer Crystallization Via Time-Resolved Synchrotron Scattering Techniques", Materials Research Society Spring Meeting, San Francisco, CA., March 31, 1997
35. "New Insight into The Crystallization Behavior of Polymers and Fibers via Time-Resolved Synchrotron X-ray Measurements and Novel Data Analysis Techniques", CCP-13 Workshop, Synchrotron Research Source, Daresbury Laboratory, Manchester, UK., May 7, 1997

36. "Control of Crystallization and Morphology in Semi-Stiff Polymers via Molecular Architecture, Processing and Advanced In-Situ Characterization Techniques", General Electric Central Research & Development, Schenectady, NY., May 28, 1997
37. "New Insight into Polymer Crystallization via Time-Resolved Synchrotron X-ray Techniques", Naval Research Laboratory, Washington, DC., June 24, 1997
38. "Polymer Research Opportunities via Synchrotron Scattering Techniques and The Advanced Polymers PRT Beamline at X27C", BESAC Site Visit, National Synchrotron Light Source, Brookhaven National Laboratory, Upton, NY., June 25, 1997
39. "Study of Structural and Morphological Development During Fiber Spinning and Deformation Via Simultaneous 2D SAXS/WAXS Techniques", 46 Annual Denver X-ray Conference, Steamboat Springs, CO., August 3, 1997
40. "Probing Polymers via Synchrotron X-rays", State University of New York at Stony Brook, Materials Science and Engineering Colloquium, Stony Brook, NY., Oct. 29, 1997
41. "New Insights Into Crystallization and Melting Behavior of Polymers Via Synchrotron X-ray Scattering Methods", Central Research Division, Dow Chemical Company, Midland, MI., Dec. 4, 1997
42. "Probing Polymers Science via Synchrotron Radiation", Dow Corning Company, Midland, MI., Dec. 5, 1997
43. "Probing Polymers Science via Synchrotron Radiation", Research & Development Center, Montell, USA, Elkton, MD., Dec. 12, 1997
44. "New Insights Into Crystallization and Melting Behavior of Polymers Via Synchrotron X-ray Scattering Methods", EXXON Chemicals, Baytown, TX., Jan. 16, 1998
45. "New Insights Into Crystallization and Melting Behavior of Polymers Via Synchrotron X-ray Scattering Methods", Chemical Eng., University of Delaware, Newark, DE., Jan. 21, 1998
46. "Probing Polymers Science via Synchrotron Radiation", Ethicon, A Johnson & Johnson Company, Somerville, NJ., Jan 31, 1998
47. "Research Opportunity in Polymer Science by Simultaneous Synchrotron Small- and Wide- Angle X-ray Scattering Techniques", Small Angle Scattering, EXAFS and XANES Workshop, PPG Chemicals Technical Center, Pittsburgh, September 17, 1998
48. "Structure Development during Deformation of Poly(urethane) Based Polymers with Nanostructured Reinforcement", State University of New York at Stony Brook, Materials Science and Engineering Colloquium, Stony Brook, NY., Oct. 14, 1998.
49. "Research Opportunity in Polymer Science by Synchrotron X-ray Scattering Techniques", Chemistry and Chemical Engineering Department, Polytechnic University, Brooklyn, NY, October 28, 1998.
50. "Structural Changes during Deformation of Segmented Chain Elastomers with Nanostructured Reinforcement", Chemical Engineering Department, National Taiwan University, Taipei, Taiwan, November 16, 1998.
51. "Research Opportunity in Polymer Science by Simultaneous Synchrotron Small- and Wide- Angle X-ray Scattering Techniques", SRRC Users Meeting and Scattering Workshop, Hsinchu, Taiwan, November 18-21, 1998.
52. "Structural Changes during Deformation of Segmented Chain Elastomers with Nanostructured Reinforcement", Phillips Laboratory, Air Force Research Laboratory, Edward SFB, January 19, 1999.
53. "Probing the early stages of polymer crystallization by simultaneous small- and wide-angle X-ray scattering and laser light scattering", SAS99, XI International Conference on Small Angle Scattering, Upton, NY., May 20, 1999
54. "New Research Opportunities in Polymer Science via Synchrotron Radiation", Shaping Polymer for Novel Application by Crystallization", Changchun Institute of Applied Chemistry, Changchun, China, June 14-20, 1999.
55. "Small-Angle X-ray Analysis of Semi-Crystalline Polymers", 48th Annual Denver X-ray Conference, Polymer Data Analysis Workshop, Steamboat Springs, CO., August 3, 1999
56. "Effect of Orientation on Polymer Crystallization - A Study Of Melt Spinning Of Poly(Vinylidene fluoride) By In-Situ Synchrotron X-Ray Scattering ", European Physical Society Conference on Macromolecular Physics, Potsdam, Germany, Sept. 30-Oct. 2, 1999.
57. "Advanced Polymers Beamline (X27C) at National Synchrotron Light Source, Brookhaven National Laboratory", European Synchrotron Radiation Facility, Grenoble, France, Oct. 4, 1999.
58. "Research Opportunities in Polymer Science by Synchrotron X-ray Scattering Techniques", Physics Department, Boston University, Boston, MA October 15, 1999.

59. "Toward the Understanding of Early Stages of Polymer Crystallization: from Quiescent State to Elongational Flow", 6th Pacific Polymer Conference, Guangzhou, China, December 7-11, 1999.
60. "Some New Insights into the Morphological Development during Fiber Melt Spinning", Clemson University, Clemson, SC, January 20, 2000.
61. "Synchrotron Scattering Analysis", Dow Chemical Company, Midland, MI., February 24, 2000.
62. "Understanding of Process, Crystallization and Morphology Relationships in Isotactic Polypolypropylene", ExxonMobil Chemicals, Baytown, TX., April 28, 2000.
63. "Probing the Early Stages of Polymer Crystallization at Quiescent and Flow States", European Polymer Federation, Europolymer Conference 2000, Gargnano, Italy, May 31, 2000.
64. "POSS-Polyurethane and POSS-iPP", Nanostructured Chemicals Workshop, Huntington Beach, CA, September 7, 2000.
65. "Flow-Induced Crystallization in Polymers by In-Situ X-ray Scattering Study", Polymer Technology Center, Texas A&M, College Station, TX, Oct. 6, 2000.
66. "Orientation-Induced Crystallization in Isotactic Polypropylene", Goodyear Akron Polymer Lecture Group, Akron University, Akron, OH, November 3, 2000.
67. "Orientation-Induced Crystallization in Polymers", in Symposium of "Scattering Studies of Mesoscopic Scale Structure and Dynamics in Soft Matter", Messina, Italy, November 22-25, 2000.
68. "Orientation-Induced Crystallization in Polymers", Chemical Engineering Department, University of Palermo, Palermo, Sicily, Italy, November 27, 2000
69. "Orientation-Induced Crystallization in Polymers", Instituto de Estructura de la Materia, CSIC, Madrid, Spain, November 30, 2000
70. "Orientation-Induced Crystallization in Polymers", Chemical Engineering Department, Princeton University, December 11, 2000.
71. "Flow-Induced Crystallization in Polymers", ExxonMobile Chemicals, Clinton, NJ, March 1, 2001.
72. "Real-time measurements of structure development during polymer flow", 2001 Gordon Research Conference on CAE in Polymer Processing, Ventura, CA, March 4, 2001.
73. "Synthetic and Natural Nanofibers for Biomedical Applications", Chemistry Department, City College of New York, New York, March 28, 2001.
74. "Orientation-Induced Crystallization in Polymers", "Nanofillers Induced Physical Gelation in Polyolefins and Elastomers", EXXONMOBIL Chemicals, Baytown, TX., May 24, 2001.
75. "Polymer Research Opportunities by Synchrotron X-rays", 2001 Science, Engineering and Technology Seminars (SETS) and Business Expo, AACF (Association of American-Chinese Professionals) Foundation, Houston, TX, May 25, 2001.
76. "Silicon Based Nanocomposites", Estee Lauder Company, Inc., Melville, NY, June 6, 2001.
77. "Orientation-Induced Crystallization in Polymers", 2001 Telluride Workshop on Polymer Theory vs Polymer Experiment, Telluride, Colorado, August 6-10, 2001.
78. "Orientation-Induced Crystallization in Polymers", HORIZONS lecture, Kimberly-Clark Corp., Rosewell, GA, June 15, 2001.
79. "Physics of Orientation-Induced Crystallization in Polymers - A Case Study of Isotactic Polypropylene in Shear", Italian Association of Science and Technology of Macromolecules (AIM), European Polymer Federation (EPF), Salerno, Italy, October 14-17, 2001.
80. "Manipulation of Structure and Property in Vinyl-Based Polymer/Clay Nanocomposites", Building and Fire Research Laboratory, NIST, Gaithersburg, MD, January 16, 2002.
81. "Orientation-Induced Crystallization In Isotactic Polypropylene", 'Studies in Crystallization and Orientation of Thermoplastics', SPE ANTEC Meeting, San Francisco, CA, May 5-9, 2002.
82. "Control of Structure and Property in Nanocomposites Comprising Semicrystalline Polymer Matrix and Clay", 'International Symposium on Nanostructure, Deformation and Fracture in Semicrystalline Polymers', 223rd ACS National Meeting, Polymer Materials Science and Engineering Division, Orlando, FL, April 7-11, 2002.
83. "A Novel Diffraction Analysis for Estimate of Mesophase in Crystalline Polymer Fibers", 'Symposium on Polymer Diffraction Methods', 223rd ACS National Meeting, Polymer Chemistry Division, Orlando, FL, April 7-11, 2002
84. "Crystalline Morphology and Elastic Recovery of Semi-crystalline Ethylene-Propylene Elastomer", 223rd ACS National Meeting, Polymer Chemistry Division, Orlando, FL, April 7-11, 2002
85. "Orientation-Induced Crystallization in Long Chain Branched Polypropylenes and Ethylene-Propylene Copolymers", ExxonMobil Chemical Company, Baytown Research Center, Baytown, TX, March 22, 2002.

86. "Polymer Nanocomposite Technology", Chemical Technology Division of Associations of Chinese American Professionals, Houston, TX, March 23, 2002.
87. "New Insights into Natural Bone and Synthetic Nanocomposites by Synchrotron X-ray Scattering" Frontiers for Synchrotron Research on Soft Matter and Biomaterials Workshop organized by BNL, Tarrytown, New York, April 25-27, 2002.
88. "Orientation Induced Crystallization in Polymers", Polymer Processing for Nanostructure Control Workshop IPRIME Annual Meetings, University of Minnesota, Minneapolis, MN, May 28-29, 2002.
89. "Orientation-Induced Crystallization in Polymers", International Symposium on Polymer Crystallization, Mishima, Japan, June 9-12, 2002.
90. "Polymer Nanocomposite Technology", Chemical Engineering Department, National Taiwan University, Taipei, Taiwan, June 21, 2002.
91. "Polymer Research Opportunities Using Synchrotron Scattering Techniques", Chemical Engineering Department, Chung-Hsin University, Taichung, Taiwan, June 25, 2002.
92. "Orientation Induced Crystallization in Polymers", Materials Science and Engineering Department, Chung-Shan University, Kaohsiung, Taiwan, June 26, 2002.
93. "Nanostructured Bioabsorbable Membranes for Biomedical Applications", Union Chemical Laboratory, Hsin-Chu, June 28, 2002.
94. "Manipulation of Structure and Morphology in Semicrystalline Bioabsorbable Polymers", International Symposium on Polymer Physics, PP'2002, Qingdao, China, July 2-6, 2002.
95. "Orientation Induced Crystallization in Polymers", Department of Textile and Fibers Engineering, Georgia Institute of Technology, Atlanta, GA, September 26, 2002.
96. "Mesomorphic PET as Precursor to Crystallization during Deformation", Corporate Research Laboratory, Kodak Company, Rochester, NY, Oct. 24, 2002.
97. "Polymer Nanocomposites Technology", The 2nd Annual Emerging Information Technology Conference - Princeton, NJ, Nov 1, 2002.
98. "New Insights Into Natural Bone and Synthetic Nanocomposites by Synchrotron X-ray Scattering", Department of Chemistry, Rensselaer Polytechnic Institute, Troy, November 8, 2002.
99. "Stony Brook/Baytown Collaborations of Synchrotron X-ray Study of Polymer Science", ExxonMobil Chemicals, Baytown, TX, November 15, 2002.
100. "Nanostructured Bioabsorbable Membranes for Biomedical Applications", Association of Chinese American Professionals, Houston, TX, November 16, 2002.
101. "Orientation Induced Crystallization in Polypropylene, Effects of Molecular Weight", Dow Chemical, Houston, TX, January 14, 2003.
102. "Shear-Induced Precursor Structures in Polyolefin Melts by In-Situ Rheo-SAXS and -WAXD Studies", Keynote Lecture, Engineering Properties & Structure Session, ANTEC 2003 Meeting in Nashville, TN, May 6, 2003.
103. "Non-Woven Nanofiber Technology from STAR, Inc.", Long Island Life Sciences Initiative's 2003 Long Island Life Sciences Summit, 'Nurturing the Life Sciences Revolution: A Strategic Perspective', Huntington, NY, May 8, 2003.
104. "Structural Development during Thermal Deformation in Poly(ethylene terephthalate) Film", Eastman Chemical Company, Kingsport, TN, June 12, 2003.
105. "Structural Development during Thermal Deformation in Poly(ethylene terephthalate) Film", Mitsubishi Polyester Films, Greenville, SC, June 16, 2003
106. "Flow-Induced Crystallization in Polyolefins", Milliken and Company, Spartanburg, SC, June 19, 2003.
107. "Flow-Induced Crystallization in Polyolefins", EquiStar Chemicals, Cincinnati, OH, August 5, 2003.
108. "Orientation-Induced Crystallization in Polymers", Chemical Engineering and Chemistry, Eindhoven University of Technology, Eindhoven, Netherlands, Sept. 19, 2003.
109. "Shear-Induced Precursor Structures in Polyolefin Melts by In-Situ Rheo-SAXS and -WAXD Studies", European Discussion Meeting on Polymer Physics, Waldau, Germany, Sept 24 - 27, 2003.
110. "Flow-Induced Crystallization Precursor Structures in Polymer Melts", Swiss Federal Institutes of Technology (ETH-Zurich), Zurich, Switzerland, Sept 28-Oct. 3, 2003.
111. "Real-Time Synchrotron X-ray Techniques for Polymer Processing Research", 3M Research Center, St. Paul, MN, Oct. 16, 2003.
112. "Adhesion and Anti-adhesion, from DNAs, Cells to Body Parts", Department of Chemical Engineering, National Tsing Hua University, Nov. 22, 2003.

113. "Synchrotron SAXS/WAXD application on soft condensed matter", 2003 Hsinchu Materials Nanotechnology Forum at ITRI, Hsinchu, Taiwan, Nov. 25,26, 2003
114. "Adhesion and Anti-adhesion, from DNAs, Cells to Body Parts", 2002 Gordon Research Conference, Colloidal, Macromolecular & Polyelectrolyte Solutions, Ventura Beach, CA, Feb 1-6, 2004.
115. "Flow-Induced Crystallization Precursor Structures in Polymer Melt", 9th Microsymposium in Wittenberg, Crystallization Processes and Micromechanical Effects in Confined Polymer System, Wittenberg , Germany, May 6-7, 2004.
116. "Structural formation of amorphous poly(ethylene terephthalate) during uniaxial deformation above and below glass temperature", SPE ANTEC Meeting, Chicago, IL, May 16-20, 2004
117. "Real-Time Synchrotron X-ray Techniques for Polymer Processing Research", SPE ANTEC Meeting, Frontier Award Symposium in honor of M. T. Shaw, Chicago, IL, May 16-20, 2004
118. "Strain Induced Phase Transition and Superstructure Development in Poly(ethylene Terephthalate)", International Symposium for Polymer Physics, Dali and Lijiang of Yunan, China, June 1-5, 2004.
119. "Directed nucleation scaffolds by polymer flow"3rd East Asian Polymer Conference, Chengdu, China, May 26-29, 2003
120. "Synchrotron SAXS Techniques for Polymer Research", Small Angle Scattering Workshop, Denver X-ray Conference, Steamboat Springs, Colorado August 2-6, 2004.
121. "Flow-Induced Crystallization in Polyethylene and Blends", ExxonMobil Chemicals, Baytown, TX, October 15, 2004.
122. "In-Situ Synchrotron X-Ray Study of Polymer Processing", Chemical Engineering Department, the Autonomous University of San Luis Potosí in México, October 18, 2004.
123. "Biodegradable Nanofibers for Biomedical Applications", for Explorations in Nanoscale Science and Engineering, 2004 Science and Technology Series Sponsored by The Johns Hopkins University, Center Talented Youth Workshop, October 24, 2004.
124. "Super-Tough Surface-Modified Carbon Nanofiber/UHMWPE Nanocomposites" Annual Meeting of Emerging Information Technology Conference (EITC) –2004, Princeton University, Princeton, NJ, October 28-29, 2004.
125. "High Throughput Electro-Blowing Technology for Fabrication of Nanofibrous Barrier Fabrics", 14th TANDEC International Nonwovens Conference, Knoxville, TN, November 9-11, 2004.
126. "In-situ Synchrotron X-Ray Studies of Modified Carbon Nano-fiber and UHMWPE Nano-Composite Films during Deformation", MRS Symposium on "Materials for Space Applications", Boston. MA, Nov. 29 – Dec. 2, 2004.
127. "Synchrotron X-ray Techniques for the Study of Clay-Based Polymer Nanocomposites", the 167th Spring Technical Meeting of the Rubber Division, ACS in San Antonio, TX, May 16-18, 2005.
128. "Advanced Nanoscale Processing of Nanofibrous Articles and Their Applications", Korea Research Institute of Chemical Technology, Daejeon, Korea, December 6, 2004.
129. "Flow-Induced Crystallization in Polymers", KAIST, Korea, December 6, 2004.
130. "Advanced Synchrotron Research in Polymer Science", The symposium celebrating the 10th anniversary of Pohang Accelerator Laboratory, Pohang, Korea, December 8, 2004.
131. "Advanced Nanoscale Processing of Nanofibrous Articles and Their Applications", Department of Organic and Polymeric Materials, Tokyo Institute of Technology, Tokyo, Japan, December 10, 2004.
132. "Flow-Induced Crystallization in Polymers", The Raymond F. Boyer Lecture Series, Department of Macromolecular Science and Engineering, Case Western Reserve University, Cleveland, OH, January 14, 2005.
133. "Structure Characterization of Nanocomposites by Synchrotron X-ray Rays", NanoCenter Polymer Nanocomposites Symposium Univ. Southern Carolina, April 7-8, 2005.
134. "Flow-induced crystallization precursor structures in entangled polyethylene melt", Phil Geil 75th Birthday Symposium, University of Illinois, Urbana-Champaign, I.L. April 8-9, 2005.
135. "Nanofibers for Biomedical Applications", Chemistry Department, Hofstra University, Long Island, NY, April 13, 2005.
136. "What can you do with fibers 1000 times smaller than spider silk", Extreme Textiles Symposium, Cooper-Hewitt National Design Museum, New York City, N.Y., May 12, 2005.
137. "What can you do with fibers 1000 times smaller than spider silk", Institut Charles Sadron, Strasbourg, France, June 23, 2005.
138. "Flow-Induced Crystallization in Polymers", Universite de Mons, Mons, Belgium, June 29, 2005.
139. "Nanofiber Technology for Biomedical Applications", Physikalisches Institut, Albert-Ludwigs-Universitaet, Freiburg, Germany, July 8, 2005.

140. "Flow-Induced Shish Kebab Precursor Structures in Entangled Polymer Melts", Polymer Processing Society in Quebec City, Canada, August 14-17, 2005
141. "Nanofiber Technology", DuPont Richmond Spruance Plant, Richmond, VA, August 23, 2005.
142. "Flow-Induced Crystallization Precursor Structures in Entangled Polymer Melts", European Discussion Meeting on Polymer Physics, "Polymer Crystallization", Waldau / Hochschwarzwald Germany, October 5 - 8, 2005
143. "Flow-Induced Crystallization in Entangled Polymer Melts", Dipartimento di Ingegneria Chimica e Alimentare, Universita' degli Studi di Salerno, Fisciano (SA), Italy, October 10, 2005
144. "Functional Nanofibers for Biomedical Applications", Proceeding of 2005 International Conference on Advanced Fibers and Polymer Materials, Shanghai, China, October 19-21, 2005.
145. "Biodegradable Nanofibers for Biomedical Applications", The First International Symposium of Research Center for Environment Friendly Polymers (IS-RCEFP-I), Kwansai Gakuin University Convention Center, Nishinomiya, Hyogo, Japan, Oct. 24-25, 2005.
146. "Polymer Nanofibers and Their Applications", Chemistry Department, Union College, New York, Nov. 3, 2005.
147. "A Scattering Study of Flow-Induced Crystallization Precursor Structures in Entangled Polyethylene Melt", Workshop on Application of Scattering Methods to Investigation of Structure and Dynamics of Soft Condensed Matter Villa Bencista, San Domenico (Florence), Italy, Nov. 11-13, 2005.
148. "Flow-Induced Crystallization Precursor Structure in Entangled Polymer Melt", Dow Chemical, Freeport TX, Nov. 29, 2005.
149. "Nanofiber Technology: Challenges and Opportunities", Institute of Materials Science, University of Connecticut, Connecticut, Storrs, Dec. 16, 2005.
150. "X-ray Characterization of Polymer Nanocomposites", ExxonMobil Chemical Company, Baytown, Texas, January 18, 2006.
151. "Flow Induced Crystallization from Entangled Melts", Twenty-Ninth Asilomar Conference on Polymeric Materials, Asilomar State Park, Pacific Grove, CA, February 5-8, 2006.
152. "Flow-Induced Crystallization Precursor Structure in Entangled Polymer Melt", APS March Meeting, Baltimore, MD, March 13-17, 2006.
153. "Thermal Stability of Shear-Induced Shish-Kebab Precursor Structure from High Molecular Weight Polyethylene Chains", 231st ACS National Meeting, Division of Polymeric Materials: Science and Engineering, Symposium on "Complex Fluids in Confined Spaces: Colloids and Complex Fluids", Atlanta, GA, March 26-30, 2006.
154. "Functional Nanofiber Technology through Combination of Chemistry, Physics and Engineering" Chemistry Department, The College of Staten Island, City University of New York, Staten Island, NY, April 13, 2006
155. "Functional Nanofiber Technology through Combination of Chemistry, Physics and Engineering" Chemistry Department, Lehigh University, PA, April 26, 2006
156. "Nanofiber Technology: Challenges and Opportunities", Dept. of Textiles and Apparel, Cornell University, May 4, 2006.
157. "Functional Nanofiber Technology through Combination of Chemistry, Physics and Engineering" Chemistry Department, State University of New York at Binghamton, NY, May 5, 2006
158. "Pushing the envelope of in-situ synchrotron scattering technique for characterization of biocomposites", Soft Materials & Nanoscience ERL Workshop, CHESS, Cornell University, June 19-20, 2006.
159. "Nanostructure Characterization by Advanced Scattering Techniques" Chemical Engineering Department, National Taiwan University of Science and Technology (NTUST), Taipei, Taiwan, June 27, 2006.
160. "Nanofiber Technology: Challenges and Opportunities" Center for Condensed Matter Sciences (CCMS), National Taiwan University (NTU), Taipei, Taiwan, June 28, 2006.
161. "Nanofiber Technology for Health: Challenges and Opportunities" Chemical Engineering Department, National Tsin-Hwa University (NTHU), Hsin-Chu, Taiwan, June 30, 2006.
162. "Nanostructure Characterization by Advanced Scattering Techniques" National Chiao-Tung University (NCTU), Hsin-Chu, Taiwan, June 30, 2006.
163. "On-Line Nanostructure Characterization by Synchrotron X-ray Scattering and Diffraction Techniques", 22nd Annual Meeting of Polymer Processing Society, Yamagata, Japan, July 2-6, 2006.
164. "Synchrotron X-Ray Scattering of Polymer Nanocomposites", Synchrotron Radiation in Polymer Science III (SRPS3) Proceeding, Spring-8, Japan, July 6 - 8, 2006.

165. "Probing Shear-Induced Crystallization Precursor Structure in Entangled Polymer Melts by In-Situ Rheo-SAXS and Rheo-WAXD", XIII International Conference on Small-Angle Scattering Symposium, Kyoto, Japan, July 9-13., 2006.
166. "Polymer Nanocomposite Containing Modified Carbon Nanotubes/Nanofibers", Toyobo Company, Otsu, Japan, July 14, 2006.
167. "Nanofiber Technology for Health: Challenges and Opportunities", Department of Chemical Engineering and Materials Science, YuanZe University, Chungli, Taiwan, July 17, 2006.
168. "Nanofiber Technology for Health: Challenges and Opportunities", Health Materials and Techniques: Research and Development over the Past 25 Years: Investment in Basic Research Leading to Benefits for Society, HIST/PRES symposium, 232nd ACS National Meeting, San Francisco, CA, September 10-14, 2006.
169. "Nanofibrous Materials for Biomedical and Environmental Applications", Health Materials and Techniques: Research and Development over the Past 25 Years: Investment in Basic Research Leading to Benefits for Society, HIST/PRES symposium, 232nd ACS National Meeting, San Francisco, CA, September 10-14, 2006.
170. "The Origin of Flow-Induced Crystallization in Entangled Polymer Melts " International Polymer Physics Meeting to honour Prof. Francisco José Baltá-Calleja on his 70th birthday, "Advances in Nanostructure and Physical Properties of Polymer Materials and Nanocomposites", Madrid, Spain, October 23-24, 2006.
171. "Structure, Process and Property Relationships of Olefin Block Copolymers via In-Situ Synchrotron X-ray Studies", The Dow Chemical Company, Freeport, TX, Nov. 7, 2006.
172. "On-Line Nanostructure Characterization by Synchrotron X-ray Scattering and Diffraction Techniques", W. L. Gore Company, Elkton, MD, Nov. 9, 2006.
173. "Effects of Microwave Irradiation on Nanostructure of Somasif Organoclay", ExxonMobil Chemical Company, Baytown, TX, Nov. 17, 2006.
174. "On-Line Nanostructure Characterization by Synchrotron X-ray Scattering and Diffraction Techniques", Arkema Inc. (Formerly Atofina Chemicals Inc.) King of Prussia, PA, January 17, 2007.
175. "Advanced Structure Characterization during Fiber Processing - Development of Supertough Nanocomposite Fibers 90th Eastern Science and Technology Forum, Shanghai, China, April 23, 2007
176. "Flow-Induced Crystallization from Entangled Polymer Melts", Donghua University, Shanghai, China, April 23, 2007.
177. "New Horizon of Nanofiber Technology for Environmental Applications", the Alan Lawley Seminar, Department of Materials Science and Engineering, Drexel University, May 8, 2007.
178. "Advanced Nanostructure Characterization by Synchrotron Scattering/Diffraction Techniques – Instrumentation and Applications", Workshop on Synchrotron Radiation in Polymer Science, University of Science and Technology of China, Hefei, China, May 15, 2007
179. "Advanced Nanostructure Characterization by Synchrotron Radiation", Peking University, Beijing, China, May 16, 2007
180. "Structure Characterization of Nanocomposites by Synchrotron X-ray Rays" Nanotech 2007. Santa Clara (Silicon Valley) CA, May 20-24, 2007
181. "Transition Metal Ion Modified Organoclays as Fire Retardant Fillers for Polymer Nanocomposites", 18th Annual BCC Conference of FR on Polymeric Materials, Stamford, CT, May 21-23, 2007.
182. "Nanostructure Characterization of Biocomposites by Synchrotron Scattering" COST P12 Workshop on Applications of Synchrotron Light to Non-crystalline Diffraction in Materials and Life Sciences, Madrid, Spain, Oct. 15-17, 2007.
183. "Nanofiber Technology and Ultrafiltration", International Symposium on Polymers for Advanced Technologies (PAT2007), Shanghai, China, October 22 to 25, 2007.
184. "Fluoropolymer Nanocomposites Based on Fluorinated Carbon Nanotubes", Xerox Corporation, Webster, NY, Nov. 19, 2007.
185. "On-Line Nanostructure Characterization by Synchrotron X-ray Scattering and Diffraction Techniques", Chevron-Phillips Seminar Series, Macromolecules and Interfaces Institute, Virginia Tech, Blacksburg, VA, January 23, 2008.
186. "New Horizon of Nanofiber Technology for Environmental Applications", The Princeton Institute for the Science and Technology of Materials (PRISM) at Princeton University, Princeton, NJ, March 5, 2008.
187. "New Horizon of Nanofiber Technology for Environmental Applications" Macromolecular Science and Engineering, University of Michigan, Ann Arbor, MI, March 7, 2008.
188. Water Innovation, "From Ideas to Innovations", UCLA Anderson Entrepreneurs Conference (<http://www.uclamba.com/eac/2008>), May 9, 2008.

189. "New Breakthroughs in Water Purification - Nanofiber Technology & Molecular Engineering for Environment: Application to Water Purification", Commission on Sustainable Development 16 Conference, United Nations, May 16, 2008.
190. "Functional Nanofibrous Scaffolds for Biomedical Applications", The 40th Middle Atlantic Regional Meeting (MARM 2008) of the American Chemical Society, Queensborough Community College, Bayside, Queens, NY, May 17-21, 2008.
191. "Nanofiber Technology for Energy Saving Water Purification", Case Western Reserve University, Cleveland, Ohio, May 30, 2008.
192. "Structural Analysis of Polymer-Inorganic Nanocomposites by Synchrotron X-ray Scattering"; "Instrumentation Development of Multi-Scaled Scattering for Bio-Macromolecular Solutions at the National Synchrotron Light Source", 5th East-Asian Polymer Conference, Shanghai, China, June 4, 2008.
193. "Functional Nanofibrous Scaffolds for Biomedical Applications"; "Functional Nanofiber Technology for Environmental Application", the International Forum on Nanofibers and Functional Materials (111 project), Donghua University, Shanghai, China, June 5 and 6, 2008.
194. "Flow-induced Crystallization from Entangled Melts", International Symposium on Polymer Physics, PP'2008, Xiamen, China, June 8-12, 2008.
195. "Advanced Nanostructure Characterization of Polymeric Materials by Synchrotron X-ray Scattering/Diffraction Techniques", 24th Annual Meeting of Polymer Processing Society; PPS-24, Salerno, Italy, June 15-19, 2008.
196. "Functional Nanofibrous Scaffolds for Biomedical Applications", 2008 Emerging Information and Technology Conference, National Cheng Kung University, Tainan, Taiwan, June 26-27, 2008
197. "Nanofiber Technology for Water Purification", IUPAC-sponsored 42nd World Polymer Congress ("Macro 2008"), Taipei International Convention Center, Taipei, Taiwan, June 29 to July 4, 2008
198. "Structural Analysis of Polymer-Inorganic Nanocomposites by Synchrotron X-ray Scattering", "Polymeric Materials P2008", Martin-Luther-Universität Halle-Wittenberg, Halle (Saale), Germany, September 24 - 26, 2008
199. "Nanofiber Technology for Water Purification", The Fiber Society 2008 Fall Meeting and Technical Conference, Industrial Materials Institute Campus, Boucherville, Québec, Canada, October 1-3, 2008
200. "Advanced Nanostructure Characterization of Soft Matter by Synchrotron X-ray Techniques", Society of Plastics Engineers, Engineering Properties & Structure Division and Philadelphia Section, TOPCON: New Approaches in Polymer Characterization: Nanocomposites, Block Copolymers and other Nanostructured Materials, Wilmington, DE, October 13-14, 2008,
201. "Nanofiber Technology for Water Purification" the Lux Executive Summit Conference, Cambridge, MA, October 20-21, 2008.
202. "Nanofiber Technology for Environmental Applications", Chemical Engineering Department, University of Salerno, Salerno Italy, October 27, 2008.
203. "Nanofiber Technology for Environmental Applications", Institute of Physics, National Research Council - Messina, Sicily, Italy, October 28, 2008.
204. "In situ characterization of polymer processing by synchrotron scattering", Chemical Engineering Department, University of Palermo, Sicily, Italy, October 30, 2008.
205. "Advanced Nanostructure Characterization by Synchrotron Scattering/Diffraction Techniques", Department of Mechanical Engineering, Stevens Institute of Technology, Hoboken, NJ, November, 12, 2008.
206. "Low Pressure High Flux Nanofibrous Membranes for Water Purification", Advances in Materials and Processes for Polymeric Membrane Mediated Water Purification at California's Asilomar Conference Center, Monterey, California, February 22-25, 2009.
207. "Synchrotron Research on Polymer Science", A Symposium honoring Dr. Darrell Reneker's 80th Birthday, University of Akron, College of Polymer Science And Polymer Engineering, Akron, OH, March 13-15, 2009.
208. "High Flux Nanofibrous Membranes for Water Purification", in the session of Physics of Polymer Membranes for Water Purification, Pittsburgh, Pennsylvania, APS March Meeting, March 18, 2009.
209. "Breakthrough Nanofiber Technology for Water Purification", Tongji University, Shanghai, April 20, 2009.
210. "Synchrotron Research on Polymer Science", State Key Lab for Chemical Fibers & Polymer Materials, Donghua University, Shanghai, May 27, 2009.
211. "In-Situ Structure Characterization during Fiber Processing by Synchrotron X-ray Scattering/Diffraction Techniques", 2009 Fiber Society Conference, Donghua University, Shanghai, May 28, 2009

212. "Breakthrough Nanofiber Technology for Water Purification", Beijing University of Chemical Technology, Beijing, June 1, 2009.
213. "Breakthrough Nanofiber Technology for Water Purification", Polymer and Chemical Engineering Innovation Northeast Ohio (PINO) 2009 Conference, Case Western Reserve University, July 17, 2009.
214. "Structure, Property and Process Relationship of Thermoplastic Polyolefin Elastomers", Symposium on Polyolefin Crystallization, the ExxonMobil Global Microscopy Network, and Products Fundamentals Research, ExxonMobil, Clinton, NJ, July 21, 2009.
215. "Energy-saving nanofibrous membrane technology for water purification", Division of Industrial & Engineering Chemistry, Symposium Honoring Professor Donald R. Paul on the Occasion of his 70th Birthday, ACS Fall Meeting, Washington, DC, August 18, 2009.
216. "Breakthrough polymer nanofiber technology for water purification", 2009 International Conference on Advanced Fibers and Polymer Materials (ICAFPM 2009), Shanghai, China, October 21 – 24, 2009.
217. "Synchrotron Research on Polymer Science", College of Polymer Science and Engineering, Sichuan University, Chengdu, China, October 27, 2009.
218. "Highly Efficient Microfiltration Membranes based on Hierarchical Nanofiber Structure", International Symposium on Polymer Physics, PP' 2010, Ji'nan, China, June 6-10, 2010.
219. "Highly Efficient Microfiltration Membranes based on Hierarchical Fiber Composite Configuration", Nanofibers for the 3rd Millennium 2010 (N3M 2010), Raleigh, North Carolina, August 30 - September 1, 2010.
220. "Breakthrough polymer nanofiber technology for water purification", Applied Chemistry Lecture Series, Chanchung Institute of Applied Chemistry, Chinese Academy of Sciences, Changchung, November 19, 2010.
221. "In-situ Synchrotron X-ray Studies on the Structure-Property Relationships in Polyolefin Blends and Copolymers", College of Polymer Science and Engineering, Sichuan University, Chengdu, Sichuan, November 24, 2010.
222. "Highly Permeable Nanofibrous Filters for Water Purification", ACS Division of Polymer Chemistry "Advances in Materials and Processes for Polymeric Membrane Mediated Water Purification 2011" Conference, Asilomar Conference Grounds, Pacific Grove, California, February 27 – March 2, 2011.
223. "Highly Efficient Nanofibrous Membranes for Water Purification", POLYCHAR 19 – World Forum on Advanced Materials Kathmandu, Nepal, March 20-24, 2011.
224. "Highly Efficient Nanofibrous Membranes for Water Purification", State Key Lab for Chemical Fibers & Polymer Materials, Donghua University, Shanghai, April 1, 2011.
225. "Highly Permeable Nanofibrous Membranes for Water Purification", International Conference on Advanced Fibers and Polymer Materials (ICAFPM 2011), Shanghai, China, August 15 – 17, 2011.
226. "Highly Permeable Nanofibrous Membranes for Water Purification", Department of Materials and Optoelectronic Science, National Sun Yat-Sen University, Kaohsiung, Taiwan, August 19, 2011.
227. "Highly Permeable Nanofibrous Membranes for Water Purification", Department of Chemical Engineering, National Tsing Hua University, Hsinchu, Taiwan, August 22, 2011.
228. "Highly Permeable Nanofibrous Membranes for Water Purification", Department of Chemistry and Department of Chemical Engineering & Materials Science, University of Minnesota, Minneapolis, Minnesota, September 23, 2011.
229. "NSLS-II Current Status and Plans", Shanghai Synchrotron Radiation Facility, Shanghai, China, October 31, 2011.
230. "New Insights on the Formation of Bone by Synchrotron X-ray Scattering", Department of Chemistry, The Chinese University of Hong Kong, Hong Kong, China, November 2, 2011.
231. "Highly Permeable Nanofibrous Membranes for Water Purification", NUS Nanoscience and Nanotechnology Initiative National University of Singapore, Singapore, November 4, 2011.
232. "X-ray scattering fundamentals- theoretic computation of scattering patterns", "X-ray scattering study of polyolefin crystallization - crystalline morphology development and mechanical behavior", Workshop "SAXS and WAXS/XRD in ExxonMobil", Corporate Strategic Research, Clinton, NJ, November 9, 2011.
233. "Highly Efficient Nanofibrous Membranes for Water Purification", Institute of Materials Science, University of Connecticut, Storrs, CT., February 3, 2012.
234. "Highly Efficient Nanofibrous Membranes for Water Purification", College of Chemistry and Chemical Biology, Gunma University, Gunma, Japan, May 28, 2012.
235. "Highly Efficient Nanofibrous Membranes for Water Purification", School of Chemistry and Chemical Engineering, Nanjing University, Nanjing, China, June 1, 2012.

236. "Highly Permeable Nanofibrous Membranes for Water Purification", Polymer Physics 2012, Chengdu, China, June 6, 2012.
237. "Highly Efficient Nanofibrous Membranes for Water Purification", College of Polymer Sciences and Engineering, Sichuan University, Chengdu, China, June 7, 2012.
238. "Nanofibrous Polymeric Membranes with Directed Water Channels", ACS "Water Purification 2013" Workshop, Asilomar Conference Grounds, Pacific Grove, CA, February 24 - 27, 2013.
239. "Highly permeable nanofibrous membranes for energy efficient water purification", ACS National Meeting, Polymeric Materials: Science and Engineering Division, the "Porous Polymers" Symposium, New Orleans, LA, April 7-11, 2013.
240. "Nanofibrous Cellulose Membranes for Water Purification", Planery Lecture, 6th International Symposium on Engineering Plastics, Xiamen, China, August 25-28, 2013.
241. "Synchrotron X-ray Characterizations of Polymers and Biomaterials", Key Laboratory of Rubber-plastics, Ministry of Education, Qingdao University of Science and Technology, Qingdao, China, September 24, 2013.
242. "Highly Efficient Nanofibrous Membranes for Water Purification" D6 (Advanced Fibers and Nano-composites) Session, IUMRS-13th International Conference on Advanced Materials, Qingdao, China, September 23-27, 2013.
243. "Synchrotron X-ray Characterizations of Polymers and Biomaterials", Institute of Chemistry, Chinese Academy of Sciences, Beijing, September 25, 2013.
244. "Synchrotron X-ray Characterizations of Polymers and Biomaterials", Sinopec Headquarter, Beijing, September 26, 2013.
245. "Planning for Excellence, Chemistry Department at Stony Brook", Facultad de Ciencias Químicas, La Universidad Autónoma de San Luis Potosí (UASLP), Mexico, January 8, 2014.
246. "Highly permeable nanofibrous membranes for water purification", Chemistry Department, Stony Brook University, Feb 13, 2014.
247. "New breakthroughs in highly permeable polymer membranes for water purification", IBM Research Center - Almaden Science & Technology, Feb. 25, 2014.
248. "Electro-Spinning Technology & its Applications to Fibrous Membranes" in Electrospinning and Nanofibers: Symposium in Honor of the 85th Birthday of Darrell Reneker, Division of Polymeric Materials Science and Engineering (PMSE), 247th American Chemical Society National Meeting, Dallas, TX, March 16-20, 2014.
249. "New breakthroughs in highly permeable polymer membranes for water purification", "Dr R A Mashelkar Endowment Lecture on Advanced Materials" at the Council of Scientific and Industrial Research (CSIR) - National Chemical Laboratory (NCL), India, March 6, 2014.
250. "Electro-Spinning Technology & its Applications to Fibrous Membranes" in Electrospinning and Nanofibers: Symposium in Honor of the 85th Birthday of Darrell Reneker, Division of Polymeric Materials Science and Engineering (PMSE), 247th American Chemical Society National Meeting, Dallas, TX, March 18, 2014.
251. "High flux nanofibrous membranes for water purification", POLYCHAR 22: World Forum on Advanced Materials, Stellenbosch, South Africa, April 10, 2014.
252. "Highly Permeable Nanofibrous Membranes for Water Purification", Chinese American Academic & Professional Society (CAAPS), Taipei Economic and Cultural Office in New York, May 9, 2014.
253. "Highly Permeable Nanofibrous Membranes for Water Purification", State Key Lab for Chemical Fibers & Polymer Materials, Donghua University, Shanghai, May 27, 2014.
254. "Highly Permeable Nanofibrous Membranes for Water Purification", 11th International Symposium of Polymer Physics (PP2014), Nanjing, China, June 9, 2014.
255. "Characterization of cellulose nano-fibers & applications to fibrous membranes", 30th International Conference of the Polymer Processing Society (PPS-30), Cleveland, Ohio, June 11, 2014.
256. "Highly permeable nanofibrous membranes for water purification", Materials Science and Engineering Division, National Institute of Standards and Technology, Gaithersburg, MD, July 14, 2014.
257. "Breakthrough Nanofibrous Membranes for Water Purification", Chinese American Academic and Professional Society 2014 Annual Convention (CAAPS2014), Technology Innovation & Applications Session, Flushing, NY August 17, 2014.
258. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", Kathmandu Symposia on Advanced Materials – 2014 (KaSAM-2014), Kathmandu, Nepal, September, 8, 2014.
259. "Synchrotron X-ray study of extensional flow-induced crystallization in isotactic polypropylene", International Symposium on Fiber Science and Technology (ISF2014), Tokyo, Japan, Sept. 29, 2014.

260. "Structural study of cellulose nascent crystals", ICR Symposium on Polymer Crystals (ICRSPC2014), Kyoto, Japan, Oct. 2, 2014.
261. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", Tianfu Forum for Polymer Lecture Series, State Key Laboratory of Polymer Materials Engineering, Polymer Research Institute and College of Polymer Science & Engineering, Sichuan University, Chengdu, China, October 15, 2014
262. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", 3rd Saudi International Nanotechnology Conference and workshops (SINC 2014), King Abdulaziz City for Science and Technology (KACST), Riyadh, Saudi Arabia, December 3, 2014.
263. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", Institut Charles Sadron, CNRS, Starsbourg, France, December 8, 2014.
264. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", Centre for Materials for Electronics Technology (C-MET), Thrissur, India, January 19, 2015.
265. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", Centre for Nanoscience and Nanotechnology, School of Chemical Sciences, Mahatma Gandhi University, Kerala, India, January 21, 2015.
266. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", Material Sciences and Technology Division, CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), Thiruvananthapuram, India, January 22, 2015.
267. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", Department of Fiber and Polymer Sciences, Division of Textiles and Clothing, University of California, Davis, February 20, 2015.
268. "Crystallization of Polyolefins under Flow and Deformation", SCG Chemicals Co., Ltd, Siam Cement Group, (SCG), Rayong, Thailand, March 16, 2015.
269. "Synchrotron X-ray Characterizations of Polymers and Biomaterials", Synchrotron light research institute (SRLI), Nakhon Ratchasima, Thailand, March 18, 2015.
270. "Synchrotron X-ray research of structure-property relationship in polymers", and "Highly Permeable Nanofibrous Cellulose Membranes for Water Purification", 3M Corporate Research Processing Laboratory, St. Paul, MN, May 14 and 15.
271. "Exploring the Nature of Cellulose Microfibrils", 2015 International Conference on Advanced Fibers and Polymer Materials (ICAFPM 2015), Donghua University, Shanghai, China, May 24–27, 2015.
272. "Exploring the Nature of Cellulose Microfibrils", College of Polymer Science and Engineering, State Key Laboratory of Polymer Materials Engineering, Sichuan University, Chengdu, China, May 28, 2015.
273. "Exploring the Nature of Cellulose Microfibrils", College of Material Science and Engineering, Beijing University of Chemical Technology, Beijing, China, June 1, 2015.
274. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", The Symposium in honor of Professor Richard Stein on his 90th Birthday, University of Massachusetts, Amherst, MA, August 21, 2015.
275. "Structure Characterization of Cellulose Nanofibers/Microfibrils", 6th Conference on Synchrotron Radiation in Polymer Science, Madrid, Spain, September 7-10, 2015.
276. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", in the symposium of "Polymer processing with resulting morphology and properties: feet in the present and eyes at the future.", Salerno, Italy, October 15- 17, 2015.
277. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes" (Plenary Speaker), Australasian Polymer Symposium, Gold Coast, Australia, July 14, 2015.
278. "Exploring the nature of cellulose microfibrils and their applications in water purification", Australian Institute for Bioengineering and Nanotechnology, The University of Queensland, Australia, July 16, 2015.
279. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", Department of Chemical & Biomolecular Engineering, Melbourne University, Melbourne, Australia, July 20, 2015.
280. "Breakthrough Water Purification Technology Based on Highly Permeable Nanofibrous Membranes", Stein Symposium (in honor of Prof. Richard Stein's 90th Birthday), University of Massachusetts, Amherst, MA, August 21, 2015.
281. "Structure Characterization of Cellulose Nanofibers/Microfibrils", Advanced Light Source, Lawrence Berkeley National Laboratory, Berkeley, CA, August 24, 2015.
282. "Structure Characterization of Cellulose Nanofibers/Microfibrils", 6th International Conference on Synchrotron Radiation in Polymer Science, Madrid, September 9, 2015.
283. "Structure Characterization of Cellulose Nanofibers/Microfibrils", Department of Polymer Engineering, University of Minho, Guimarães, Portugal, September 11, 2015.

284. "Highly Permeable Nanofibrous Cellulose Membranes for Water Purification", Chemistry Department, New York University, New York City, NY, October 2, 2015.
285. "Highly Permeable Nanofibrous Cellulose Membranes for Water Purification", Macromolecular Sciences and Engineering Department, Case Western Reserve University, Cleveland, OH, October 7, 2015.
286. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", an International Conference celebrating the 70th birthday of Giuseppe Titomanlio (GT70 International Conference), Salerno, Italy, October 16, 2015.
287. "Structure Characterization of Cellulose Nanofibers/Microfibril", ALBA Synchrotron Light Facility, Barcelona, Spain, October 19, 2015.
288. "Discovery of Sustainable Nanomaterials for Water Purification", ACS Award Symposium, Department of Chemistry, Stony Brook University, Stony Brook, NY, October 29, 2015.
289. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", Wallenberg Wood Science Centre (WWSC) Fall Conference/Workshop in Gothenburg, Sweden, December 8, 2015.
290. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", Government Engineering College, Thrissur, Kerala, India, January 20, 2016.
291. "Breakthrough water filtration membrane technology based on nanofibers", Center of Functional Nanomaterials (CFN) Colloquium, Brookhaven National Laboratory, Upton, NY, Feb 18, 2016.
292. "Center for Integrated Electric Energy Systems (CIEES)", The 3rd International Electric Vehicle Expo (IEVE), Jeju, Korea, March 21, 2016.
293. "Breakthrough Water Purification Technologies Based on Nanofibrous Membranes", EE15: Materials for Sustainable Development - Integrated Approaches, 2016 MRS Spring Meeting & Exhibit, Phoenix, Arizona, March 31, 2016.
294. "Breakthrough Water Purification Technologies Based on Nanofibrous Membranes", 2106 Dow Chemical (China) Innovation Forum, Shanghai, China, May 26, 2016.
295. "Breakthrough Water Purification Technologies Based on Nanofibrous Membranes", Eastern Forum of Science and Technology, Forum on Fundamental and Application Issues of Low-Dimension Materials, Shanghai, China, May 26, 2016.
296. "Scattering in Polymer Science – Characterization of Nanocelluloses", Wallenberg Wood Science Centre (WWSC) Spring Conference/Workshop in Åland Islands, Finland, June 13-15, 2015.
297. "Breakthrough Water Purification Technologies Based on Nanofibrous Membranes", Department of Chemical and Biomolecular Engineering, The Ohio State University, Columbus, OH, August 25, 2016.
298. "Breakthrough Water Purification Technologies Based on Nanofibrous Membranes", Department of Chemical Engineering, National Taiwan University, Taipei, Taiwan, October 5, 2016.
299. "Processing of Highly Permeable Membranes for Water Purification", Polymer Processing Society Asia/Australia Conference 2016 (PPS-2016), Chengdu, China, October 13, 2016.
300. "Multi-scale Structure Characterization of Complex Polymer Systems", College of Material Science and Engineering, Beijing University of Chemical Technology, Beijing, China, October 18, 2016.
301. "Multi-scale Structure Characterization of Complex Polymer Systems", Key Laboratory of Rubber-Plastics, Qingdao University of Science and Technology, Qingdao, China, October 20, 2016.
302. "Highly permeable nanocellulose membranes for water purification", International Union of Materials Research Societies, International Conferences in Asia (IUMRS-ICA 2016), Qingdao, China, October 21, 2016.
303. "Nanocelluloses for Water Purification", International Union of Materials Research Societies, International Conferences in Asia (IUMRS-ICA 2016), Qingdao, China, October 21, 2016.
304. "Nanocelluloses for Water Purification", The 4th Saudi International Nanotechnology Conference (SINC 2016), King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia, October 26, 2016.
305. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", International Conference on Advances in Functional Materials, ICAFM2017, Anna University, Guindy, Chennai, India, January 6-8, 2017.
306. "Nanocelluloses for Water Purification", MACRO2017 International Conference on Polymer Science and Technology, Thiruvananthapuram, India, January 9-11, 2017.
307. "Nanocelluloses for Water Purification", CINVESTAV, Unidad Irapuato, Mexico, February 6, 2017.
308. "Structure and property relations in crystalline and multicomponent polymers"; "Probing the structure, property and processing relations in polyolefins by in-situ X-ray scattering", SCG Chemicals Co., Ltd, Siam Cement Group, (SCG), Rayong, Thailand, February 20-21, 2017.

309. "Synchrotron scattering applications in polymer and soft matter science", Synchrotron Light Research Institute (SLRI), Nakhon Ratchasima, Thailand, February 22, 2017.
310. "Learning how to use agricultural wastes to treat waste water through nanotechnology", the World Water Day event, Botswana Institute for Technology Research and Innovation (BITRI), Gaborone, Botswana, March 22, 2017.
311. "New ideas for global water challenges", NAI-SBU Young Academic Inventor's Award Symposium, Stony Brook University, September 12, 2017.
312. "Advancing Nanocellulose Technologies for Water Purification", 2017 International Conference on BioNano Innovation, Australian Institute for Bioengineering and Nanotechnology, The University of Queensland, Brisbane, Australia, September 24, 2017.
313. "Advancing Nanocellulose Technologies for Water Purification", International Conference on Advanced Fibers and Polymer Material (ICAFPM), Donghua University, Shanghai, China, October 11, 2017.
314. "Sustainable Extraction of Carboxycellulose Nanofibers for Environmental and Advanced Materials Applications", College of Material Science and Engineering, Beijing University of Chemical Technology, Beijing, China, October 17, 2017.
315. "Nanocelluloses for Water Purification", 9th Sino-US Joint Conference of Chemical Engineering, organized by Beijing University of Chemical Technology, Beijing, China, October 17, 2017.
316. "Advancing Nanocellulose Technologies for Water Purification", R&D Technology Club Seminar Series, Pall Corporation, Port Washington, NY, December 5, 2017.
317. "To Purify Water with Nanocelluloses", African Materials Research Society (AMRS) Conference, "Addressing Africa's Challenges through Materials Development", Gaborone, Botswana, December 11, 2017.
318. "Extracting nanocelluloses from underutilized biomass for water purification", BiMaC Innovation, KTH, in IVA (The Royal Swedish Academy of Engineering Sciences) Stockholm, Sweden, January 29, 2018.
319. "New ways to lift the burden of drinking water challenges for our planet", Harvard Project for Asian and International Relations, "The Crisis of Water Sanitation", Harvard University, Massachusetts, February 18, 2018.
320. "Advancing Nanocellulose Membrane Technology for Water Purification", Chemical Engineering Department, Donghai University, Taichun, Taiwan, May 21, 2018.
321. "Advancing Nanocellulose Membrane Technology for Water Purification", Department of Chemical Engineering, National Tsing Hua University, Hsinchu, Taiwan, May 25, 2018.
322. "Advancing Nanocellulose Membrane Technology for Water Purification", College of Materials Science and Engineering, Beijing University of Chemical Technology, Beijing, China, May 28, 2018.
323. "Advancing Nanocellulose Membrane Technology for Water Purification", College of Materials Science and Engineering, Donghua University, Shanghai, China, May 31, 2018.
324. "Advancing Nanocellulose Technologies for Water Purification", 2018 MRS Fall Meeting, Boston, Massachusetts, November 29, 2018.
325. "New and Sustainable Nanocellulose Technologies for Desalination and Waste Water Treatments", Botswana Institute for Technology Research and Innovation (BITRI), Gaborone, Botswana, December 12, 2018.
326. "Advancing Nanocellulose Membrane Technology for Water Purification", Manhattan College, Riverdale, NY February 27, 2019.
327. "Advancing Nanocellulose Membrane Technology for Water Purification", Suffolk County Community College, Michael J. Grant Campus, Long Island, NY, March 11, 2019.
328. "Advancing Nanocellulose Technology for Water Purification", The City College of New York, Grove School of Engineering, New York City, NY, April 18, 2019.
329. "Fundamental aspects of structure and property relationship in semi-crystalline polyolefins", Siam Cement Group, SCG Chemicals Co., Ltd., Bangkok, Thailand, September 17, 2019.
330. "Sustainable New Materials Based on Nanocellulose for Water Purification", Chemical Engineering Department, Tsinghua University, Beijing, China, September 24, 2019.
331. "Sustainable New Materials Based on Nanocellulose for Water Purification", College of Materials Science and Engineering, Beijing University of Chemical Technology, Beijing, China, September 24, 2019.
332. "Nanocellulose Technologies for Water Purification", Ningbo Key Laboratory of Specialty Polymers, Department of Materials Science and Chemical Engineering, Ningbo University, Ningbo, Nov 18, 2019.
333. "Sustainable Water Purification Using Biomass Nanofibers", 9th International Conference on Advanced Fibers and Polymer Materials (ICAFPM 2019), Donghua University, Shanghai, China, November 21, 2019.

334. "Synchrotron enabled soft matter research: From polymers to nanocellulose", Division of Polymeric Materials Science and Engineering, SESSION: Celebrating 50 Years of Polymer Science at ExxonMobil's Corporate Research Laboratories, ACS National Meeting, Philadelphia, PA, March 24, 2020.
335. "Sustainable water purification using biomass nanofibers", Division of Cellulose and Renewable Materials, SESSION: Cellulose & Renewable Materials for Gas, Air & Water/Liquid Purification, ACS National Meeting, Philadelphia, PA, March 25, 2020.
336. "Fabrication, characterization and applications of nanocellulose for water purification", Symposium on Polymer Rheology, Processing, and Characterization in Honor of Dr. Montgomery T. Shaw's 77th Birthday and Many Contributions, Society of Plastic Engineering, ANTEC 2020, San Antonio, TX, March 31, 2020.
337. "Exploring the nature of plant biomass building block-elementary microfibril", 4th Symposium of Polymer Crystallization: Theory, Applications and Characterizations (Virtual Meeting), Chinese Chemical Society, Hangzhou, China, April 25, 2020.
338. "Nanocellulose technologies to advance the nexus of food-energy-water systems", Wallenberg Wood Science Centre (WWSC) Workshop: Researchers' Response to Crisis (Virtual Meeting), June 15, 2020.
339. "Nanocellulose technologies to advance the nexus of food energy water systems", Chinese American Academic & Professional Society (CAAPS), (Virtual Meeting), August 8, 2020.
340. "Nanocellulose technologies to advance the nexus of food energy water systems", NYS Center for Clean Water Technology, Stony Brook University, (Virtual Meeting), August 31, 2020.
341. "Synchrotron enabled soft matter research: from polyolefin to nanocellulose", Dow Chemical Virtual Seminar, September 10, 2020.

9. MEETING PRESENTATIONS

1984

1. B. S. Hsiao, M. T. Shaw and E. T. Samulski, "High Pressure DTA Apparatus for the Study of Liquid Crystalline Polymers" (poster), NBS/SPE Symp. on Applications of Phase Diagrams in Polymer Science, October, Gaithersburg, MD.

1985

2. B. S. Hsiao, E. T. Samulski and M. T. Shaw, "High Pressure Study of Potential Liquid Crystalline Polymers" (oral), APS Annual Meeting, March, Baltimore, MD.

1986

3. B. S. Hsiao, E. T. Samulski and M. T. Shaw, "A High-Pressure DTA Apparatus Based on an Instron Capillary Rheometer" (oral), SPE ANTEC Meeting, April, Boston, MA.
4. B. S. Hsiao, E. T. Samulski and M. T. Shaw, "High Pressure Study of A Liquid Crystal Polymer" (poster), Gordon Research Conference on Liquid Crystal Polymers, July, New London, NH.
5. B. S. Hsiao, M. T. Shaw and E. T. Samulski, "A High Pressure DTA/Dilatometric Apparatus Based on an Instron Capillary Rheometer" (oral), 41st Annual Calorimetry Conference, August, Annandale, NJ.
6. M. T. Shaw, E. T. Samulski and B. S. Hsiao, "Pressure Effects with Polymeric Liquid Crystals" (oral), AIChE National Meeting, August, Boston, MA.
7. B. S. Hsiao, M. T. Shaw and E. T. Samulski, "Pressure and Temperature Effects on Longitudinal Volume Viscosity" (oral), 58th Society of Rheology Annual Meeting, October, Tulsa, OK.

1987

8. B. S. Hsiao, M. T. Shaw and E. T. Samulski, "Characterization of A High Pressure Phase of A Liquid Crystal Polymer" (oral), SPE RETEC meeting, October, Chicago, IL.

1988

9. S. Rojstaczer, B. S. Hsiao, R. S. Stein, R. Gaudiana and N. Weeks, "Light Scattering Studies of Stiff Rod Molecules for Use in Molecular Composites" (poster), Polymer Science and Plastics Technology Symp., March, Sturbridge, MA.
10. S. Rojstaczer, B. S. Hsiao and R. S. Stein, "Texture Formation in Thermotropic Liquid Crystalline Polymers" (oral), ACS National Meeting, June, Toronto, Canada.
11. S. Rojstaczer, B. S. Hsiao and R. S. Stein, "Optical Studies of Thermotropic Liquid Crystal Polymers Upon Annealing and Deformation" (poster), Gordon Research Conference on Liquid Crystal Polymers, July, New London, NH.
12. R. S. Stein, S. Rojstaczer, B. S. Hsiao, R. Gaudiana and N. Weeks, "Studies of Ordering of Stiff and Semi-Flexible Molecules in Solution and in the Melt" (oral), MRS Fall Meeting, December, Boston, MA.

1989

13. B. S. Hsiao, R. S. Stein, N. Weeks and R. Gaudiana, "Light Scattering Studies of Molecular Composites Comprising Stiff and Semi-Flexible Macromolecules" (oral), APS Annual Meeting, March, St. Louis, MO.
14. R. S. Stein, S. Rojstaczer and B. S. Hsiao, "The Role of Disclination in the Annealing and Flow of Thermotropic Liquid Crystalline Polymers" (oral), Polymer Processing Society Meeting, August, Amherst, MA.
15. B. S. Hsiao, H. H. Winter and R. S. Stein, "Rheo-Optical Studies of a Thermotropic Liquid Crystalline Polyester" (oral), ACS National Meeting, September, Miami, FL.
16. B. S. Hsiao and E. J. H. Chen, "Study of Transcrystallization in Polymer Composites" (oral), MRS Fall Meeting, November, Boston, MA.
17. B. S. Hsiao, R. S. Stein, S. Addad-Cohen, N. Weeks and R. Gaudiana, "Light Scattering Studies of the State of Dispersion in Molecular Composites" (oral), MRS Fall Meeting, November, Boston, MA.

1990

18. B. S. Hsiao and E. J. H. Chen, "Transcrystalline Interphase in Advanced Polymer Composites" (oral), ICCI-III, Controlled Interphases in Composite Materials Symp., April, Cleveland, OH.
19. B. S. Hsiao and I. Y. Chang, "Structure/Property/Processing Relations of PEKK Resin Matrix for Advanced Composites" (oral), DuPont TECHCON 90, April, Chantilly, VA.
20. E. J. H. Chen and B. S. Hsiao, "Transcrystalline Interphase in Advanced Polymer Composites" (oral), DuPont TECHCON 90, April, Chantilly, VA.
21. B. S. Hsiao and E. J. H. Chen, "Interfacial Bond Strength of Transcrystalline Interphase in Polymer Composites" (oral), 33rd IUPAC, MACRO 90 Meeting, July, Montreal, Canada.
22. B. S. Hsiao, R. S. Stein, H. H. Winter and K. Deutscher, "Light Scattering and Birefringence Studies of Orientation of Sheared Thermotropic Liquid Crystalline Polymers" (oral), 33rd IUPAC, MACRO 90 Meeting, July, Montreal, Canada.
23. B. B. Sauer, P. Avakian, H. Starkweather and B. S. Hsiao, "Thermally Stimulated Current Studies of Poly(aryl ether ketone) and polycarbonate" (poster), ACS National Meeting, August, Washington, DC.
24. R. S. Stein, H. H. Winter and B. S. Hsiao, "Time-Resolved Scattering Studies of Polymer Morphology, Deformation and Flow" (oral), 62nd Society of Rheology Annual Meeting, October, Santa Fe, NM.
25. E. J. H. Chen and B. S. Hsiao, "The Effects of Transcrystalline Interphase in Advanced Polymer Composites" (oral), The Textile Institute Annual World Conference, November, Dundee, UK.

1991

26. E. J. H. Chen and B. S. Hsiao, "Transcrystalline Interphases in Polymer Composites" (poster), Gordon Research Conference on Composites, January, Ventura, CA.
27. K. H. Gardener, B. S. Hsiao and R. R. Matheson, "Crystallization and Morphology of Poly(ether ketone ketone) (PEKK)" (poster), Polymer Physics Symposium to mark the retirement of A. Keller, April, Bristol, UK.
28. I. Y. Chang and B. S. Hsiao, "Thermal Properties of High Performance Thermoplastic Composites Based on Poly(ether ketone ketone) (PEKK)" (oral), 36th SAMPE Symposium., April, San Diego, CA.
29. B. S. Hsiao, I. Y. Chang and B. B. Sauer, "Novel Crystallization Kinetics Modeling of Advanced Polymer Composites" (oral), SPE ANTEC Meeting, May, Montreal, Canada.
30. B. S. Hsiao, D. Wu, K. Gardner and B. Chu, "Crystallization and Melting Studies of Poly(aryl ether ketones) by Synchrotron X-ray" (poster), Annual Users' Meeting, National Synchrotron Light Source, May, Brookhaven National Laboratory, Long Island, NY.
31. B. S. Hsiao and I. Y. Chang, "Thermal Behavior of High Performance Poly(ether ketone ketone) (PEKK)" (oral), ACS Polymer Technology Conference, June, Philadelphia, PA.
32. K. H. Gardener, B. S. Hsiao and R. R. Matheson, "Structure and Morphology of Poly(ether ketone ketone)" (oral), Pacific-International Congress on X-ray Analytical Methods, August, Honolulu, HI.
33. B. S. Hsiao, "Crystallization Induced Gelation in Poly(aryl ether ketones)" (poster), National ACS Meeting, August, New York City, NY.
34. K. H. Gardner, B. S. Hsiao and R. R. Matheson, "Structure, Crystallization and Melting of Poly(aryl ether ketone ketone) (PEKK). Part I: Structure" (poster), National ACS Meeting, August, New York City, NY.
35. B. S. Hsiao, K. H. Gardner and R. R. Matheson, "Structure, Crystallization and Melting of Poly(aryl ether ketone ketone) (PEKK). Part II: Crystallization and Melting" (poster), National ACS Meeting, August, New York City, NY.
36. B. B. Sauer, P. Avakian, H. Starkweather and B. S. Hsiao, "Interpretation of Relaxation Spectra Obtained from Thermal Stimulated Current" (oral), NATAS Conference, September, Minneapolis, MN.

1992

37. B. S. Hsiao, K. H. Gardner and R. R. Matheson, "Crystallization Study of Poly(aryl ether ketone ketone) Copolymers Containing Different para/meta Isomer Ratios" (oral), APS Meeting, March, Indianapolis, IN.
 38. B. S. Hsiao, J. M. Schultz and K. H. Gardner, "Blends of Poly(aryl ether ketone ketones) Having Different para/meta Isomer Ratios" (oral), APS Meeting, March, Indianapolis, IN.
 39. P. A. Weimann, R. J. Composto and B. S. Hsiao, "Effect of Ionic Salt Diluent on the Crystallization Behavior and Morphology of Intermediate Molecular Weight Poly(ethylene oxide)" (oral), APS Meeting, March, Indianapolis, IN.
 40. B. S. Hsiao, K. H. Gardner, D. Q. Wu and B. Liang and B. Chu, "Time-Resolved X-ray Study of Crystallization and Melting in Poly(aryl ether ether ketones)" (oral), National ACS Meeting, April, San Francisco, CA.
 41. D. Q. Wu, B. Liang, B. S. Hsiao, Y. Li and B. Chu, "Synchrotron SAXS Studies of NAFION Morphology", (poster), National ACS Meeting, April, San Francisco, CA.
 42. K. H. Gardner, B. S. Hsiao and K. L. Faron, "Diffraction Studies of Polymorphism in Poly(aryl ether ketones)" (oral), National ACS Meeting, April, San Francisco, CA.
 43. B. S. Hsiao and B. B. Sauer, "Crystallization Effect on Miscibility and Morphology of Poly(aryl ether ketone) and Poly(ether imide) Blends" (oral), SPE ANTEC Meeting, May, Detroit, MI.
 44. R. G. Kander, R. K. Verma and B. S. Hsiao, "A Study of the Processing Structure Property Relationship in Poly(aryl ether ketone ketone)" (oral), SPE ANTEC Meeting, May, Detroit, MI.
 45. K. H. Gardner, B. S. Hsiao and K. L. Faron, "Neutron Study of Selectively Deuterated Poly(aryl ether ketone ketone)" (oral), National ACS Meeting, August, Washington, D.C.
 46. B. S. Hsiao, B. B. Sauer and J. G. Van Alsten, "Crystallization and Morphology Relationship in Miscible Poly(aryl ether ketones)/Poly(ether imide) Blends" (poster), National ACS Meeting, August, Washington, D.C.
 47. X. Lu, R. A. Weiss, B. S. Hsiao, D. Q. Wu, Y. J. Li and B. Chu, "Microstructure of Blends of Block Copolymer Ionomers and Poly(caprolactone) and Poly(styrene-co-4-vinyl pyridene)" (oral), National ACS Meeting, August, Washington, D.C.
 48. K. H. Gardner, B. S. Hsiao and K. L. Faron, "X-ray Diffraction Studies of Polymorphism in Poly(aryl ether ketones)" (oral), 41st Annual Denver Conference on Applications of X-ray Analysis, July, Colorado Springs, CO.
 49. B. S. Hsiao and K. H. Gardner, "Time-Resolved X-ray Studies of Crystallization and Melting in Poly(aryl ether ketone)" (oral), Crystallization of Polymers, NATO Advanced Research Workshop, September, Mons, Belgium.
 50. K. H. Gardner, B. S. Hsiao and K. L. Faron, "Diffraction Studies of Polymorphism in Poly(aryl ether ketones)" (oral), Crystallization of Polymers, NATO Advanced Research Workshop, September, Mons, Belgium.
 51. W. Wang, B. S. Hsiao and J. M. Schultz, "Crystallization of PEKK-Based Polymer Alloys" (oral), AIChE Fall Meeting, October, Miami Beach, FL.
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52. B. S. Hsiao, K. H. Gardner, W. Wang and J. M. Schultz, "Anomalous Spherulite Growth in Poly(aryl ether ketones)" (oral), APS Meeting, March, Seattle, WA.
 53. B. S. Hsiao, K. H. Gardner, D. Q. Wu and B. Chu, "Time Resolved SAXS Study of Poly(aryl ether ketones)" (oral), APS Meeting, March, Seattle, WA.
 54. S. Z. D. Cheng, S. S. Wu, J. Chen, Q. Zhuo, R. P. Quirk, E. D. Von Meewall, A. Habenschuss, P. R. Zschack and B. S. Hsiao, "End Group and Molecular Weight Effects on Thickening and Thinning Processes in Low Molecular Weight Poly(ethylene Oxide) Fractions", (oral), APS Meeting, March, Seattle, WA.
 55. W. Wang, J. M. Schultz, B. S. Hsiao and K. H. Gardner, "Phase Separation During Crystallization of PEEK/PEKK Blends" (poster), APS Meeting, March, Seattle, WA.
 56. J. G. Van Alsten, S. R. Lustig and B. S. Hsiao, "Polymer Diffusion in Semi-Crystalline Systems" (oral), APS Meeting, March, Seattle, WA.
 57. B. S. Hsiao, K. H. Gardner, W. Wang and J. M. Schultz, "Crystallization and Morphology Studies of Poly(aryl ether ketone) Blends" (poster), SPE ANTEC Meeting, May, New Orleans, LA.
 58. R. Verma, R. Kander, B. S. Hsiao and R. B. Croman, "A New Damage Evaluation Model for Composite Materials" (oral), SPE ANTEC Meeting, May, New Orleans, LA.
 59. H. Ade, S. Cameron, C. Costello, B. Hsiao and S. Subramony, "Polarization Dependent XANES Microscopy and Its Applications to Polymer Science" (oral), The Forth International Conference on X-ray Microscopy, XRM'93, September, Moscow, Russia.

60. H. Ade, B. S. Hsiao, G. Mitchel, S. Cameron and C. Costello, "X-ray Microscopy in Polymer Science: Prospects of a New Imaging Technique" (oral), MSA Meeting, Symposium "Aspects of Imaging in Polymer Science", August, Cincinnati, OH.
61. B. B. Sauer and B. S. Hsiao, "Effects of Heterogeneous Distribution of Lamellar Stacks in Semi-Crystalline Polymers on Amorphous Relaxations" (oral), National ACS Meeting, August, Chicago, IL.
62. B. S. Hsiao, K. H. Gardner and A. Biswas, "SAXS Study of Crystallization in Poly(Aryl Ether Ketones) and Polyimides" (oral), 42nd Annual Denver Conference on Applications of X-ray Analysis, August, Denver, CO.
63. H. Ade, A. P. Smith, R. Cieslinski, B. S. Hsiao, G. Mitchell and E. Rightor, "Chemical Contrast X-ray Microscopy", (oral), MRS Fall Meeting, November, Boston, MA.

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64. H. Ade, B. S. Hsiao and G. Mitchell, "Imaging of Polymeric Materials with Chemical and Orientational Sensitivity" (oral), APS Meeting, March, Pittsburgh, PA.
65. R. M. Ho, S. Z. D. Cheng, B. S. Hsiao and K. H. Gardner, "Crystal Morphology and Phase Identifications in Poly(aryl ether ketone ketone)" (oral), APS Meeting, March, Pittsburgh, PA.
66. R. K. Verma, R. G. Kander, B. S. Hsiao, B. Chu, V. Velikov and H. Marand, "Time-Resolved SAXS Studies During Crystallization and Melting in PEEK" (oral), APS Meeting, March, Pittsburgh, PA.
67. B. S. Hsiao, K. H. Gardner and S. Z. D. Cheng, "Time-Resolved X-ray Studies of Crystallization and Triple-Melting Behavior in Poly(aryl ether ketone ketone) Containing Isophthalic Moiety" (oral), MacroAkron'94., IUPAC 35th International Symposium on Macromolecules, July, Akron, OH.
68. J. M. Stouffer, H. Starkweather, B. S. Hsiao and P. Avakian, "The Effect of Nylon 66 Copolymers Modified with 2-Methyl Pentamethylene Diamine on Morphology and Thermal Properties" (oral), MacroAkron'94., IUPAC 35th International Symposium on Macromolecules, July, Akron, OH.
69. A. Biswas, B. S. Hsiao, M. Capel and A. D. Kennedy, "Morphology Characterization of Semicrystalline Fibers Using Small Angle X-ray Scattering" (oral), MacroAkron'94., IUPAC 35th International Symposium on Macromolecules, July, Akron, OH.
70. R. M. Ho, S. Z. D. Cheng, B. S. Hsiao and K. H. Gardner, "Crystal Structure and Phase Identifications in Poly(aryl ether ketone ketones) and Their Copolymers" (oral), MacroAkron'94., IUPAC 35th International Symposium on Macromolecules, July, Akron, OH.
71. B. S. Hsiao, A. D. Kennedy, R. A. Leach, R. Barton, Jr., S. Seifert and H. G. Zachmann, "Structure Development During Fiber Processing Via Synchrotron X-ray Measurements" (oral), IUPAC, International Polymer Symposium Taipei, November, Taipei, Taiwan.

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72. A. P. Smith, H. Ade, B. Hsiao and S. Subramoney, "Radial Order In Kevlar Fibers Determined By X-ray Linear Dichroism Microscopy" (oral), APS Meeting, March, San Jose, CA.
73. B. S. Hsiao, K. H. Gardner, R. M. Ho and S. Z. D. Cheng, "Phase Transformation and Polymorphism in Poly(aryl ether ketone ketone) Copolymers" (oral), APS Meeting, Dillon Award Symp., March, San Jose, CA.
74. R. M. Ho, S. Z. D. Cheng, B. S. Hsiao and K. H. Gardner, "Crystal Morphology and Phase Identification in Poly(aryl ether ketone ketone) and Their Copolymers" (oral), APS Meeting, March, San Jose, CA.
75. W. Wang, J. M. Schultz and B. S. Hsiao, "Time-Resolved SAXS Study of Crystallization of PEEK Copolymers and Their Blends" (oral), APS Meeting, March, San Jose, CA.
76. P. Harney, B. S. Hsiao, A. D. Kennedy and B. Chu, "Synchrotron SAXS Studies of Amorphous PET Fiber During Deformation" (oral), National ACS Meeting, March, Anaheim, CA.
77. B. Sauer and B. S. Hsiao, "Restricted Motions in Semi-Crystalline Polymers and Blends" (oral), National ACS Meeting, March, Anaheim, CA.
78. B. S. Hsiao, A. D. Kennedy, R. A. Leach, R. Barton, Jr., R. Harlow, R. Ross, S. Seifert and H. G. Zachmann, "In-Situ Structural Characterization During Fiber Melt Spinning Via Synchrotron X-ray Diffraction Measurement" (poster), National ACS Meeting, March, Anaheim, CA.
79. B. S. Hsiao, B. B. Sauer, R. A. Leach, B. Chu, P. Harney, H. G. Zachmann and S. Seifert, "New Insight Of Isothermal Melt Crystallization Via Time-Resolved Simultaneous SAXS/WAXD Measurements" (poster), National ACS Meeting, March, Anaheim, CA.
80. B. S. Hsiao, R. A. Leach, A. D. Kennedy, K. H. Gardner, C. Gochanour, A. Biswas, S. Seifert and H. G. Zachmann, "Structural Study Of Semi-Crystalline Fibers During Deformation Via Synchrotron SAXS Technique" (oral), National ACS Meeting, March, Anaheim, CA.
81. R. Verma, A. Biswas and B. S. Hsiao, "Small Angle X-ray Scattering for Lamellar Semi-Crystalline Systems: Some Novel Data Analysis Techniques" (poster), National ACS Meeting, March, Anaheim, CA.

82. R. Verma, B. Chu, H. Marand and B. S. Hsiao, "Real Time SAXS Studies of Lamellar Level Morphological Development in PEEK" (poster), National ACS Meeting, March, Anaheim, CA.
83. S. Z. D. Cheng, S. W. Lee, E. Von Meerwall and B. S. Hsiao, "Molecular Shape Effects on the Crystallization, Melting and Morphology of Star Poly(ethylene oxide) Fractions" (oral), National ACS Meeting, March, Anaheim, CA.
84. R. M. Ho, S. Z. D. Cheng, B. S. Hsiao and K. H. Gardner, "Crystal Morphology and Phase Identifications in Poly(aryl ether ketone)s and Their Copolymers" (poster), National ACS Meeting, March, Anaheim, CA.
85. A. D. Kennedy, B. S. Hsiao, R. A. Leach, P. Harney, B. Chu, S. Seifert, H. G. Zachmann, "Structural Development and Change During Spinning and Drawing of 66-Nylon: Real Time Synchrotron X-ray Studies" (oral), ACA Annual Meeting, July, Montreal, Canada
86. K. H. Gardner, B. S. Hsiao, H. Shih, S. Stoppel, E. T. Samulski and J. Preston, "The Crystal Structure of Poly(p-Phenylene Thiophenylamide)" (oral), ACA Annual Meeting, July, Montreal, Canada
87. B. S. Hsiao, A. Biswas, R. K. Verma, "SAXS Analysis For Morphological Characterization of Unoriented and Oriented Semi-crystalline Polymers" (oral), ACA Annual Meeting, July, Montreal, Canada
88. B. S. Hsiao, R. A. Leach, K. H. Gardner, C. Gochanour, A. Biswas, S. Seifert, H. G. Zachmann, "Morphological Development During The Deformation of a Segmented Segregated Elastomeric Fiber" (oral), ACS Intersociety Polymer Conference, October, Baltimore, MD.
89. A. D. Kennedy, B. S. Hsiao, P. Harney, B. Chu, S. Seifert and H. G. Zachmann, "Real Time Study of Morphology Development in Spinning and Drawing 66-nylon" (oral), Europhysics Conf. on Macromol. Phys. and Hamburg Macromol. Symposium, September, Hamburg, Germany
90. R. A. Leach, B. S. Hsiao, K. H. Gardner, C. Gochanour, A. Biswas, S. Seifert and H. G. Zachmann, "Structural Development in The Deformation of Poly(urethane-urea) Determined by Simultaneous SAXS and WAXD" (oral), Europhysics Conf. on Macromol. Phys. and Hamburg Macromol. Symposium, September, Hamburg, Germany

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91. R. Verma, B. S. Hsiao and A. Biswas, "Analysis of SAXS Data from Semicrystalline Ionomeric Systems" (oral), ACS Spring Meeting, March, New Orleans, LA.
92. B. Hsiao and R. Verma, "New Insight of Isothermal Polymer Crystallization by Synchrotron Time-Resolved SAXS Measurements" (oral), APS Meeting, March, St. Louis, MO.
93. W. Wang, J. M. Schultz and B. S. Hsiao, "Simultaneous SAXS/WAXS Study of Crystallization of PEEK/PEKK Blends" (oral), APS Meeting, March, St. Louis, MO.
94. D. M. Dean, R. A. Register, L. Rebenfeld and B. S. Hsiao, "Molecular and Lamellar Orientation of the Transcrystalline Region in Fiber-Reinforced Polypropylene Composites" (oral), APS Meeting, March, St. Louis, MO.
95. B. S. Hsiao, A. Biswas, M. Capel and S. Cheng, "Morphological Characterization of High Performance Polymer Fibers Via SAXS Technique" (oral), APS Meeting, March, St. Louis, MO.
96. R. Verma, H. Marand and B. Hsiao, "Morphological Changes During Secondary Crystallization and Melting in Poly(ether ether ketones) as Studied by Small Angle X-ray Scattering" (poster), APS Meeting, March, St. Louis, MO.
97. T. A. Ezquerra, E. Lopez-Cabarcos, F. J. Balta-Calleja and B. Hsiao, "Precursors of Crystallization Via Density Fluctuations in PEKK" (poster), APS Meeting, March, St. Louis, MO.
98. J. M. Schultz, W. Wang and B. S. Hsiao, "Lamellar Structure Study of Poly(aryl ether ether ketone) during Isothermal Crystallization and Melting" (poster), APS Meeting, March, St. Louis, MO.
99. R. Verma, B. S. Hsiao and A. Biswas, "New Insights on the Morphology of Ionomers Revealed by Novel Small Angle X-ray Scattering Data Analysis" (oral), APS Meeting, March, St. Louis, MO.
100. S. Z. D. Cheng, S. W. Lee, E. Chen, E. D. von Meerwall, B. S. Hsiao and R. Verma, "Molecular Architecture Effects on Star Poly(ethylene oxide) Crystallization" (oral), APS Meeting, March, St. Louis, MO.
101. B. B. Sauer, B. S. Hsiao and R. Verma, "Morphological Contributions to Constrained Relaxations: Comparison of Stiff Aromatic Versus Flexible Semicrystalline Polymers" (oral), 11th International Congress on Thermal Analysis and Calorimetry, August, Philadelphia, PA.
102. B. B. Sauer, B. S. Hsiao and K. L. Faron, "Phase Behavior of Semi-Crystalline Polyimide and PEEK Blends" (oral), Engineered Polymer Blends Symposium, Sponsored by Polytechnic Univ., Sept., Hoechst Celanese Site, Summit, NJ.

103. W. Wang, J. M. Schultz and B. S. Hsiao, "Crystallization and Phase Behaviors of PEEK, PEKK and Their Blends" (poster), Composites'96 and Oriented Polymers Symposium, National Research Council of Canada, October, Boucherville, Canada.
104. B. S. Hsiao, J. M. Schultz and W. Wang, "Microstructure and Phase Separation of PEEK, PEKK and Their Blends" (oral), MRS Fall Meeting, Symposium on Morphological Control in Multiphase Polymer Mixtures, November, Boston, MA.
105. B. Chu, P. Harney, B. S. Hsiao, A. Kennedy, R. Leach and B. Chase, "Synchrotron X-ray Studies Of PET Fiber" (oral), Fiber Society Fall Meeting, October, Newport, RI.
106. B. S. Hsiao, "Structure and Morphology Changes During Fiber Deformation via On-line X-ray Scattering Techniques" (oral), AICHE Annual Meeting, November, Chicago, IL.
107. D. Dean, R. Register, L. Rebenfeld, B. Hsiao, "Investigation of Transcrystalline Interface in Fiber Reinforced Polypropylene Composites" (oral), AICHE Annual Meeting, November, Chicago, IL.

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108. S. Seifert, B. Hsiao, J. Schultz, J. Samon, I. Gurke, N. Stribeck, C. Saw and G. Collins, "On-line Simultaneous SAXS and WAXD Studies during Fiber Spinning of Polyethylene and Poly(vinylidene fluoride)" (poster), APS Meeting, March, Kansas City, MO.
109. J. R. Sharrow, J. M. Schultz, B. S. Hsiao and H. Chang, "Comparisons of Morphological Evaluation on Nylon 66 Fibers Via WAXD, SAXS and Radial Distribution Function Methods" (poster), APS Meeting, March, Kansas City, MO.
110. B. S. Hsiao, A. Nogales, F. J. Balta-Calleja, T. Ezquerro, B. Sauer, S. Seifert, Y. Kapalu, R. Stein, M. Muthukumar and M. Koch, "Some Possible Evidences of Density Fluctuations as Precursors of Crystallization in Ethylene-1-Octene Copolymers" (poster), APS Meeting, March, Kansas City, MO.
111. B. S. Hsiao, "The Nature of Secondary Crystallization During Isothermal Crystallization Probed by Time-Resolved SAXS" (oral), APS Meeting, March, Kansas City, MO.
112. R. Leach, B. Hsiao, A. Kennedy, B. Chu and P. Harney, "Synchrotron X-ray Studies of Polymers Deformation" (oral), APS Meeting, March, Kansas City, MO.
113. R. S. Stein, Y. Akpalu, M. Muthukumar, B. Hsiao, J. Gronauer, S. Groth, G. Zachmann, "Probing the Fundamentals of the Melt Crystallization Mechanism of Polyethylene Melts and Their Homogeneous Blends" (invited talk), APS Meeting, March, Kansas City, MO.
114. Y. Akpalu, R. S. Stein, M. Muthukumar and B. Hsiao, "Effect of Melt Miscibility on Crystallization and Melting of Blends of Different Polyethylenes: Small Angle Light Scattering Studies" (poster), APS Meeting, March, Kansas City, MO.
115. A. D. Kennedy, B. S. Hsiao, R. A. Leach and B. Chase, "Real-Time X-ray and Raman Studies of 6,6 Nylon Drawing" (oral), Fiber Society/TRI/NCRC Joint Meeting, October, Knoxville, TN

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116. B. S. Hsiao, F. J. Yeh, B. Chu and B. B. Sauer, "Behavior of Microphase Separation in a Poly(urethane-urea) Film under Deformation" APS Meeting, March, Los Angeles, CA.
117. B. S. Hsiao, B. Chu and F. J. Yeh, "Advanced Polymers PRT at NSLS - A Dedicated Polymers Beamline", APS Meeting, March, Los Angeles, CA.
118. Y. Gao, K. Sheth, B. S. Hsiao, F. Yeh, Z. G. Wang, "Development of Lamellar Microstructure During Isothermal Crystallization of Poly(butylene terephthalate) Semicrystalline Polymers" APS Meeting, March, Los Angeles, CA.
119. B. S. Hsiao, F. Yeh, B. Chu, B. B. Sauer "Effect of Polymer Diluents on The Lamellar Morphology of Poly(oxymethylene) Blends", APS Meeting, March, Los Angeles, CA.
120. Y. Akpalu, R. S. Stein, M. Muthukumar, B. S. Hsiao, "Effect of Branch Content on Spherulitic Growth in Homogeneous Ethylene-1-Octene Copolymer Blends: Time-Resolved Synchrotron X-ray and Small Angle Light Scattering (SALS)", APS Meeting, March, Los Angeles, CA.
121. J. Samon, J. Schultz, J. Wu, B. Hsiao, R. Kolb, "On-line Simultaneous SAXS and WAXS Studies during Fiber Spinning of Nylon-6", APS Meeting, March, Los Angeles, CA.
122. J. Wu, J. Schultz, F. Yeh and B. Hsiao, "In-situ Simultaneous Synchrotron Small- and Wide- Angle X-ray Scattering Measurement of PVDF Fibers Under Strain", APS Meeting, March, Los Angeles, CA.
123. K. Guruswamy, R. K. Verma, J. A. Kornfield, F. Yeh and B. S. Hsiao, "Shear Induced Crystallization in Isotactic Polypropylene Optical and SAXS Studies", APS Meeting, March, Los Angeles, CA.
124. F. Yeh, B. S. Hsiao, B. Chu and B. Sauer, "Synchrotron X-Ray Scattering Applications in Crystallization and Deformation of Polymers" (oral), SPE ANTEC Meeting, April, Atlanta, GA

- 125.S. Kim, Z. Wang, R. A. Phillips, F. Yeh and B. S. Hsiao, "Morphology Development in Polypropylene Homopolymer Tacticity Mixtures: Isotactic/Syndiotactic Blends", 46th Annual Undergraduate Research Symposium, May, New York Univ., New York, NY.
- 126.J. Lopez, Z. G. Wang, B. Hsiao and P. Armistead, "Dynamic Structure Development during Isothermal Crystallization and Melting of Linear Polyethylenes", 46th Annual Undergraduate Research Symposium, May, New York Univ., New York, NY.
- 127.W. D. Liu, H. L. Yang, B. S. Hsiao and R. S. Stein, "Real Time Crystallization and Melting Study of Ethylene Based Copolymers", ACS National Meeting, August, Boston, MA.
- 128.F. Yeh, B. Hsiao, B. Sauer, "Deformation-Induced Structural Changes in Poly(urethaneurea) Film", ACS National Meeting, August, Boston, MA.
- 129.J. Wu, J. M. Schultz and B. S. Hsiao, "The Melting Behavior of Poly(vinylidene fluoride) Crystallized at High Temperature or Under High Pressure", AIChE Annual Meeting, November,
- 130.B. S. Hsiao, B. Chu and F. Yeh, "Advanced Polymers Beamline (X27C) at the National Synchrotron Light Source, Brookhaven National Laboratory", Workshop on Polymer Applications of X-ray Microscopy at NIST, May, Gaithersburg, MD.
- 131.S. Kim, Z. Wang, R. A. Phillips, F. Yeh and B. S. Hsiao, "Morphology Development in Polypropylene Homopolymer Tacticity Mixtures: Isotactic/Syndiotactic Blends", ACS National Meeting, August, Boston, MA.
- 132.R. A. Phillips, Z. G. Wang and B. S. Hsiao, "Morphology Development in Polypropylene Homopolymer Tacticity Mixtures: Isotactic/Atactic Blends", ACS National Meeting, August, Boston, MA.
- 133.Z. G. Wang, B. S. Hsiao, B. B. Sauer and W. G. Kampert, "The Nature of Secondary Crystallization in Poly(ethyleneterephthalate)", ACS National Meeting, August, Boston, MA.
- 134.J. Lopez, Z. G. Wang, B. Hsiao and P. Armistead, "Dynamic Structure Development during Isothermal Crystallization and Melting of Linear Polyethylenes", ACS National Meeting, August, Boston, MA.
- 135.S. Z. D. Cheng, E. Chen, G. Xue, S. Lee, A. Zhang, B. Moon, H. Lin, F. Harris, B. S. Hsiao and F. J. Yeh, "Effect of Conformational Defect in Low Molecular Weight PEO fraction on Crystallization and Phase Behavior", ACS National Meeting, August, Boston, MA.
- 136.B. S. Hsiao, X. Fu, H. White, M. Rafailovich, P. T. Mather, K. P. Chaffee, H. Jeon, J. D. Lichtenhan and J. Schwab, "Structural Development during Deformation of a Nano-Reinforced Poly(urethane) with Polyhedral Oligomeric Silsesquioxane (POSS)" ACS National Meeting, August, Boston, MA.
- 137.A. Brenner, R. Gross, Z. G. Wang and B. S. Hsiao, "Crystallization and Morphology Study of Nylon11/Polytetramethylene Glycol Block Copolymers" (oral), Undergraduate Research Symposium, SUNY Stony Brook, Stony Brook, NY.
- 138.Z. G. Wang, B. Hsiao, P. Agarwal, S. Srivatsan and E. Sirota, "Probing the Myth of Initial Polymer Crystallization" (poster), Polymer Physics, Gordon Research Conference, Salve Regina Univ., August, Newport, RI.
- 139.J. M. Samon, J. M. Schultz, B. S. Hsiao, "Study of the Cold Drawing of Nylon 6 Fiber by Simultaneous In-Situ Small- and Wide-Angle X-ray Scattering Techniques", (poster), AIChE Annual Meeting, November, Miami, FL.
- 140.E. Chen, B. S. Moon, F. W. Harris, S. Z. D. Cheng, B. S. Hsiao and F. Yeh, "Melting and Annealing Behavior of Non-Integral Folding Chain Crystals of Low Molecular Weight Two-Arm Poly(Ethylene Oxide) Fractions Crystallized from Melt", Twenty-Sixth Conference of the North American Thermal Analysis Society,
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- 141.J. Samon, J. Schultz, J. Wu, S. Khot and B. Hsiao, "Synchrotron Small- and Wide-Angle X-ray Scattering during the Melt Spinning of Polybutene-1 Fiber" (oral), APS Meeting, March, Atlanta, GA.
- 142.M. S. Lisowski, J. Runt, F. Yeh and B. Hsiao, "Time-Resolved Small- and Wide-Angle X-ray Scattering Study of Crystallization of Poly(ethylene oxide) and Model PEO Blends" (poster), APS Meeting, March, Atlanta, GA.
- 143.Z. G. Wang, B. Hsiao, P. Agarwal, S. Srivatsan and E. Sirota, "Probing the Fundamentals of Initial Polymer Crystallization" (oral), APS Meeting, March, Atlanta, GA.
- 144.E.-Q. Chen, S.-W. Lee, A. Zhang, B.-S. Moon, F. W. Harris, S. Z. D. Cheng B. S. Hsiao and F. Yeh, "Crystallization, Melting and Annealing of Low Molecular Weight Star PEO Fractions" (oral), APS Meeting, March, Atlanta, GA.
- 145.P. S. Honigfort, R. M. Ho, S. Z. D. Cheng and B. S. Hsiao, "Studies on the Crystalline Structure of Poly(aryl ether ketone ketone) Copolymer" (poster), APS Meeting, March, Atlanta, GA.
- 146.Y.-L. Loo, R. A. Register and B. S. Hsiao, "Secondary Crystal Melting in Ethylene-Methacrylic Acid Ionomers" (poster), APS Meeting, March, Atlanta, GA.

147. E. Schrag, B. Hsiao, X. Fu, J. D. Lichtenhan, J. Schwab, P. T. Mather, M. Rafailovich, S. Ge and H. White, "Polyhedral Oligomeric Silesquioxane (POSS) Nano-Reinforced Polyurethane (PU) Thin Films" (poster), APS Meeting, March, Atlanta, GA.
148. D. Fang, S. Ran, X. Zong, B. Hsiao and B. Chu, "Study of Structural & Morphological Changes of Polypropylene Fibers during Deformation by WAXD/SAXS" (poster), APS Meeting, March, Atlanta, GA.
149. S. Z. D. Cheng, L. Zhu, R. P. Quirk, B. S. Hsiao, F. Yeh, B. Chu, "Competitions among Self-Organization, Vitrification, and Crystallization in Amorphous-Crystalline Block Copolymers" (oral), APS Meeting, March, Atlanta, GA.
150. G. Kumaraswamy, R. K. Verma, A. M. Issaian, P. Wang, J. A. Kornfield F. Yeh and B. S. Hsiao, "The Effect of Molecular Weight on the Shear-Enhanced Crystallization of isotactic Polypropylene: Relating In-situ Rheo Optics and Synchrotron SAXS/WAXD Studies to Ex-situ Structure Determination" (oral), APS Meeting, March, Atlanta, GA.
151. Z. G. Wang, B. S. Hsiao, C. Kopp, B. X. Fu, H. Hu, D. F. Fang, E. B. Sirota, P. Agarwal and S. Srinivas, "Probing the early stages of polymer crystallization by simultaneous small- and wide-angle X-ray scattering and laser light scattering" (oral), XI International Conference on Small Angle Scattering, May, Upton, NY.
152. N. S. Murthy, Z. G. Wang, B. S. Hsiao, "Lamellar Structure Analysis of Melting and Recrystallization in Nylon66 Using Small-Angle X-ray Scattering" (oral), XI International Conference on Small Angle Scattering, May, Upton, NY.
153. L. Z. Liu, B. S. Hsiao and B. Chu, "Static and Time-Resolved Synchrotron X-ray Study of Crystallization and Phase Separation in Compatible Polymer Blends" (poster), XI International Conference on Small Angle Scattering, May, Upton, NY.
154. Y. L. Loo, R. A. Register and B. S. Hsiao, "The Melting of Secondary Crystals in Ethylene-Methacrylic Acid Ionomers" (oral), XI International Conference on Small Angle Scattering, May, Upton, NY.
155. W. Liu, S. Kim, B. S. Hsiao, R. S. Stein, B. Landes and M. Y. Keating, "Crystallization Study of Ethylene Based Copolymers by simultaneous SAXS/WAXD and DSC Techniques" (poster), XI International Conference on Small Angle Scattering, May, Upton, NY.
156. X.-H. Zong, Z.-G. Wang, B. S. Hsiao, B. Chu, J. J. Zhou and D. D. Jamiolkowski "Morphological Development During Crystallization and its Relationships with Degradation Properties in Absorbable Poly(Glycolide), Poly(Glycolide-Co-Lactide) and Copolymers" (poster), XI International Conference on Small Angle Scattering, May, Upton, NY.
157. Z. G. Wang, B. S. Hsiao, B. B. Sauer, W. G. Kampert, "The Nature of Secondary Crystallization in Poly(ethylene terephthalate)" (poster), Prof. Ron Eby 70th Birthday Symposium, May, Akron, OH.
158. H. Yang, B. Hsiao, B. Landes, R. Bubeck and Y. B. Huang, "Crystallization Study of Syndiotactic Polystyrene via Time-Resolved X-ray Scattering and Diffraction Methods" (poster), ACS PMSE Meeting, August, New Orleans, MI.
159. Z. G. Wang, B. S. Hsiao, C. Kopp, E. B. Sirota, P. Agarwal and S. Srinivas, "Probing the Early Stages of Polymer Crystallization by Simultaneous Small- and Wide-Angle X-ray Scattering and Laser Light Scattering" (oral), ACS PMSE Meeting, August, New Orleans, MI.
160. Y. L. Loo, R. A. Register and B. S. Hsiao, "The Melting of Secondary Polyethylene Crystals in a Slow Cooled Ethylene-Methacrylic Acid Ionomer" (oral), ACS PMSE Meeting, August, New Orleans, MI.
161. W. Liu, B. S. Hsiao, R. S. Stein, "Real Time Crystallization and Melting Study of Metallocene-Based Polyethylene Copolymers by SAXS, WAXD and DSC Techniques" (oral), ACS PMSE Meeting, August, New Orleans, MI.
162. Z. G. Wang, B. S. Hsiao, B. B. Sauer, H. Chang and J. M. Schultz, "Correct Determination of Crystal Lamellar Parameters in Poly(ethylene terephthalate) by Small-Angle X-ray Scattering" (poster), ACS PMSE Meeting, August, New Orleans, MI.
163. J. A. Kornfield, G. Kumaraswamy, P. Wang, R. K. Verma, F. Yeh and B. S. Hsiao, "Effect of Shear History on Crystallization of Isotactic Polypropylene" (oral), ACS PMSE Meeting, August, New Orleans, MI.
164. B. B. Sauer, B. S. Hsiao and Z. G. Wang, "Morphological Changes During Crystallization and Melting of Polymers Studied by Synchrotron X-ray and Modulated DSC" (oral), ACS PMSE Meeting, August, New Orleans, MI.
165. B. S. Hsiao, Z.-G. Wang, B. B. Sauer, H. Chang and J. M. Schultz, "The Nature of Secondary Crystallization in Poly(ethylene terephthalate)" (oral), 48th Annual Denver X-ray Conference, August, Steamboat Springs, CO.
166. B. B. Sauer, B. S. Hsiao and Z.-G. Wang, "Morphological Changes during Crystallization and Melting of Flexible and Stiff Polymers Studied by Synchrotron X-Ray" (oral), 48th Annual Denver X-ray Conference, August, Steamboat Springs, CO.

167. S. Z. D. Cheng, L. Zhu, R. P. Quirk, B. S. Hsiao and F. Yeh, "Phase Structures and Morphologies Determined by Self-Organization, Crystallization and Vitrification in Poly(Ethylene Oxide) -b-Polystyrene Diblock Copolymers" (oral), 48th Annual Denver X-ray Conference, August, Steamboat Springs, CO.
168. N.S. Murthy, D.T. Grubb, B. Hsiao, Z-G. Wang, " Studies of the Effects of Strain and Temperature on the Lamellar Structure of Polymers using Small-Angle X-Ray Scattering" (oral), 48th Annual Denver X-ray Conference, August, Steamboat Springs, CO.
169. N. Beck Tan, D. Crawford, E. E. Napadensky, K. Laverdure, S. Gido, D. Reuschle, D. Mountz, K. Mauritz, W. Liu and B. Hsiao, "Perm-Selective Elastomeric Membranes from Self-Assembled Block Copolymer Ionomers" (oral), Materials Research Society, Fall meeting, December, Boston MA.

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170. B. Hsiao, "Probing the Early Stages of Polymer Crystallization: from Quiescent State to Flow" (oral), APS Meeting, March, Minneapolis, MN.
171. E. Schrag, W. Zheng, X. Fu, H. White, Ben Hsiao, M. Rafailovich, J. Sokolov, A. Winesett, H. Ade, D. Gersappe, S. Schwarz, "Compatibilization of Polymer Blends with POSS" (oral), APS Meeting, March, Minneapolis, MN.
172. W. Liu, F. Medellin-Rodriguez, R. Somani, I. Sics, B. S. Hsiao, M. Rafailovich, B. Chu and J. Sokolov, "Morphological Evolution under Shear of PS/PMMA/clay Nanocomposites using Synchrotron X-Ray Method" (oral), APS Meeting, March, Minneapolis, MN.
173. L. Zhu, Stephen Z. D. Cheng, B. H. Calhoun, Q. Ge, R. P. Quirk, B. S. Hsiao, F. Yeh, "Confined Crystallization in A Lamellar Forming PEO-b-PS Diblock Copolymer" (oral), APS Meeting, March, Minneapolis, MN.
174. J. M. Samon, J. M. Schultz, B. S. Hsiao, J. Wu and S. Khot, "Structure Development During the Melt Spinning of Poly(oxymethylene) Fiber" (oral), APS Meeting, March, Minneapolis, MN.
175. E.-Q. Chen, S. Z. D. Cheng and B. S. Hsiao, "Recrystallization and Reorganization of Linear Low Molecular Weight Poly(ethylene oxide)" (oral), APS Meeting, March, Minneapolis, MN.
176. G. Kumaraswamy, A. M. Issaian, R. K. Verma, J. A. Kornfield, F. Yeh and B. S. Hsiao, "The Role of Melt Relaxation Dynamics in Shear Enhanced Crystallization of Semicrystalline Polymers" (oral), APS Meeting, March, Minneapolis, MN.
177. Z. Wang, B. S. Hsiao, S. Srinivas and Buckley Crist, "Relationship between Crystal Thickness and Isothermal Crystallization Temperature for Determination of Equilibrium Melting Temperature for Syndiotactic Polypropylene" (poster), APS Meeting, March, Minneapolis, MN.
178. R. H. Somani, I. Sics, B. S. Hsiao, Z. G. Wang, F. Balta-Calleja, T. Ezquerra, S. Srinivas and A. Tsou, "Shear-Induced Orientation in Polyethylene Melt Near the Melting Temperature by Synchrotron SAXS and WAXD", (poster), APS Meeting, March, Minneapolis, MN.
179. R. H. Somani, I. Sics, B. S. Hsiao, Z. G. Wang, F. Balta-Calleja, T. Ezquerra, S. Srinivas and A. Tsou, "Shear-Induced Orientation and Subsequent Crystallization in Subcooled Melt of Polypropylene by Synchrotron SAXS", (oral), APS Meeting, March, Minneapolis, MN.
180. R. A. Vaia, D. Lincoln, Z. G. Wang, B. S. Hsiao and R. Krishnamoorti, "Crystallization of Polymers in Confined Environments: Structural Development of Semi-crystalline Polymer-Layered Silicate Nanocomposites", (oral), APS Meeting, March, Minneapolis, MN.
181. F. J. Medellin-Rodriguez, B. Hsiao, B. Chu, R. Vaia and S. Phillips, "Time-Resolved Steady Shear Study of End-Thetered Nylon6-Clay Nanocomposites Followed by Non-Isothermal Crystallization", (oral), APS Meeting, March, Minneapolis, MN.
182. N. S. Murthy, Z. G. Wang, M. K. Akkapeddi and B. S. Hsiao, "Crystallization Kinetics of Nylon Blends and Copolymers using Simultaneous Small- and Wide-Angle X-ray Measurements", (oral), APS Meeting, March, Minneapolis, MN.
183. B. X. Fu, W. Zhang, B. S. Hsiao, G. Johansson, B. B. Sauer, S. Phillips, R. Blanski, M. Rafailovich and J. Sokolov, "Synthesis and Characterization of Novel Segmented Poly(urethanes) containing Polyhedral Oligimeric Silsesquioxanes (POSS) Nanostructured Molecules", (poster), ACS Meeting, March, San Francisco, CA.
184. R. A. Vaia, D. Lincoln, Z.-G. Wang, B. S. Hsiao and R. Krishnamoorti, "Characterization of Mesoscopic Structure of Polymer-Layered Silicate Nanocomposites and Impact on Polymer Crystallinity", (oral), ACS Meeting, March, San Francisco, CA.
185. Shaofeng Ran, Dufei Fang, Xinhua Zong, Philip Cunniff, Ben Hsiao and Ben Chu, "Structural Studies on the Deformation of Kevlar Fibers via On-line Synchrotron SAXS/WAXD", (oral), Polymer Fibers 2000, June, Manchester, United Kingdom.

- 186.R. Somani, B. S. Hsiao, R. S. Stein, S. Srinivas, A. Tsou, F. Balta-Calleja, A. Nogales, "Orientation-Induced Crystallization in Isotactic Polypropylene", (poster), Gordon Research Conference, Polymer Physics, July, New London, CT.
- 187.C. Burger, L. Liu, B. Hsiao, B. Chu, M. Glimcher, T. Hori, "Some New Insights into the Initial Biomineralization Stages in Bone by Synchrotron X-ray Techniques" (poster), Gordon Research Conference, Biomineralization, August, New Hampshire, CT.
- 188.B. S. Hsiao, "Orientation-Induced Crystallization in Polymers", in Symposium of "Scattering Studies of Mesoscopic Scale Structure and Dynamics in Soft Matter" (oral), November, Messina, Italy.
- 189.B. S. Hsiao, R. Somani, S. Srinivas and A. Tsou, "Flow Induced Crystallization in Isotactic Polypropylene" (oral), ACS Millennium Polymer Conference, December, Hawaii.

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- 190.Zhigang Wang, Xuehui Wang, Norbert Striebeck, Benjamin S. Hsiao and Charles C. Han "Morphology development upon melting of ultrahigh molecular weight polyethylene formed at high pressure by Ultra SAXS and DSC", (poster), APS Meeting, March, Seattle, WA.
- 191.J. D. Cho, J. Runt, F. Yeh, B. Hsiao, "Crystallization and Structure Formation of Polyethylene oxide Fractions and Their Blends", (poster), APS Meeting, March, Seattle, WA.
- 192.F. Balta-Calleja, T. Ezquerro, A. Nogales, R. Somani, B. Hsiao, S. Srinivas, A. Tsou, H. Fruitwala, "Shear-induced crystallization of isotactic polypropylene with different molecular weight distributions: in-situ synchrotron SAXS and WAXD studies", (oral), APS Meeting, March, Seattle, WA.
- 193.L Yang, R. H Somani, B. X Fu, L Liu, B. S Hsiao, S. H Phillips, P Ruth and R Blansky, "In-situ X-ray studies of Molecular Orientation Enhancement in Polyhedral Oligomeric silsesquioxanes(POSS)/iPP nanocomposites", (poster), APS Meeting, March, Seattle, WA.
- 194.S. Z. D. Cheng, L. Zhu, P. Huang, B. H. Calhoun, Q. Ge, R. P. Quirk, E. L. Thomas, B. S. Hsiao, F. Yeh, L. Liu and B. Lotz, "Nano-confined Polymer Crystallization in Self-assembled Block Copolymers", (oral), APS Meeting, March, Seattle, WA.
- 195.L. Zhu, P. Huang, B. H. Calhoun, S. Z. D. Cheng, Q. Ge, R. P. Quirk, E. L. Thomas, B. S. Hsiao, F. Yeh, L. Liu and B. Lotz, "Caged Polymer Crystallization in Perforated Layers", (poster), APS Meeting, March, Seattle, WA.
- 196.R. H. Somani, L. Yang, L. Liu, B. S. Hsiao, S. Srinivas, A. Tsou and H. Fruitwala, "Orientation-induced morphology and structure development in i-PP melt after step shear using synchrotron SAXS and WAXD", (oral), APS Meeting, March, Seattle, WA.
- 197.Shaofeng Ran, Christian Burger, Dufei Fang, Xinhua Zong, Sharon Cruz, Benjamin Hsiao, Benjamin Chu, Robert Bubeck, Kazuyuki Yabuki, Yoshihiko Teramoto, David Martin, Philip Cunniff, "In-situ Structural Studies during PBO Fiber Spinning by Synchrotron WAXD/SAXS", (poster), APS Meeting, March, Seattle, WA.
- 198.Benjamin Hsiao, Rajesh Somani and Richard Stein, "Physics of Orientation-Induced Crystallization in Isotactic Polypropylene", (oral), APS Meeting, March, Seattle, WA.
- 199.Joshua M. Samon, Jerold M. Schultz and Benjamin S. Hsiao, "Structure Development in the Early Stages of Crystallization during Melt Spinning", (oral), APS Meeting, March, Seattle, WA.
- 200.Dufei Fang, Xinhua Zong, Wander Chen, Sharon Cruz, Benjamin Hsiao and Benjamin Chu "Nano-structured Electrospun Poly-D,L-lactide-co-glycolide Membranes for Antiadhesion Applications", (oral), Fiber Society Spring 2001 Meeting on New Frontiers in Fiber-Based Products, May, Raleigh, NC.
- 201.E. Chen, S. Li, B. Garlick, B. Hsiao, B. Chu, X. Zong, D. Fang and C. Brathwaite, "Prevention of Abdominal Adhesions Using a Novel Barrier – Preliminary Results", Plastic Surgery/Wound Healing, Oct.
- 202.M. Y. Gelfer, C. Burger, B. Hsiao, B. Chu, C. Avila-Orta, M. Si, M. Rafailovich "Manipulating the Microstructure and Rheology in Polymer-Organoclay Composites", Nanocomposite, September, Montreal, CA
- 203.Derek M. Lincoln, Richard A. Vaia, Zhi-Gang Wang, Benjamin S. Hsiao and Ramanan Krishnamoort, "Structure Model for Nylon 6/Montmorillonite Nanocomposites", ACS Fall National Meeting, August, Chicago, IL.
- 204.Rajesh H. Somani, Christian Burger, Benjamin S. Hsiao and Richard S. Stein "Scattering from precursors of primary nucleation in sheared isotactic polypropylene melt", ACS Fall National Meeting, August, Chicago, IL.
- 205.George Z.G. Wang, Howard Wang, K Shimizu, Charles C Han and Benjamin S Hsiao "Early stage crystallization in poly (ethylene-co-hexene) by SAXS/WAXD, DSC, OM and AFM", ACS Fall National Meeting, August, Chicago, IL.

206. Jaedong Cho, James T. Garrett, Ruijian Xu, Fengji Yeh, Benjamin S. Hsiao, J. S. Lin, and James Runt, "Crystallization and Structure Formation of Strongly-Interacting Polymer Mixtures: Poly(ethylene oxide) and Styrene-Hydroxystyrene Random Copolymers", ACS Fall National Meeting, August, Chicago, IL.
207. Mikhail Y. Gelfer, Cristian Burger, Benjamin S. Hsiao, Benjamin Chu, Hyun Hoon Song, Carlos A. Avila-Orta, Mayu Si, Miriam H. Rafailovich, and Lizhi Liu, "Phase Transition in Organoclays", ACS Fall National Meeting, August, Chicago, IL.
208. Christian Burger, Li-Zhi Liu, Benjamin S. Hsiao, Benjamin Chu, Jonathan Hanson, Tatsu-yuki Hori, and Melvin J. Glimcher. "Synchrotron SAXS/WAXS study of the composite nature of bone", ACS Fall National Meeting, August, Chicago, IL.
209. Xuan Fu, Lizhi Liu and Benjamin Hsiao, "Synchrotron X-ray Study of Ethylene-Propylene Copolymer under Deformation", ACS Fall National Meeting, August, Chicago, IL.
210. Shaofeng Ran, Zhigang Wang, Christian Burger, Benjamin Chu and Benjamin S. Hsiao, "Strain-induced crystallization from glassy state of PET film: in-situ X-ray diffraction studies", ACS Fall National Meeting, August, Chicago, IL.
211. Howard Wang, George Z. G. Wang, Charles C. Han, and Benjamin S. Hsiao. "Simultaneous SAXS and WAXS study of the isothermal crystallization in polyolefin blends", ACS Fall National Meeting, August, Chicago, IL.
212. M. Y. Gelfer, C. Burger, B. S. Hsiao, B. Chu, H. H. Song, C. A. Avila-Orta, L. Liu, F. Yeh, M. Si, M. Rafailovich and A. H. Tsou, "Manipulating the microstructure and rheology in polymer-organoclay composites", ACS Fall National Meeting, August, Chicago, IL.
213. Mikhail Y Gelfer, Lizhi Liu, Benjamin Hsiao, Benjamin Chu, Hyun H. Song, Carlos Avila-Orta, Christian Burger, Mayu Si and Mariam Rafailovich, "Novel Rheological Properties in Polymer-Organoclay Composites", Soc. of Rheology Meeting, October, Gaithersburg, MD.
214. K. Kim, W. Chen, M. Yu, S. Zhong, D. Fang, B. S. Hsiao, B. Chu and M. Hadjiargyrou, "Bioadsorbable membrane as tissue surrogates for bone cells", Materials Research Society, November, Boston, MA.
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215. Michael Goldman, Viveck Vaudevan, Mayu Si, Michael Gelfer, Benjamin Hsiao, Jonathan Sokolov, Miriam Rafailovich, Dennis Peiffer, "PMMA and PS / Clay Nanocomposites", APS Meeting, March, Indianapolis, IN.
216. E. Balizer, Z. Wang, A. Petchsuk, B. Hsiao, M. Chung, "Morphological Studies of Ferroelectric Terpolymers (VDF/TrFE/CTFE) by SAXS/WAXD", APS Meeting, March, Indianapolis, IN.
217. Zhigang Wang, Zhiyong Xia, Benjamin Hsiao, H J Sue, Charles Han, "In-Situ Small-Angle X-Ray Scattering Study of Simple Shear Oriented Poly(Ethylene Terephthalate) During Heating", APS Meeting, March, Indianapolis, IN.
218. Lei Zhu, Ping Huang, Yan Chen, S.Z.D. Cheng, Qing Ge, Roderic P. Quirk, Benjamin S. Hsiao, Fengji Yeh, Lizhi Liu, "Hexagonally Perforated Layer Phase Formed under Plastic Deformation", APS Meeting, March, Indianapolis, IN.
219. Howard Wang, Hongdoo Kim, Erik K. Hobbie, Zhi-gang Wang, Shimizu Katsumi, Charles C. Han, Benjamin S. Hsiao, "Shear-Induced Structural and Morphological Changes in Polyolefin Blends", APS Meeting, March, Indianapolis, IN.
220. J. Cho, S. Baratian, J. Kim, J. Runt, F. Yeh, B. S. Hsiao, "Crystallization and Microstructure Formation of Poly(L-lactide-co-meso-lactide) Copolymers: A Time-Resolved Wide- and Small-Angle X-ray Scattering Study", APS Meeting, March, Indianapolis, IN.
221. P. Huang, J. Jing, L. Zhu, Y. Chen, S.Z.D. Cheng, Y. Guo, Q. Ge, R.P. Quirk, B.S. Hsiao, L. Liu, F. Yeh, B. Lotz, "Phase Morphology and Crystal Orientation Changes in Two-Dimensionally Confined Nano-Cylinders in a Poly(Ethylene Oxide)-B-Polystyrene Diblock Copolymer", APS Meeting, March, Indianapolis, IN.
222. R.H. Somani, L. Yang, B.S. Hsiao, P. Agarwal, H. Fruitwala, A. Tsou, "Probing Polymer Melt Structure at the Early Stages of Crystallization By in-Situ Rheo -SAXS and -WAXD Techniques", APS Meeting, March, Indianapolis, IN.
223. Shaofeng Ran, Benjamin S. Hsiao and Benjamin Chu, "A Novel Diffraction Analysis for Estimate of Mesophase in Crystalline Polymer Fibers", ACS Meeting, April, Orlando, FL.
224. Li-Zhi Liu, Benjamin S. Hsiao, Xuan Fu, Shaofeng Ran, Andy H. Tsou, Shigeyuki Toki and Benjamin Chu, "Crystalline Morphology and Elastic Recovery of Semi-crystalline Ethylene-Propylene Elastomer", ACS Meeting, April, Orlando, FL.
225. M. Y. Gelfer, B. S. Hsiao, Z. Wang, C. Burger, B. Chu, I. Sics, W-J. Choi "Control of Structure and Property in Nanocomposites Comprising Semicrystalline Polymer Matrix and Clay", ACS Meeting, April, Orlando, FL.

226. Lei Zhu, Ping Huang, Yan Chen, Stephen Z. D. Cheng, Qing Ge, Roderic P. Quirk, Benjamin S. Hsiao, Fengji Yeh, and Lizhi Liu, "Dislocation-controlled hexagonally perforated layer phase in a PEO-b-PS diblock copolymer", ACS Meeting, April, Orlando, FL.
227. Lei Zhu, Stephen Z. D. Cheng, Yan Chen, Ping Huang, Qing Ge, Roderic P. Quirk, Benjamin S. Hsiao, Fengji Yeh, and Lizhi Liu, "Nano-tailored polymer crystallization in the HPL phase of a PS-b-PEO diblock copolymer", ACS Meeting, April, Orlando, FL.
228. George Zhigang Wang, Edward Balizer, Benjamin S. Hsiao and Charles H. Han, "Structure Evolution during Ferroelectric Phase Transition In A Vinylidene Fluoride/Trifluoroethylene Copolymer", ACS Meeting, April, Orlando, FL.
229. Toki, Shigeyuki; Sics, Igors; Ran, Shaofeng; Liu, Lizui; Hsiao, Benjamin S.; Murakami, Syozo; Senoo, Kazunobu; Kohjiya, Shinzo. "New insights into structural developments in natural rubber during uniaxial deformation by in-situ synchrotron X-ray diffraction." American Chemical Society, Rubber Division, 161st Spring Technical Program, Savannah, GA, April 29-May 1,
230. Zhiyong Xia and Hung-Jue Sue, Zhigang Wang and Benjamin S. Hsiao, "Application of Small-angle X-ray Scattering to the Lamellar Thickness Analysis in Semicrystalline Polymers", SPE ANTEC Meeting, May, San Francisco, CA
231. Shashi K. Gupta, Joseph J. Schwab, Andre Lee, Bruce X. Fu and Benjamin S. Hsiao, "POSSTM Reinforced Fire Retarding Epoxy Resins", SAMPE Meeting, May, Long Beach, CA.
232. Kwangsok Kim, Meiki Yu, Steven X. Zong, Jonathan Chiu, Dufei Fang, Young Soo Seo, Benjamin S. Hsiao, Benjamin Chu, and Michael Hadjiargyrou "Controlled Degradation of Electrospun Poly(DL-lactide) Nanofiber Membranes", ACS National Meeting, August, Boston, MA.
233. Xinhua Zong, Dufei Fang, Kwangsok Kim, Shaofeng Ran, Benjamin S. Hsiao, Benjamin Chu, Collin Brathwaite, Sean Li and Elliot Chen "Nonwoven Nanofiber Membranes of Poly(lactide) and Poly(glycolide-co-lactide) via Electrospinning and Their Applications for Anti-Adhesions", ACS National Meeting, August, Boston, MA.
234. M. Y. Gelfer, C. Burger, L. Liu, B. S. Hsiao, B. Chu, I. Sics, B. X. Fu, M. Si and M. Rafailovich, "Investigation of Morphology and Rheology of Nanocomposites Comprising Organoclays, POSS and Ethylene-Acrylate Copolymers", Gordon Research Conference, Polymer Physics, August, Colby-Sawyer College, NH.
235. Y. K. Luu, K. Kim, B. S. Hsiao, B. Chu and M. Hadjiargyrou, "Monitoring the Release of Plasmid DNA from Electrospun Poly(Lactide-co-Glycolide) Based Nanostructured Membranes", National Biomedical Engineering Society Conference, October, Houston, TX.
236. Toki, Shigeyuki; Sics, Igors; Ran, Shaofeng; Liu, Lizhi; Hsiao, Benjamin S. "Structural developments in natural and synthetic poly-isoprene rubbers during uniaxial deformation by in-situ synchrotron X-ray diffraction." American Chemical Society, Rubber Division, 162nd Fall Technical Program, Pittsburgh, PA, Oct. 8-11,
237. Huang, Ping; Zhu, Lei; Jing, Jiaokai; Chen, Yan; Cheng, Stephen Z. D.; Guo, Ya; Ge, Qing; Quirk, Roderic P.; Hsiao, Benjamin S.; Yeh, Fengji; Liu, Lizhi. "Phase morphology and crystal orientation changes in nano-confined lamellae of PEO-b-PS block copolymer", NATAS Annual Conference on Thermal Analysis and Applications, September 21-22, Pittsburgh, PA.
238. Zhu, Lei; Mimnaugh, Brion R.; Huang, Ping; Chen, William Y.; Ge, Qing; Quirk, Roderic P.; Cheng, Stephen Z. D.; Thomas, Edwin L.; Lotz, Bernard; Hsiao, Benjamin S.; Yeh, Fengji; Liu, Lizhi. "Hard and soft confinement effects on nano-confined polymer crystallization in cylindrical mesophases", NATAS Annual Conference on Thermal Analysis and Applications, September 21-22, Pittsburgh, PA.
239. J. Chiu, K. Kim, S. Zhong, B. S. Hsiao, B. Chu, M. Hadjiargyrou "Development Of Cell-Delivery Vehicles From Electrospun Nanostructured Membranes" National Biomedical Engineering Society Conference, October, Houston, TX.
240. Hilmar Koerner, Chyi-Shan Wang, Richard A. Vaia, Max D. Alexander, Nathan A. Pearce, Heather Bentley, Benjamin S. Hsiao, Igor Sics, "Deformation-Structure Relationships of Carbon Nanotubes Filled Thermoplastic Elastomers", MRS Fall Meeting, December 2-6, Boston, MA.
241. Shigeyuki Toki, Igors Sics, Benjamin S. Hsiao, Syozo Murakami, Msatoshi Tosaka, Shinzo Kohjiya, Sirilux Poompradub and Yuko Ikeda "Structural Developments in Synthetic Rubbers during Uniaxial Deformation by *In-Situ* Synchrotron X-Ray Diffraction", On International Seminar on Elastomer (ISE), April 2nd, at Kyoto Japan.
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242. T. Mace, H. Hristov, O. Thomas, B. Hsiao, C. Avila-Ortega, R. Somani, L. Yang, "Thermoplastic Polyurethanes Phase Segregation Kinetics Study", APS Meeting, March, Austin, TX.

243. Richard Vaia, Max Alexander, Nathan Pearce, Hilmar Koerner, Chyi-Shan Wang, Benjamin Hsiao, Igor Sics “Shape Recovery of Elastomeric Carbon-Nanotube Nanocomposites”, APS Meeting, March, Austin, TX.
244. Benjamin Hsiao, Rajesh Somani, Ling Yang, Hitesh Fruitwala, “Shear-Induced Precursor Structures for Crystallization in Isotactic Polypropylene Melt by Rheo-SAXS and -WAXD Studies”, APS Meeting, March, Austin, TX.
245. Carlos Avila-Orta, Rajesh Somani, Ling Yang, Benjamin Hsiao, Gad Marom, “Synchrotron small- and wide-angle X-ray scattering studies of shear-induced crystallization in iPP/UHMWPE solution blends”, APS Meeting, March, Austin, TX.
246. Ling Yang, Rajesh Somani, Igor Sics, Benjamin Hsiao, Rainer Kolb, David Lohse, Christine Ong, Hitesh Fruitwala, “Flow Induced Crystallization in Model Polyethylene Blends: Molecular Weight Effect of the Matrix”, APS Meeting, March, Austin, TX.
247. Ling Yang, Rajesh Somani, Igor Sics, Benjamin Hsiao, Rainer Kolb, David Lohse, Christine Ong, Hitesh Fruitwala, “In-situ Rheo-SAXS and Rheo-WAXD studies of Shear Induced Structures in Model Polyethylene Blend”, APS Meeting, March, Austin, TX.
248. Carlos Avila-Orta, Rajesh Somani, Ling Yang, Benjamin Hsiao, Gad Marom, “Effect of fiber on shear-induced crystallization of i-PP in UHMWPE/i-PP and Aramid/i-PP fiber composites”, APS Meeting, March, Austin, TX.
249. Ping Huang, Lei Zhu, Alexander J. Jing, William Y. Chen, Stephen Z. D. Cheng, Ya Guo, Qing Ge, Roderic P. Quirk, Edwin L. Thomas, Bernard Lotz, Benjamin S. Hsiao, Fengji Yeh, Lizhi Liu, “Size Effect on Crystal Orientation Changes in Nano-Confined Lamellae of PEO-b-PS Block Copolymer”, APS Meeting, March, Austin, TX.
250. Howard Wang, A.J. Müller, K. Shimizu, Z.G. Wang, C.C. Han, B.S. Hsiao, “How Does Phase Separation Affect Crystallization Kinetics in a Polymer Blend?”, APS Meeting, March, Austin, TX.
251. Benjamin S. Hsiao, “Flow-induced Crystallization Precursor Structures in Polymer Melts”, 2nd NIST-KIPS (Kyoto Institute of Polymer Science) Joint Symposium on Polymer Science, NIST, Gaithersburg, MD, March 20-21.
252. Daniel Dikovsky, Gad Marom, Carlos Avila-Orta, Rajesh Somani, Ling Yang and Benjamin Hsiao, “Orientation of Shear Flow Induced Crystallinity in Short UHMWPE and Aramid Fiber Reinforced iPP Composites”, International Conference on Science and Technology of Composite Materials (COMAT) in Merida, Yucatan Mexico, November 4-7.
253. Daniel Dikovsky, Gad Marom, Carlos Avila-Orta, Rajesh Somani, Ling Yang, Benjamin Hsiao, “Shear flow induced crystallinity in short fiber reinforced iPP composites”, PPS 2003 in Athens, Greece, September 14-17.
254. Kawakami, Daisuke; Fu, Bruce X.; Ran, Shaofeng; Sics, Igor; Hsiao, Benjamin S. “Structural formation of amorphous poly(ethylene terephthalate) under uniaxial deformation using synchrotron radiation”, ACS National Meeting, New Orleans, LA, March 23-27.
255. Ran, Shaofeng; Fang, Dufei; Toki, Shigeyuki; Hsiao, Benjamin; Chu, Benjamin. “Combination of Raman spectroscopy and synchrotron X-ray diffraction for in situ studies of iPP fibers under deformation”, ACS National Meeting, New Orleans, LA, March 23-27.
256. Gelfer, Mikhail Y.; Burger, Christian; Fadeev, Alexander; Hsiao, Benjamin; Chu, Benjamin. “Novel approach for X-ray structure characterizations of layered nanofiller-based nanocomposites”, ACS National Meeting, New Orleans, LA, March 23-27.
257. Shigeyuki Toki, Igor Sics, Benjamin S. Hsiao, Syozo Murakami, Masatoshi Tosaka, Sirilux Poompradub and Shinzo Kohjiya, “Structural Developments in Synthetic Rubbers during Uniaxial Deformation by In-Situ Synchrotron X-Ray Diffraction”, International Seminar on Elastomer, Kyoto, Japan, April 2-4.
258. Shigeyuki Toki, Igor Sics, Shaofeng Ran, Lizhi Liu, Benjamin S. Hsiao, Syozo Murakami, Masatoshi Tosaka, Shinzo Kohjiya, Sirilux Poompradub and Yuko Ikeda, “Strain-induced molecular orientation and crystallization in natural and synthetic rubbers under uniaxial deformation by in-situ synchrotron X-ray study”, Paul Flory Symposium, ACS Rubber Division Meeting, 163rd Spring Technical Meeting, San Francisco, CA, April 27-30.
259. Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, “Multiple-Jet Electrospinning of Non-Woven Nanofiber Articles”, ACS Fall Meeting, New York, NY, September 7-11.
260. Rajesh H. Somani, Ling Yang, Benjamin S. Hsiao, Pawan K. Agarwal, Aspy Mehta, Weiquing Weng, “Effects of long chain branching in polypropylene on shear-induced crystallization”, ACS Fall Meeting, New York, NY, September 7-11.
261. Benjamin Hsiao, Rajesh Somani, and Ling Yang, “Flow-induced crystallization precursors in polymer melt”, ACS Fall Meeting, New York, NY, September 7-11.

262. Xinhua Zong, Kwangsok Kim, Jonathan Chiu, Benjamin S. Hsiao, Benjamin Chu, Sean Li, Barbara Garlick, Collin Brathwaite, Thomas Zimmerman and Dufei Fang, "Prevention of post-surgical adhesions using electrospun bioabsorbable non-woven nanofiber membranes", ACS Fall Meeting, New York, NY, September 7-11.
263. X. Zong, H. Bien, C.Y. Chung, L. Yin, K. Kim, D.F. Fang, B. Chu, B. S. Hsiao and E. Entcheva, "Electrospun Non-Woven Membranes as Scaffolds for Heart Tissue Constructs", ACS Fall Meeting, New York, NY, September 7-11.
264. Kwangsok Kim, Charles Chang, Xinhua Zong, Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, "The incorporation of an antibiotic drug in electrospun poly(lactide-co-glycolide) non-woven nanofiber scaffolds", ACS Fall Meeting, New York, NY, September 7-11.
265. Chang Seoul, Igors Sics, Benjamin Chu and Benjamin S. Hsiao, "Deformation Study of Melt-Pressed Ultrahigh Molar Mass Polyethylene Films", ACS Fall Meeting, New York, NY, September 7-11.
266. Daisuke Kawakami, Shaofeng Ran, Igors Sics, Carlos Avila-Orta, Benjamin Chu and Benjamin S. Hsiao "A Structural Study Of Amorphous Poly(Ethylene Terephthalate) Under Extensional Deformation By X-ray Diffraction And Raman Spectroscopy", ACS Fall Meeting, New York, NY, September 7-11.
267. Lei Zhu, Lu Sun, Qing Ge, Roderic P. Quirk, Benjamin S. Hsiao, Carlos A. Avila-Orta, and Igors Sics, "Comparison of crystallization kinetics in nanoconfined cylinder and double gyroid phases", ACS Fall Meeting, New York, NY, September 7-11.
268. Igors Sics, Carlos Avila-Orta, Jong Kahk Keum, Ling Yang, Rajesh Somani, Christian Burger, Shaofeng Ran, Benjamin Chu, Benjamin Hsiao, David Cookson, Dave Schultz, Lee Myungae and P. James Viccaro, "Elongation-induced crystalline microstructures in iPP and iPP/UHMWPE blend during fiber spinning" ACS PMSE, ACS Fall Meeting, New York, NY, September 7-11.
269. Shaofeng Ran, Christian Burger, Igors Sics, Kyunghwan Yoon, Dufei Fang, Kwangsok Kim, Jong Kahk Keum, Benjamin Hsiao, Benjamin Chu, David Cookson, Dave Shultz, Myungae Lee, Jim Viccaro and Yasuo Ohta "In-Situ Synchrotron SAXS/WAXD of Melt Spinning of Modified Carbon Nanofiber and Polypropylene Nanocomposite" ACS Fall Meeting, New York, NY, September 7-11.
270. H. L. Jiang, D. F. Fang, B. Hsiao, B. Chu and W. Chen, "Hydrophobic/Hydrophilic Electrospun Membranes for Biomedical Applications", ACS Fall Meeting, New York, NY, September 7-11.
271. Alexander Fadeev, Sue D'Andrea, Mikhail Y. Benjamin Hsiao and Andy H. Tsou, "Highly-Ordered Thermally Stable Nano-Layered Materials Manufactured From Apatite Mineral", ACS Fall Meeting, New York, NY, September 7-11.
272. Benjamin S. Hsiao, "Biodegradable Nanofiber Membrane for Biomedical Applications", 6th Austrian Polymer Meeting/XXIst Hermann Mark Meeting, Vienna, Austria, September 15-17.
273. Daisuke Kawakami, Shaofeng Ran, Christian Burger, Bruce Fu, Igors Sics and Benjamin S. Hsiao, "Structural formation of amorphous poly(ethylene terephthalate) under uniaxial deformation", The Society of Rheology 75th Annual Meeting in Pittsburgh, PA, October 15.
274. M. Gelfer, C. Burger, C. Avila, L. Yang, I. Sics, B. S. Hsiao, B. Chu, M. Si, M. Rafailovich, B. Saur "Structural and Rheological Investigation of Nanocomposites Prepared by Melt-Blending of Ethylene-Vinyl Based Copolymers with Organoclays" Nanocomposite Conference, Montreal, Canada, Nov. 17-21
275. Rajesh H. Somani, Ling Yang and Benjamin S. Hsiao, "Flow Induced Crystallization in Polymers", ASME (American Society of Mechanical Engineers) IMECE meeting in Washington, DC, Nov 11-21.
276. Toki, Shigeyuki; Sics, Igors; Liu, Li-Zhi; Hsiao, Benjamin S.; Tsou, Andy H.; Datta, Sudhin. "Structure changes during uniaxial deformation of ethylene-propylene elastomer by in-situ synchrotron wide-angle X-ray diffraction studies." American Chemical Society, Rubber Division, 164th Fall Technical Program, Cleveland, OH, Oct. 14-17
277. Tosaka, M.; Kohjiya, S.; Murakami, S.; Poompradub, S.; Ikeda, Y.; Toki, S.; Sics, I.; Hsiao, B. "Effect of network-chain length on strain-induced crystallization of NR and IR vulcanizates." American Chemical Society, Rubber Division, 164th Fall Technical Program, Cleveland, OH, Oct. 14-17
278. Shigeyuki Toki, Li-Zhi Liu, Igors Sics, Benjamin S. Hsiao and Andy H. Tsou, "Structure Changes During Uniaxial Deformation of Ethylene-Propylene Elastomer by *In-Situ* Synchrotron X-Ray Studies", 8th Japan International SAMPE Symposium, Tokyo, Japan, November 18-21.
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279. J. Chiu, X. Zong, B. S. Hsiao, B. Chu, M. Hadjiargyrou., "Development of a Viable Collagen-Containing, Non-Woven, Electro-Spun Poly-l-Lactide Scaffold for Tissue Engineering" (poster) Gordon Research Conference on Colloidal, Macromolecular & Polyelectrolyte Solutions, Ventura, CA, Feb. 1-6.

280. K. Kim, C. Chang, Y. K. Luu, D. Fang, B. S. Hsiao, B. Chu, M. Hadjiargyrou., "Biodegradable Amphiphilic Block Copolymers for the Control of Degradation and Drug Release in Electro-Spun Nano-Fibrous Scaffolds" (poster) Gordon Research Conference on Colloidal, Macromolecular & Polyelectrolyte Solutions, Ventura, CA, Feb. 1-6.
281. D. Liang, K. Kim, Y. K. Luu, M. Hadjiargyrou, B. S. Hsiao, B. Chu, "Encapsulation of Plasmid DNA by PLA-PEG-PLA in an Electro-Spun PLGA Scaffold as Non-Viral Gene Delivery Vehicle", Gordon Research Conference on Colloidal, Macromolecular & Polyelectrolyte Solutions, Ventura, CA, Feb. 1-6.
282. L. Yang, R. H. Somani, C. A. Avila-Orta, B. S. Hsiao, R. Kolb, T. Sun and D. Lohse, "Probing the Origin of Shish-Kebab Formation in Model Polyethylene Blend under Shear by In-situ Rheo-SAXS and Rheo-WAXD", American Physical Society Meeting, Montreal, Canada, March 22-26.
283. Lei Zhu, Lu Sun, Benjamin Hsiao, Carlos Avila-Orta, "Self-assembly Behavior and Crystallization of a Low Molecular Weight Double Crystalline Polyethylene-block-Poly(ethylene oxide) Diblock Copolymer", American Physical Society Meeting, Montreal, Canada, March 22-26.
284. Lei Zhu, Lu Sun, Qing Ge, Roderic P. Quirk, Stephen Z.D. Cheng, Benjamin S. Hsiao, Igors Sics, Carlos Avila-Orta, "Complex Transformations between Bicontinuous Cubic and Cylinder Phases in a Polystyrene-block-Poly(ethylene oxide) Diblock Copolymer", American Physical Society Meeting, Montreal, Canada, March 22-26.
285. Daisuke Kawakami, Benjamin S. Hsiao, Shaofeng Ran, Christian Burger and Igors Sic, "Structural formation of amorphous poly(ethylene terephthalate) during uniaxial deformation above and below glass temperature", SPE ANTEC Meeting, Chicago, IL, May 16-20
286. Benjamin S. Hsiao, "Real-Time Synchrotron X-ray Techniques for Polymer Processing Research", SPE ANTEC Meeting, Chicago, IL, May 16-20
287. M. Gelfer, A. Drozdov, C. Burger, B. S. Hsiao, B. Chu, M. Si, M. Rafailovich, "Effects of temperature and matrix composition on the structure and rheology relationship of polymer-organoclay nanocomposites", 14th International Congress on Rheology (ICR2004), Seoul, Korea, August 22-27
288. Xuming Chen, Kyunghwan Yoon, Christian Burger, Igors Sics, Benjamin S. Hsiao, Benjamin Chu, "In-situ Synchrotron X-Ray Studies of Modified Carbon Nano-fiber and UHMWPE Nano-Composite Films during Deformation", 2004 Fall MRS Meeting, Boston, MA, Nov. 29-Dec. 2.
289. Sirilux Poompradub, Masatoshi Tosaka, Shinzo Kohjiya, Yuko Ikeda, Shigeyuki Toki, Igors Sics, Benjamin S. Hsiao, "Smart in situ nanocomposite: Strain-induced crystallization in carbon black filled natural rubber", MACRO 2004 - 40th IUPAC World Polymer Congress, Paris, France, July 4-9.
290. M. Y. Gelfer, C. Burger, G. Jeschke, A. Fadeev, P. Nawani, B. S. Hsiao, B. Chu, M. Si, M. Rafailovich, "Investigation of thermally induced phase transitions and degradation of organoclays using in-situ X-ray scattering and FTIR spectroscopy", Nanocomposites 2004, San Francisco, CA, September 1-3.
291. Shigeyuki Toki, Igors Sics, Chris Burger, Dufei Fang, Benjamin S. Hsiao, Andy H. Tsou and Sudhin Datta, "Structural Evolution and Mechanical Properties in New TPE during Uniaxial Deformation by in-situ Synchrotron X-Ray Scattering", American Chemical Society Rubber Division 165th Spring Meeting, Grand Rapids, Michigan, May 17-19.
292. Shigeyuki Toki, Igors Sics, Christian Burger, Dufey Fang, Benjamin S. Hsiao, Andy H. Tsou² and Sudhin Datta, "Structure changes and Stress-build up during Uniaxial Deformation in Propylene based TPE by In-situ Synchrotron WAXD and SAXS studies", Polymer Processing Society 20th Anniversary Meeting, Akron OH, June 20-24.
293. Lu Sun, Ethan A. Ertel, Jianjun Miao, Lei Zhu, Benjamin S. Hsiao, and Carlos A. Avila-Ort, "Two-step De-intercalation and Intercalation Induced by Polymer Crystallization and Melting in Poly(ethylene oxide)/Organoclay Nanocomposites", ACS PMSE Fall Meeting, Philadelphia, PA, August 22-26.
294. Jianjun Miao, Lei Zhu, Lu Tian, Kathryn E. Uhrich, Carlos A. Avila-Orta and Benjamin S. Hsiao, "Forced Polymer Chain Folding in Amphiphilic Unimolecular Micelles", ACS PMSE Fall Meeting, Philadelphia, PA, August 22-26.
295. Rajesh H. Somani, Ling Yang, Benjamin S. Hsiao, Rainer Kolb and Hitesh Fruitwala, "Shear rate effect of flow-induced oriented precursor structure in polypropylene melt", ACS PMSE Fall Meeting, Philadelphia, PA, August 22-26.
296. Carlos A. Avila-Orta, Christian Burger, Rajesh Somani, Ling Yang, Benjamin S. Hsiao and Gad Marom, "Shear-Induced Crystallization Precursor Structures in iPP/UHMWPE Blends by In-Situ Small- and Wide-Angle X-ray Scattering", ACS PMSE Fall Meeting, Philadelphia, PA, August 22-26.

297. Jong Kahk Keum, Christian Burger, Rajesh Somani, Ling Yang, Hongyu Chen, Rainer Kolb, Ching-Tai Liu and Benjamin S. Hsiao, "Synchrotron X-ray scattering studies on the nature of flow-induced shish-kebab structure in polyethylene blends", ACS PMSE Fall Meeting, Philadelphia, PA, August 22-26.
298. Ling Yang, Rajesh H. Somani, Igors Scis, Carlos A. Avila-Orta, Benjamin S. Hsiao, "Flow-induced Crystallization Precursor Structures in Model Polyethylene Blend", ACS PMSE Fall Meeting, Philadelphia, PA, August 22-26.
299. Xuming Chen, Kyunghwan Yoon, Christian Burger, Igors Sics, Benjamin S. Hsiao and Benjamin Chu, "Super-Tough Performance of Modified Carbon Nanofiber (MCNF)/UHMWPE Nanocomposite Films", ACS POLY Fall Meeting, Philadelphia, PA, August 22-26.
300. C. V. Krishnana, M. Garnett, B. Hsiao and B. Chu, "Electrochemical measurements of isopolyoxomolybdates: I. pH dependent behavior of sodium molybdate", ACS PMSE Fall Meeting, Philadelphia, PA, August 22-26.
301. C. V. Krishnana, M. Garnett, J. Chen, C. Burger, B. Hsiao and B. Chu, "Electrochemical and X-ray measurements of isopolyoxomolybdates: II. Mono, di, and heptaoxomolybdates", ACS PMSE Fall Meeting, Philadelphia, PA, August 22-26.
302. Huang, Ping; Zhu, Lei; Guo, Ya; Ge, Qing; Quirk, Roderic P.; Thomas, Edwin L.; Lotz, Bernard; Hsiao, Benjamin S.; Avila-Orta, Carlos A.; Sics, Igors; Cheng, Stephen Z. D. "Comparison of poly(ethylene oxide) crystal orientation changes in two-dimensionally nano-confined cylinders constructed by a poly(ethylene oxide)-b-polystyrene diblock copolymer and a blend of poly(ethylene oxide)-b-polystyrene and polystyrene.", ACS PMSE Fall Meeting, Philadelphia, PA, August 22-26.
303. Sun, Lu; Liu, Yuxiu; Zhu, Lei; Hsiao, Benjamin S.; Avila-Orta, Carlos A. "Self-assembly and crystalline morphology in polyethylene and poly(ethylene oxide) copolymers", ACS PMSE Fall Meeting, Philadelphia, PA, August 22-26.
304. Tenneti, Kishore K.; Li, Christopher Y.; Zhang, Dong; Zhang, Hailiang; Wan, Xinhua; Chen, Er-Qiang; Zhou, Qi-Feng; Avila-Orta, Carlos; Igos, Sics; Hsiao, Benjamin S. "Nanoscale hierarchical structures of a series of liquid crystalline "rod-coil" block copolymers." ACS POLY Fall Meeting, Philadelphia, PA, August 22-26.
305. Mikhail Y Gelfer, Alex Drozdov, Christian Burger, Benjamin Hsiao, Benjamin Chu, Mayu Si, Miriam Rafailovich, "Effects of temperature and matrix composition on the structure and rheology relationship in polymer-organoclay nanocomposites", the XIVth International Congress on Rheology, Seoul, Korea, August 22-27.
306. Lei Zhu, Lu Sun, Qing Ge, Roderic P. Quirk, Stephen Z. D. Cheng, Benjamin S. Hsiao, Carlos A. Avila-Orta and Igors Sics, "Epitaxial Phase Transformation in Cylindrical and Double Gyroid Mesophases in Diblock Copolymers", 2004 MRS Fall Meeting, Boston, MA, Nov. 29-Dec. 3.
307. Jianjun Miao, Lei Zhu, Lu Tian, Kathryn E. Uhric, Carlos A. Avila-Orta and Benjamin S. Hsiao, "Forced Polymer Chain Folding in Amphiphilic Unimolecular Micelles", 2004 MRS Fall Meeting, Boston, MA, Nov. 29-Dec. 3.
308. Lu Sun, Lei Zhu, Jianjun Miao, Carlos A. Avila-Orta, Igors Sics and Benjamin S. Hsiao, "Two-step De-intercalation and Intercalation Induced by Polymer Crystallization and Melting in Poly(ethylene oxide)/Organoclay Nanocomposites", 2004 MRS Fall Meeting, Boston, MA, Nov. 29-Dec. 3.
309. Xuming Chen, Kyunghwan Yoon, Christian Burger, Igors Sics, Benjamin Chu and Benjamin S. Hsiao, "Super-Tough Performance of Modified Carbon Nanofiber (MCNF)/UHMWPE Nanocomposite Films", Symposium on Materials for Space Applications, 2004 MRS Fall Meeting, Boston, MA, Nov. 29-Dec. 3.
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310. M. Y. Gelfer, C. Burger, G. Panek, G. Jeschke, A. Y. Fadeev, M. Si, M. H. Rafailovich, P. Nawani, B. Chu and B. Hsiao, "Investigation of thermally induced phase transitions and degradation of organoclays based on synthetic Somasif clays using in-situ X-ray scattering" (oral), American Chemical Society Meeting, San Diego, CA, March 13-17.
311. J. Keum, R. Somani, F. Zuo, L. Yang, I. Sics, B. Hsiao, H. Chen, R. Kolb and C.-T. Lue, "Examination of Flow-Induced Crystallization Precursor Structures in Polyethylene Blend Films by Reversed Melting Method" (oral), American Physical Society Meeting, Los Angeles, CA, March 21-25.
312. Benjamin Hsiao, Ling Yang, Rajesh Somani, Lei Zhu, "Unexpected Shish-Kebab Structure in Shear-Induced Polyethylene Melt" (oral), American Physical Society Meeting, Los Angeles, CA, March 21-25.
313. Rajesh Somani, Igors Sics, Benjamin Hsiao, "Shear-Induced Shish-Kebab Morphology in Polymer Melts - Flow Between Two Parallel Plates versus Coaxial Cylinders" (oral), American Physical Society Meeting, Los Angeles, CA, March 21-25.

314. Feng Zuo, JongKahk Keum, Ling Yang, Rajesh Somani, Benjamin Hsiao, "Thermal Stability of Shear-Induced Precursors of Shish-Kebab in a Model Polyethylene Blend by in-situ Rheo-SAXS and -WAXD" (oral), American Physical Society Meeting, Los Angeles, CA, March 21-25.
315. Lei Zhu, Jianjun Miao, Guoqiang Xu, Lu Tian, Kathryn Uhrich, Carlos Avila-Orta, Benjamin Hsiao, "Molecular Architecture Induced Chain-Folding in Polymeric Amphiphilic Unimolecular Micelles" (oral), American Physical Society Meeting, Los Angeles, CA, March 21-25.
316. Jianjun Miao, Li Cui, Lei Zhu, Igors Sics, Benjamin Hsiao, "Can short alkyl chain fold in lamellar crystals?" (oral), American Physical Society Meeting, Los Angeles, CA, March 21-25.
317. Kishore Tenneti, Christopher Li, Yingfeng Tu, Xinhua Wan, Qu-Feng Zhou, Carlos Avila-Orta, Benjamin Hsiao, "On the influence of temperature and volume fraction on liquid crystalline block copolymer nanoscale architectures" (oral), American Physical Society Meeting, Los Angeles, CA, March 21-25.
318. Li Cui, Jianjun Miao, Lei Zhu, Igors Sics, Benjamin Hsiao, "Confined Discotic Liquid Crystalline Self-Assembly in a Novel Coil-Coil-Disk Triblock Oligomer" (oral), American Physical Society Meeting, Los Angeles, CA, March 21-25.
319. Ping Huang, Stephen Z. D. Cheng, Ya Guo, Roderic P. Quirk, Benjamin S. Hsiao, Carlos A. Avila-Orta, Igors Sics, "Induced PEO Crystal Orientation within the Inversed Cylindrical Morphology of PEO-b-PS Block Copolymer" (oral), American Physical Society Meeting, Los Angeles, CA, March 21-25.
320. Richard Vaia, Hilmar Koerner, Benjamin S. Hsiao and Igors Sics "Morphology -- Deformation Correlations in Nanocomposite Elastomers" (oral), the 167th Spring Technical Meeting of the Rubber Division, ACS in San Antonio, TX, May 16-18.
321. Hsiao, Benjamin S.; Gelfer, Mikhail Y. "Synchrotron X-ray techniques for the study of clay-based polymer nanocomposites.", Spring Technical Meeting - American Chemical Society, Rubber Division, 167th, San Antonio, TX, United States, May 16-18.
322. Vaia, Richard; Mirau, Peter; Alexander, Max; Koerner, Hilmar; Hsiao, Benjamin S.; Sics, Igors. "Morphology-deformation correlations in nanocomposite elastomers", Spring Technical Meeting - American Chemical Society, Rubber Division, 167th, San Antonio, TX, United States, May 16-18.
323. Kohjiya, Shinzo; Kato, Atsushi; Shimanuki, Junichi; Ikeda, Yuko; Tosaka, Masatoshi; Poompradub, Sirilux; Toki, Shigeyuki; Hsiao, Benjamin S.. "Nano-structural elucidation in carbon black loaded NR vulcanizate by 3D-TEM and in situ WAXD measurements." Spring Technical Meeting - American Chemical Society, Rubber Division, 167th, San Antonio, TX, United States, May 16-18.
324. Toki, Shigeyuki; Hsiao, Benjamin S.; Kohjiya, Shinzo; Tosaka, Masatoshi; Tsou, Andy H.; Datta, Sudhin. "Synchrotron X-ray studies of vulcanized rubbers and thermoplastic elastomers", Spring Technical Meeting - American Chemical Society, Rubber Division, 167th, San Antonio, TX, United States, May 16-18
325. M. Y. Gelfer, C. Burger, P. Nawani, B. Chu, B. S. Hsiao, M. Si, and M. Rafailovich, "Novel approach for the interpretation of x-ray scattering data from layered systems", 23rd Disc. Conf. of P.M.M., Curr. Fut. Trends Polym. Mater. Prague, Poland, August.
326. C. Burger, H. Zhou, B. S. Hsiao, and B. Chu, "Theoretical treatment and practical aspects of systems with preferred orientation", XXth IUCr Congress, Florence, Italy, August 23-31.
327. Feng Zuo, Hongyu Chen, Jing Li, Ronald Wevers, Greg Meyers, Jongkhak Keum, Xuming Chen and Benjamin S. Hsiao, "In-situ Synchrotron SAXS/WAXD Studies on Stretching of Isotactic Polypropylene" (poster), ACS, PMSE Fall Meeting, Washington, DC., August 28 to September 2.
328. Xuming Chen, Christian Burger, Xuefen Wang, Weidong He, Kyunghwan Yoon, Rajesh H. Somani, Dufei Dang, Igors Sics, Lixia Rong, Benjamin S. Hsiao and Benjamin Chu, "In-Situ X-Ray Scattering Studies of Fluorinated Multi-Wall Carbon Nanotube (FMWNT)/Fluorinated Ethylene Propylene (FEP) Composite Fiber during Stretching" (poster), ACS, PMSE Fall Meeting, Washington, DC., August 28 to September 2.
329. Jong Kahk Keum, Christian Burger, Feng Zuo, Igors Sics, Benjamin Hsiao, Thomas Sun, Arnold Lustiger, "Synchrotron X-ray diffraction/scattering studies on the nucleation and growth habits of flow-induced shish-kebab structure in linear polyethylene (HDPE) melts", ACS, PMSE Fall Meeting, Washington, DC., August 28 to September 2.
330. Igors Šics, Lixia Rong, Benjamin S. Hsiao and Benjamin Chu, "Advanced Polymers Beamline (X27C) at National Synchrotron Light Source, BNL", ACS, PMSE Fall Meeting, Washington, DC., August 28 to September 2.
331. Pranav Nawani, Mikhail Y. Gelfer, Benjamin S. Hsiao, "Investigations of morphology and thermal behavior of transition metal ions modified clays using in-situ X-ray scattering", ACS, PMSE Fall Meeting, Washington, DC., August 28 to September 2.

332. Hong-wen Zhou, Christian Burger, Jinglu Chen, Benjamin S. Hsiao, Benjamin Chu, Lila Graham and Melvin J. Glimcher, "Interpretation of 2D Small-Angle X-Ray Diffraction Patterns from Mineralized Collagen Fibrils in Fish Bone", ACS, PMSE Fall Meeting, Washington, DC., August 28 to September 2.
333. P. Huang, S. Z. D. Cheng, R. Van Horn, Y. Guo, R. P. Quirk, B. Lotz, E. L. Thomas, B. Hsiao, C. A. Avila-Orta, I. Sics, "PEO crystal orientation changes within an inversed cylindrical morphology constructed by a PEO-b-PS block copolymer", ACS, PMSE Fall Meeting, Washington, DC., August 28 to September 2.
334. L. Cui, J. Miao, L. Zhu, I. Sics, B. S. Hsiao, "Confined discotic liquid crystalline self-assembly in a novel coil-coil-disk triblock oligomer", ACS, PMSE Fall Meeting, Washington, DC., August 28 to September 2.
335. K. K. Tenneti, X. Chen, C. Y. Li, X. Wan, Q.-F. Zhou, I. Sics, B. S. Hsiao, "Asymmetric Liquid Crystalline Rod-Coil Block Copolymer System", ACS, PMSE Fall Meeting, Washington, DC., August 28 to September 2.
336. Benjamin Chu and Benjamin S. Hsiao, "Electro-spinning Technology and its Applications", The Polymer Congress in Beijing, Oct. 9-10.
337. Andy H. Tsou, Matthew B. Measmer, Mikhail Y. Gelfer, Pranav Nawani and Benjamin S. Hsiao, "Evaluation of Organosilicate Dispersion in Polymer Nanocomposites by Permeability", International Rubber Conference Proceeding, Yokohama, Japan, Oct. 25-28.
338. Shigeyuki Toki, Igor Sics, Benjamin S. Hsiao, Sureerut Amnuayporn Sri and Seiichi Kawahara, "Strain-Induced Crystallization in Un-Vulcanized Natural Rubbers by Synchrotron X-Ray Study", American Chemical Society Rubber Division Preprint, 168th Technical Meeting, Pittsburgh, PA, November 1-3.
339. C. Burger, H. Zhou, X. Chen, J.K. Keum, B.S. Hsiao, B. Chu, "Polymer Fiber Diffraction and Its Quantitative Analysis", Pittsburgh Diffraction Conference, Argonne, IL, November 3-5.
340. Kyunghwan Yoon, Kwangsok Kim, Xuefen Wang, Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, "High Flux Ultrafiltration Membranes Based on Electrospun Nanofibrous Scaffolds", Symposium on Nanomaterials and the Environment, MRS 2005 Fall Meeting, Boston, MA, Nov. 29-Dec. 3.
341. C. A. Avila-Orta, M. V. Davila-Rodriguez, Y. A. Aguirre-Figueroa, F. J. Medellín-Rodrigue, B. S. Hsiao, "Thermal And Electrical Properties of iPP/MWCNT Nanocomposites", International Congress of Composites (COMAT 2005), Buenos Aires- Argentina, December 11-14.

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342. M. Gelfer, C. Burger, P. Nawani, A. Drozdov, B. S. Hsiao, B. Chu, M. Si, M. Rafailovich, "Effects of temperature and matrix composition on the structure and rheology relationship in polymer-organoclay nanocomposites", 4th Mediterranean Conference on Chemical Engineering, Le Meridien Hotel on the Dead Sea, Israel, January 9-11
343. Kishore Tenneti, Xiaofang Chen, Christopher Li, Xinhua Wan, Qi-Feng Zhou, Igor Sics and Benjamin Hsiao, "Phase structures of block copolymers blended with small molecules", APS March Meeting, Baltimore, MD, March 13-17.
344. Kishore Tenneti, Xiaofang Chen, Christopher Li, Yingfeng Tu, Xinhua Wan, Qi-Feng Zhou, Igor Sics and Benjamin Hsiao, "Perforated layer structures in liquid crystalline block copolymers", APS March Meeting, Baltimore, MD, March 13-17.
345. Benjamin Hsiao, "Flow-Induced Crystallization Precursor Structure in Entangled Polymer Melt", APS March Meeting, Baltimore, MD, March 13-17.
346. Feng Zuo, Jong Kahk Keum, Ling Yang, Rajesh H. Somani and Benjamin S. Hsiao "Thermal Stability of Shear-Induced Shish-Kebab Precursor Structure from High Molecular Weight Polyethylene Chains", 231st ACS National Meeting, Division of Polymeric Materials: Science and Engineering, Symposium on "Complex Fluids in Confined Spaces: Colloids and Complex Fluids", Atlanta, GA, March 26-30.
347. Benjamin Chu and Benjamin Hsiao, "Super-Tough Nano-Composites with Modified Carbon Nano-Fibers", Polymer Physics '2006 Conference, Suzhou, China, June 1-5.
348. Dehai Liang, Christine Falabella, Michael Hadjiargyrou, Benjamin Hsiao, Benjamin Chu, "Controlled Release of Plasmid DNA from Electrospun Nanofibrous Scaffolds in Tissue Engineering", Polymer Physics '2006 Conference, Suzhou, China, June 1-5.
349. Dehai Liang, Jun Zhang, Weidong He, Benjamin Hsiao, Benjamin Chu, "Laser light scattering study on DNA/poly(ethylene glycol)-b-poly(L-lysine) complexes in aqueous and non-aqueous solutions", 4th East-Asian Polymer Conference (EAPC-4), Nankai University, Tianjin, China, May 28-31.
350. Benjamin S. Hsiao "On-Line Nanostructure Characterization by Synchrotron X-ray Scattering and Diffraction Techniques", 22nd Annual Meeting of Polymer Processing Society, Yamagata, Japan, July 2-6, 2006.
351. Benjamin S. Hsiao and Benjamin Chu, "Synchrotron X-Ray Scattering of Polymer Nanocomposites", Synchrotron Radiation in Polymer Science III (SRPS3) Meeting, Spring-8, Japan, July 6 - 8.

352. Benjamin S. Hsiao, Rajesh H. Somani, Ling Yang, Feng Zuo and Jong-Khak Keum, "Probing Shear-Induced Crystallization Precursor Structure in Entangled Polymer Melts by In-Situ Rheo-SAXS and Rheo-WAXD", XIII International Conference on Small-Angle Scattering Symposium, Kyoto, Japan, July 9-13.
353. H.-W. Zhou, C. Burger, L. Graham, M. J. Glimcher, I. Sics, B. S. Hsiao, and B. Chu, "Biom mineralization of Type-I Collagen Fibrils in Intramuscular Herring Bone", XIII International Conference on Small-Angle Scattering Symposium, Kyoto, Japan, July 9-13.
354. Dehai Liang; Jun Zhang; Weidong He; Benjamin Hsiao; Benjamin Chu "Laser light scattering study on DNA/poly(ethylene glycol)-b-poly(L-lysine) complexes in aqueous and non-aqueous solutions", World Polymer Congress – Macro 2006, 41st International Symposium on Macromolecules, Rio de Janeiro, July 16 – 21.
355. Benjamin Chu and Benjamin S. Hsiao, "Nanofiber Technology for Health: Challenges and Opportunities", 232nd ACS National Meeting, San Francisco, CA, September 10-14.
356. Benjamin S. Hsiao and Benjamin Chu, "Nanofibrous Materials for Biomedical and Environmental Applications", 232nd ACS National Meeting, San Francisco, CA, September 10-14.
357. Kyunghwan Yoon, Benjamin S. Hsiao and Benjamin Chu, "High flux ultrafiltration membranes based on poly(acrylonitrile) nanofibrous scaffolds and crosslinked poly(vinyl alcohol) coating", 232nd ACS National Meeting, San Francisco, CA, September 10-14.
358. Antonis Kalarakis, Kyunghwan Yoon, Rajesh Somani, Igors Sics, Benjamin S. Hsiao and Benjamin Chu, "Polymer Chain Dynamics and Melting Behavior in a Carbon Nanofiber Reinforced Elastomeric Composite", 232nd ACS National Meeting, San Francisco, CA, September 10-14.
359. Xuming Chen, Christian Burger, Jie Cai, Lina Zhang, Benjamin Hsiao and Benjamin Chu, "X-ray studies of regenerated cellulose fibers wet spun from environmental friendly NaOH/urea aqueous solution", 232nd ACS National Meeting, San Francisco, CA, September 10-14.
360. Tsai-Ming Chung, Rong-Ming Ho, Jing Chung Kuo, Jing-Cherng Tsai, Benjamin S. Hsiao and Igors Sics, "Trilayer Crystalline Lamellar Morphology under Confinement", 232nd ACS National Meeting, San Francisco, CA, September 10-14.
361. Christopher Y. Li, Kishore K. Tenneti, Xiaofang Chen, Xinhua Wan, Qi-Feng Zhou and Benjamin S. Hsiao, "Phase structures of mesogen jacketed liquid crystalline "rod-coil" block copolymers", 232nd ACS National Meeting, San Francisco, CA, September 10-14.
362. Kishore K. Tenneti, Christopher Y. Li, Xiaofang Chen, Xinhua Wan, Qi-Feng Zhou and Benjamin S. Hsiao, "Phase structures of block copolymer complexes with bent-core mesogens", 232nd ACS National Meeting, San Francisco, CA, September 10-14.
363. B. Larin, C.A. Avila-Orta, Rajesh H. Somani, B.S. Hsiao and Gad Marom, "The significance of flow induced structures in fiber reinforced thermoplastic composites", Manufacturing and Processing Technologies at 5th Asian-Australasian Conference on Composite Materials (ACCM-5) in Hong Kong, November 27-30.
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364. Feng Zuo, Xuming Chen, Jong kahk Keum, Yiming Mao, Benjamin S. Hsiao, Hongyu Chen and Debbie Chiu, "Structure, Property and Processing Relationship of Olefin Block Copolymers via In-Situ Synchrotron X-ray Studies", 233rd National ACS Meeting, Chicago, IL, March 25-29.
365. Mun F. Tse, Benjamin S. Hsiao, and Pranav Nawani, "Characterization of Nanoclays in Solvents", 233rd National ACS Meeting, Chicago, IL, March 25-29.
366. Pranav Nawani, Christian Burger, Mikhail Gelfer, Benjamin Chu, Benjamin S. Hsiao, Andy H. Tsou and Weiqing Weng, "Preferred Orientation of Organoclay in Nanocomposites by 3D TEM and SAXS Study", 233rd National ACS Meeting, Chicago, IL, March 25-29.
367. Sudipto Das, Derek B. Klinedinst, Iskender Yilgor, Frederick L. Beyer, Shigeyuki Toki, Benjamin S. Hsiao and Garth L. Wilkes, "Structure-property relationships of segmented polyurethanes and polyureas based on single molecule hard segments", 233rd National ACS Meeting, Chicago, IL, March 25-29.
368. Junchai Zhao, Zhigang Wang, and Benjamin S. Hsiao, "Reorganization and crystallization of quenched mesomorphic isotactic polypropylene during thermal annealing", 233rd National ACS Meeting, Chicago, IL, March 25-29.
369. Benjamin S. Hsiao, Feng Zuo, Jongkahk Keum, Xuming Chen, Hongyu Chen, Jing Li, "Temperature Effects on Interlamellar Chain Entanglement and Structural Changes in Isotactic Polypropylene during Uniaxial Tensile Deformation", APS March Meeting, Denver, CO, March 6-9
370. Aihua He, Junxing Li, Charles Han, Dufei Fang, Benjamin Hsiao and Benjamin Chu, "Electrospinning of Hyaluronic acid (HA) and HA/Gelatin Blends", APS March Meeting, Denver, CO, March 6-9.

371. Pranav Nawani and Benjamin S. Hsiao “Transition Metal Ion Modified Organoclays as Fire Retardant Fillers for Polymer Nanocomposites”, 18th Annual BCC Conference of FR on Polymeric Materials, Stamford, CT, May 21-23, 2007.
372. Lei Zhu, Lu Sun, Lixia Rong, Benjamin Hsiao, “Tailor-Made Onion-Like Stereocomplex Crystals in Incompatible Enantiomeric Polylactide Containing Block Copolymer Blends”, APS March Meeting, Denver, CO, March 6-9.
373. Kishore Tenneti, Xiaofang Chen, Christopher Li, Lixia Rong and Benjamin Hsiao, “Phase structures of a series of bent-core mesogen jacketed liquid crystalline block polymers”, APS March Meeting, Denver, CO, March 6-9.
374. Lu Sun, Jorge Ginorio, Lei Zhu, Lixia Rong, Igor Sics and Benjamin Hsiao, “Phase Transitions and Honeycomb Morphology in an Incompatible Blend of Enantiomeric Polylactide Block Copolymers”, APS March Meeting, Denver, CO, March 6-9.
375. Kishore Tenneti, Xiaofang Chen, Christopher Li, Lixia Rong and Benjamin Hsiao, “Morphological transformation and mesostructure formation in diblock copolymer blends” APS March Meeting, Denver, CO, March 6-9.
376. Benjamin Chu, Benjamin S. Hsiao, Kyunghwan Yoon, “Nanofiber and Nanocomposite-Fiber Technology for Environmental Applications”, American Association of Textile Chemists and Colorists (AATCC) International Conference, Innovations in Nanotechnologies, Composites, and Sports/Military Materials Symposium, Atlanta, Georgia, April 11-12.
377. Shih-Yaw Lai, Hongyu Chen and Benjamin Hsiao “Structure, Property and Processing Relationship of Novel Polyolefin Elastomers”, The PPS-2007 Asia/Australia Regional Meeting, Shanghai, China, July 12-14, 2007.
378. Yimin Mao, Feng Zuo, Rajesh H. Somani, Jong Kahk Keum, Benjamin S. Hsiao, “Influence of Strain on Shear-Induced Crystallization of Poly(ethylene oxide)”, 234th ACS National Meeting, Boston, MA, August 19-23.
379. Feng Zuo, Yiming Mao, Jong Kahk Keum, Benjamin S. Hsiao, Hongyu Chen, Debbie Chiu, and Shih-Yaw Lai, “Shear-induced Crystallization of Olefin Block Copolymer via In-Situ Synchrotron X-ray Studies” 234th ACS National Meeting, Boston, MA, August 19-23.
380. Hongyang Ma, Lixia Rong, Kyunghwan Yoon, Benjamin S. Hsiao and Benjamin Chu, “Structure and Property of High Flux Cellulose Membranes Fabricated by Ionic Liquid”, 234th ACS National Meeting, Boston, MA, August 19-23.
381. Jong Kahk Keum, Feng Zuo, Yimin Mao and Benjamin S. Hsiao “Flow-induced crystallization precursor structure in high molecular weight isotactic polypropylene/low molecular weight linear low density polyethylene blends” 234th ACS National Meeting, Boston, MA, August 19-23.
382. Benjamin S Hsiao, Jong Kahk Keum, and Feng Zuo “Dynamic formation of shear-induced shish-kebab structure in highly entangled melts of UHMWPE/HDPE blends” 234th ACS National Meeting, Boston, MA, August 19-23.
383. Kyunghwan Yoon, Christopher Pang, Benjamin S Hsiao, and Benjamin Chu “High flux nanofiltration membranes based on interfacially polymerized polyamide on nanofibrous scaffolds”, 234th ACS National Meeting, Boston, MA, August 19-23.
384. Lei Zhu, Lu Sun, Lixia Rong, and Benjamin S. Hsiao, “Tailoring onion-like morphology in polylactide-containing block copolymers”, 234th ACS National Meeting, Boston, MA, August 19-23.
385. Kishore K. Tenneti, Xiaofang Chen, Christopher Y. Li, Xinhua Wan, Qi-Feng Zhou, Lixia Rong, and Benjamin S. Hsiao “Hierarchical nanostructures of mesogen jacketed bent-core liquid crystalline block copolymers” 234th ACS National Meeting, Boston, MA, August 19-23.
386. Jaseung Koo, Kwanwoo Shin, Young-Soo Seo, Tadanori Koga, Seongchan Park, Sushil K. Satija, Xuming Chen, Kyunghwan Yoon, Benjamin S. Hsiao, Hila Calev, Jonathan Sokolov, and Miriam Rafailovich, “Control of Dewetting Dynamics at a Polymer-Polymer interface by Adding Multi-Walled Carbon Nanotubes”, Division of Colloid & Surface Chemistry. 234th ACS National Meeting, Boston, MA, August 19-23.
387. Weiqing Weng, Benjamin S. Hsiao, Pranav Nawani, Brendan Rodgers, Robert N Webb “Isobutylene Polymer Nanocomposite as Advanced Tire Innerliner Materials”, 9th International Symposium on Engineering Polymers for Advanced Technologies, Shanghai, China, October 22-25.
388. Shigeyuki Toki, Norio Minouchi, Igor Sics, Benjamin S. Hsiao and Shinzo Kohjiya, “Strain-Induced Crystallization and Tensile Strength in Carbon Black Filled Natural Rubber Compounds by Synchrotron X-Ray Study”, Proceeding of 11th International Seminar on Elastomers, Freiburg, Breisgau, Germany, Sept. 23-27.
389. C. Burger, H. Zhou, B.S. Hsiao, B. Chu, L. Graham, M.J. Glimcher, “New Insights into the Mineralization Process of Bone”, 2007 Denver X-ray Conference, Colorado Springs, CO, July 30 – Aug. 3.

390. C. Burger, P. Nawani, B.S. Hsiao, B. Chu, M. Gelfer, "SAXS from Polymer-Clay Composites and Other Layered Systems" 2007 Denver X-ray Conference, Colorado Springs, CO, July 30 – Aug. 3.
391. Pranav Nawani, Christian Burger, Benjamin Hsiao "Effect of carbon black on the preferred orientation of organoclays dispersed in polymer nanocomposites", UKPCF2007 International Conference on Polymer Colloids, University of Warwick, Coventry, UK, Sept. 16 -18.
392. Gad Marom, Carlos Avila-Orta, Boris Larin, Rajesh Somani, Benjamin S. Hsiao "The combined effect of shear and fibers on the formation of orientated crystalline domains in discontinuous aramid fiber/isotactic polypropylene composites", COMAT 2007, Rio de Janeiro, Brazil, December 09-12
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393. Yimin Mao, Feng Zuo, Jong Kahk Keum, Benjamin S. Hsiao, "Crystallization of Propylene-Hexene Random Copolymer", APS March Meeting, New Orleans, Louisiana, March 10-14.
394. Feng Zuo, Yiming Mao, Jong Kahk Keum, Benjamin S. Hsiao, Hongyu Chen, Debbie Chiu, Shih-Yaw Lai, "Deformation-induced structure evolution in olefin block copolymer", APS March Meeting, New Orleans, Louisiana, March 10-14.
395. Jong Kahk Keum, Yimin Mao, Feng Zuo and Benjamin S. Hsiao, "Investigation of extensional flow-induced crystallization in entangled polymer melt", APS March Meeting, New Orleans, Louisiana, March 10-14.
396. Kishore Tenneti, Xiaofang Chen, Christopher Li, Xinhua Wan, Qi-Feng Zhou, Lixia Rong and Benjamin Hsiao, "Competition between liquid crystalline (LC) ordering and block copolymer (BCP) microphase separation in a series of LCBCPs", APS March Meeting, New Orleans, Louisiana, March 10-14.
397. Robert K. Prud'homme, Ilhan A. Aksay, Richard A. Register, Doug H. Adamson, Bulent Osbas, Michael McCallister, Hannes Schneipp, Benjamin Chu, Shigeyuki Toki and Benjamin Hsiao, "Functionalized Graphene nano sheets (FGS) as a new material for polymer and elastomer composites and barrier films", 173rd ACS Rubber Technical Meeting, Dearborn, MI, April 28-30.
398. Benjamin S. Hsiao and Benjamin Chu, "Functional Nanofibrous Scaffolds for Biomedical Applications", 40th Middle Atlantic Regional Meeting (MARM), Queensborough Community College, Bayside, NY, May 17–21.
399. Fen Wan, Chirakkal V. Krishnan, Benjamin S. Hsiao and Benjamin Chu "Nanostructured Tri-Block Copolymer Gels for Pain Management", 40th Middle Atlantic Regional Meeting (MARM), Queensborough Community College, Bayside, NY, May 17–21.
400. Benjamin Chu, Dufei Fang, Christian Burger and Benjamin S. Hsiao, "Instrumentation Development of Multi-Scaled Scattering for Bio-Macromolecular Solutions at the National Synchrotron Light Source", 5th East-Asian Polymer Conference, Shanghai, China, June 3-6.
401. Pranav Nawani, Hongwen Zhou, Christian Burger, Benjamin Chu and Benjamin S. Hsiao "Structural Analysis of Polymer-Inorganic Nanocomposites by Synchrotron X-ray Scattering", 5th East-Asian Polymer Conference, Shanghai, China, June 3-6.
402. Benjamin S. Hsiao, "Flow-induced Crystallization from Entangled Melts", International Symposium on Polymer Physics, PP'2008, Xiamen, China, June 8-12
403. Rossana Iervolino, Franco Cocchini, Maria Rossella Nobile, Xuming Chen, Feng Zuo, Rajesh H. Somani, Benjamin S. Hsiao and Benjamin Chu, "Rheological properties and shear induced crystallization of model polyethylene blends", 24th Annual Meeting of Polymer Processing Society; PPS-24, Salerno, Italy, June 15-19.
404. Benjamin S. Hsiao, "Advanced Nanostructure Characterization of Polymeric Materials by Synchrotron X-ray Scattering/Diffraction Techniques", 24th Annual Meeting of Polymer Processing Society; PPS-24, Salerno, Italy, June 15-19.
405. Peter Glass, Jonathan B. Chiu, Chirakkal V. Krishnan, Karin C. Wang, Randy K. Ramcharitar, Fen Wan, Benjamin S. Hsiao, Benjamin Chu, "Nanostructured smart gel for pain management", IASP, 12th World Congress of Pain, Glasgow, UK, Aug. 17-22.
406. Shifeng Han, Fen Wan, Benjamin Hsiao and Benjamin Chu, "Controlled release of drugs in electrospun polycaprolactone membranes", 236th ACS National Meeting, Philadelphia, PA, August 17-21.
407. Jonathan B. Chiu, Karin C. Wan², Randy Ramcharitar, Fen Wan, Chirakkal V. Krishnan, Benjamin S. Hsiao, and Benjamin Chu, "Thermo-sensitive gels polymers for tunable, therapeutic delivery", 236th ACS National Meeting, Philadelphia, PA, August 17-21.
408. Jianjun Miao, Lixia Rong, Benjamin S. Hsiao and Lei Zhu, "Synthesis and Self-assembly of Asymmetric Amphiphilic Discotic Oligomer Based on Porphyrin", 236th ACS National Meeting, Philadelphia, PA, August 17-21.

409. Weiqiang Cao, Lu Sun, Lixia Rong, Benjamin Hsiao, and Lei Zhu “Chirality effect on interaction parameters in poly(ethylene-co-1-butene)-b-poly lactide diblock copolymers”, 236th ACS National Meeting, Philadelphia, PA, August 17-21.
410. Yong-Cheng Shi, Liming Cai, Benjamin S. Hsiao, Lixia Rong, “Starch Structure via Small-Angle X-ray Scattering and Wide-angle X-ray Scattering”, American Association of Cereal Chemists International Conference, Hawaii, September 21-24.
411. Cruz-Delgado, Víctor J.; Hernández-Hernández, Ernesto; Esparza-Juárez, M. Elena; Méndez-Padilla M. Guadalupe; Rodríguez-Hernández M. Teresa; Huerta-Martínez, Blanca M.; Medellín-Rodríguez, Francisco J.; Hsiao, Benjamin S.; Ávila-Orta, Carlos A. “In situ-polymerization route for the preparation of PET/MWCNT polymer nanocomposites”, Preprint for Macromex, a joint meeting of the Polymer Society of Mexico and the ACS-Division of Polymer Chemistry, Los Cabos, Baja California Mexico, December 7-10

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412. Benjamin S. Hsiao and Benjamin Chu, “High Flux Nanofibrous Membranes for Water Purification”, in the session of Physics of Polymer Membranes for Water Purification, Pittsburgh, Pennsylvania, APS March Meeting, March 18.
413. Yimin Mao, Christian Burger, Feng Zuo, Xiaowei Li, Benjamin S. Hsiao, Derek W. Thurman and Andy H. Tsou “A WAXD Study of Crystallization of Propylene-1-Butene Random Copolymer: Experiment and Simulation”, 237th ACS National Meeting, Salt Lake City, UT, March 22-26.
414. Xiaowei Li, Jong Kahk Keum, Feng Zuo, Yimin Mao and Benjamin S. Hsiao, “Extensional Flow-Induced Crystallization in Multi-Component Polyolefin Melts”, 237th ACS National Meeting, Salt Lake City, UT, March 22-26.
415. Feng Zuo, Yiming Mao, Benjamin S. Hsiao, Hongyu Chen, Debbie Chiu and Shih-Yaw Lai “Evolution of Monoclinic and Orthorhombic Phases during the Deformation of Olefin Block Copolymers”, 237th ACS National Meeting, Salt Lake City, UT, March 22-26.
416. Hongyang Ma, Kyunghwan Yoon, Lixia Rong, Benjamin S. Hsiao and Benjamin Chu, “High flux nanofibrous membranes based on cellulose barrier processed by ionic liquids”, 237th ACS National Meeting, Salt Lake City, UT, March 22-26.
417. Hongyang Ma, Ran Wang, Nan Li, Lixia Rong, Benjamin S. Hsiao and Benjamin Chu “Preparation, modification and characterization of nanoscale cellulose fibers”, 237th ACS National Meeting, Salt Lake City, UT, March 22-26.
418. Rossana Iervolino, Elvira Somma, Maria Rossella Nobile and Benjamin S. Hsiao, “The combined effect of multi-walled carbon nanotubes and shear flow on the crystallization of isotactic poly(1-butene)”, Blends, Copolymers and Nanocomposites Symposia at 5th Annual European Rheology Conference, AERC 2009 Meeting, Cardiff - United Kingdom, April 15-17.
419. E. Somma, O. Valentino, R. Iervolino, G.P. Simon, B. S. Hsiao, M. R. Nobile, “Temperature effect on the percolation network of multi-walled carbon nanotubes polymer nanocomposites”, Blends, Copolymers and Nanocomposites Symposia at 5th Annual European Rheology Conference, AERC 2009 Meeting, Cardiff - United Kingdom, April 15-17.
420. Benjamin Chu and Benjamin S. Hsiao, “Energy-saving nanofibrous membrane technology for water purification”, Division of Industrial & Engineering Chemistry, Symposium Honoring Professor Donald R. Paul on the Occasion of his 70th Birthday, ACS Fall Meeting, Washington, DC, August 18
421. Benjamin Chu and Benjamin S. Hsiao, “Application of Cellulose to Water Purification”, The International Conference on Advanced Materials (ICAM), Rio de Janeiro, Brazil, September 20 – 25.
422. Chu B, Fang DF, Burger C, Hsiao B “Instrumentation on multi-scale scattering of bio-macromolecular solutions”, Frontiers in Polymer Science, International Symposium Celebrating the 50th Anniversary of the Journal Polymer, Mainz, Germany, June 7 – 9.
423. Chu B, Hsiao B “Nanofiber Technology for Environmental Applications”, Frontiers in Polymer Science, International Symposium Celebrating the 50th Anniversary of the Journal Polymer, Mainz, Germany, June 7 – 9.
424. Benjamin S. Hsiao “Probing Flow-Induced Crystallization in Polymers by Scattering”, XIV International Conference on Small-Angle Scattering (SAS-2009), September 13-18, Oxford, UK
425. Benjamin S. Hsiao “In-Situ Structure Characterization Capability for Polymer Processing by Synchrotron X-Ray Scattering/Diffraction at the NSLS/BNL”, Synchrotron Radiation in Polymer Science (SRPS)-IV Meeting, September 8-11, Rolduc Abby, Netherlands

426. F. Deplace, Z. Wang, N. A. Lynd, A. Hotta, G. H. Fredrickson, E. J. Kramer, H. Ohtaki, K. Hirokane, F. Yamada, Y-W Shin, F. Shimizu, J.M. Rose, E. B. Lobkovsky, G. W. Coates, S. Toki, L. Rong, J. Zhu and B. S. Hsiao "Processing - Structure - Mechanical Property Relationships of Semicrystalline Polyolefin-based Block Copolymers", Synchrotron Radiation in Polymer Science (SRPS)-IV Meeting, September 8-11, Rolduc Abby, Netherlands
427. Shigeyuki Toki, Benjamin S. Hsiao, Sureerut Amnuaypornsi and Jitladda Sakdapipanich, "Hierarchic Multi-Scaled Structures in Natural Rubber", American Chemical Society, 176th Technical Meeting of the Rubber Division, October 13-15, Pittsburg, KY

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428. F. Deplace, Z. Wang, P. Hustad, J. Tian, G. W. Coates, J. M. Rose, F. Shimizu, S. Toki, L. Rong, J. Zhu, B.S. Hsiao, G. H. Fredrickson, and E. J. Kramer, "Structural changes of semicrystalline polyolefin block copolymer elastomers during step cycle mechanical processing", APS March Meeting, March 15 - 19, Portland, OR
429. Yimin Mao, Christian Burger, Xiaowei Li, Benjamin S. Hsiao, Andy H. Tsou, and Derek W. Thurman, "A 2D Synchrotron X-Ray Study on Stress-Induced Crystallization of Propylene-1-Butylene Random Copolymer: Polymorphism and Preferred Orientation", APS March Meeting, March 15 - 19, Portland, OR
430. Benjamin Chu and Benjamin S. Hsiao, Ma, Hongyang, "Micro- and ultra-filtration membranes for water purification", 239th ACS National Meeting, March 21-25, San Francisco, CA
431. Elluru, Mahati; Hsiao, Benjamin; Chu, Benjamin. "Customized smart gel for post lumpectomy patients", 239th ACS National Meeting, March 21-25, San Francisco, CA
432. Benjamin Chu, Benjamin S. Hsiao "Advances in Polymer Nanofiber Technology for Water Purification", ANTEC 2010, May 16-20, Orlando, FL
433. Takahiro Sakurai, Takeshi Kikutani, Takarada Wataru, Shigeyuki Toki, Benjamin S. Hsiao "Preparation of Elastomeric Fibers by Melt Spinning of Polypropylenes of Low Stereo-regularity", 5th Pacific Rim Conference on Rheology (PRCR-5), August 1-6, Sapporo, Japan
434. Ma, Hongyang; Hsiao, Benjamin S.; Chu, Benjamin. "High-flux thin-film nanofibrous composite ultrafiltration membranes containing cellulose barrier layer", 240th ACS National Meeting, August 22-26, Boston, MA
435. Wang, Ran; Liu, Yang; Ma, Hongyang; Fang, Dufei; Hsiao, Benjamin S.; Chu, Benjamin. "Polyacrylonitrile electrospun membrane for microfiltration", 240th ACS National Meeting, August 22-26, Boston, MA
436. Benjamin Chu and Benjamin S. Hsiao, "Breakthrough Nanofiber Technology for Environment and Health 23rd National Meeting of Mexican Polymer Society (SPM)", October 11-14, Tijuana, Baja, Mexico,
437. Shigeyuki Toki, Ryuichi Takagi, Masayoshi Ito, Benjamin S. Hsiao, "Rupture, orientation and strain-induced crystallization of polymer chain network in vulcanized polyisoprene during uniaxial deformation by Electron Spin Resonance (ESR) and synchrotron X-ray analysis", Japan Elastomer Conference, Dec.2, Kyoto, Japan

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438. Xiaowei Li, Yimin Mao Hongyang Ma and Benjamin S. Hsiao "An In-Situ X-ray Scattering Study during Uniaxial Stretching of Ionic liquid/Ultra-High Molecular Weight Polyethylene Blend", APS National Meeting, March 21-25, Dallas, Texas
439. Yimin Mao, Christian Burger, Xiaowei Li, Benjamin Hsiao, "Structure Evolution of Propylene-1-Butylene Random Copolymer under Uniaxial Stretching: from Unit Cells to Lamellae", APS National Meeting, March 21-25, Dallas, Texas
440. Ran Wang, Hongyang Ma, Benjamin S. Hsiao and Benjamin Chu, "High-Flux Functional Nanofibrous Membrane for Removal of Bacteria and Viruses", 241st ACS National Meeting, March 27-31, Anaheim, CA.
441. Yang Liu, Ran Wang, Hongyang Ma, Benjamin S. Hsiao and Benjamin Chu, "High-Flux Microfiltration Filters Based on Electrospun PVA Nanofibrous Mats", 241st ACS National Meeting, March 27-31, Anaheim, CA.
442. Hongyang Ma, Benjamin S. Hsiao and Benjamin Chu, "Thin-Film Nanofibrous Composite Ultrafiltration Membranes Based on Polyvinyl Alcohol Barrier Layer Containing Ultra-Fine Cellulose Nanofibers", 241st ACS National Meeting, March 27-31, Anaheim, CA.
443. Mahati Elluru, Benjamin Chu, Benjamin S. Hsiao, Michael Hadjiargyrou, "Nanostructured Hydrogel Implants for Post Lumpectomy Patients", 241st ACS National Meeting, March 27-31, Anaheim, CA.
444. Fanny Deplace, Zhigang Wang, Geoffrey W. Coates, Jeffrey M. Rose, Yong-Woo Shin, Fumihiko Shimizu, S. Toki, Lixia Rong, J. Zhu, Benjamin S. Hsiao, Glenn H. Fredrickson, Edward J. Kramer, "Tough organogels and elastomers from block copolymers with semicrystalline syndiotactic polypropylene blocks", 241st ACS National Meeting, March 27-31, Anaheim, CA.

445. Anna Sato, Ran Wang, Hongyang Ma, Benjamin S. Hsiao, Benjamin Chu and Yimei Zhu, "Novel Nanofibrous Scaffolds for Water Filtration with Bacteria and Virus Removal Capability", "Microscopy & Microanalysis 2011", Microscopy Society of America, August 7-11, Nashville, Tennessee.
446. Justin Che, Shigeyuki Toki, Lixia Rong, Benjamin S. Hsiao, Juan Valentin and Justo Brasero, "Strain-Induced Crystallization of Pre- and Post-Vulcanized Natural Rubber Latex During Uniaxial Deformation by In-Situ Synchrotron X-Ray Diffraction", Technical Meeting - American Chemical Society, Rubber Division, 180th, October 11-13, Cleveland, OH.
447. Shigeyuki Toki, Justin Che, Lixia Rong, Benjamin S. Hsiao, Adul Nimpaiboon, Jitladda Sakdapipanich, "The origin of strength of natural rubber studied by synchrotron X-ray: network in raw rubber and vulcanized rubber", Technical Meeting - American Chemical Society, Rubber Division, 180th, October 11-13, Cleveland, OH.

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448. Benjamin Hsiao, Hong-Wen Zhou, Christian Burger, Benjamin Chu, Melvin J. Glimcher, "Molecular packing in bone collagen fibrils prior to mineralization", APS National Meeting, February 27 - March 2, Boston, Massachusetts
449. Xiaowei Li, Christian Burger, Yimin Mao, Benjamin Hsiao, "Time-resolved WAXD/SAXS Characterization on the Crystallization of Silica Filled HDPE Nanocomposite", APS National Meeting, February 27 - March 2, Boston, Massachusetts.
450. Justin Che, Shigeyuki Toki, Juan Valentin, Justo Brasero, Lixia Rong, Benjamin S. Hsiao, "New Insights into Chain Order Dynamics and Structural Development in Sulfur-Vulcanized Natural Rubber Latex using Multiple Quantum NMR and Synchrotron X-Ray Diffraction" APS National Meeting, February 27 - March 2, Boston, Massachusetts.
451. Ying Su, Christian Burger, Benjamin S. Hsiao, Benjamin Chu, "Synchrotron SAXS and WAXD Studies of Cellulose Nascent Crystals: Experiment and Structure Analysis", APS National Meeting, February 27 - March 2, Boston, Massachusetts.
452. Tsung-Ming Yeh, Devinder Mahajan, Benjamin S. Hsiao, Benjamin Chu, "Polymeric nanofibrous composite membranes for energy efficient ethanol dehydration", ACS National Meeting, March 25 - 29, 2012, San Diego, CA
453. Fanny Deplace, Glenn H. Fredrickson, Edward J. Kramer, Geoffrey W. Coates, Hisashi Ohtaki, Yong-Woo Shin, Fumihiko Shimizu, Lixia Rong, Benjamin S. Hsiao, "Tough polyolefin elastomers from copolymers with semicrystalline sPP grafts", The 15th international conference on Deformation, Yield and Fracture of Polymers (DYFP2012), April 1-5, Rolduc Abbey in Kerkrade, the Netherlands.
454. Rui Yang, Katherine B. Aubrecht, Robert B. Grubbs, Benjamin S. Hsiao and Benjamin Chu, "Surface Modification of Cellulose/Chitosan Nanofibers for Heavy Metal Adsorption", Gordon Research Conference on Membrane Technology, July 28 -29 in New London, NH.
455. Xiao Wang , Benjamin S. Hsiao and Benjamin Chu, "Preparation of Thin-film Nanofibrous Composite (TFNC) Membranes by Reversed Interfacial Polymerization (RIP) Technique for Water Purification", Gordon Research Conference on Membrane Technology, July 28 -29 in New London, NH.
456. Tsung-Ming Yeh, Devinder Mahajan, Benjamin S. Hsiao and Benjamin Chu, "Nanofibrous Composite Membranes for Energy Efficient Ethanol Dehydration by Pervaporation", Gordon Research Conference on Membrane Technology, July 28 -29 in New London, NH.
457. Wang, Xiao; Fang, Dufei; Hsiao, Benjamin; Chu, Benjamin "Trade-off between rejection and flux for thin film nanocomposite (TFNC) nanofiltration (NF) membrane", 244th ACS National Meeting, August 19-23, Philadelphia, PA.
458. Toki, Shigeyuki; Che, Justin; Rong, Lixia; Hsiao, Benjamin S.; Amnuaypornsrri, Sureerut; Nimpaiboon, Adul; Sakdapipanich, Jitladda "Entanglement and end linking network on stress-strain relation and strain-induced crystallization of un-vulcanized and vulcanized natural and synthetic rubbers", Technical Meeting of the Rubber Division, American Chemical Society, 182nd, Cincinnati, OH.
459. Che, Justin; Burger, Christian; Toki, Shigeyuki; Rong, Lixia; Hsiao, Benjamin S.; Amnuaypornsrri, Sureerut; Sakdapipanich, Jitladda "Two-dimensional wide-angle X-ray diffraction simulation study on strain-induced crystallization and temperature-induced crystallization of un-vulcanized natural and synthetic rubber", Technical Meeting of the Rubber Division, American Chemical Society, 182nd, Cincinnati, OH.

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460. Ying Su, Christian Burger, Benjamin S. Hsiao and Benjamin Chu, “Structure of Cellulose Nascent Crystals Studied by X-ray Scattering”, 245th ACS National Meeting, Cellulose Division, April 7-11, New Orleans, Louisiana
461. Zhe Wang, Benjamin S. Hsiao, Benjamin Chu, “Preparation and Characterization of Poly (ethylene glycol) Diacrylate / Nanofibrous Cellulose Composite Top Layer with Excellent Anti-fouling Properties”, 245th ACS National Meeting, Cellulose Division, April 7-11, New Orleans, Louisiana
462. Rui Yang, Ran Wang, Katherine B. Aubrecht, Robert B. Grubbs, Benjamin S. Hsiao, Benjamin Chu “Surface Modification of Cellulose/chitosan Nanofibers for Chromium (VI) Adsorption”, 245th ACS National Meeting, Cellulose Division, April 7-11, New Orleans, Louisiana
463. Tsung Ming Yeh, Devinder Mahajan, Benjamin S. Hsiao, and Benjamin Chu, “High Flux Ethanol Dehydration using Multilayered Graphene Oxide Membranes”, 245th ACS National Meeting, Division of Organic Chemistry Materials, April 7-11, New Orleans, Louisiana.
464. Ma, Hongyang; Hsiao, Benjamin S.; Chu, Benjamin, “Highly permeable nanofibrous membranes for energy efficient water purification”, 245th ACS National Meeting, Division of Polymer Materials Science and Engineering, April 7-11, New Orleans, Louisiana.
465. Tsung Ming Yeh, Devinder Mahajan, 2, Benjamin S. Hsiao and Benjamin Chu, “High Flux Ethanol Dehydration using Multilayered Graphene Oxide Membranes”, ACS “Water Purification 2013” Workshop, February 24 – 27, Asilomar Conference Grounds, Pacific Grove, CA.
466. Zhe Wang, Benjamin S. Hsiao and Benjamin Chu, “Nanofibrous Cellulose Composite Membrane with a Poly(ethylene glycol) Diacrylate Top Layer”, ACS “Water Purification 2013” Workshop, February 24 - 27, Asilomar Conference Grounds, Pacific Grove, CA.
467. Xiao Wang, Dufei Fang, Benjamin S. Hsiao and Benjamin Chu, “Thin-Film Nanofibrous Composite Membranes for Nanofiltration Applications”, ACS “Water Purification 2013” Workshop, February 24 - 27, Asilomar Conference Grounds, Pacific Grove, CA.
468. Toki, S.; Che, J.; Burger, C.; Hsiao, B. S.; Amnuaypornsrri, S.; Sakdapipanich, J., “Strain-induced crystallites and temperature-induced crystallites in poly-isoprene by 2D WAXD simulating analysis”, Constitutive Models for Rubber VIII, the European Conference on Constitutive Models for Rubber, June 25-28, San Sebastian, Spain.
469. Che, Justin; Burger, Christian; Toki, Shigeyuki; Rong, Lixia; Amnuaypornsrri, Sureerut; Sakdapipanich, Jitladda; Hsiao, Benjamin S., “Strain-induced crystal and crystallites structure of natural rubber and synthetic cis-1,4-polyisoprene by a new 2D wide angle X-ray diffraction simulation method”, 246th ACS National Meeting & Exposition, September 8-12, Indianapolis, IN.
470. Che, Justin; Locker, C. Rebecca; Lee, Sanghun; Rutledge, Greg C.; Hsiao, Benjamin S.; Tsou, Andy H., “Plastic deformation of semi-crystalline polyethylene by X-ray scattering: Comparison with atomistic simulations”, 246th ACS National Meeting & Exposition, September 8-12, Indianapolis, IN.
471. Che, Justin; Burger, Christian; Toki, Shigeyuki; Rong, Lixia; Hsiao, Benjamin S.; Amnuaypornsrri, Sureerut; Sakdapipanich, Jitladd, “New insights into strain-induced crystallization and temperature-induced crystallization of un-vulcanized and peroxide-vulcanized natural rubber”, Fall Technical Meeting of the Rubber Division, American Chemical Society, 184th, Oct. 8-10, Cleveland, OH.
472. Brian Momani, Xiaowei Li, Xiaoliang Wang, Benjamin Hsiao, H. Henning Winter “Rheological Expression of Clay Self-Exfoliation in a Polymer Nanocomposite”, October 13-17, 85th Annual Meeting of The Society of Rheology, Montréal, Québec, Canada.
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473. Benjamin Hsiao and Benjamin Chu, “Electro-Spinning Technology & its Applications to Fibrous Membranes” in Electrospinning and Nanofibers: Symposium in Honor of the 85th Birthday of Darrell Reneker, Division of Polymeric Materials Science and Engineering (PMSE), 247th American Chemical Society National Meeting, March 16-20, Dallas, TX.
474. Deplace, Fanny; Fredrickson, Glenn H.; Kramer, Edward J.; Coates, Geoffrey W.; Ohtaki, Hisashi; Shimizu, Fumihiko; Shin, Yong-Woo; Rong, Lixia; Hsiao, Benjamin S., “Polyolefin elastomers and gels from copolymers with semicrystalline sPP blocks and grafts”, Division of Polymeric Materials Science and Engineering (PMSE), 247th American Chemical Society National Meeting, March 16-20, Dallas, TX.
475. Benjamin S. Hsiao “High flux nanofibrous membranes for water purification”, POLYCHAR 22: The World Forum on Advanced Materials, April 7-11, Stellenbosch, South Africa.

476. H. Hristov, O. Thomas and B. Hsiao, "In-Situ Sxrs Study of Phase Segregation in Thermoplastic Elastomers", Symposium H : ALTECH 2014 - Analytical techniques for precise characterization of nanomaterials of the E-MRS 2014 Spring Meeting, May 26-30, Lille, France.
477. Benjamin S. Hsiao and Benjamin Chu, "Highly Permeable Nanofibrous Membranes for Water Purification", 11th International Symposium of Polymer Physics (PP2014), June 8-12, Nanjing, China.
478. Benjamin Chu, Benjamin S. Hsiao and Ying Su, "Characterization of Cellulose Nano-Fibers & Applications to Fibrous Membranes", 30th International Conference of the Polymer Processing Society (PPS-30), June 8-12, Cleveland, OH.
479. Hongyang Ma, Benjamin Chu and Benjamin S. Hsiao, "Recent advances in porous nanofibrous membranes for water purification", 248th ACS National Meeting, Aug 10-14, San Francisco, CA.
480. Benjamin S. Hsiao, "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", Kathmandu Symposia on Advanced Materials – 2014 (KaSAM-2014), September, 7-10, Kathmandu, Nepal.
481. Benjamin S. Hsiao, "Synchrotron X-ray study of extensional flow-induced crystallization in isotactic polypropylene", International Symposium on Fiber Science and Technology (ISF2014), Sept. 29 - Oct 1, Tokyo, Japan.
482. Benjamin S. Hsiao, "Structural study of cellulose nascent crystals", ICR Symposium on Polymer Crystals (ICRSPC2014), Oct. 2-3, Kyoto, Japan.

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483. Ying Su, Benjamin S. Hsiao and Benjamin Chu, "Structure studies of natural cellulose microfibrils by synchrotron small-angle X-ray scattering", Division of Polymeric Materials Science and Engineering (PMSE), 249th ACS National Meeting, March 22-26, Denver, Colorado.
484. Benjamin S. Hsiao and Andy H. Tsou, "Crystallization of Polyolefins under Flow and Deformation", Division of Polymeric Materials Science and Engineering (PMSE), 249th ACS National Meeting, March 22-26, Denver, Colorado.
485. Benjamin Chu and Benjamin S. Hsiao, "Cellulose Nanofibers as a Key Component in Separation Membranes", Division of Polymeric Materials Science and Engineering (PMSE), 249th ACS National Meeting, March 22-26, Denver, Colorado.
486. Benjamin Hsiao, 267. "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", 35th Australasian Polymer Symposium, 12 – 15 July, Gold Coast, Australia.
487. Shanshan Xu, Benjamin S. Hsiao, Charles C. Han, Benjamin Chu, "Selective Cell Interactions and Antibacterial Behavior of Functional Fibrous Membranes", Division of Polymeric Materials Science and Engineering (PMSE), 250th ACS National Meeting, August 16-20, Boston, MA.
488. Benjamin S. Hsiao and Benjamin Chu, "Highly Permeable Nanofibrous Membranes for Water Purification", Division of Polymeric Materials Science and Engineering (PMSE), 250th ACS National Meeting, August 16-20, Boston, MA.
489. Benjamin Chu and Benjamin S. Hsiao, "Application of Green Technology to Fibrous Separation Membranes for Water Purification", Symposium on Green Technology, 8th China-US Joint Conference of Chemical Engineering, at the East China University of Science and Technology, October 12-16, Shanghai, China
490. Benjamin S. Hsiao and Benjamin Chu, "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", The 2015 International Chemical Congress of Pacific Basin Societies (Pacifichem), December 15-20, Honolulu, Hawaii.
491. Benjamin S. Hsiao, Benjamin Chu and Ying Su, "Structure Characterization of Cellulose Nanofibers and Microfibrils", The 2015 International Chemical Congress of Pacific Basin Societies (Pacifichem), December 15-20, Honolulu, Hawaii.

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492. Benjamin S. Hsiao, "Highly permeable nanofibrous cellulose membranes for water purification", Division of Cellulose and Renewable Materials (Session: Structure of Native Celluloses & Variety of Nano-celluloses That Can Be Formed from Them: Anselme Payen Award Symposium in honor of Akira Isogai), 251st ACS National Meeting, March 13-17, San Diego, CA.
493. Benjamin S. Hsiao, "Probing shish-kebab precursor structures in model polyethylene blends under shear", Division of Polymeric Materials Science and Engineering (session: Flow-Induced Crystallization of Polymers), 251st ACS National Meeting, March 13-17, San Diego, CA.
494. Yimin Mao, Kai Liu and Benjamin S. Hsiao, "Multi-scale Characterization of Cellulose TEMPO-Nanofiber Suspension", APS March Meeting, March 14-18, Baltimore, Maryland.

495. Benjamin S. Hsiao, "Breakthrough Water Purification Technologies Based on Nanofibrous Membranes", 2016 MRS Spring Meeting & Exhibit, March 28-April 1, Phoenix, Arizona.
496. Priyanka R. Sharma and Prof. Benjamin, "Cost Effective and Environment Friendly Method to Produce Carboxycellulose Nanofibers", 2016 Advanced Energy Conference, April 20- 22, New York City, NY.
497. Plinio Guzman, Luis Lituma and Benjamin S. Hsiao, "Inexpensive and robust thermally-driven water desalination", 2016 Advanced Energy Conference, April 20- 22, New York City, NY.
498. Benjamin Chu, Benjamin S. Hsiao and Hongyang Ma, "Perception on New Membrane Structures for Air Purification", 12th International Symposium on Polymer Physics, Session 5 Multi-phase & Multi-component Systems, June 10-14, Guiyang City, Guizhou, China.
499. Benjamin S. Hsiao, "Breakthrough water filtration membrane technology based on nanofibers", 252nd ACS National Meeting, August 21-25, Philadelphia, PA.
500. Benjamin S. Hsiao, " Highly permeable membranes with nanofibrous composite barrier layer for reverse osmosis and nanofiltration", 252nd ACS National Meeting, August 21-25, Philadelphia, PA.
501. Jin Luo, Wei Zhao, Shiyao Shan, Jack Lombardi, Darshana Weerawarne, Thomas Rovere, Ning Kang, Zakiya Skeete, Yvonne Xu, Amber Vargas, Bonggu Shim, Benjamin Hsiao, Mark Poliks, Chuan-Jian Zhong, "Understanding low-temperature sintering and adhesion properties of metal nanoparticles printed sensor devices", 252nd ACS National Meeting, August 21-25, Philadelphia, PA.
502. Ning Kang, Jack Lombardi, Fang Lin, Shan Yan, Juhee Kim, Mihdhar Almihdhar, Yvonne Xu, Brandon Burg, Jin Luo, Benjamin Hsiao, Mark Poliks, Chuan-Jian Zhong, "Electrochemical characterization of nanoparticle-nanofibrous composites and potential application in wearable sensors", 252nd ACS National Meeting, August 21-25, Philadelphia, PA.
503. Benjamin S. Hsiao, "Processing of Highly Permeable Membranes for Water Purification", Polymer Processing Society Asia/Australia Conference 2016 (PPS-2016), October 11-14, Chengdu, China.
504. Benjamin S. Hsiao, "Highly permeable nanocellulose membranes for water purification", International Union of Materials Research Societies, International Conferences in Asia (IUMRS-ICA 2016), October 20-24, Qingdao, China.
505. Benjamin S. Hsiao, "Nanocelluloses for Water Purification", International Union of Materials Research Societies, International Conferences in Asia (IUMRS-ICA 2016), October 20-24, Qingdao, China.
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506. Benjamin S. Hsiao, "Breakthrough Water Purification Technologies based on Nanofibrous Membranes", Advances in Functional Materials (ICA2017) at Anna University, January 6-8, Chennai, India.
507. Benjamin S. Hsiao "Nanocelluloses for Water Purification", International Conference on Polymer Science and Technology (MACRO 2017), Advances in Polymer Science and New Generation Technologies, SPSI-ACS Jubilee Symposium, January 8-11, Thiruvananthapuram, India
508. Yimin, Kai Liu, Chengbo Zhan, Lihong Geng, Benjamin Chu and Benjamin S. Hsiao, "Characterization of Nanocelluloses Using Small-angle Neutron, X-ray and Dynamic Light Scattering Techniques", 253rd ACS National Meeting, April 2-6, San Francisco, CA.
509. Priyanka Sharma, Benjamin Chu, and Benjamin Hsiao, "A Novel One Step Method to Prepare Carboxycellulose Nanofibers from Raw Biomass and their Applications in Heavy Metal Ions Remediation", 253rd ACS National Meeting, April 2-6, San Francisco, CA.
510. Yaopeng Zhang, Alexander Norman, Joseph A. Throckmorton, Antonios K. Doufas, Andy Tsou, Benjamin S. Hsiao, "Shear Induced Crystallization of Bimodal and Unimodal High Density Polyethylene", 253rd ACS National Meeting, April 2-6, San Francisco, CA.
511. Kai Liu, Hongyang Ma, Benjamin Chu and Benjamin S. Hsiao, "Highly permeable thin film composite membranes with nanocomposite barrier layer for desalination applications", 253rd ACS National Meeting, April 2-6, San Francisco, CA.
512. Benjamin S. Hsiao, "Advancing Nanocellulose Technologies for Water Purification", International Conference on Advanced Fibers and Polymer Material (ICAFPM), Donghua University, October 8-10, Shanghai, China.
513. Benjamin S. Hsiao and Benjamin Chu, "Nanocelluloses for Water Purification", 9th Sino-US Joint Conference of Chemical Engineering, Green Chemical Engineering, Beijing University of Chemical Technology, October 15-19, Beijing, China.
514. Benjamin S. Hsiao, "Advancing Nanocellulose Technologies for Water Purification", African Materials Research Society (AMRS) Conference, "Addressing Africa's Challenges through Materials Development" December 9-14, Gaborone, Botswana.

515. Shigeyuki Toki, Benjamin S. Hsiao and Krisda Suchiva, "Strain-Induced Crystallization and Mechanical Properties of Rubber and Thermo-Plastic Elastomer", International Conference on Nanotechnology: Ideas, Innovations and Initiatives (ICN:3I-2017), December 6 - 8, IIT Roorkee, Uttarakhand, India.
516. Acacia Leakey, Ritika Roshi, Tom Lindstrom, Plinio Guzman, Benjamin S. Hsiao "Solar-Powered Membrane Distillation for Desalination of Brackish Water: from Robust System Design to Sustainable Membrane Development" African Materials Research Society (AMRS) Conference, "Addressing Africa's Challenges through Materials Development", December 10-14, Gaborone, Botswana.

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517. Xiangyu Huang, Pejman Hadi, Benjamin S Hsiao, "Fabrication of cationic cellulose from natural bioresources for waste activated sludge dewatering treatment", 255rd ACS National Meeting, March 18-22, New Orleans, LA.
518. Mengying Yang, Benjamin S Hsiao, Pejman Hadi, "Effect of the surface zeta potential on the fouling reduction of nanocellulose coated ultrafiltration membranes", 255rd ACS National Meeting, March 18-22, New Orleans, LA.
519. Benjamin S Hsiao, "Advancing Nanocellulose Membrane Technology for Water Purification", 34th International Conference of the Polymer Processing Society (PPS-34), Taipei International Convention Center, May 21-25, Taipei, Taiwan.
520. Shan Yan, Chirag S. Soni, Brianna L. Perris, Stephen E. Ruiz, Cameron L. Ghazvini, Jack Lombardi, Jin Luo, Benjamin S Hsiao, Mark David Poliks, Chuanjian Zhong, "Biosensors printed on paper and embedded with functional nanoparticle assemblies for human performance monitoring", 256rd ACS National Meeting, August 19 - 23, Boston, MA.
521. Shan Yan, Brianna L. Perris, Chirag S. Soni, Stephen E. Ruiz, Cameron L. Ghazvini, Jack Lombardi, Jin Luo, Benjamin S Hsiao, Susan Lu, Mark David Poliks, Ivan Gitsov Ivanov, Chuanjian Zhong, "Tunable chemical sensing interfaces using dendronized nanoparticles coupled with nanofibrous paper substrates", 256rd ACS National Meeting, August 19 - 23, Boston, MA.
522. Ritika Joshi, Benjamin S Hsiao, "Extraction of nanocellulose from a unique grass - spinifex via different methods and its application in water purification", 256rd ACS National Meeting, August 19 - 23, Boston, MA.
523. Sunil Kumar Sharma, Priyanka R Sharma, Hui, Benjamin S Hsiao, "Highly proton conductive nitro-oxidized cellulose nanopaper for polymer electrolyte membrane (PEM) fuel cell", 256rd ACS National Meeting, August 19 - 23, Boston, MA.
524. Priyanka R Sharma, Sunil Kumar Sharma, Richard Antoine, Benjamin S Hsiao, "Efficient removal of arsenic from water using regenerated microfibrillated cellulose supported zinc oxide/hydroxide nanoparticles", 256rd ACS National Meeting, August 19 - 23, Boston, MA.
525. Pejman Hadi, Mengying Yang, Harold Walker, Benjamin S Hsiao, "Sustainable biomass-derived nanocellulose as anti-biofouling layer for membranes", 256rd ACS National Meeting, August 19 - 23, Boston, MA.
526. Shan Yan, Stephen E. Ruiz, Chirag S. Soni, Brianna L. Perris, Cameron L. Ghazvini, Jack Lombardi, Jin Luo, Mark David Poliks, Benjamin S Hsiao, Chuanjian Zhong, "Printed paper sensors for detecting chemical/biological species", 256rd ACS National Meeting, August 19 - 23, Boston, MA.
527. Chengbo Zhan, Hongrui He, Sunil Kumar Sharma, Ruifu Wang, Priyanka Radhey Sharma, Benjamin S Hsiao, "Nanosized titanium dioxide embedded in nanocellulose scaffold as photocatalyst for dye degradation and bacterial inactivation", 256rd ACS National Meeting, August 19 - 23, Boston, MA.
528. Qinyi Fu, Benjamin Ocko, Hongyang Ma, Benjamin S Hsiao, "Structural study of polyamide barrier layers in reverse osmosis membrane", 256rd ACS National Meeting, August 19 - 23, Boston, MA.
529. T. Rosén, C. Zhan, R. Wang, S. Chodankar, L. Yang and B.S. Hsiao, "Time-Resolved Characterization of Nanocellulose Gelation Processes", XVII International Small Angle Scattering Conference - SAS2018, October 7-12, Traverse City, Michigan.
530. Qinyi Fu, Benjamin Ocko, Hongyang Ma, Benjamin S Hsiao, "Structural Study of Polyamide Barrier Layers In Reverse Osmosis Membranes", XVII International Small Angle Scattering Conference - SAS2018, October 7-12, Traverse City, Michigan.
531. Benjamin S. Hsiao, "Advancing Nanocellulose Technologies for Water Purification", 2018 MRS Fall Meeting, November 25-30, Boston, Massachusetts.

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532. Tomas Rosen, Chengbo Zhan, Ruifu Wang, Shirish Chodankar, Benjamin Hsiao, "Angular dynamics of cellulose nanofibrils in channel flow", APS March Meeting, March 4-8, Boston, Massachusetts.

533. Ruifu Wang, Tomas Rosen, Chengbo Zhan, Benjamin Hsiao, "The morphology and flowing behaviors of TEMPO-oxidized cellulose nanofibers dispersed in non-aqueous solutions", PS March Meeting, March 4–8, Boston, Massachusetts.
534. Qinyi Fu, Nisha Verma, Hongyang Ma, Francisco J. Medellin-Rodriguez, Ruipeng Li, Masafumi Fukuto, Benjamin S. Hsiao, and Benjamin M. Ocko, "Molecular structure of aromatic reverse osmosis polyamide barrier layers prepared at the oil/water interface", 257th ACS National Meeting, March 31-April 4, Orlando, Florida.
535. Benjamin M. Ocko, Qinyi Fu, Nisha Verma, Ruipeng Li, Masafumi Fukuto, Christopher Stafford, and Benjamin S. Hsiao, "The molecular structure of commercial reverse osmosis polyamide barrier layers", 257th ACS National Meeting, March 31-April 4, Orlando, Florida.
536. Sunil K. Sharma, Ken Johnson, Priyanka R. Sharma and Benjamin S. Hsiao, "Bionanomaterials derived from carboxy cellulose nanofibers-Al¹³ composite for effective removal of fluoride from water", 257th ACS National Meeting, March 31-April 4, Orlando, Florida.
537. Jackie Zheng, Nancy Li, Pejman Hadi Myavagh, Benjamin S Hsiao, "High flux nanocellulose-embedded mixed matrix membranes", 257th ACS National Meeting, March 31-April 4, Orlando, Florida.
538. Hui Chen, Sunil Sharma, Priyanka Radhey Sharma, Heidi Yeh, Benjamin S Hsiao, "Efficient removal of Arsenic (III) by novel micro and nano dialdehyde cellulose-cysteine complex extracted from wood pulp cellulose", 257th ACS National Meeting, March 31-April 4, Orlando, Florida.
539. Priyanka Sharma, Sunil Sharma, Kuan Che-Fang, Miriam Rafailovich, Benjamin S Hsiao, "Study the effect of nitro-oxidized cellulose nanofibers on growth of fibroblast and dental pulp cells", 257th ACS National Meeting, March 31-April 4, Orlando, Florida.
540. Ken I. Johnson, Sunil K Sharma, Priyanka R Sharma, Hao-Yen Chang, Benjamin S Hsiao "Ammonium remediation using nitro-oxidized cellulose nanofibers as a slow release fertilizer", 257th ACS National Meeting, March 31-April 4, Orlando, Florida.
541. Priyanka Sharma, Sunil K Sharma, Benjamin S Hsiao, "Nanocellulose scaffold for water purification", 258th ACS National Meeting, August 25-29, San Diego, CA.
542. Sunil Sharma, Priyanka Sharma and Benjamin S Hsiao, "Efficient removal of hazardous fluoride from drinking water by using bionanomaterial derived from nitro-oxidized carboxynanocellulose", 258th ACS National Meeting, August 25-29, San Diego, CA.
543. Xiangyu Huang, Guilherme Dognani, Pejman Hadi Myavagh, Benjamin S Hsiao, "Removal of chromium (VI) from aqueous solutions by cationic nanostructured cellulose", 258th ACS National Meeting, August 25-29, San Diego, CA.
544. Ritika Joshi, Tom Lindstrom and Benjamin S Hsiao, "Developing hydrophobic cellulosic membrane for membrane distillation", 258th ACS National Meeting, August 25-29, San Diego, CA.
545. Sunil Sharma, Priyanka Sharma and Benjamin S Hsiao, "Nitro-oxidized carboxy nanocellulose derived from agave for effective removal of lanthanides from water", 258th ACS National Meeting, August 25-29, San Diego, CA.
546. Priyanka Sharma, Sunil K Sharma and Benjamin S Hsiao, "Nitro-oxidized carboxycellulose nanofibers", 258th ACS National Meeting, August 25-29, San Diego, CA.
547. Mengying Yang, Pejman Hadi Myavagh, Hongyang Ma, Harold Walker and Benjamin S Hsiao, "Improving the fouling resistance of nanocellulose membranes for ultrafiltration", 258th ACS National Meeting, August 25-29, San Diego, CA.
548. Madani A Khan, Dale Gene Drucekhammer, Benjamin S Hsiao, Sunil K Sharma, "Removal of water toxins via ligandfunctionalized cellulose-based membranes", 258th ACS National Meeting, August 25-29, San Diego, CA.
549. HongRui He, Tomas Rosén, Chengbo Zhan, Ruifu Wang, Shirish Chodankar, Lin Yang and Benjamin S Hsiao "Time resolved characterization of metal ioninduced nanocellulose gelation by small angle X-ray scattering" 258th ACS National Meeting, August 25-29, San Diego, CA.

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550. Benjamin S. Hsiao, "Fabrication, characterization and applications of nanocellulose for water purification", Symposium on Polymer Rheology, Processing, and Characterization in Honor of Dr. Montgomery T. Shaw's 77th Birthday and Many Contributions, Society of Plastic Engineering, ANTEC 2020, March 31, San Antonio, TX.
551. Benjamin S Hsiao, Tomas Rosen, Daniel Soderberg, "Synchrotron enabled soft matter research: From polymers to nanocellulose", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
552. Benjamin S Hsiao, Priyanka R Sharmar, "Sustainable water purification using biomass nanofibers", ACS National Meeting, March 22 - March 26, Philadelphia, PA.

553. Isha Brahmabhatt, Sunil Sharma, Priyanka R. Sharma, Marc Nolan, Benjamin S Hsiao, "Removal of rare earth metal ions from contaminated water by sustainable carboxycellulose nanofibers derived from agave through nitro oxidation process", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
554. Priyanka R. Sharma, Sunil Kumar Sharma, Benjamin Hsiao, "Reinforcement of guayule and natural rubber latex using nitro-oxidized jute nanofibers", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
555. Ken Johnson, William Borges, Priyanka R. Sharma, Sunil Sharma, Hao-Yen Jefferson Chang, Min Liu, Benjamin S Hsiao, "Cellulose sulfate nanofibers for ammonium removal and water purification applications", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
556. Madani Khan, Wenjing Yang, Jenny Gao, Benjamin S Hsiao, Dale Gene Drueckhammer, "Incorporation of iron on nanocellulose for arsenic removal from water", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
557. Tomas Rosen, Ruifu Wang, HongRui He, Chengbo Zhan, Shirish Chodankar, Benjamin S Hsiao, "Time-resolved structural transition during nanocellulose gel formation using an in situ SAXS/flow-focusing technique", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
558. Sunil Sharma, Priyanka Sharma, Songtao Li, George Cai, Songze Wu, Aniket Raut, Miriam Rafailovich, Benjamin S Hsiao, "Highly cross-linked carboxycellulose nanofiber-based sustainable membrane with high proton conduction and PEM fuel cell performance", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
559. Sarah Lotfikatouli, Pejman Hadi, Mengying Yang, Harold Walker, Benjamin S Hsiao, Xinwei Mao, "Enhanced anti-fouling performance in nitrogen removing MBRs using nanocellulose coated membrane", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
560. Ritika Joshi, Jackie Zheng, Tom Lindstrom, Benjamin S Hsiao, "abrication of a composite nanostructured cellulose membrane for direct contact membrane distillation", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
561. Xiangyu Huang, Hongbin Zhuo, Pejman Hadi, Benjamin S Hsiao, "Selective adsorption and separation of dyes by dialdehyde cellulose and cationic dialdehyde cellulose", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
562. HongRui He, Tomas Rosen, Ruifu Wang, Chengbo Zhan, Andreas B Fall, Christian Aulin, Shirish Chodankar, Tom Lindström, Benjamin S Hsiao, "Cellulose nanofibril's cross-section determined through quantized polydispersity fitting of small-angle X-ray scattering data", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
563. Ruifu Wang, Tomas Rosen, HongRui He, Chengbo Zhan, Shirish Chodankar, Benjamin S Hsiao, "Dynamics of the nanocellulose in dispersions under the confined flow", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
564. Ruifu Wang, Tomas Rosen, Mengying Yang, HongRui He, Evan Wang, Shirish Chodankar, Benjamin S Hsiao, "Chemical cross-linking of cellulose nanofibers assisted by hydrodynamic alignment using flow-focusing", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
565. Nisha Verma, Qinyi Fu, Benjamin S Hsiao, Benjamin Ocko, "Molecular structure study-facilitated selection of monomers for fabricating reverse osmosis polyamide membranes", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
566. Hui Chen, Priyanka R. Sharma, Sunil Sharma, Eric Fung, Rangjian Cao, Duning Li, Benjamin S Hsiao, "Fundamental study of nitro-oxidation method on biomass (jute)", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
567. Lexin Chen, Nisha Verma, Hongyang Ma, Benjamin S Hsiao, "Ionic liquid surfactant-assisted interfacial polymerization for high flux composite reverse osmosis membranes", ACS National Meeting, March 22 - March 26, Philadelphia, PA.
568. Ken Imaoka Johnson, William Borges, Priyanka R Sharma, Sunil K Sharma, Hao-Yen Jefferson Chang, Jianfeng Jim Lin, Benjamin S Hsiao, "CELL 50: Cellulose sulfate nanofibers for ammonium removal and water purification applications", ACS Fall 2020 Virtual Meeting, August 17 - August 20.
569. Priyanka R. Sharma, Benjamin S Hsiao, Sunil Sharma, "CELL 54: Structure properties relationships of nitro-oxidized carboxycellulose nanofibers", ACS Fall 2020 Virtual Meeting, August 17 - August 20.
570. Madani Khan, Jenny Gao, Wenjing Yang, Samuel Soliman, Antoine Mialon, Dale Gene Drueckhammer, Benjamin S Hsiao, "CELL 55: Characterization of lytic polysaccharide monoxygenase mediated cellulose from underutilized biomass", ACS Fall 2020 Virtual Meeting, August 17 - August 20.
571. Priyanka R. Sharma, Sunil K Sharma, Hui Chen, Benjamin S Hsiao, "ENVR 51: Nanocellulose from synthesis to application in environmental remediation", ACS Fall 2020 Virtual Meeting, August 17 - August 20.

572. Sarah Lotfikatouli, Pejman Hadi, Mengying Yang, Harold Walker, Benjamin S Hsiao, Xinwei Mao, "ENVR 63: Mitigation of biofouling in nitrogen removing MBRs employing environmentally sustainable Thin Film Nanofibrous Composite membrane", ACS Fall 2020 Virtual Meeting, August 17 - August 20.
573. Qinyi Fu, Nisha Verma, Benjamin Ocko, Benjamin S Hsiao, "POLY 18: Water adsorption in aromatic reverse osmosis polyamide barrier layers observed by grazing incidence wide-angle X-ray scattering", ACS Fall 2020 Virtual Meeting, August 17 - August 20.
574. Nisha Verma, Lexin Chen, Qinyi Fu, Benjamin S Hsiao, Benjamin Ocko, "POLY 74: Surfactant-assisted interfacial polymerization: High permeance reverse osmosis membranes", ACS Fall 2020 Virtual Meeting, August 17 - August 20.