

Jihua Chen

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Summary

Nanostructural revelation and guided assembly of organic, polymeric, and ionic complexes for optoelectronics, energy storage, and beyond.

Citation and H-index

167 publications, an H index of 56, and over 10k citations on [Google Scholar](#)

Experiences

2016-present Macromolecular Nanomaterials Staff, Center for Nanophase Materials Sciences (CNMS)
Microscopy Staff, Contact for Polymer Microscopy
2011-2015 Research Scientist, Chemical Functionality Group, CNMS, ORNL
2009–2010 Postdoc, CNMS, ORNL
2007–2009 Postdoc, Univ. of Minnesota at Twin Cities

Education

University of Michigan–Ann Arbor, MI	Macromolecular Sci. and Engr.	Ph.D., 2006
Clemson University, SC	Textiles, Fiber, and Polymer Sci.	M.S., 2002
Beijing Univ. of Aeronautics & Astronautics	Polymers and Composites	B.S., 1997

Selected High-Impact Publications

Advanced Materials (2 times), *Adv Funct Mater* (6 times), *Angewandte Chemie* (4 times),
ACS Applied Materials & Interface (7 times), *ACS Macro Letter* (3 times), *ACS Nano* (2 times),
Chemistry of Materials (4 times), *JACS* (1 time), *Journal of Materials Chemistry* (5 times),
Journal of Power Source (1 time), *Materials Horizon* (1 time), *Macromolecules* (3 times),
Nano Energy (2 times), *Nano Letters* (3 times), *Nature Communication* (3 times), *Nanoscale* (7 times),
SmartMat (1 time)

Service

2024 Focus Session Organizer, Connecting Real and Reciprocal Space in Soft Matter, DSOFT, Americal Physical Society (APS)
2023 Organizer, Data Analytics and AI for Soft Material, PMSE/I&EC Joint Symposium, ACS fall meeting
2023-2026 Executive committee, Data Science Topical Group (GDS), APS
2023 Session Chair, Polymers 2023 (virtual and San Francisco, CA)
2022 Organizing Committee, Soft Matter Symposium, ORNL
2022 Topic Collection editor, Frontier in Nanotechnology
2021 Section board member, Nanomaterials (IF 5.7)
2021 Soft Matter representative, Neutron Advisory Board (NAB) Review, ORNL
2021 Poster Judge, ACS DPOLY
2021 Guest Editor, Nanomaterials (IF 5.7)
2018 Associate Editor, Frontier in Chemistry (IF 5.5)

2017 Science Lab Leader, Farragut Intermediate School
 2015 Guest Lecturer, University of Alabama, ECS 690 “Organic Optoelectronics”
 2014 Guest Speaker, ACS Project SEED program, University of South Carolina
 2012 Instructor, Soft Matter TEM Workshop, CNMS, ORNL (with D. Wei from Zeiss)
 2012- 2021 Impact of Materials on Society Subcommittee, Materials Research Society (MRS)
 2015 Symposium Organizer, Microscopy and Microanalysis Meeting, Portland, OR
 2012-2015 New Meetings Subcommittee, MRS
 2012-2015 Government Agency Subcommittee, MRS
 2012 Session Chair, “Low-Voltage Electron Microscopy and Spectroscopy” (MRS fall)
 2012-present CNMS facility tour and scientific overview presentation to hundreds of visitors
 2012–Present Proposal Reviewer: for various funding agencies in Europe and USA
 2008–Present Manuscript Reviewer (>300 times): *Advanced Materials*; *Journal of Physical Chemistry Letters*; *Energy and Environmental Science*; *Chemical Society Review*; *Nanoscale*; *Crystal Growth & Design*; *IEEE Electron Device Letter*; *Chemical Communications*; *Journal of Materials Chemistry*; *RSC Advances*; *Crystal Engineering Communications*; *Physical Chemistry Chemical Physics*; *Polymer Chemistry*; *Dalton Transactions*; *Soft Matter*; *Synthetic Metals*; *Plant Physiology and Biochemistry*; *Mathematical and Computational Applications*; *Materials Research Society Proceedings*; *Applied Physics Letters*; *Journal of Applied Polymer Science*; *Crystal Growth and Design*; *Materials Chemistry and Physics*; *Crystals*; *Polymers*; *Journal of Electronic Materials*; *Materials Horizons*; *Microscopy and Microanalysis*; *Organic Electronics*, *ACS Applied Materials and Interface*; *Nanotechnology*

Honors

2021 Outstanding Presentation, Energy Congress 2021
 2016 Outstanding Technical Paper Award, Composites and Advanced Materials Expo
 2014 Distinguished Scientific Paper Award, CNMS, ORNL
 2013 Outstanding Poster, Physical Sciences Directorate Program Review, ORNL
 2005 American Chemical Society DPOLY Travel Award
 2005 Charles Overberger Award for Excellence in Research, University of Michigan
 2004 High Resolution Electron Microscopy Winter School Scholarship, Arizona State University
 2002 Huntsman Chemical Corp. Award for Academic Excellence, University of Michigan

Full list of Publications

* contributed as Corresponding Author;

· energy Storage,

^ biomaterials and biomass,

conjugated molecules and hybrid nanomaterials

166.· Z Liu, JK Keum, T Li, J Chen, K Hong, Y Wang, BG Sumpter, R Advincula, R.Kumar, “Anti-polyelectrolyte and polyelectrolyte effects on conformations of polyzwitterionic chains in dilute aqueous solutions”, *PNAS Nexus*, pgad204, 2023

165.# F Yang, J Feng, J Chen, Z Ye, J Chen, DK Hensley, Y Yin, “Engineering surface strain for site-selective island growth of Au on anisotropic Au nanostructures”, *Nano Research* 16 (4), 5873-5879, 2023

164. #^ J. Chen*, “Crystallization and Assembly-Driven Nanostructures for Energy, Electronics, Environment, and Emerging Applications”, *Nanomaterials* 13 (4), 637, 2023
163. · Q. Li, T. Ju, R. Li, S. Wang, Y. Yang, H. Ishida, Y.W. Harn, J. Chen, B. Hirt, ... L. Zhu, “Investigation into the crystal structure–dielectric property correlation in barium titanate nanocrystals of different sizes”, *Nanoscale* 15 (17), 7829-7844, 2023
162. ^ W. Hua, K. Mitchell, L.S. Kariyawasam, C. Do, J. Chen, L. Raymond, ... Y. Jin “Three-Dimensional Printing in Stimuli-Responsive Yield-Stress Fluid with an Interactive Dual Microstructure”, *ACS Applied Materials & Interfaces* 14 (34), 39420-39431, 2022
161. · D. Parikh, L. Geng, H. Lyu, C.J. Jafta, H. Liu, H.M. Meyer III, J. Chen, X.G. Sun, S. Dai, J. Li, “Correction to “Operando Analysis of Gas Evolution in TiNb2O7 (TNO)-Based Anodes for Advanced High Energy Lithium-Ion Batteries under Fast Charging”, *ACS Applied Materials & Interfaces* 14 (16), 19078-19078, 2022
160. # Z. Cao, G. Ma, M. Leng, S. Zhang, J. Chen, C. Do, K. Hong, L. Fang, X. Gu, “Variable-Temperature Scattering and Spectroscopy Characterizations for Temperature-Dependent Solution Assembly of PffBT4T-Based Conjugated Polymers” *ACS Applied Polymer Materials* 4 (5), 3023-3033, 2022
159. # F. Yang, J. Feng, J. Chen, Z. Ye, J. Chen, D.K. Hensley, Y. Yin, “Engineering surface strain for site-selective island growth of Au on anisotropic Au nanostructures”, *Nano Research*, 1-7, 2022
158. ^ X. Tang, C. Liu, J. Keum, J. Chen, B.E. Dial, Y. Wang, W.Y. Tsai, W. Bras, ...X. Chen, “Upcycling of semicrystalline polymers by compatibilization: mechanism and location of compatibilizers”, *RSC advances* 12 (18), 10886-10894, 2022
157. K. Bornani, P Shah, B Barkakaty, J. Chen, B Lokitz, J Mays, SM Kilbey, “Role of tunable polymer flexibility in controlling wetting behavior and thermal properties of poly (1, 3-cyclohexadiene)-silica nanocomposites”, *SPE Polymers* 3 (1), 3-11, 2022
156. #^ J. Chen *, “Advanced Electron Microscopy of Nanophased Synthetic Polymers and Soft Complexes for Energy and Medicine Applications”. *Nanomaterials*. 2021; 11(9):2405. <https://doi.org/10.3390/nano11092405>
155. · D. Parikh, L.Geng, H. Lyu, C.J. Jafta, H. Liu, H. M. Meyer III, J. Chen, X.-G. Sun, S. Dai, and J. Li, “Operando Analysis of Gas Evolution in TiNb2O7 (TNO)-Based Anodes for Advanced High-Energy Lithium-Ion Batteries under Fast Charging”, *ACS Applied Materials & Interfaces* 2021 13 (46), 55145-55155, DOI: 10.1021/acscami.1c16866
154. # Z. He, Z. Zhang, S. Bi, J. Chen, “Tuning charge transport in organic semiconductors with nanoparticles and hexamethyldisilazane”, *Journal of Nanoparticle Research*, 2021, 23(1), 5
153. # Z. He, Z. Zhang, K. Asare-Yeboah, S. Bi, J. Chen *, D. Li *, “Polyferrocenylsilane Semicrystalline Polymer Additive for Solution-Processed p-Channel Organic Thin Film Transistors”, *Polymers*, 2021, 13 (3) : 402
152. · M. Sakhakarmy, S. Tian, L. Raymond, G. Xiong, J. Chen, Y. Jin, “Printability study of self-supporting graphene oxide-laponite nanocomposites for 3D printing applications”, *The International Journal of Advanced Manufacturing Technology* , 2021, issue 1-2
151. # Z. Wang, H. Chen, Y. Wang, J. Chen, M. A. Arnould, B. Hu, I. Popovs, S. M.

- Mahurin, S. Dai*, “Polymer-Grafted Porous Silica Nanoparticles with Enhanced CO₂ Permeability and Mechanical Performance”, *Applied Materials & Interfaces*, 13 (23), 27411-27418, 2021
150. R. Kumar, Z. Liu, B. Lokitz, J. Chen, J.-M. Carrillo, J. Jakowski, C. P. Collier, S. Retterer, R. Advincula, “Harnessing autocatalytic reactions in polymerization and depolymerization”, *MRS Communications*, 2021
<https://doi.org/10.1557/s43579-021-00061-9>
- 149.# J. Chen,* S. Das, M. Shao, G. Li, H. Lian, J. Qin, J.F. Browning, J. K. Keum, D. Uhrig, G. Gu,* K. Xiao,* “Phase segregation mechanisms of small molecule - polymer blends unraveled by varying polymer chain architecture”, *SmartMat*, 2021, <https://doi.org/10.1002/smm2.1036>
- 148.# Z. He, Z. Zhang, K. Asare-Yeboah, S. Bi, J. Chen*, D. Li*, “Crystal Growth of Small-Molecule Organic Semiconductors with Nucleation Additive”, *Current Applied Physics*, Volume 21, Pages 107-115, January 2021
- 147.# Z. He, Z. Zhang, S. Bi, J. Chen*, “Effect of Polymer Molecular Weight on Morphology and Charge Transport of Small-Molecular Organic Semiconductors”, *Electron. Mater. Lett.*, 38, (2020)
- 146.# Z. He, Z. Zhang, S. Bi, K. Asare-Yeboah, J. Chen*, D. Li, “A Facile and Novel Route to Improve TIPS Pentacene Based Organic Thin Film Transistor Performance with Elastomer”, *Syn. Met.*, 262, 116337, (2020)
145. # Z. He, Z. Zhang, S. Bi, J. Chen*, D. Li, “Conjugated Polymer Controlled Morphology and Charge Transport of Small-Molecule Organic Semiconductors”, *Sci. Reports*, 10 (1), 1-9, (2020)
- 144.# Z. He, Z. Zhang, S. Bi, K. Asare-Yeboah, J. Chen*, “Ultra-low Misorientation Angle in Small-molecule Semiconductor/ Polyethylene Oxide Blends for Organic Thin Film Transistors”, *J. Polym. Res.*, 27 (3) 1-7 (2020)
143. # Z. He, J. Chen*, D. Li, “Polymer Additive Controlled Morphology for High Performance Organic Thin Film Transistors”, *Soft Matter* 15(29), 5790 (2019)
142. # Z. He, J. Chen*, D. Li, “Crystal Alignment for High Performance Organic Electronics Devices”, *J. Vacuum Sci & Tech A* 37 (4), 040801 (2019)
141. M. Jin, X. Qian, J. Gao, Y. Du, J. Chen, D. Hensley, Hoi, C.H., Y. Cui, R. Percoco, C. Ritzi, Y.F. Yue, “Facile synthesis of nanosized CuO@HKUST-1 composite for photocatalytic degradation of methylene blue”, *Inorg. Chem.*, 58 (13), 8332 (2019)
- 140.^ S.H. Barnes, M. Goswami, N.A. Nquyen, J.K. Keum, C.C. Bowland, J. Chen, A.K. Naskar, “An Ionomeric Renewable Thermoplastic”, *Macro. Rap. Comm.* 40 (13) 1900059 (2019)
- 139.# Y. Wang, X. Dong, X. Tang, H. Zheng, K. Li, X. Lin, L. Fang, G. Sun, X. Chen, L. Xie, C.L. Bull, N.P. Funnell, T. Hattori, A. Sano-Furukawa, J. Chen, D.K. Hensley, G. Cody, Y. Ren, H.H. Lee, H.-K. Mao, “Pressure Induced Diels-Alder Reactions in C₆H₆-C₆F₆ Cocrystal towards Graphane Structure”, *Angewan. Chem. Inter. Ed.*, 58 (5), 1468 (2019)
138. ^ D. Saha, R. Thorpe, S. Van Bramer, N. Alexander, D. Hensley, G. Orkoulas, J. Chen, “Synthesis of Nitrogen and Sulfur Co-Doped Nanoporous Carbons from Algae: Role in CO₂ Separation”, *ACS Omega*, 3(12), 18592 (2018)
137. D. Saha, M.M. Desipio, T. J. Hoinkis, E.J. Smelz, R. Thorpe, D.K. Hensley, J. Chen, “Influence of Hydrogen Peroxide in Enhancing Photocatalytic Activity of Carbon Nitride Under Visible Light”, *J. Environ. Chem. Eng.*, 6, 4927 (2018)

136. # N. Osti, E. Mamontov, L. Daemen, J. Browning, J. Keum, H.C. Ho, J. Chen, K. Hong, S. Diallo, “Side Chain Dynamics in Semi-Conducting Polymer MEH-PPV”, *J. Appl. Polym. Sci.*, 136(14), 47394 (2019)
135. ^ S. Bhagia, X. Meng, B. R. Evans, J. R. Dunlap, G. Bali, J. Chen, K.S. Reeves, H.C. Ho, B. H. Davison, and A. J. Ragauskas, “Ultrastructure and Enzymatic Hydrolysis of Deuterated Switchgrass”, *Scientific Reports*, 8(1), 1-9 (2018)
134. · H. C. Ho, M. Goswami, J. Chen, J. K. Keum, A.K. Naskar, “Amending the Structure of Renewable Carbon from Biorefinery Waste-Streams for Energy Storage Applications”, *Scientific Reports*, 8(1), 1-13 (2018)
133. J. Park, D. A. Cullen, J. Chen, G. Polizos, J. Sharma, “Same Solution synthesis and self-assembly of porous nanoparticles into microspheres”, *Appl. Surf. Sci.*, 467-468, 634 (2019)
132. # K. P. Goetz, J. Tsutsumi, S. Pookpanratana, J. Chen, N. S. Corbin, R. K. Behera, V. Coropceanu, C. A. Richter, C. A. Hacker, T. Hasegawa, O. D. Jurchescu, “Reply to Comment on Polymorphism in the 1:1 Charge-Transfer Complex DBTTF–TCNQ and Its Effects on Optical and Electronic Properties”, *Advanced Electronic Materials*, **3**, 1600521 (2017)
131. # Y.C. Mei, D. Fogel, J. Chen, J.W. Ward, M.M. Payne, J.E. Anthony, O.D. Jurchescu, “Interface Engineering to Enhance Charge Injection and Transport in Solution-Deposited Organic Transistors”, **50**, 100-105, *Organic Electronics* (2017)
130. · A.S. Pandian, X. C. Chen, J. Chen, B.S. Lokitz, R.E. Ruther, G. Yang, K. Lou, J. Nanda, F.M. Delnick, N. J. Dudney, “Facile and Scalable Fabrication of Polymer-Ceramic Composite Electrolyte with High Ceramic Loadings”, *Journal of Power Source*, 390, 153-164 (2018)
129. · H. Lyu, P. Li, J. Liu, S. Mahurin, J. Chen, D. Hensley, Z. Guo, S. Dai, X.G. Sun, “Aromatic polyimide/graphene composite organic cathodes for ultrafast and sustainable lithium ion batteries”, **11**, 763-72, *ChemSusChem* (2018)
128. D. Saha, S.D. Akkoyunlu, R. Thorpe, D.K.Hensley, J. Chen, “Adsorptive Recovery of Neodymium and Dysprosium in Phosphorous Functionalized Nanoporous Carbon”, *J. Environ. Chem. Eng.*, **5**, 4684-92 (2017)
127. # S.K.Ahn, J.M.Y. Carrillo, J.K. Keum, J. Chen, D. Uhrig, B. S. Lokitz, B. G. Sumpter, S. M. Kilbey, “Nanoporous poly(3-hexylthiophene) thin film structures from self-organization of a tunable molecular bottlebrush scaffold”, *Nanoscale*, **9**, 7071-7080 (2017)
126. C.W. Abney, J. T. Patterson, J. C. Gilhula, L. Wang, D. K. Hensley, J. Chen, G.S. Foo, Zili Wu, Sheng Dai, “Controlling interfacial properties in supported metal oxide catalysts through metal–organic framework templating”, *J. Mater. Chem. A*, **5**, 13565-13572 (2017)
125. · C. D. Tran, H.C. Ho, J. K. Keum, J. Chen, N. C. Gallego, A. K. Naskar, “Sustainable Energy-Storage Materials from Lignin–Graphene Nanocomposite-Derived Porous Carbon Film”, *Energy Technologies*, **5**, 1927-35 (2017) **(Front Cover)**
124. · Y. Li, G. M. Veith, K. L. Browning, J. Chen, D. K. Hensley, M. P. Paranthaman, S. Dai, X.G. Sun, “Lithium malonate borate additives enabled stable cycling of 5 V lithium metal and lithium ion batteries”, *Nano Energy*, **40**, 9-19 (2017)

123. D. Saha, S. Barakat, S.E. Van Bramer, K. A. Nelson, D. K. Hensley, J. Chen, “Noncompetitive and Competitive Adsorption of Heavy Metals in Sulfur-Functionalized Ordered Mesoporous Carbon”, *ACS Appl. Mater. Interfaces*, **8**, 34132–34142, (2016)
122. ^ D. Saha, S.E. Van Bramer, G. Orkoulasa, H.C. Ho, J. Chen, D. K. Hensley, “CO₂ capture in lignin-derived and nitrogen-doped hierarchical porous carbons”, *Carbon*, **121**, 257–266 (2017)
121. D. Saha, G. Orkoulas, S. Yohannan, H.C. Ho, E. Cakmak, J. Chen, S. Ozcan, “Nanoporous Boron Nitride as Exceptionally Thermally Stable Adsorbent: Role in Efficient Separation of Light Hydrocarbons”, *ACS Appl. Mater. Interfaces*, **9**, 14506–14517 (2017)
120. K. Misichronis, J. Chen, A. Imel, R. Kumar, J. Thostenson, K. Hong, M. Dadmun, B. G. Sumpter, J. G. Kennemur, N. Hadjichristidis, J. W. Mays, A. Avgeropoulos, “Investigations on the Phase Diagram and Interaction Parameter of Poly(styrene-*b*-1,3-cyclohexadiene) Copolymers”, *Macromolecules*, **50**, 2354–2363 (2017)
119. Y. Yue, Y. Li, C. A. Bridges, G. Rother, J. Zhang, J. Chen, D. K. Hensley, M. K. Kidder, B.C. Richardson, M.P. Paranthaman, S. Dai, “Hierarchically Superstructured Metal Sulfides: Facile Perturbation-Assisted Nanofusion Synthesis and Visible Light Photocatalytic Characterizations”, *ChemNanoMat*, **2**, 1104–1110 (2016)
118. ^ J. Wang, R. Boy, N. A. Nguyen, J. K. Keum, D. A. Cullen, J. Chen, M. Soliman, K. C. Littrell, D. Harper, L. Tetard, T. G. Rials, A. K. Naskar, N. Labbé, “Controlled Assembly of Lignocellulosic Biomass Components and Properties of Reformed Materials”, *ACS Sustainable Chem. Eng.*, **5**, 8044-8052 (2017)
117. ^ T. Bova, C. D. Tran, M. Y. Balakshin, J. Chen, E. A. Capanem, A. K. Naskar, “An approach towards tailoring interfacial structures and properties of multiphase renewable thermoplastics from lignin–nitrile rubber”, *Green Chem.*, **18**, 5423-5437 (2016)
116. D. Saha, G. Orkoulasa, J. Chen, D. K. Hensley, “Adsorptive separation of CO₂ in sulfur-doped nanoporous carbons: Selectivity and breakthrough simulation”, *Microporous and Mesoporous Materials*, **241**, 226–237 (2017)
115. ^ D. Saha, C. L. Heldt, M. F. Gencoglu, K. S. Vijayaragavan, J. Chen, A. Saksule, “A study on the cytotoxicity of carbon-based materials”, *Materials Science and Engineering: C*, **68**, 101–108 (2016)
114. Y. Yue, L. Zhang, J. Chen, D. K. Hensley, S. Dai, S.H. Overbury, “Mesoporous xEr₂O₃·CoTiO₃ composite oxide catalysts for low temperature dehydrogenation of ethylbenzene to styrene using CO₂ as a soft oxidant”, *RSC Adv.*, **6**, 32989-32993 (2016)
113. M.Y. Kim, E. A. Kyriakidou, J.S. Choi, T. J. Toops, A. J. Binder, C. Thomas, J. E. Parks II, V. Schwartz, J. Chen, D. K. Hensley, “Enhancing low-temperature activity and durability of Pd-based diesel oxidation catalysts using ZrO₂ supports”, **187**, 181–194 (2016)
112. ^ D. Saha, A. Spurria, J. Chen, D. K. Hensley, “Controlled release of alendronate from nitrogen-doped mesoporous carbon”, *Microporous and Mesoporous Materials*, **229**, 8–13 (2016)
111. # N. Herath, S. Das, J. Zhu, R. Kumar, J. Chen, K. Xiao, G. Gu, J. F. Browning, B. G. Sumpter, I. N. Ivanov, V. Lauter, “Unraveling the Fundamental Mechanisms of

- Solvent-Additive-Induced Optimization of Power Conversion Efficiencies in Organic Photovoltaic Devices”, *ACS Appl. Mater. Interfaces*, **8**, 20220–20229 (2016)
110. Y. Li, O. Rios, J. K. Keum, J. Chen, M. R. Kessler, “Photoresponsive Liquid Crystalline Epoxy Networks with Shape Memory Behavior and Dynamic Ester Bonds”, *ACS Appl. Mater. Interfaces*, **8**, 15750–15757 (2016)
109. ^ M.H. Lahiani, E. Dervishi, I. Ivanov, J. Chen, M. Khodakovskaya, “Comparative study of plant responses to carbon-based nanomaterials with different morphologies”, *Nanotechnology*, **27**, 265102 (2016)
108. ^ C. D. Tran, J. Chen, J. K. Keum, A. K. Naskar, “A New Class of Renewable Thermoplastics with Extraordinary Performance from Nanostructured Lignin-Elastomers”, *Adv. Funct. Mater.*, **26**, 2677–2685 (2016)
107. # K. P. Goetz, J. Tsutsumi, S. Pookpanratana, J. Chen, N. S. Corbin, R. K. Behera, V. Coropceanu, C. A. Richter, C. A. Hacker, T. Hasegawa, O. D. Jurchescu, “Polymorphism in the 1:1 Charge-Transfer Complex DBTTF–TCNQ and Its Effects on Optical and Electronic Properties”, *Advanced Electronic Materials*, **2**, 1600203 (2016)
106. ^ K. Akato, C. D. Tran, J. Chen, Amit K. Naskar, “Poly(ethylene oxide)-Assisted Macromolecular Self-Assembly of Lignin in ABS Matrix for Sustainable Composite Applications”, *ACS Sustainable Chem. Eng.*, **3**, 3070–3076 (2015)
105. Y. Yue, C. Zhang, Q. Tang, R. T. Mayes, W. Liao, C. Liao, C. Tsouris, J. J. Stankovich, J. Chen, D. K. Hensley, C. W. Abney, D. Jiang, S. Brown, S. Dai, “A Poly(acrylonitrile)-Functionalized Porous Aromatic Framework Synthesized by Atom-Transfer Radical Polymerization for the Extraction of Uranium from Seawater”, *Ind. Eng. Chem. Res.*, **55**, 4125–4129 (2016)
104. · B. P. Gindt, D. G. Abebe, Z. J. Tang, M. B. Lindsey, J. Chen, R. A. Elgammal, T. A. Zawodzinski, T. Fujiwara, “Nanoporous polysulfone membranes via a degradable block copolymer precursor for redox flow batteries”, *J. Mater. Chem. A*, **4**, 4288–4295 (2016)
103. K. Misichronis, J. Chen, J. K. Kahk, A. Imel, M. Dadmun, K. Hong, N. Hadjichristidis, J. W. Mays, A. Avgeropoulos, “Diblock copolymers of polystyrene-*b*-poly(1,3-cyclohexadiene) exhibiting unique three-phase microdomain morphologies”, *Journal of Polymer Science B*, **54**, 1564–1572 (2016)
102. M. Tassi, E. Bartolini, P. Adriaensens, L. Bianchi, B. Barkakaty, R. Carleer, J. Chen, D. K. Hensley, A. Marrocchi, L. Vaccaro, “Synthesis, characterization and catalytic activity of novel large network polystyrene-immobilized organic bases”, *RSC Adv.*, **5**, 107200–107208 (2015)
101. # K. Goetz, J. Tsutsumi, S. Pookpanratana, J. Chen, T. Hasegawa, O. Jurchescu, “Polymorphism in the organic charge-transfer complex dibenzotetrathiafulvalene-7,7,8,8-tetracyanoquinodimethane (DBTTF-TCNQ) and its effect on optical and electrical properties”, *Organic Field-Effect Transistors XIV and Organic Sensors and Bioelectronics VIII*, edited by Iain McCulloch, Oana D. Jurchescu, Ioannis Kymissis, Ruth Shinar, Luisa Torsi, SPIE, **9568**, 95680E-1 (2015)
100. A. Marrocchi, P. Adriaensens, E. Bartolini, B. Barkakati, R. Carleer, J. Chen, D. K. Hensley, C. Petrucci, M. Tassi, L. Vaccaro, “Novel Cross-Linked Polystyrenes with Large Space Network as Tailor-Made Catalyst Supports for Sustainable Media”, *European Polymer Journal*, **73**, 391–401 (2015)
99. # Z. He, F. Liu, C. Wang, J. Chen, L. He, D. Nordlung, H. Wu, T.P. Russell, Y. Cao, “Simultaneous Spin-coating and Solvent Annealing: Manipulating the Active Layer

- Morphology to a Power Conversion Efficiency of 9.6% in Polymer Solar Cell”, *Materials Horizon*, **2**, 592-597 (2015)
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97. · S. Bi, C.-N. Sun, T. A. Zawodzinski, F. Ren, J.K. Keum, S.-K. Ahn, D. Li, J. Chen,* “Reciprocated Suppression of Polymer Crystallization toward Improved Solid Polymer Electrolytes: High Ion Conductivity and Tunable Mechanical Properties”, *Journal of Polymer Science B: Polymer Physics*, **53**, 1450 (2015)
96. # D. Khatiwada, S. Venkatesan, Q. Chen, J. Chen, N. Adhikari, A. Dubey, A.F. Mitul, L. Mohammed, Q. Qiao, “Improved Performance by Morphology Control via Fullerenes in PBDT-TBT-AlkoBT Based Organic Solar Cells”, *Journal of Material Chemistry A*, **3**, 15307 (2015)
95. D. Saha, K. Nelson, J. Chen, Y. Lu, S. Ozcan, “Adsorption of Co₂, CH₄, and N₂ in Micro-Mesoporous Nanographene: A Comparative Study”, *Journal of Chemical & Engineering Data*, **60**, 2636 (2015)
94. # S. Bi, Z. He, J. Chen, D. Li, “Solution-Grown Small Molecule Organic Semiconductor with Enhanced Crystal Alignment and Areal Coverage for Organic Thin Film Transistors”, *AIP Advances*, **5**, 077170 (2015)
93. # N.T. Shewmon, D.L. Watkins, J.F. Galindo, R.B. Zerdan, J. Chen, J. Keum, A. E. Roitberg, J. Xue, R.K. Castellano, “Enhancement in Organic Photovoltaic Efficiency through the Synergistic Interplay of Molecular Donor Hydrogen Bonding and pi-Stacking”, *Advanced Functional Materials*, **25**, 5166 (2015)
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