

MC-CAM Publications

2018:

“Acceptor Percolation Determines how Electron-Accepting Additives Modify Transport of Ambipolar Polymer Organic Field-Effect Transistors”

Michael J. Ford, Ming Wang, Karen C. Bustillo, Jianyu Yuan, Thuc-Quyen Nguyen, and Guillermo C. Bazan
ACS Nano, Just Accepted Manuscript (2018). [DOI Link](#)

“Electrical Double-Slope Nonideality in Organic Field-Effect Transistors”

Hung Phan, Michael J. Ford, Alexander T. Lill, Ming Wang, Guillermo C. Bazan, and Thuc-Quyen Nguyen
Advanced Functional Materials, 28(17): 1707221 (2018). [DOI Link](#)

2017:

“Linear Conjugated Polymer Backbones Improve Alignment in Nanogroove-Assisted Organic Field-Effect Transistors”

Ming Wang, Michael J. Ford, Cheng Zhou, Martin Seifrid, Thuc-Quyen Nguyen, and Guillermo C. Bazan
Journal of the American Chemical Society, 139(48): 17624-17631 (2017). [DOI Link](#)

“Improving Electrical Stability and Ideality in Organic Field-Effect Transistors by the Addition of Fullerenes: Understanding the Working Mechanism”

Hung Phan, Michael J. Ford, Alexander T. Lill, Ming Wang, Guillermo C. Bazan, Thuc-Quyen Nguyen
Advanced Functional Materials, 27(38): 17013558 (2017). [DOI Link](#)

“Understanding the links between composition, polyhedral distortion, and luminescence properties in green-emitting β -Si_{6-z}Al_zO_zN_{8-z}:Eu²⁺ phosphors”

Clayton Cozzan, Geneva Laurita, Michael W. Gaultois, Marcus Cohen, Alexander A. Mikhailovsky, Mahalingam Balasubramanian and Ram Seshadri
Journal of Materials Chemistry C, 5(38): 10039-10046 (2017). [DOI Link](#)

“Molecular Considerations for Mesophase Interaction and Alignment of Lyotropic Liquid Crystalline Semiconducting Polymers”

Colin R. Bridges, Michael J. Ford, Guillermo C. Bazan, and Rachel A. Segalman
ACS Macro Letters, 6(6): 619-624 (2017). [DOI Link](#)

“Catalyst-free one-step synthesis of ortho-tetraaryl perylene diimides for efficient OPV non-fullerene acceptors”

Xiangchun Li, Hengbin Wang, Julia A. Schneider, Zitang Wei, Wen-Yong Lai, Wei Huang, Fred Wudl, and Yonghao Zheng
Journal of Materials Chemistry C, 5(11): 2781-2785 (2017). [DOI Link](#)

“Carrier-Selective Traps: A New Approach for Fabricating Circuit Elements with Ambipolar Organic Semiconductors”

Michael J. Ford, John G. Labram, Ming Wang, Hengbin Wang, Thuc-Quyen Nguyen, Guillermo C. Bazan
Advanced Electronic Materials, 3: 1600537 (2017). [DOI Link](#)

“Structural Evolution and Atom Clustering in β -SiAlON: β -Si_{6-z}Al_zO_zN_{8-z}”

Clayton Cozzan, Kent J. Griffith, Geneva Laurita, Jerry G. Hu, Clare P. Grey, and Ram Seshadri,
Inorganic Chemistry, 56(4): 2153-2158 (2017). [DOI Link](#)

“Local Structure Evolution and Modes of Charge Storage in Secondary Li-FeS₂ Cells”

Megan M. Butala, Martin Mayo, Vicky V. T. Doan-Nguyen, Margaret A. Lumley, Claudia Göbel, Kamila M. Wiaderek, Olaf J. Borkiewicz, Karena W. Chapman, Peter J. Chupas, Mahalingam Balasubramanian, Geneva Laurita, Sylvia Britto, Andrew J. Morris, Clare P. Grey, and Ram Seshadri
Chemistry of Materials, 29(7): 3070-3082 (2017). [DOI Link](#)

“Reversible Capacity of Conductive Carbon Additives at Low Potentials: Caveats for Testing Alternative Anode Materials for Li-Ion Batteries”

Kimberly A. See, Margaret A. Lumley, Galen D. Stucky, Clare P. Grey, and Ram Seshadri
Journal of the Electrochemical Society, 164(2): A327-A333 (2017). [DOI Link](#)

“Hole Mobility and Electron Injection Properties of D-A Conjugated Copolymers with Fluorinated Phenylene Acceptor Units”

Ming Wang, Michael J. Ford, Alexander T. Lill, Hung Phan, Thuc-Quyen Nguyen, Guillermo C. Bazan
Advanced Materials, 29 (7): 1603830 (2017). [DOI Link](#)

“Charge transport in a two-dimensional hybrid metal halide thiocyanate compound”

John G. Labram, Naveen R. Venkatesan, Christopher J. Takacs, Hayden A. Evans, Erin E. Perry, Fred Wudl, and Michael L. Chabinyc
Journal of Materials Chemistry C, 5(24): 5930-5938 (2017). [DOI Link](#)

“High Sulfur Content Material with Stable Cycling in Lithium - Sulfur Batteries”

Molleigh B. Preefer, Bernd Oschmann, Craig J. Hawker, Ram Seshadri, and Fred Wudl
Angewandte Chemie, 56 (47): 15118-15122 (2017). [DOI Link](#)

2016:

“Influence of molecular structure on the performance of low Voc loss polymer solar cells”

Ming Wang, Hengbin Wang, Michael Ford, Jianyu Yuan, Cheng-Kang Mai, Stephanie Fronk, Guillermo C. Bazan
Journal of Materials Chemistry A, 4: 15232-15239 (2016). [DOI Link](#)

“A Fully Aromatic High Performance Thermoset via Sydnone-Alkyne Cycloaddition”

Nisha V. Handa, Shaoguang Li, Jeffrey A. Gerbec, Naoko Sumitani, Craig J. Hawker, and Daniel Klinger
Journal of the American Chemical Society, 138 (20): 6400-6403 (2016). [DOI Link](#)

“Fullerene Additives Convert Ambipolar Transport to p-Type Transport while Improving the Operational Stability of Organic Thin Film Transistors”

Michael J. Ford, Ming Wang, Hung Phan, Thuc-Quyen Nguyen, Guillermo C. Bazan
Advanced Functional Materials, 26(25): 4472-4480 (2016). [DOI Link](#)

“(TTF)Pb₂I₅: A Radical Cation-Stabilized Hybrid Lead Iodide with Synergistic Optoelectronic Signatures”

Hayden A. Evans, Anna J. Lehner, John G. Labram, Douglas H. Fabini, Omar Barreda, Sara R. Smock, Guang Wu, Michael L. Chabinyc, Ram Seshadri and Fred Wudl
Chemistry of Materials, 28(11): 3607-3611 (2016). [DOI Link](#)

“MnO Conversion in Li-Ion Batteries: In Situ Studies and the Role of Mesostructuring”

Megan M. Butala, Katherine R. Danks, Margaret A. Lumley, Shiliang Zhou, Brent C. Melot, and Ram Seshadri
ACS Applied Materials & Interfaces, 8(10): 6496-653 (2016). [DOI Link](#)

“Fluorine substitution influence on benzo[2,1,3]thiadiazole based polymers for field-effect transistor applications”

Ming Wang, Michael Ford, Hung Phan, Jessica Coughlin, Thuc-Quyen Nguyen and Guillermo C. Bazan

Chemical Communications, 52: 3207-3210 (2016). [DOI Link](#)

“High Mobility Organic Field-Effect Transistors from Majority Insulator Blends”

Michael J. Ford, Ming Wang, Shrayesh N. Patel, Hung Phan, Rachel A. Segalman, Thuc-Quyen Nguyen, and Guillermo C. Bazan

Chemistry of Materials, 28 (5): 1256-1260 (2016). [DOI Link](#)

“Flexible Organic Transistors with Controlled Nanomorphology”

Byoung Hoon Lee, Ben B. Y. Hsu, Shrayesh N. Patel, John Labram, Chan Luo, Guillermo C. Bazan, and Alan J. Heeger

Nanoletters, 16 (1): 314-319 (2016). [DOI Link](#)

“Formation and Structure of Lyotropic Liquid Crystalline Mesophases in Donor–Acceptor Semiconducting Polymers”

Colin R. Bridges, Michael J. Ford, Bhooshan C. Popere, Guillermo C. Bazan, and Rachel A. Segalman

Macromolecules, 49 (19), 7220–7229 (2016). [DOI Link](#)

2015:

“A single-phase full-color phosphor based on Ba₃MgSi₂O₈ co-activated with Eu²⁺, Tb³⁺, and Mn²⁺”

Alexander Birkel, Nicholas A. DeCino, Clayton Cozzan, Alexander A. Mikhailovsky, Byung-Chul Hong, Ram Seshadri

Solid State Sciences, 48: 82-89 (2015). [DOI Link](#)

“Nanostructured Mn-Doped V₂O₅ Cathode Material Fabricated from Layered Vanadium Jarosite”

Hongmei Zeng, Deyu Liu, Yichi Zhang, Kimberly A. See, Young-Si Jun, Guang Wu, Jeffrey A. Gerbec, Xiulei Ji, and Galen D. Stucky

Chemistry of Materials, 27 (21): 7331-7336 (2015). [DOI Link](#)

“NEXAFS Spectroscopy Reveals the Molecular Orientation in Blade-Coated Pyridal[2,1,3]thiadiazole-Containing Conjugated Polymer Thin Films”

Shrayesh N. Patel, Gregory M. Su, Chan Luo, Ming Wang, Louis A. Perez, Daniel A. Fischer, David Prendergast, Guillermo C. Bazan, Alan J. Heeger, Michael L. Chabinyc, and Edward J. Kramer

Macromolecules, 48 (18): 6606–6616 (2015). [DOI Link](#)

“Electronic structure and photovoltaic application of BiI₃”

Anna J. Lehner, Hengbin Wang, Douglas H. Fabini, Christopher D. Liman, Claire-Alice Hébert, Erin E. Perry, Ming Wang, Guillermo C. Bazan, Michael L. Chabinyc and Ram Seshadri

Applied Physics Letters, 107: 131109 (2015). [DOI Link](#)

“Electrical Instability Induced by Electron Trapping in Low-Bandgap Donor–Acceptor Polymer Field-Effect Transistors”

Hung Phan, Ming Wang, Guillermo C. Bazan, Thuc-Quyen Nguyen

Advanced Materials, 27 (43): 7004-7009 (2015). [DOI Link](#)

“Temperature-Dependent Polarization in Field-Effect Transport and Photovoltaic Measurements of Methylammonium Lead Iodide”

John G. Labram, Douglas H. Fabini, Erin E. Perry, Anna J. Lehner, Hengbin Wang, Anne M. Glaudell, Guang Wu, Hayden Evans, David Buck, Robert Cotta, Luis Echegoyen, Fred Wudl, Ram Seshadri, and Michael L. Chabinyc

The Journal of Physical Chemistry Letters, 6 (18): 3565-3571 (2015). [DOI Link](#)

“Crystal and Electronic Structures of Complex Bismuth Iodides $A_3Bi_2I_9$ ($A = K, Rb, Cs$) Related to Perovskite: Aiding the Rational Design of Photovoltaics”

Anna J. Lehner, Douglas H. Fabini, Hayden A. Evans, Claire-Alice Hébert, Sara R. Smock, Jerry Hu, Hengbin Wang, Josef W. Zwanziger, Michael L. Chabinye, and Ram Seshadri

Chemistry of Materials, 27 (20): 7137-7148 (2015). [DOI Link](#)

“Twisted olefinic building blocks for low bandgap polymers in solar cells and ambipolar field-effect transistors”

Chien-Yang Chiu, Hengbin Wang, Hung Phan, Kazuya Shiratori, Thuc-Quyen Nguyen, Craig J. Hawker

Journal of Polymer Science Part A: Polymer Chemistry, 54 (17): 889-899 (2015). [DOI Link](#)

2014:

“High-Mobility Field-Effect Transistors Fabricated with Macroscopic Aligned Semiconducting Polymers”

Hsin-Rong Tseng, Hung Phan, Chan Luo, Ming Wang, Louis A. Perez, Shrayesh N. Patel, Lei Ying, Edward J. Kramer, Thuc-Quyen Nguyen, Guillermo C. Bazan, and Alan J. Heeger

Advanced Materials, 26 (19): 2993-2998 (2014). [DOI Link](#)

“High Open Circuit Voltage in Regioregular Narrow Band Gap Polymer Solar Cells”

Ming Wang, Hengbin Wang, Takamichi Yokoyama, Xiaofeng Liu, Ye Huang, Yuan Zhang, Thuc-Quyen Nguyen, Shinji Aramaki, and Guillermo C. Bazan

Journal of the American Chemical Society, 136 (36): 12576-12579 (2014). [DOI Link](#)

“Local structure and structural rigidity of the green phosphor β -SiAlON:Eu²⁺”

J. Brgoch, M. W. Gaultois, M. Balasubramanian, K. Page, B.-C. Hong, and R. Seshadri

Applied Physics Letters, 105: 181904 (2014). [DOI Link](#)

“Sulfur infiltrated mesoporous graphene–silica composite as a polysulfide retaining cathode material for lithium–sulfur batteries”

Kyoung Hwan Kim, Young-Si Jun, Jeffrey A. Gerbec, Kimberly A. See, Galen D. Stucky, Hee-Tae Jung

Carbon, 69: 543-551 (2014). [DOI Link](#)

“Accessing $(Ba_{1-x}Sr_x)Al_2Si_2O_8:Eu$ phosphors for solid state white lighting via microwave assisted preparation: Tuning emission color through coordination environment”

J. Brgoch, S. D. Kloß, K. A. Denault, and R. Seshadri

Zeitschrift für Anorganische und Allgemeine Chemie, 640 (6): 1182-1189 (2014). [DOI Link](#)

“Data-driven discovery of energy materials: efficient $BaM_2Si_3O_{10}:Eu^{2+}$ ($M = Sc, Lu$) phosphors for application in solid state white lighting”

J. Brgoch, Kathryn Hasz, Kristin A. Denault, Christopher K. H. Borg, Alexander A. Mikhailovsky, and Ram Seshadri

Faraday Discussions, 176: 333-347 (2014). [DOI Link](#)

“Sulfur-functionalized mesoporous carbons as sulfur hosts in Li–S batteries: Increasing the affinity of sulfur intermediates to enhance performance”

K. See, Y.-S. Jun, J. Gerbec, J. Sprafke, F. Wudl, G. Stucky, and R. Seshadri

ACS Applied Materials Interfaces, 6 (14): 10908-10916 (2014). [DOI Link](#)

“Effect of copper metalation of tetrabenzoporphyrin donor material on organic solar cell performance”

Michele Guide, Jason D. A. Lin, Christopher M. Proctor, Jingrun Chen, Carlos Garcia-Cervera, and Thuc-Quyen Nguyen

Journal of Materials Chemistry A, 21 (2): 7890-7896 (2014). [DOI Link](#)

“General Strategy for Self-Assembly of Highly Oriented Nanocrystalline Semiconducting Polymers with High Mobility”

Chan Luo, Aung Ko Kyaw, Louis A. Perez, Shrayesh Patel, Ming Wang, Bruno Grimm, Guillermo C. Bazan, Edward J. Kramer, and Alan J. Heeger
Nanoletters, 14 (5): 2764-2771 (2014). [DOI Link](#)

“Twisted but Conjugated: Building Blocks for Low Bandgap Polymers”

Dr. Chien-Yang Chiu, Dr. Hengbin Wang, Dr. Fulvio G. Brunetti, Prof. Fred Wudl and Prof. Craig J. Hawker
Angewandte Chemie International Edition, 53 (15): 3996-4000 (2014). [DOI Link](#)

2013:

“Allyl Glycidyl Ether-Based Polymer Electrolytes for Room Temperature Lithium Batteries”

Katherine P. Barteau, Martin Wolfs, Nathaniel A. Lynd, Glenn H. Fredrickson, Edward J. Kramer, and Craig J. Hawker
Macromolecules, 46 (22): 8988-8994 (2013). [DOI Link](#)

“Average and Local Structural Origins of the Optical Properties of the Nitride Phosphor $\text{La}_{3-x}\text{Ce}_x\text{Si}_6\text{N}_{11}$ ($0 < x \leq 3$)”

Nathan C. George, Alexander Birkel, Jakoah Brgoch, Byung-Chul Hong, Alexander A. Mikhailovsky, Katharine Page, Anna Llobet, and Ram Seshadri
Inorganic Chemistry, 52 (23): 13730-13741 (2013). [DOI Link](#)

“A structure-property-performance investigation of perylene diimides as electron accepting materials in solar cells”

Michele Guide, Sara Pla, Alexander Sharenko, Peter Zalar, Fernando Fernández-Lázaro, Ángela Sastre-Santos, and Thuc-Quyen Nguyen
Physical Chemistry Chemical Physics, 15: 18894 – 18899 (2013). [DOI Link](#)

“Bimodal Mesoporous Titanium Nitride/Carbon Microfibers as Efficient and Stable Electrocatalysts for Li–O₂ Batteries”

Jihee Park, Young-Si Jun, Woo-ram Lee, Jeffrey A. Gerbec, Kimberly A. See, and Galen D. Stucky
Chemistry of Materials, 25 (19): 3779-3781 (2013). [DOI Link](#)

“Dithienylbenzodipyrrolidone: New Acceptor for Donor–Acceptor Low Band Gap Polymers”

Weibin Cui and Fred Wudl
Macromolecules, 46 (18): 7232-7238 (2013). [DOI Link](#)

“A One-Step Strategy for End-Functionalized Donor–Acceptor Conjugated Polymers”

Maxwell J. Robb, Damien Montarnal, Nancy D. Eisenmenger, Sung-Yu Ku, Michael L. Chabinyc, and Craig J. Hawker
Macromolecules, 46 (16): 6431-6438 (2013). [DOI Link](#)

“Regioregular pyridyl[2,1,3]thiadiazole-coindacenodithiophene conjugated polymers”

Wen Wen, Lei Ying, Ben B. Y. Hsu, Yuan Zhang, Thuc-Quyen Nguyen, and Guillermo C. Bazan
Chemical Communications, 49 (65): 7192-7194 (2013). [DOI Link](#)

“A High Capacity Calcium Primary Cell Based on the Ca-S System”

Kimberly A. See, Jeffrey A. Gerbec, Young-Si Jun, Fred Wudl, Galen D. Stucky, Ram Seshadri
Advanced Energy Materials, 3 (8): 1056-1061 (2013). [DOI Link](#)

“Eu²⁺-doped $M_2\text{SiO}_4$ ($M = \text{Ca}, \text{Ba}$) phosphors prepared by a rapid microwave-assisted sol–gel method: Phase formation and optical properties”

Alexander Birkel, Nicholas A. DeCino, Nathan C. George, Katherine A. Hazelton, Byung-Chul Hong, Ram Seshadri

Solid State Sciences, 19: 51-57 (2013). [DOI Link](#)

2012:

“All-Conjugated Triblock Polyelectrolytes”

Lei Ying, Peter Zalar, Samuel D. Collins, Zhao Chen, Alexander A. Mikhailovsky, Thuc-Quyen Nguyen, and Guillermo C. Bazan

Advanced Materials, 24 (48): 6496-6501 (2012). [DOI Link](#)

“Crystalline Polymorphs of [6,6]-Phenyl-C₆₁-butyric Acid *n*-Butyl Ester (PCBNB)”

Soo-Hyung Choi, Christopher D. Liman, Stephan Krämer, Michael L. Chabinyc, and Edward J. Kramer

Journal of Physical Chemistry B, 116 (45): 13568-13574 (2012). [DOI Link](#)

“High Mobility Field Effect Transistors Based on Macroscopically Oriented Regioregular Copolymers”

Hsin-Rong Tseng, Lei Ying, Ben B. Y. Hsu, Louis A. Perez, Christopher J. Takacs, Guillermo C. Bazan, and Alan J. Heeger

Nanoletters, 12 (12): 6353-6357 (2012). [DOI Link](#)

“A Modular Strategy for Fully Conjugated Donor-Acceptor Block Copolymers”

Sung-Yu Ku, Michael A. Brady, Neil D. Treat, Justin E. Cochran, Maxwell J. Robb, Edward J. Kramer, Michael L. Chabinyc and Craig J. Hawker

Journal of the American Chemical Society, 134 (38): 16040-16046 (2012). [DOI Link](#)

“Polymer-Fullerene Miscibility: A Metric for Screening New Materials for High-Performance Organic Solar Cells”

Neil D. Treat, Alessandro Varotto, Christopher J. Takacs, Nicolas Batara, Mohammed Al-Hashimi, Martin J. Heeney, Alan J. Heeger, Fred Wudl, Craig J. Hawker, and Michael L. Chabinyc

Journal of the American Chemical Society, 134 (38): 15869-15879 (2012). [DOI Link](#)

“Tough and Elastic Thermoplastic Organogels and Elastomers Made of Semicrystalline Polyolefin-Based Block Copolymers”

Fanny Deplace, Arthur K. Scholz, Glenn H. Fredrickson, Edward J. Kramer, Yong-

WooShin, Fumihiko Shimizu, Feng Zuo, Lixia Rong, Benjamin S. Hsiao, and Geoffrey W. Coates

Macromolecules, 45 (13): 5604-5618 (2012). [DOI Link](#)

“Patterning and Electronic Tuning of Laser Scribed Graphene for Flexible All-Carbon Devices”

Veronica Strong, Sergey Dubin, Maher F. El-Kady, Andrew Lech, Yue Wang, Bruce H. Weiller, and Richard B. Kaner

ACS Nano, 6 (2): 1395-1403 (2012). [DOI Link](#)

“Microwave assisted preparation of Eu²⁺-doped Åkermanite Ca₂MgSi₂O₇”

Alexander Birkel, Lucy E. Darago, Alasdair Morrison, Laurianne Lory, Nathan C. George, Alexander A. Mikhailovsky, Christina S. Birkel, and Ram Seshadri

Solid State Sciences, 14 (6): 739-745 (2012). [DOI Link](#)

“Rapid Microwave Preparation of Highly Efficient Ce³⁺-Substituted Garnet Phosphors for Solid State White Lighting”

Alexander Birkel, Kristin A. Denault, Nathan C. George, Courtney E. Doll, Bathylle Héry, Alexander A. Mikhailovsky, Christina S. Birkel, Byung-Chul Hong, and Ram Seshadri

Chemistry of Materials, 24 (6): 1198-1204 (2012). [DOI Link](#)

“Control of Efficiency, Brightness, and Recombination Zone in Light-Emitting Field Effect Transistors”
Ben B.Y. Hsu, Chunhiu Duan, Ebinazar B. Namdas, Andrea Gutacker, Jonathan D. Yuen, Fei Huang, Yong Cao, Guillermo C. Bazan, Ifor D. W. Samuel, Alan J. Heeger^{1,*}
Advanced Materials, 24 (9): 1171-1175 (2012). [DOI Link](#)

“Propylene Polymerization with α -Keto- β -Diimine Initiators Proceeds via Enantiomorphic Site Control”
Jason D. Azoulay, Haiyang Gao, Zachary A. Koretz, Gerald Kehr, Gerhard Erker, Fumihiko Shimizu, Griselda B. Galland, and Guillermo C. Bazan
Macromolecules, 45 (11): 4487-4493 (2012). [DOI Link](#)

“Two-Dimensional GIWAXS Reveals a Transient Crystal Phase in Solution-Processed Thermally Converted Tetrabenzoporphyrin”
Christopher D. Liman, Soohyung Choi, Dag W. Breiby, Justin E. Cochran, Michael F. Toney, Edward J. Kramer, and Michael L. Chabinyc
Journal of Physical Chemistry B, 117 (46): 14557-14567 (2012). [DOI Link](#)

2011:

“A Facile Synthesis of Low-Band-Gap Donor–Acceptor Copolymers Based on Dithieno[3,2-*b*:2',3'-*d*]thiophene”
Sung-Yu Ku, Christopher D. Liman, Daniel J. Burke, Neil D. Treat, Justin E. Cochran, Elizabeth Amir, Louis A. Perez, Michael L. Chabinyc, and Craig J. Hawker
Macromolecules, 44 (24): 9533-9538 (2011). [DOI Link](#)

“Regioregular Pyridal[2,1,3]thiadiazole π -Conjugated Copolymers”
Lei Ying, Ben B. Y. Hsu, Hongmei Zhan, Gregory C. Welch, Peter Zalar, Louis Perez, Edward J. Kramer, Thuc-Quyen Nguyen, Alan J. Heeger, Wai-Yeung Wong, and Guillermo C. Bazan
Journal of the American Chemical Society, 133 (46): 18538-18541 (2011). [DOI Link](#)

“Clay-Catalyzed Cracking Leads to Suppressed Flammability in Clay–Polyolefin Nanocomposites”
Bryanna M. Kunkel, Brian C. Peoples, Cathleen M. Yung, Susannah L. Scott
Macromolecular Materials and Engineering, 296 (12): 1075-1080 (2011). [DOI Link](#)

“Linear, high molecular weight polyethylene from a discrete, mononuclear phosphinoarenesulfonate complex of nickel(II)”
Philippe Perrotin, Jenny S. McCahill, Guang Wu, Susannah L. Scott
Chemical Communications, 47: 6948-6950 (2011). [DOI Link](#)

“Solution-Processed Nanostructured Benzoporphyrin with Polycarbonate Binder for Photovoltaics”
Sung-Yu Ku, Christopher Liman, Justin Cochran, Michael Toney, Michael Chabinyc, Craig Hawker
Advanced Materials, 23 (20): 2289-2293 (2011). [DOI Link](#)

“1,4-Fullerene Derivatives: Tuning the Properties of the Electron Transporting Layer in Bulk-Heterojunction Solar Cells”
Alessandro Varotto, Neil D. Treat, Jang Jo, Christopher G. Shuttle, Nicolas A. Batara, Fulvio G. Brunetti, Jung Hwa Seo, Michael L. Chabinyc, Craig J. Hawker, Alan J. Heeger, Fred Wudl
Angewandte Chemie International Edition, 50 (22): 5166-5169 (2011). [DOI Link](#)

“Nanoscale Characterization of Tetrabenzoporphyrin and Fullerene-Based Solar Cells by Photoconductive Atomic Force Microscopy”
Michele Guide, Xuan-Dung Dang, Thuc-Quyen Nguyen
Advanced Materials, 23 (20): 2313-2319 (2011). [DOI Link](#)

“Understanding ligand-centred photoluminescence through flexibility and bonding of anthraquinone inorganic-organic frameworks”

Joshua D. Furman, Ryan P. Burwood, Min Tang, Alexander D. Mikhailovsky, and Anthony K. Cheetham
Journal of Materials Chemistry, 21: 6595 – 6601 (2011). [DOI Link](#)

“Towards enhanced ligand-centred photoluminescence in inorganic–organic frameworks for solid state lighting”

Joshua D. Furman, Brent C. Melot, Simon J. Teat, Alexander A. Mikhailovsky and Anthony K. Cheetham
Physical Chemistry Chemical Physics, 13: 7622 – 7629 (2011). [DOI Link](#)

“Synthesis and Characterization of Semicrystalline Polyethylene-*graft*-Poly(acrylic acid) Copolymers”

Yanika Schneider, Brian T. McVerry, Guillermo C. Bazan
Macromolecular Chemistry and Physics, 212 (5): 507-514 (2011). [DOI Link](#)

“A synthetic approach to a fullerene-rich dendron and its linear polymer via ring-opening metathesis polymerization”

Jonggi Kim, Myoung Hee Yun, Junghoon Lee, Jin Young Kim, Fred Wudl and Changduk Yang
Chemical Communications, 47: 3078-3080 (2011). [DOI Link](#)

2010:

“Binuclear Initiators for the Telechelic Synthesis of Elastomeric Polyolefins”

Robert C. Coffin, Yanika Schneider, Edward J. Kramer, and Guillermo C. Bazan
Journal of the American Chemical Society, 132: 13869-13878 (2010). [DOI Link](#)

“Ketene Functionalized Polyethylene: Control of Cross-Link Density and Material Properties”

Frank A. Leibfarth, Yanika Schneider, Nathaniel A. Lynd, Alison Schultz, Bongjin Moon, Edward J. Kramer, Guillermo C. Bazan, and Craig J. Hawker
Journal of the American Chemical Society, 132: 14706-14709 (2010). [DOI Link](#)

“Nanostructured Hybrid Solar Cells: Dependence of the Open Circuit Voltage on the Interfacial Composition”

Neil D. Treat, Luis M. Campos, Michael D. Dimitriou, Biwu Ma, Michael L. Chabinye, Craig J. Hawker
Advanced Materials, 22 (40): 4982-4986 (2010). [DOI Link](#)

“Well-Defined Cationic Methallyl α -Keto- β -Diimine Complexes of Nickel”

Jason D. Azoulay, Zachary A. Koretz, Guang Wu, and Guillermo C. Bazan
Angewandte Chemie, 49 (43): 7890-7894 (2010). [DOI Link](#)

“Step-Cycle Mechanical Processing of Gels of sPP-*b*-EPR-*b*-sPP Triblock Copolymer in Mineral Oil”

Zhigang Wang, Yanhua Niu, Glenn H. Fredrickson, Edward J. Kramer, Yong-Woo Shin, Fumihiko Shimizu, Feng Zuo, Lixia Rong, Benjamin S. Hsiao and Geoffrey W. Coates
Macromolecules, 43 (16): 6782-6788 (2010). [DOI Link](#)

“Processing-Structure-Mechanical Property Relationships of Semicrystalline Polyolefin-Based Block Copolymers”

Fanny Deplace, Zhigang Wang, Nate Lynd, Atsushi Hotta, Jeffrey M. Rose, Jeffrey M. Rose, Philip D. Hustad, Jun Tian, Hisashi Ohtaki, Geoffrey W. Coates, Fumihiko Shimizu, Kousou Hirokane, Fumiyoshi Yamada, Yong-Woo Shin, Lixia Rong, Jie Zhu, Shigeyuki Toki, Benjamin S. Hsiao, Glenn H. Fredrickson, Edward J. Kramer
Journal of Polymers Science Part B: Polymer Physics, 48 (13): 1428-1437 (2010). [DOI Link](#)

“High performance encapsulation structures utilizing Russian Doll architectures”

Jimmy Granstrom, Mikael Gällstedt, Michael Villet, Ji Sun Moon, and Tirtha Chatterjee

Thin Solid Films, 518 (18): 5282-5287 (2010). [DOI Link](#)

“Tunable, Ligand-Based Emission from Inorganic-Organic Frameworks: A New Approach to Phosphors for Solid State Lighting”

Joshua D. Furman, Alina Y. Warner, Simon J. Teat, Alexander A. Mikhailovsky, and Anthony K. Cheetham
Chemistry of Materials, 22 (7): 2255-2260 (2010). [DOI Link](#)

“Self-Assembly and Charge-Transport Properties of a Polythiophene-Fullerene Triblock Copolymer”

Mark Dante, Changduk Yang, Bright Walker, Fred Wudl and Thuc-Quyen Nguyen
Advanced Materials, 22 (16): 1835-1839 (2010). [DOI Link](#)

“Synthesis of Eu²⁺-Activated MYSi₄N₇ (M=Ca,Sr,Ba) and SrYSi_{4-x}Al_xN_{7-x}O_x (x=0–1) Green Phosphors by Carbothermal Reduction and Nitridation”

Tomoyuki Kurushima, Gautam Gundiah, Yasuo Shimomura, Masayoshi Mikami, Naoto Kijima, and Anthony K. Cheetham
Journal of the Electrochemical Society, 157 (3): J64-J68 (2010). [DOI Link](#)

“High Surface Area Poly(3-hexylthiophenes) Thin Films from Cleavable Graft Copolymers”

Kulandaivelu Sivanandan, Tirtha Chatterjee, Neil Treat, Edward J. Kramer, and Craig J. Hawker
Macromolecules, 43 (1): 233-241 (2010). [DOI Link](#)

“Improvements in barrier performance of perfluorinated polymer films through suppression of instability during film formation”

Jimmy Granstrom, Anshuman Roy, Griffin Rowell, Ji Sun Moon, Evan Jerkunica and Alan J. Heeger
Thin Solid Films, 518 (14): 3767-3771 (2010). [DOI Link](#)

2009:

“Dendronized macromonomers for three-dimensional data storage”

Anzar Khan, Anders E. Daugaard, Andrea Bayles, Shogo Koga, Yasuaki Miki, Ken Sato, Jun Enda, Soren Hvilsted, Galen D. Stucky and Craig J. Hawker
Chemical Communications, 425 (2009). [DOI Link](#)

“High throughput screening and measurements of proton conductivity of newly developed PEM materials based on proton transport visualization”

Anna Ivanovskaya, Jie Fan, Fred Wudl, Galen Stucky
Journal of Membrane Science, 330: 326-333 (2009). [DOI Link](#)

“Electrocatalytic Activity of Gold–Platinum Clusters for Low Temperature Fuel Cell Applications”

Wei Tang, Shrisudersan Jayaraman, Thomas Jaramillo, Galen Stucky, Eric McFarland
Journal of Physical Chemistry C, 113 (12): 5014-5024. [DOI Link](#)

“Nickel α -Keto- β -Diimine Initiators for Olefin Polymerization”

Jason D. Azoulay, Rene S. Rojas, Abigail V. Serrano, Hisashi Ohtaki, Griselda B. Galland, Guang Wu, Guillermo C. Bazan
Angewandte Chemie, 48 (6): 1089-1092 (2009). [DOI Link](#)

“Heteroanalogues of PCBM: N-Bridged Imino-PCBMs for Organic Field-Effect Transistors”

Changduk Yang, Shinuk Cho, Alan Heeger, Fred Wudl
Angewandte Chemie, 48 (9): 1592-1595 (2009). [DOI Link](#)

“Cationic Conjugated Polyelectrolyte Electron Injection Layers: Effect of Halide Counterions”

Andres Garcia, Jacek Z Brzezinski, Thuc-Quyen Nguyen
Journal of Physical Chemistry C, 113 (7): 2950-2954 (2009). [DOI Link](#)

“A general strategy for highly efficient nanoparticle dispersing agents based on hybrid dendritic linear block copolymers”
Robert Vestberg, Ashley M. Piekarski, Eric D. Pressly, Kim Y. Van Berkel, Michael Malkoch, Jeffrey Gerbec, Nobuhiko Ueno, Craig J. Hawker
Journal of Polymer Science Part A: Polymer Chemistry 47 (5): 1237-1258. [DOI Link](#)

“Long-Lifetime Polymer Light-Emitting Electrochemical Cells Fabricated with Crosslinked Hole-Transport Layers”
Yan Shao, Xiong Gong, Alan J. Heeger, Michelle Liu, Alex K.Y. Jen
Advanced Materials, 21 (19): 1972-1975 (2009). [DOI Link](#)

“Well-defined donor–acceptor rod–coil diblock copolymers based on P3HT containing C₆₀: the morphology and role as a surfactant in bulk-heterojunction solar cells”
Changduk Yang, Jae Kwan Lee, Alan J. Heeger, Fred Wudl
Journal of Materials Chemistry, 19 (30): 5416-5423 (2009). [DOI Link](#)

“Multilayer barrier films comprising nitrogen spacers between free-standing barrier layers”
Jimmy Granstrom, Michael Villet, Tirtha Chatterjee, Jeffrey A. Gerbec, Evan Jerkunica, Anshuman Roy
Applied Physics Letters, 95 (10): 093306 (2009). [DOI Link](#)

“Applications of Photocurable PMMS Thiol-Ene Stamps in Soft Lithography”
Luis M Campos, Tu T. Truong, Dong Eun Shim, Michael D. Dimitriou, Daniel Shir, Ines Meinel, Jeffrey A. Gerbec, H. Thomas Hahn, John A. Rogers and Craig J. Hawker
Chemistry of Materials, 21 (21): 5319-5326 (2009). [DOI Link](#)

“Novel Elastomers Prepared by Grafting n-Butyl Acrylate from Polyethylene Macroinitiator Copolymers”
Yanika Schneider, Nathaniel A. Lynd, Edward J. Kramer, and Guillermo C. Bazan
Macromolecules, 42 (22): 8763-8768 (2009). [DOI Link](#)

“Living polymerization of ethylene and alpha-olefins using a nickel alpha-keto-beta-diimine initiator”
Jason Azoulay, Yanika Schneider, Griselda B. Galland, Guillermo C. Bazan
Chemical Communications, 41: 6177-6179 (2009). [DOI Link](#)

2008:

“New Polyethylene Macroinitiators and Their Subsequent Grafting by Atom Transfer Radical Polymerization”
Yanika Schneider, Jason D. Azoulay, Robert C. Coffin and Guillermo C. Bazan
Journal of the American Chemical Society, 130 (32): 10464-10465 (2008). [DOI Link](#)

“Imaging the interfaces of conjugated polymer optoelectronic devices”
D. W. Steuerman, A. Garcia, M. Dante, R. Yang, J. P. Löfvander, T.-Q. Nguyen
Advanced Materials, 20 (3): 528-534 (2008). [DOI Link](#)

“LED to LEC Transition Behavior in Polymer Light-Emitting Devices”
Yan Shao, Guillermo C. Bazan, Alan J. Heeger
Advanced Materials, 20 (6): 1191-1193 (2008). [DOI Link](#)

“Conjugated Oligoelectrolyte Electron Transport/Injection Layers for Organic Optoelectronic Devices”
Renqiang Yang, Yunhua Xu, Xuan-Dung Dang, Thuc-Quyen Nguyen, Yong Cao, and Guillermo C. Bazan

Journal of the American Chemical Society, 130 (11): 3282-3283 (2008). [DOI Link](#)

“Oxygen Electroreduction on Gold-Cobalt Oxide Binary Nanocluster Catalysts”

Hongfei Lin, Wei Tang, Alan Kleiman-Shwarsstein, Eric W. McFarland

Journal of the Electrochemical Society, 155 (2): B200-B206 (2008). [DOI Link](#)

“Novel red phosphors based on vanadate garnets for solid state lighting applications”

Gautam Gundiah, Y. Shimomura, N. Kijima, and A. K. Cheetham

Chemical Physics Letters, 455 (4-6): 279-283 (2008). [DOI Link](#)

“Functionalized methanofullerenes used as n-type materials in bulk-heterojunction polymer solar cells and in field-effect transistors”

Changduk Yang, Jin Young Kim, Shinuk Cho, Jae Kwan Lee, Alan J. Heeger and Fred Wudl

Journal of the American Chemical Society, 130 (20): 6444-6450 (2008). [DOI Link](#)

“Holographic Recording in Cross-Linked Polymeric Matrices through Photoacid Generation”

Anzar Khan, Luis M Campos, Alexander Mikhailovsky, Muhammet Toprak, Nicholas C. Strandwitz, Galen D. Stucky, Craig J. Hawker

Chemistry of Materials, 20: 3669-3674 (2008). [DOI Link](#)

“Highly Versatile and Robust Materials for Soft Imprint Lithography Based on Thiol-ene Click Chemistry”

Luis M. Campos, Ines Meinel, Rosette G. Guino, Martin Schierhorn, Nalini Gupta, Galen D. Stucky, Craig J. Hawker

Advanced Materials, 20 (19): 3728-3733 (2008). [DOI Link](#)

“High-Performance, Nondiffusive Crosslinked Polymers for Holographic Data Storage”

Anzar Khan, Galen D. Stucky, Craig J. Hawker

Advanced Materials, 20 (20): 3937-3941 (2008). [DOI Link](#)

“Influence of Steric and Electronic Perturbations on the Polymerization Activities of α -Iminocarboxamide Nickel Complexes”

Jason D. Azoulay, Koji Itigaki, Guang Wu and Guillermo C. Bazan

Organometallics, 27 (10): 2273-2280 (2008). [DOI Link](#)

“Local structure and time-resolved photoluminescence of emulsion prepared YAG nanoparticles”

J.D. Furman, G. Gundiah, N. Pizarro, A.K. Cheetham

Chemical Physics Letters, 465 (1-3): 67-72 (2008). [DOI Link](#)

“Highly dispersed clay-polyolefin nanocomposites free of compatibilizers, via the in situ polymerization of alpha-olefins by clay-supported catalysts”

Susannah Scott, Brian Peoples, Cathleen Yung, Rene Rojas, Vikram Khanna, Hironari Sano, Toru Suzuki, Fumihiko Shimizu

Chemical Communications, 35: 4186-4188 (2008). [DOI Link](#)

“Size-Dependent Activity of Gold Nanoparticles for Oxygen Electroreduction in Alkaline Electrolyte”

Wei Tang, Hongfei Lin, Alan Kleiman-Shwarsstein, Galen D. Stucky, Eric W. McFarland

Journal of Physical Chemistry C, 112 (28): 10515-10519 (2008). [DOI Link](#)

“Synthesis of Amorphous Silicon Carbide Nanoparticles in Sub-ten Nanometers Size Domain in a Low-Pressure Microwave Plasma Reactor”

Hongfei Lin, Jeffrey A. Gerbec, Michael Sushchikh, Eric W. McFarland

Nanotechnology, 19 (32): 325601 (2008). [DOI Link](#)

“Encapsulation of organic light-emitting devices using a perfluorinated polymer”

J. Granstrom, J.S. Swensen, J.S. Moon, G. Rowell, J. Yuen, A.J. Heeger

Applied Physics Letters, 93 (19): 193304 (2008). [DOI Link](#)

2007:

“Long Lifetime Polymer Light Emitting Electrochemical Cells”

Yan Shao, Guillermo C. Bazan, Alan J. Heeger

Advanced Materials, 19 (3): 365-370 (2007). [DOI Link](#)

“Structure-property correlations in Ce-doped garnet phosphors for use in solid state lighting”

Jennifer L. Wu, Gautam Gundiah and A.K. Cheetham

Chemical Physics Letters, 441: 250-254 (2007). [DOI Link](#)

“Fabrication of new fullerene composite membranes and their application in proton exchange membrane fuel cells”

Hengbin Wang, Ryan DeSousa, Jeffrey Gasa, Ken Tasaki, Galen Stucky, Bruno Joussetme, Fred Wudl

Journal of Membrane Science, 289 (1-2): 277-283 (2007). [DOI Link](#)

“Pseudo-tetrahedral copolymers with ethylene and a functionalized comonomer”

Robert C. Coffin, Steven J. Diamanti, Atsushi Hotta, Vikram Khanna, Edward J. Kramer, Glenn H. Fredrickson and Guillermo C. Bazan

Chemical Communications, 34: 3550-3552 (2007). [DOI Link](#)

“Structure-function relationships of conjugated polyelectrolyte electron injection layers in polymer light emitting diodes”

Andres Garcia, Renqiang Yang, Youngeup Jin, Bright Walker, and Thuc-Quyen Nguyen

Applied Physics Letters, 91 (15): 153502 (2007). [DOI Link](#)

2006:

“Tapered Block Copolymers Containing Ethylene and a Functionalized Comonomer”

Steve J. Diamanti, Vikram Khanna, Atsushi Hotta, Robert C. Coffin, Diane Yamakawa, Edward J. Kramer, Glenn H. Fredrickson, and Guillermo C. Bazan

Macromolecules, 39 (9): 3270-3274 (2006). [DOI Link](#)

“Photonic Crystal-Assisted Light Extraction from a Colloidal Quantum Dot/GaN Hybrid Structure”

Frédéric S. Diana, Aurélien David, Ines Meinel, Rajat Sharma, Claude Weisbuch, Shuji Nakamura, and Pierre M. Petroff

Nanoletters, 6 (6): 1116-1120 (2006). [DOI Link](#)

“Voltage Induced Metal-Insulator Transition in Polythiophene Field Effect Transistors”

Anoop Dhoot, Guangming Wang, Daniel Moses, and Alan J. Heeger

Physical Review Letters, 96: 246403 (2006). [DOI Link](#)

“Low Voltage Electrodeposition of Fullerol Thin Films from Aqueous Solutions”

Alan Kleiman-Shwarsstein, Thomas F. Jaramillo, Sung-Hyeon Baeck, Michael Sushchikh and Eric W. McFarland

Journal of the Electrochemical Society, 153 (7): C483-C487 (2006). [DOI Link](#)

“Infrared Imaging of the Nanometer-Thick Accumulation Layer in Organic Field-Effect Transistors”

Z. Q. Li, G. M. Wang, N. Sai, D. Moses, M. C. Martin, M. Di Ventra, A.J. Heeger, and D. N. Basov
Nano Letters, 6 (2): 224-228 (2006). [DOI Link](#)

“Semicrystalline thermoplastic elastomeric polyolefins: Advances through catalyst development and macromolecular design”

Atsushi Hotta, Eric Cochran, Janne Ruokolainen, Vikram Khanna, Glenn H. Fredrickson, Edward J. Kramer, Yong-Woo Shin, Fumihiko Shimizu, Anna E. Cherian, Phillip D. Hustad, Jeffrey M. Rose, and Geoffrey W. Coates

Proceedings of PNAS, 103 (42): 15327-15332 (2006). [DOI Link](#)

“Control of Cationic Conjugated Polymer Performance in Light Emitting Diodes by Choice of Counterion”

Renqiang Yang, Hongbin Wu, Yong Cao, Guillermo C. Bazan

Journal of the American Chemical Society, 128 (45): 14422-14423 (2006). [DOI Link](#)

“One-Step Microwave Preparation of Well-Defined and Functionalized Polymeric Nanoparticles”

Zesheng An, Wei Tang, Craig J. Hawker, Galen D. Stucky

Journal of the American Chemical Society, 128 (47): 15054-15055 (2006). [DOI Link](#)

“Control of Interchain Contacts, Solid-State Fluorescence Quantum Yield, and Charge Transport of Cationic Conjugated Polyelectrolytes by Choice of Anion”

Renqiang Yang, Andres Garcia, Dmitry Korystov, Alexander Mikhailovsky, Guillermo C. Bazan, and Thuc-Quyen Nguyen

Journal of the American Chemical Society, 128 (51): 16532-16539 (2006). [DOI Link](#)

"Encapsulation of ZnS:Mn²⁺ Nanocrystals with Diblock Copolymers"

Sangcheol Kim, Frédéric S. Diana, Pierre M. Petroff and Edward J. Kramer

Journal of Polymer Science Part B: Polymer Physics, 44 (22): 3227-3233 (2006). [DOI Link](#)

2005:

“Water/Methanol-Soluble Conjugated Copolymer as an Electron-Transport Layer in Polymer Light-Emitting Diodes,”

W. Ma, P. K. Iyer, X. Gong, B. Liu, D. Moses, G. C. Bazan, A. J. Heeger,

Advanced Materials, 17(3): 274-277 (2005). [DOI Link](#)

“Combinatorial electrochemical synthesis and screening of Pt-WO₃ catalysts for electro-oxidation of methanol,”

Shrisudersan Jayaraman, Sung-Hyeon Baeck, Thomas F. Jaramillo, Alan Kleiman-Shwarsstein, Eric McFarland,

Review of Scientific Instruments, 76: 062227-1 – 062227-5 (2005). [DOI Link](#)

“Water-Soluble [2.2] Paracyclophane Chromophores with Large Two-Photon Action Cross Sections,”

Han Young Woo, Janice W. Hong, Bin Liu, Alexander Mikhailovsky, Dmitry Korystov, Guillermo Bazan,

Journal of the American Chemical Society, 127(3): 820-821 (2005). [DOI Link](#)

“Solvatochromism of Distyrylbenzene Pairs Bound Together by [2.2]Paracyclophane: Evidence for a Polarizable "Through-Space" Delocalized State,”

Janice W. Hong, Han Young Woo, Bin Liu, Guillermo Bazan,

Journal of the American Chemical Society, 127(20): 7435-7443 (2005). [DOI Link](#)

“Wetting morphologies at microstructured surfaces,”

Ralf Seeman, Martin Brinkmann, Edward J. Kramer, Frederick F. Lange, and Reinhard Lipowsky,

Proceedings of National Academy of Sciences, 102(6): 1848-1852 (2005). [DOI Link](#)

“Single-crystal mesoporous silica ribbons,”

Jianfang Wang, Chia-Kuang Tsung, Ryan C. Hayward, Yiying Wu, and Galen D. Stucky,
Angewandte Chemie International Edition, 44 (2): 332-336 (2005). [DOI Link](#)

"Morphology and Thermodynamic Behavior of Syndiotactic Polypropylene-Poly(Ethylene-co-Propylene) Block Copolymers Prepared by Living Olefin Polymerization,”

J. Ruokolainen, R. Mezzenga, G.H. Fredrickson, E.J. Kramer, P.D. Hustad, and G.W. Coates,
Macromolecules, 38: 851-860 (2005). [DOI Link](#)

“Microwave Enhanced Reaction Rates for Nanoparticle Synthesis,”

Jeffrey A. Gerbec, Donny Magana, Aaron Washington, and Geoffrey F. Strouse,
Journal of the American Chemical Society, 127 (45): 15791-15800 (2005). [DOI Link](#)

“Multilayer Polymer Light-Emitting Diodes: White-Light Emission with High Efficiency,”

X. Gong, S. Wang, D. Moses, G. C. Bazan, A. J. Heeger,
Advanced Materials, 17 (17): 2053-2058 (2005). [DOI Link](#)

“Synthesis and Characterization of Pt-WO₃ as Methanol Oxidation Catalysts for Fuel Cells,”

Shrisudersan Jayaraman, Thomas F. Jaramillo, Sung-Hyeon Baeck, and Eric W. McFarland,
Journal of Physical Chemistry B, 109 (48): 22958-22966 (2005). [DOI Link](#)

“Two-Photon Absorption in Aqueous Micellar Solutions,”

Han Young Woo, Dmitry Korystov, Alexander Mikhailovsky, Thuc-Quyen Nguyen, and Guillermo C. Bazan,
Journal of the American Chemical Society, 127 (40): 13794-13795 (2005). [DOI Link](#)

“Time-Resolved Studies of Fluorescence and Band-Edge Charge Carriers dynamics in InGap Colloidal Quantum Dots,”

Alexander A. Mikhailovsky, Frederic S. Diana, Sangcheol Kim, Edward J. Kramer, and Pierre M. Petroff,
Proceedings of SPIE, 5929: 59290R1-59290R9 (2005). [DOI Link](#)

2004:

“Poly(3-hexylthiophene) Field-Effect Transistors with High Dielectric Constant Gate Insulator,”

Guangming Wang, Daniel Moses and Alan J. Heeger, Hong-mei Zhang, Mux Narasimhan and R.E. Demaray,
Journal of Applied Physics, 95(1): 316-322 (2004). [DOI Link](#)

“Conjugated polymer composites for use in electrophosphorescent light-emitting diodes,”

Xiong Gong, Wanli Ma, Jacek C. Ostrowski, Guillermo C. Bazan, Daniel Moses, and Alan J. Heeger
Proceedings of SPIE, 5214: 94-113 (2004). [DOI Link](#)

“Excitation Energy Transfer from Polyfluorene to Fluorenone Defects,”

X. Gong, D. Moses, A.J. Heeger,
Synthetic Metals, 141(1-2): 17-20 (2004). [DOI Link](#)

“Fabrication of Regioregular Poly(3-hexylthiophene) Field-Effect Transistors by Dip-Coating,”

Guangming Wang, Takashi Hirasa, Daniel Moses, Alan J. Heeger,
Synthetic Metals, 146: 127-132 (2004). [DOI Link](#)

“White electrophosphorescence from semiconducting polymer blends,”

X. Gong, W. L. Ma, J. C. Ostrowski, G. C. Bazan, D. Moses, and A. J. Heeger,
Advanced Materials, 16: 615-619 (2004). [DOI Link](#)

“End-capping as a method for improving carrier injection in electrophosphorescent light-emitting diodes,”
X. Gong, W.L. Ma, J. C. Ostrowski, K. Bechgaard, G. C. Bazan, D. Moses, A. J. Heeger and S. Xiao,
Advanced Functional Materials, 14: 393-397 (2004). [DOI Link](#)

“White Light Electrophosphorescence from Polyfluorene-based Light-Emitting Diodes: Utilization of Fluorenone Defects,”

X. Gong, D. Moses, A. J. Heeger,
Journal of Physical Chemistry B, 108(25): 8601-8605 (2004). [DOI Link](#)

“Self-assembling nanoparticles into holographic nanopatterns,”

Seung-Heon Lee, Frederic Diana, Antonio Badolato, Pierre Petroff, Ed Kramer,
Journal of Applied Physics, 95(10): 5922-5924 (2004). [DOI Link](#)

“Patterning of polymers: precise channel stamping by optimizing wetting properties,”

Ralf Seeman, Edward J. Kramer, and Frederick F. Lange,
New Journal of Physics, 6(111): 1-10 (2004). [DOI Link](#)

“Mesostuctured Composite Materials for Multibit-per Site Optical Data Storage,”

Jianfang Wang and Galen D. Stucky,
Advanced Functional Materials, 14(5): 409-415 (2004). [DOI Link](#)

“Synthesis of Mesoporous Silica Nanofibers with Controlled Pore Architectures”,

Jianfang Wang, Chia-Kuang Tsung, Wenbin Hong, Yiyang Wu, Jing Tang, and Galen D. Stucky,
Chemistry of Materials, 16(24): 5169-5181 (2004). [DOI Link](#)

“Novel red phosphors for solid state lighting: The System $\text{NaM}(\text{WO}_4)_{2-x}(\text{MoO}_4)_x$; Eu^{3+} (M=Gd, Y, Bi),”

S. Neeraj, N. Kijima and A.K. Cheetham,
Chemical Physics Letters, 387: 2-6 (2004). [DOI Link](#)

“Novel red phosphors for solid state lighting: the System $\text{Bi}_x\text{Ln}_{1-x}\text{VO}_4$; Eu^{3+} / Sm^{3+} (Ln=Y, Gd)”,

S. Neeraj, N. Kijima and A.K. Cheetham,
Solid State Communications, 131(1): 65-69 (2004). [DOI Link](#)

“NMR Analysis of Surfaces and Interfaces in 2nm CdSe,”

Mia Berrettini, Gary Braun, Jerry G. Hu, and Geoffrey Strouse,
Journal of the American Chemical Society, 126(22): 7063-7070 (2004). [DOI Link](#)

“Polyelectrolyte-Quantum Dot Multilayer Films Fabricated by Combined Layer-by Layer Assembly and Langmuir Schaefer Deposition,”

Geoffrey M. Lowman, Sarah L. Nelson, Sara M. Graves, Geoffrey F. Strouse, Steven K. Burrato,
Langmuir, 20(6): 2057-2059 (2004). [DOI Link](#)

“Synthesis of Block Copolymer Segments Containing Different Ratios of Ethylene and 5-Norbornen-2-yl Acetate,”

Steven J. Diamanti, Vikram Khanna, Atsushi Hotta, Diane Yamakawa, Fumihiko Shimizu, Edward J. Kramer, Glenn H. Fredrickson, and Guillermo C. Bazan,
Journal of the American Chemical Society, 126(34): 10528-10529 (2004). [DOI Link](#)

2003:

“Stabilization of Semiconducting Polymers with Silsesquioxane,”
S. Xiao, M. Nguyen, X. Gong, Y. Cao, H. B. Wu, D. Moses, A. J. Heeger,
Advanced Functional Materials, 13: 25-29 (2003). [DOI Link](#)

“Electrophosphorescence from a conjugated copolymer doped with an iridium complex: High brightness and improve operational stability,”
X. Gong, J. C. Ostrowski, G. C. Bazan, D. Moses, A. J. Heeger, M. S. Liu and A. K.-Y. Jen,
Advanced Materials, 15(1): 45-49 (2003). [DOI Link](#)

“Beyond Superquenching: Hyper-efficient energy transfer from conjugated polymers to gold nanomaterials,”
Chunhai Fan, Shu Wang, Janice W. Hong, Guillermo C. Bazan, Kevin W. Plaxco, and Alan J. Heeger,
Proceedings of the National Academy of Sciences, 100(11): 6297-6301 (2003). [DOI Link](#)

“Stabilized Blue Emission from Polyfluorene-based Light Emitting Diode – Elimination of Fluorenone Defects,”
X. Gong, P.K.Iyer, D. Moses, G.C. Bazan, A. J. Heeger, S.S. Xiao,
Advanced Functional Materials, 13(4): 325-330 (2003). [DOI Link](#)

“High performance polymer based electrophosphorescent light-emitting diodes,”
X. Gong, J. C. Ostrowski, D. Moses, G. C. Bazan, and A. J. Heeger,
Journal of Polymer Science Part B: Polymer Physics, 41: 2691-2705 (2003). [DOI Link](#)

“Electrophosphorescence from a polymer guest-host system with an iridium complex as guest: Förster energy transfer and charge trapping,”
X. Gong, J. C. Ostrowski, G. C. Bazan, D. Moses, A. J. Heeger,
Advanced Functional Materials, 13: 439-444 (2003). [DOI Link](#)

“Increased Mobility from Regioregular Poly(3-hexylthiophene) Field-Effect Transistors,”
Alan Heeger, Guangming Wang, James Swensen, Daniel Moses,
Journal of Applied Physics, 93(10): 6137-6141 (2003). [DOI Link](#)

“Fabrication of hcp-Co Nanocrystals via Rapid Pyrolysis in Inverse PS-*b*-P2VP Micelles and Thermal Annealing,”
Frederic Diana, Seung-Heon Lee, Pierre M. Petroff, Edward J. Kramer,
Nanoletters, 3(7): 891-895 (2003). [DOI Link](#)

“Structure-Selective Synthesis of Mesostructured/Mesoporous Silica Nanofibers,”
Jianfang Wang, Jinping Zhang, Beverly Y. Asoo, and Galen D. Stucky,
Journal of the American Chemical Society, 125(46): 13966-13967 (2003). [DOI Link](#)

“Low-Shrinkage, High-Hardness, and Transparent Hybrid Coatings: Poly(methyl methacrylate) Cross-Linked with Silsesquioxane,”
J. H. Harreld, A. Esaki, G.D. Stucky,
Chemistry of Materials, 15(18): 3481-3489 (2003). [DOI Link](#)

2002:

“High-Efficiency Polymer-Based Electrophosphorescent Devices,”
X. Gong, J. C. Ostrowski, M. R. Robinson, D. Moses, G. C. Bazan, A. J. Heeger,
Advanced Materials, 14: 581-585 (2002). [DOI Link](#)

