

Zachary M. Hudson

Department of Chemistry, The University of British Columbia

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Institution	Position/Degree	Advisor	Dates
University of California, Santa Barbara, USA	Postdoctoral Fellow	C. J. Hawker	09/2014 – 07/2015
University of Bristol, UK	Postdoctoral Fellow	I. Manners	09/2012 – 08/2014
Queen's University, Canada	Ph.D.	S. Wang	09/2008 – 08/2012
Nagoya University, Japan	Graduate Fellow	S. Yamaguchi	06/2011 – 08/2011
Jilin University, China	Graduate Fellow	Y. Wang	05/2009 – 06/2009
Queen's University, Canada	B.Sc.	S. Wang	09/2004 – 04/2008

Appointments

Institution	Position	Dates
The University of British Columbia, Department of Chemistry	Associate Professor and Canada Research Chair	07/2021 – Present
	Assistant Professor and Canada Research Chair	07/2015 – 06/2021
Natural Sciences and Engineering Research Council of Canada	Council Member	05/2018 – 02/2021

Selected Awards and Distinctions

- 2022 Polymer International – IUPAC Award
- 2022 ACS Herman F. Mark Young Scholar Award
- 2021 *Journal of Materials Chemistry* Emerging Investigator
- 2021 *Polymer Chemistry* Emerging Investigator
- 2021 Dow Lecturer – University of Victoria
- 2020 ACS PMSE Young Investigator Award
- 2020 CSC Emerging Materials Investigator Award
- 2020 *Chemistry of Materials* Up-and-Coming Investigator
- 2019 CNC-IUPAC Travel Award
- 2016 Tier II Canada Research Chair
- 2014 UCSB Elings Prize Fellowship in Experimental Science
- 2014 NSERC Postdoctoral Fellowship
- 2013 EU Marie Curie International Incoming Fellowship
- 2013 Canadian Council of University Chemistry Chairs Doctoral Award
 - Awarded for the top Ph.D. thesis in chemistry in Canada.
- 2012 Governor General's Academic Gold Medal
 - Awarded for the top Ph.D. thesis at each university in Canada.
- 2012 Chemical Institute of Canada Award for Graduate Work in Inorganic Chemistry
 - Awarded for the top Ph.D. thesis in inorganic chemistry in Canada.
- 2011 Japan Society for the Promotion of Science (JSPS) Graduate Fellowship
- 2009 NSERC Canada Graduate Scholarship (CGS-D)
- 2008 NSERC Canada Graduate Scholarship (CGS-M)
- 2008 Governor General's Academic Silver Medal
- 2008 Department of Chemistry Medal
- 2007 Canadian Society for Chemistry Medal

Teaching

Course	Students	Class Hours	Term	Rating ^a
CHEM 427 – Applications of Materials Chemistry	26	36	2020	4.9/5
CHEM 120 – Structure and Bonding in Chemistry	256	36	2020	4.9/5
CHEM 427 – Applications of Materials Chemistry	18	36	2019	4.7/5
CHEM 121 – Structure and Bonding in Chemistry	220	36	2019	4.9/5
CHEM 427 – Applications of Materials Chemistry	20	36	2018	4.9/5
CHEM 121 – Structure and Bonding in Chemistry	220	36	2018	4.8/5
CHEM 427 – Applications of Materials Chemistry	20	36	2017	4.9/5
CHEM 121 – Structure and Bonding in Chemistry	234	36	2017	4.8/5
CHEM 121 – Structure and Bonding in Chemistry	240	36	2016	4.9/5
CHEM 121 – Structure and Bonding in Chemistry	222	36	2015	4.7/5

^aBased on answer to teaching evaluation question: "Overall, the instructor was an effective teacher."

Service

Government Relations

- NSERC Council, Member (2018-2021)
- NSERC-Chemistry Liason Committee, Founding Member (2016-2018)
- Canadian Society for Chemistry Advocacy Committee, Founding Member (2013-2015)
- Hosted 5 MPs and MLAs from 2016-Present for lab tours, introduction to UBC's research facilities, roundtables on scientific policy, and laboratory demonstrations. These included the Federal Minister for Science, Minister for Digital Government, and Parliamentary Secretary for Science, and the Provincial Minister for Jobs, Trade and Technology, and the Minister of Justice.

UBC Committees

- Curriculum Committee (2022-Present)
- Strategic Faculty Hiring Committee (2022-Present)
- Advisory Committee, UBC Sustainability Hub (2022)
- Chemists for Diversity and Inclusion, Faculty Liason (2020-2021)
- UBC Women in Science Graduate Recruiting Task Force (2020-2021)
- Space Committee, Member (2019-2021)
- Graduate Recruiting Committee, Chair (2017-2021)
- Fundraising and Development Committee, Member (2017-2019)
- Research Benchmarking Committee, Member (2017)
- Inorganic Discussion Group Coordinator (2016)
- Undergraduate Recruiting Committee, Member (2016)
- Graduate Recruiting Committee, Member (2015, 2016)
- Graduate Student Symposium Committee, Member (2015)

Conferences & Outreach

- Materials Division Program Chair, Canadian Chemistry Conference and Exhibition, Vancouver, (2023)
- Symposium Organizer, ACS National Meeting, Chicago, IL, USA (2022)
- Symposium Organizer, ECS Meeting, Vancouver, BC (2022)
- Event Coordinator, Verna J. Kirkness Indigenous Outreach Program (2022)
- Conference Co-organizer, 24th International Symposium on the Photochemistry and Photophysics of Coordination Compounds, Vancouver, BC (2022)
- Event Coordinator, Verna J. Kirkness Indigenous Outreach Program (2021)
- Symposium Co-Organizer, Canadian Chemistry Conference and Exhibition, Montreal, QC (2021)
- Presenter, First-Year Open House Lab Tours (2016, 2018, 2019)
- Conference Co-Organizer, International Conference on Heteroatom Chemistry, Vancouver, BC (2016)
- Demonstrator, UBC Welcome Event (2016)

Graduate and Postdoctoral Supervision

Student Name	Type	Dates
Feng Shao	PDF	04/2018 – 03/2020
Chris Tonge	PhD	09/2015 – 07/2020
Kyle Thompson	MSc	09/2015 – 03/2019
Ethan Sauvé	PhD	09/2016 – 03/2021
Nathan Paisley	PhD	09/2016 – 01/2022
Yonghui Wang	MSc	09/2016 – 02/2019
Cheyenne Christopherson	PhD	09/2017 – 01/2022
Don Mayder	PhD	09/2017 – Present
Alex Polgar	PhD	09/2018 – 07/2022
Jade Poisson	PhD	09/2018 – Present
Ryoga Hojo	PhD	09/2020 – Present
Pengfei Xu	PhD	09/2020 – Present
William Primrose	PhD	09/2020 – Present
Katrina Bergmann	PhD	09/2021 – Present
Seja Elgadi	PhD	09/2021 – Present
Lemin Li	PhD	09/2021 – Present
Angelica Pym	PhD	09/2021 – Present
Bruno Luppi	PDF	10/2021 – Present
Min Liu	PDF	01/2022 – Present
Arminé Karapetyan	MSc	01/2022 – Present
Finn Plny	MSc	04/2022 – Present
Athan Gogoulis	PhD	09/2022 – Present
Peiqi Hu	PhD	09/2022 – Present

Undergraduate Supervision

Student Name	Position ^a	Dates
Susan Cheng	Summer RA / CHEM 449	09/2015 – 08/2016
Daniel Bajj	Summer RA / CHEM 449	05/2016 – 08/2017
Ethan Sauvé	Summer RA	05/2016 – 02/2016
Jordan Heyes	Summer RA / CHEM 449	09/2016 – 08/2017
Teresa Howard	Summer RA	09/2016 – 08/2017
Lasya Vankayala	Volunteer	01/2017 – 04/2017
Sarah Halldorson	Summer RA / CHEM 449	05/2017 – 08/2019
Luigi Alde	Volunteer	01/2018 – 04/2018
Brandon Kato	Summer RA	01/2018 – 08/2018
Harrison Lefeaux	CHEM 445	09/2017 – 04/2018
Hayley Macmillan	CHEM 449	09/2017 – 04/2018
Faith Park	Summer RA	05/2018 – 08/2018
Angela Lin	Summer RA	05/2018 – 08/2019
Lingzi Gao	CHEM 445	09/2018 – 05/2019
Jaesuk Park	CHEM 445	09/2018 – 05/2019
Shine Huang	Volunteer/ CHEM 449	05/2019 – 08/2021
Annelie Reyes	CHEM 445	09/2019 – 04/2020
Brendan Liaw	CHEM 445	09/2019 – 04/2020
Dania Samara	Volunteer	01/2020 – 04/2020
Anoop Sangha	Volunteer	01/2020 – 04/2020
Connor Dalton	CHEM 449	09/2020 – 04/2021
Chol John Akech	Volunteer	01/2022 – Present
Wendy Cai	Summer RA	05/2022 – 08/2022

^aCHEM 445 and 449 are the Honours Thesis programs at UBC.

Publications

2022

87. **Mechanistic Principles for Engineering Hierarchical Porous Metal–Organic Frameworks**
M. Liu, L. Zu and [Z. M. Hudson](#)
ACS Nano **2022**, accepted.
86. **Dibenzodipyridophenazine-Based TADF Materials for Time-Gated Cellular Imaging Using Water-Dispersible Nanoparticles**
D. M. Mayder, C. J. Christopherson, W. L. Primrose, A. S.-M. Lin and [Z. M. Hudson](#)
J. Mater. Chem. B **2022**, in press. DOI: 10.1039/D2TB01252A
85. **Heptazine-Based TADF Materials for Nanoparticle-Based Non-linear Optical Bioimaging**
D. M. Mayder, R. Hojo, W. L. Primrose, C. M. Tonge and [Z. M. Hudson](#)
Adv. Funct. Mater. **2022**, in press. DOI: 10.1002/adfm.202204087
84. **Miktoarm Star Polymers: Synthesis and Applications**
M. Liu, J. R. Blankenship, A. E. Levi, Q. Fu, [Z. M. Hudson](#) and C. M. Bates
Chem. Mater. **2022**, 34, 6188–6209.
83. **Deep-Blue Emission and Thermally Activated Delayed Fluorescence via Dimroth Rearrangement of Tris(triazolo)triazines**
R. Hojo, D. M. Mayder and [Z. M. Hudson](#)
J. Mater. Chem. C **2022**, in press. DOI: 10.1039/D2TC01153K
82. **Donor Modification of Thermally Activated Delayed Fluorescence Photosensitizers for Organic Atom Transfer Radical Polymerization**
A. M. Polgar, S. H. Huang and [Z. M. Hudson](#)
Polym. Chem. **2022**, 13, 3892-3903.
81. **Rheology of Mature Fine Tailings**
J. Piette, A. Abbasi Moud, J. Poisson, B. Derakhshandeh, [Z. M. Hudson](#) and S. G. Hatzikiriakos
Phys. Fluids **2022**, 34, 063104.
80. **TADF Sensitizers as Organic and Green Alternatives in Energy Transfer Photocatalysis**
R. Hojo, A. M. Polgar and [Z. M. Hudson](#)
ACS Sus. Chem. Eng. **2022**, 10, 9665–9678.
79. **Luminescent Surface-Tethered Polymer Brush Materials**
J. Poisson and [Z. M. Hudson](#)
Chem. Eur. J., **2022**, 28, e202283262.
78. **Estimating Phosphorescent Emission Energies in Ir(III) Complexes using Large-Scale Quantum Computing Simulations**
S. N. Genin, I. G. Ryabinkin, N. R. Paisley, S. O. Whelan, M. G. Helander and [Z. M. Hudson](#)
Angew. Chem. Int. Ed. **2022**, 61, e202116175.
77. **Design of High-Performance Thermally Activated Delayed Fluorescence Emitters Containing s-Triazine and s-Heptazine with Molecular Orbital Visualization by STM**
D. M. Mayder, C. M. Tonge, G. D. Nguyen, R. Hojo, N. R. Paisley, J. Yu, G. Tom, S. A. Burke and [Z. M. Hudson](#)
Chem. Mater. **2022**, 34, 2624–2635.
76. **An Imidazoacridine-Based TADF Material as Efficient Organic Photosensitizer for Visible-Light-Promoted [2+2] Cycloaddition**
M. S. Oderinde, E. R. Sauv e, D. M. Mayder and [Z. M. Hudson](#)
Chem. Sci. **2022**, 13, 2296–2302.
75. **A Grafting-Through Strategy for the Synthesis of Bottlebrush Nanofibers from Organic Semiconductors**
K. A. Thompson, D. M. Mayder, C. M. Tonge, E. R. Sauv e, H. R. Lefeaux and [Z. M. Hudson](#)
Can. J. Chem. **2022**, in press.

2021

74. **Red-Emissive Cell-Penetrating Polymer Dots Exhibiting Thermally Activated Delayed Fluorescence for Time-Gated Cellular Imaging**
C. J. Christopherson, N. R. Paisley, Z. Xiao, W. R. Algar and Z. M. Hudson
J. Am. Chem. Soc. **2021**, *143*, 13342–13349.
73. **Polymer Dots with Enhanced Photostability, Quantum Yield, and Two-Photon Cross-Section Using Structurally Constrained Deep-Blue Fluorophores**
C. M. Tonge, D. M. Mayder, G. D. Nguyen, M. V. Tran, G. Tom, G. H. Darwish, R. Gupta, K. Lix, S. Kamal, W. R. Algar, S. A. Burke and Z. M. Hudson
J. Am. Chem. Soc. **2021**, in press. DOI: 10.1021/jacs.1c06094
72. **Preparation of Patterned and Multilayer Thin Films for Organic Electronics via Oxygen-Tolerant SI-PET-RAFT**
J. Poisson, A. M. Polgar, M. Fromel, C. W. Pester and Z. M. Hudson
Angew. Chem. Int. Ed. **2021**, *60*, 19988–19996.
71. **Near-Infrared Emitting Boron Difluoride Curcuminoid-Based Polymers Exhibiting Thermally Activated Delayed Fluorescence as Biological Imaging Probes**
N. R. Paisley, S. V. Halldorson, M. V. Tran, R. Gupta, S. Kamal, W. R. Algar and Z. M. Hudson
Angew. Chem. Int. Ed. **2021**, *60*, 18630–18638.
70. **Deep-Blue Fluorophores with Imidazoacridine Acceptors: Enhancing Photostability and Two-Photon Fluorescence using Structural Constraint**
E. R. Sauvé, C. M. Tonge and Z. M. Hudson
J. Mater. Chem. C **2021**, *9*, 4164-4172.
69. **Donor-Acceptor Materials Exhibiting Deep Blue Emission and Thermally Activated Delayed Fluorescence with Tris(triazolo)triazine**
R. Hojo, D. M. Mayder and Z. M. Hudson
J. Mater. Chem. C **2021**, *9*, 14342–14350.
68. **Thermally Activated Delayed Fluorescence Sensitization: Shaping the Excited State Pathways**
A. M. Polgar and Z. M. Hudson
Chem. Commun. **2021**, 2021, 57, 10675–10688.
67. **Exploring the Scope of Through-Space Charge Transfer Thermally Activated Delayed Fluorescence in Acrylic Donor-Acceptor Copolymers**
J. Poisson, C. M. Tonge, N. R. Paisley, E. R. Sauvé, H. McMillan, S. V. Halldorson and Z. M. Hudson
Macromolecules **2021**, *54*, 2466–2476.
66. **Enhancement of Red Thermally Assisted Fluorescence in Bottlebrush Block Copolymers**
A. M. Polgar, J. Poisson, C. J. Christopherson and Z. M. Hudson
Macromolecules **2021**, *54*, 7880–7889.
65. **Yield Stress and Wall Slip of Kaolinite Networks**
A. Abbasi Moud, J. Poisson, Z. M. Hudson and S. G. Hatzikiriakos
Phys. Fluids **2021**, *33*, 053105.

2020

64. **Polymer Crystallization by Photochemical Dimerization of a PDMS Copolymer**
T. Wright, Y. Petel, C. Zellman, E.R. Sauvé, Z.M. Hudson, C. Michal and M.O. Wolf
Chem. Sci. **2020**, *11*, 3081-3088.
63. **Organization of Chromophores into Multiblock Bottlebrush Nanofibers Allows for Regulation of Energy Transfer Processes**
E.R. Sauvé, C.M. Tonge and Z.M. Hudson
Chem. Mater. **2020**, *32*, 2208-2219.

62. **Towards Biodegradable Electronics: Ionic Diode Based on a Cellulose Nanocrystals-Agarose Hydrogel**
K. Nyamayaro, P. Keyvani, F. D'Acierno, J. Poisson, [Z.M. Hudson](#), C. Michal, J. Madden, S. Hatzikiriakos, P. Mehrkhodavandi
ACS Appl. Mater. Interfaces **2020**, *12*, 52182–52191.
61. **Thermally Assisted Fluorescent Polymers: Polycyclic Aromatic Materials for High Color Purity and White Light Emission**
A.M. Polgar, C.M. Tonge, C.J. Christopherson, N.R. Paisley, A.C. Reyes and [Z.M. Hudson](#)
ACS Appl. Mater. Interfaces **2020**, *12*, 38602-38613.
60. **Color-Tunable Thermally-Activated Delayed Fluorescence in Oxadiazole-Based Acrylic Copolymers: Photophysical Properties and Applications in Ratiometric Oxygen Sensing**
C.M. Tonge, N.R. Paisley, A.M. Polgar, K. Lix, W.R. Algar and [Z.M. Hudson](#)
ACS Appl. Mater. Interfaces **2020**, *12*, 6525-6535.
59. **1,8-Naphthalimide-Based Polymers Exhibiting Deep-Red Thermally Activated Delayed Fluorescence and their Application in Ratiometric Temperature Sensing**
C.J. Christopherson, D.M. Mayder, J. Poisson, N.R. Paisley, C.M. Tonge and [Z.M. Hudson](#)
ACS Appl. Mater. Interfaces **2020**, *12*, 20000-20011.
58. **Dextran-Functionalization of Semiconducting Polymer Dots and Conjugation with Tetrameric Antibody Complexes for Bioanalysis and Imaging**
K. Lix, M.V. Tran, M. Massey, K. Rees, E.R. Sauvé, [Z.M. Hudson](#) and W.R. Algar
ACS Appl. Bio. Mater. **2020**, *3*, 432-440.
57. **Bis(hexamethylazatriangulene)sulfone: A High-Stability Deep Blue-Violet Fluorophore with 100% Quantum Yield and CIEy < 0.07**
C.M. Tonge, J. Zeng, Z. Zhao, B.Z. Tang and [Z.M. Hudson](#)
J. Mater. Chem. C **2020**, *8*, 5150-5155.
56. **Blue to Yellow Thermally Activated Delayed Fluorescence with Quantum Yields Near Unity in Acrylic Polymers Based on D- π -A Pyrimidines**
A.M. Polgar, J. Poisson, N.R. Paisley, C.J. Christopherson, A.C. Reyes and [Z.M. Hudson](#)
Macromolecules **2020**, *53*, 2039-2050.
55. **Tunable Benzothiadiazole-Based Donor-Acceptor Materials for Two-Photon Excited Fluorescence**
N.R. Paisley, C.M. Tonge, D.M. Mayder, K.A. Thompson and [Z.M. Hudson](#)
Mater. Chem. Front. **2020**, *4*, 555 - 566.
54. **Thermally Activated Delayed Fluorescence in 1,3,4-Oxadiazoles with π -Extended Donors**
D.M. Mayder, C.M. Tonge and [Z.M. Hudson](#)
J. Org. Chem. **2020**, *85*, 11094–11103.
53. **Donor-Acceptor Materials Exhibiting Thermally Activated Delayed Fluorescence using a Planarized N-phenylbenzimidazole Acceptor**
E.R. Sauvé, J. Paeng, S. Yamaguchi and [Z.M. Hudson](#)
J. Org. Chem. **2020**, *85*, 108-117.
52. **Hierarchical Self-Assembly of Luminescent Triblock Bottlebrush Copolymers**
F. Shao, Y. Wang, C.M. Tonge, E.R. Sauvé and [Z.M. Hudson](#)
Polym. Chem. **2020**, *11*, 1062-1071.
51. **Stimuli-Responsive Thermally Activated Delayed Fluorescence in Polymer Nanoparticles and Thin Films: Applications in Chemical Sensing and Imaging**
N.R. Paisley, C.M. Tonge and [Z.M. Hudson](#)
Front. Chem. **2020**, *8*, 229.

2019

50. **Aggregation-Induced Energy Transfer in Colour-Tunable Multiblock Bottlebrush Nanofibers**
E.R. Sauv , C.M. Tonge and Z.M. Hudson
J. Am. Chem. Soc. **2019**, *141*, 16422-16431.
49. **Interface-Dependent Aggregation-Induced Delayed Fluorescence in Bottlebrush Polymer Nanofibers**
C.M. Tonge and Z.M. Hudson
J. Am. Chem. Soc. **2019**, *141*, 13970-13976.
48. **Self-Assembly of Giant Bottlebrush Block Copolymer Surfactants from Luminescent Organic Electronic Materials**
Y. Wang, F. Shao, E.R. Sauv , C.M. Tonge and Z.M. Hudson
Soft Matter **2019**, *15*, 5421 - 5430.
47. **Cu(0)-RDRP as an Efficient and Low-Cost Synthetic Route to Blue-Emissive Polymers for OLEDs**
C.M. Tonge, F. Yuan, Z.-H. Lu and Z.M. Hudson
Polym. Chem. **2019**, *10*, 3288-3297.
46. **Fluorescent Heterotelechelic Single-Chain Polymer Nanoparticles: Synthesis, Spectroscopy and Cellular Imaging**
D.N.F. Bajj, M.V. Tran, H.-Y. Tsai, H. Kim, N.R. Paisley, W.R. Algar and Z.M. Hudson
ACS Appl. Nano Mater. **2019**, *2*, 898–909.

2018

45. **Multiblock Bottlebrush Nanofibers from Organic Electronic Materials**
C.M. Tonge, E.R. Sauv , S. Cheng, T.A. Howard and Z.M. Hudson
J. Am. Chem. Soc. **2018**, *140*, 11599–11603.
44. **An Efficient Room-Temperature Synthesis of Highly Phosphorescent Styrenic Pt(II) Complexes and their Polymerization by ATRP**
D.M. Mayder, K.A. Thompson, C.J. Christopherson, N.R. Paisley and Z.M. Hudson
Polym. Chem. **2018**, *9*, 5418 - 5425.
43. **Synthesis of Phosphorescent Iridium-Containing Acrylic Monomers and their Room-Temperature Polymerization by Cu(0)-RDRP**
C.J. Christopherson, Z.S. Hackett, E.R. Sauv , N.R. Paisley, C.M. Tonge, D.M. Mayder and Z.M. Hudson
J. Polym. Sci. A: Polym. Chem. **2018**, *56*, 2539–2546.
42. **Synthesis of Polymeric Organic Semiconductors Using Semifluorinated Polymer Precursors**
N.R. Paisley, C.M. Tonge, E.R. Sauv , S.V. Halldorson and Z.M. Hudson
J. Polym. Sci. A: Polym. Chem. **2018**, *56*, 2183–2191.
41. **Polymerization of Acrylates Based on n-Type Organic Semiconductors using Cu(0)-RDRP**
C.M. Tonge, E.R. Sauv , N.R. Paisley, J. E. Heyes and Z.M. Hudson
Polym. Chem. **2018**, *9*, 3359-3367.
40. **Cu(0)-RDRP of Acrylates based on p-Type Organic Semiconductors**
E.R. Sauv , C.M. Tonge, N.R. Paisley, S. Cheng and Z.M. Hudson
Polym. Chem. **2018**, *9*, 1397-1403.
39. **Ti-Catalyzed Hydroamination for the Synthesis of Amine-Containing π -Conjugated Materials**
H. Hao, K.A. Thompson, Z.M. Hudson and L.L. Schafer
Chem. Eur. J. **2018**, *24*, 5562-5568.

2017

38. **Highly Photoluminescent Nonconjugated Polymers for Single-Layer Light Emitting Diodes**
Z.A. Page, C.-Y. Chiu, B. Narupai, D.S. Laitar, S. Mukhopadhyay, A. Sokolov, Z.M. Hudson, R. Bou Zerdan, A.J. McGrath, J.W. Kramer, B.E. Barton and C. J. Hawker
ACS Photonics, **2017**, *4*, 631-641.

2016

37. **Chemoselective Radical Dehalogenation and C–C Bond Formation on Aryl Halide Substrates Using Organic Photoredox Catalysts**
S.O. Poelma, G.L. Burnett, E.H. Discekici, K.M Mattson, N.J Treat, Y. Luo, Z.M. Hudson, S.L. Shankel, P.G. Clark, J.W. Kramer, C.J. Hawker and J. Read de Alaniz
J. Org. Chem. **2016**, *81*, 7155-7160.

2015

36. **Transformation and Patterning of Supermicelles using Dynamic Holographic Assembly**
O.E.C. Gould, H. Qiu, D.J. Lunn, J. Rowden, R.L Harniman, Z.M. Hudson, M.A Winnik, M.J. Miles and I. Manners
Nature Commun. **2015**, *6*, 10009.
35. **Multidimensional Hierarchical Self-Assembly of Amphiphilic Cylindrical Block Comicelles**
H. Qiu, Z.M. Hudson, M.A. Winnik and I. Manners
Science, **2015**, *347*, 1329-1332.
34. **A Highly Reducing Metal-Free Photoredox Catalyst: Design and Application in Radical Dehalogenations**
E.H. Discekici, N.J. Treat, S.O. Poelma, K.M. Mattson, Z.M. Hudson, Y. Luo, C.J. Hawker, J. Read de Alaniz
Chem. Commun. **2015**, *51*, 11705-11708.
33. **Fluorous Cylindrical Micelles of Controlled Length by Crystallization-Driven Self-Assembly of Block Copolymers in Fluorinated Media**
Z.M. Hudson, J. Qian, C.E. Boott, M.A. Winnik and I. Manners
ACS Macro Lett., **2015**, *4*, 187-191.
32. **A Facile Synthesis of Catechol-Functionalized Poly(Ethylene Oxide) Block and Random Copolymers** K.M Mattson, A.A. Latimer, A.J. McGrath, N.A. Lynd, P. Lundberg, Z.M. Hudson and C.J. Hawker
J. Polym. Sci. A: Polym. Chem. **2015**, *53*, 2685-2692.
31. **Triarylboron-Functionalized Metal Complexes for OLEDs**
Z.M. Hudson, X. Wang and S. Wang
Chapter 8 in "Organometallics and Related Molecules for Energy Conversion." Wong, W.-Y., Ed. Springer-Verlag: Heidelberg, **2015**, pp 207-239.

2014

30. **Gradient Crystallization-Driven Self-Assembly: Cylindrical Micelles with "Patchy" Coronal Nanosegregation via the Coassembly of Linear and Brush Block Copolymers**
J.R. Finnegan, D.J. Lunn, O.E.C. Gould, Z.M. Hudson G.R. Whittell, M.A. Winnik and I. Manners
J. Am. Chem. Soc. **2014**, *136*, 13835-13844.
29. **Tailored Hierarchical Micelle Architectures using Living Crystallization-Driven Self-Assembly in Two Dimensions**
Z.M. Hudson, C.E. Boott, M.E. Robinson, P.A. Rugar, M.A. Winnik and I. Manners
Nature Chem. **2014**, *6*, 893-898.
* Highlighted in *Nature Chem.*: "Self-Assembly: Served on a Nanoplate," C. Cai and J. Lin, **2014**, *6*, 857.
28. **Colour-Tunable Fluorescent Multiblock Micelles**
Z.M. Hudson, D.J. Lunn, M.A. Winnik and I. Manners
Nature Commun., **2014**, *5*:3372.
* Highlighted in *Chemical and Engineering News*: L.K. Wolf, "Nanopixels of Any Color," **2014**, *92*, 30.

27. **Assembly and Disassembly of Ferrocene-Based Nanotubes**
Z.M. Hudson and I. Manners
Science **2014**, *422*, 482-483. (Invited Perspective)
26. **Uniform, High Aspect Ratio Fiber-like Micelles and Block Co-Micelles with a Crystalline π -Conjugated Polythiophene Core by Self-Seeding**
J. Qian, X. Li, D.J. Lunn, J. Gwyther, Z.M. Hudson, E. Kynaston, P.A. Rupar, M.A. Winnik and I. Manners
J. Am. Chem. Soc. **2014**, *136*, 4121-4124.
25. **Impact of Constitutional Isomerism on Phosphorescence and Anion-Sensing Properties of Donor-Acceptor Organoboron Pt (II) Complexes**
M.-N. Belzile, X. Wang, Z.M. Hudson and S. Wang
Dalton Trans. **2014**, *43*, 13696-13703.

2012

24. **Modulating the Photoisomerization of N,C-Chelate Organoboranes with Triplet Acceptors**
Z.M. Hudson, S.-B. Ko, S. Yamaguchi and S. Wang
Org. Lett. **2012**, *14*, 5610-5613.
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11. **Switchable Three-State Fluorescence of a Nonconjugated Donor-Acceptor Triarylborane**
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Org. Lett. **2011**, *13*, 300-303.
10. **Highly Efficient Orange Electrophosphorescence from a Trifunctional Organoboron-Pt(II) Complex**
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8. **Enhancing Phosphorescence and Electrophosphorescence Efficiency of Cyclometalated Pt(II) Compounds with Triarylboron**
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7. **Linear and Star-Shaped Benzimidazolyl Derivatives: Syntheses, Photophysical Properties and Use as Highly Efficient Electron Transport Materials in OLEDs**
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6. **Enhancing the Photochemical Stability of *N,C*-Chelate Boryl Compounds: C-C Bond Formation versus C=C Bond *cis, trans*-Isomerization**
 C. Baik, Z.M. Hudson, H. Amarne and S. Wang
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5. **The Structure of an Anionic Coordination Polymer {K₂[Pt^{II}₂ Ag^I₈(2,2'-bipy)₂(O₂CCF₃)₁₄]_n}**
Z.M. Hudson, Y. Sun, B. Ross, R.Y. Wang and S. Wang.
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4. **Impact of Donor-Acceptor Geometry and Metal Chelation on Photophysical Properties and Applications of Triarylboranes**
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3. **Switchable Ambient-Temperature Singlet-Triplet Dual Emission in Triarylboron-Pt(II) Complexes**
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2. **Impact of the Linker on the Electronic and Luminescent Properties of Diboryl Compounds: Molecules with Two BMe₂ Groups and The Peculiar Behavior of 1,6-(BMe₂)₂pyrene**
S.-B. Zhao, P. Wücher, Z.M. Hudson, T.M. McCormick, X.-Y. Liu, S. Wang, X.-D. Feng and Z.-H. Lu
Organometallics, **2008**, *27*, 6446–6456.
1. **The Influence of Alkoxy Chain Length on the Ferroelectric Properties of Chiral Fluorene Liquid Crystals**
J.C. Roberts, Z.M. Hudson and R.P. Lemieux
J. Mater. Chem., **2008**, *18*, 3361–3365.

Award Lectures at Conferences:

1. "Interface-Dependent Aggregation-Induced Delayed Fluorescence in Bottlebrush Polymer Nanofibers." 103rd Canadian Chemistry Conference and Exhibition, Winnipeg, Canada (May 2020) (CSC Emerging Materials Investigator).
2. "Multiblock Nanofibers from Organic Electronic Materials." ACS National Meeting, San Francisco, California, USA (Aug. 2020) (ACS PMSE Early Investigator).
3. "Multiblock Nanofibers from Organic Electronic Materials." IUPAC-MACRO2020 – the 48th World Polymer Congress, Jeju, South Korea (Jun. 2020) (CNC-IUPAC Travel Award).
4. "Luminescent Polymer Nanoparticles for Diagnostics and Imaging." IUPAC MACRO2022 – the 49th World Polymer Congress, Winnipeg, Canada (July 2022) (Polymer International – IUPAC Award).
5. "Luminescent Polymer Nanoparticles for Diagnostics and Imaging." ACS National Meeting, Chicago, Illinois, USA (Aug 2020) (Herman F. Mark Young Scholar Award).

Invited Lectures at Conferences:

1. "Nanosegregation of Luminescence in Hierarchically Assembled Soft Materials." The Optical Society Advanced Photonics Meeting, Vancouver, British Columbia, Canada (Jun. 2016).
2. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." 102nd Canadian Chemistry Conference and Exhibition, Québec City, Québec, Canada (May 2019).
3. "Thermally Activated Delayed Fluorescence Materials as Ratiometric Luminescent Sensors." 103rd Canadian Chemistry Conference and Exhibition, Winnipeg, Manitoba, Canada (May 2020).
4. "Multiblock Nanofibers from Organic Electronic Materials." 103rd Canadian Chemistry Conference and Exhibition, Winnipeg, Manitoba, Canada (May 2020).
5. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." ACS Northwest Regional Meeting, Bellingham, Washington, USA (Jun. 2020).
6. "Interface-Dependent Aggregation-Induced Delayed Fluorescence in Bottlebrush Polymer Nanofibers." AIE20, Guangzhou, China (July 2021).
7. "Organization of Chromophores into Multiblock Bottlebrush Nanofibers Allows for Regulation of Energy Transfer Processes." 104th Canadian Chemistry Conference and Exhibition, Virtual Meeting (August 2021).
8. "Beyond OLEDs: Emerging Applications of Thermally Activated Delayed Fluorescence." 104th Canadian Chemistry Conference and Exhibition, Virtual Meeting (August 2021).
9. "Deep Red / Near Infrared TADF Materials: Emerging Applications in Bioimaging." Maximizing the rISC TADF Virtual Workshop. Durham, UK (September 2021)
10. "Emerging Applications of TADF Materials in Biological Sensing and Imaging" 4th International TADF Workshop. Fukuoka, Japan (October 2021).

11. "Energy Transfer Processes in Multiblock Bottlebrush Nanofibers from Organic Semiconductors." The International Chemical Congress of Pacific Basin Societies. Honolulu, USA (December 2021)
12. "Multiblock Nanofibers from Organic Electronic Materials." The International Chemical Congress of Pacific Basin Societies. Honolulu, USA (December 2021)
13. "Multiblock Nanofibers from Organic Electronic Materials." 7th International Conference on Advanced Nanomaterials and Nanotechnology (ICANN). IIT Guwahati, India (December 2021).
14. "Multiblock Nanofibers from Organic Electronic Materials." 241st Electrochemical Society Meeting, Vancouver, Canada (May 2022).
15. "Emerging Applications of TADF Materials in Biological Sensing and Imaging." Canadian Chemistry Conference and Exhibition, Calgary, Canada (June 2022).

Invited Lectures at Universities:

1. "Nanosegregation of Luminescence in Hierarchically Assembled Soft Materials." Tsinghua University, Beijing, PR China (May 2017).
2. "Nanosegregation of Luminescence in Hierarchically Assembled Soft Materials." Peking University, Beijing, PR China (May 2017).
3. "Simple Approaches to Complex Polymers for Optoelectronics: from Nanomaterials to Devices." Université de Montréal, Québec, Canada (Feb. 2019).
4. "Simple Approaches to Complex Polymers for Optoelectronics: from Nanomaterials to Devices." Université du Québec à Montréal, Québec, Canada (Feb. 2019).
5. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." Beijing University of Chemical Technology, Beijing, PR China (Jun. 2019).
6. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." Beijing Institute of Technology, Beijing, PR China (Jun. 2019).
7. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." Tsinghua University, Beijing, PR China (Jun. 2019).
8. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." McMaster University, Hamilton, Ontario, Canada (Nov. 2019).
9. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." University of Waterloo, Waterloo, Ontario, Canada (Nov. 2019).
10. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." University of Ottawa, Ottawa, Ontario, Canada (Feb. 2020).
11. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." Carleton University, Ottawa, Ontario, Canada (Feb. 2020).
12. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." Queen's University, Kingston, Ontario, Canada (Feb. 2020).
13. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." Simon Fraser University, Burnaby, British Columbia, Canada (Feb. 2020).
14. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." Western University, London, Ontario, Canada (Mar. 2020).

15. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." York University, Toronto, Ontario, Canada (Apr. 2020).
16. "Multiblock Bottlebrush Nanofibers from Organic Electronic Materials." University of Toronto, Toronto, Ontario, Canada (Apr. 2020).
17. "Beyond OLEDs: Emerging Applications of Thermally Activated Delayed Fluorescence." University of Toronto, Toronto, Ontario, Canada (May 2020 – Virtual Lecture)
18. "Beyond OLEDs: Emerging Applications of Thermally Activated Delayed Fluorescence." McGill University, Montreal, Quebec, Canada (Rescheduled to Dec 2020 as Virtual Lecture)
19. "Luminescent Polymer Nanoparticles for Diagnostics and Imaging." University of British Columbia Okanagan, British Columbia, Canada (Oct. 2020)
20. "Luminescent Polymer Nanoparticles for Diagnostics and Imaging." University of Victoria, British Columbia, Canada (Nov. 2020)
21. "Luminescent Polymer Nanoparticles for Diagnostics and Imaging." University of Sydney, Australia (Mar. 2022)
22. "Luminescent Polymer Nanoparticles for Diagnostics and Imaging." ETH Zürich, Switzerland (Jun. 2022)

Contributed Presentations at Conferences (+15 presentations as Ph.D. student / PDF):

1. "Heterotelechelic Single-Chain Polymer Nanoparticles for Selective Cell Labeling." 101st Canadian Chemistry Conference and Exhibition, Edmonton, AB, Canada (May 2018).
2. "Celebrating the Life of Suning Wang." 104th Canadian Chemistry Conference and Exhibition, Virtual Meeting (August 2021).
3. "Locked Planarity as a Route to Highly Photostable Organic Fluorophores." 24th International Symposium on the Photochemistry and Photophysics of Coordination Compounds, Vancouver, BC, Canada (July 2022).