Zachary M. Hudson

Department of Chemistry, The University of British Columbia

Address:
Department of Chemistry
The University of British Columbia
Vancouver, BC, Canada, V6T 1Z1

Tel: 604-880-9401
Fax: 604-822-2847
Email: zhudson@chem.ubc.ca
Web: hudsonlab.ca

Education and Training

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
NEXE Innovations	Chief Scientific Officer	12/2019 – Present
Natural Sciences and Engineering Research Council of Canada	Council Member	05/2018 – Present
The University of British Columbia, Department of Chemistry	Assistant Professor and Canada Research Chair	07/2015 – Present

Awards and Distinctions

At UBC:

2020 ACS PMSE Young Investigator Award
2020 CSC Emerging Materials Investigator Award
2019 CNC-IUPAC Travel Award
2016 Tier II Canada Research Chair

Prior to UBC (selected):

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
2011 Queen's University Department of Chemistry Teaching Assistant of the Year
2009 NSERC Canada Graduate Scholarship (CGS-D)
2009 Sun Microsystems Graduate Scholarship
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

Graduate and Postdoctoral Supervision

Student Name	Position	Dates	Role
Feng Shao	Postdoctoral Fellow	04/2018 – 03/2020	Supervisor
Chris Tonge	Ph.D. student	09/2015 – 07/2020	Supervisor
Kyle Thompson	M.Sc. student	09/2015 – 03/2019	Supervisor
Ethan Sauvé	Ph.D. student	09/2016 – Present	Supervisor
Nathan Paisley	Ph.D. student	09/2016 – Present	Supervisor
Yonghui Wang	M.Sc. student	09/2016 – 02/2019	Supervisor
Don Mayder	Ph.D. student	09/2017 – Present	Supervisor
Cheyenne Christopherson	Ph.D. student	09/2017 – Present	Supervisor
Alex Polgar	Ph.D. student	09/2018 – Present	Supervisor
Jade Poisson	Ph.D. student	09/2018 – Present	Supervisor
Ryoga Hojo	Ph.D. student	09/2020 – Present	Supervisor
Pengfei Xu	Ph.D. student	09/2020 – Present	Supervisor
William Primrose	Ph.D. student	09/2020 – Present	Supervisor

Undergraduate Supervision

Student Name	Position	Dates	Role
Susan Cheng	Summer student & CHEM 449	09/2015 – 08/2016	Supervisor
Daniel Bajj	Summer student & CHEM 449	05/2016 – 08/2017	Co-Supervisor
Ethan Sauvé	Summer student	05/2016 – 02/2016	Supervisor
Jordan Heyes	Summer student & CHEM 449	09/2016 – 08/2017	Supervisor
Teresa Howard	Summer student	09/2016 – 08/2017	Supervisor
Lasya Vankayala	Volunteer	01/2017 – 04/2017	Supervisor
Sarah Halldorson	Summer student & CHEM449	05/2017 – 08/2019	Supervisor
Luigi Alde	Volunteer	01/2018 – 04/2018	Supervisor
Brandon Kato	Summer student	01/2018 – 08/2018	Supervisor
Harrison Lefeaux	CHEM 445	09/2017 – 04/2018	Supervisor
Hayley Macmillan	CHEM 449	09/2017 – 04/2018	Supervisor
Faith Park	Summer student	05/2018 – 08/2018	Supervisor
Angela Lin	Summer student	05/2018 – 08/2019	Supervisor
Lingzi Gao	CHEM 445	09/2018 – 05/2019	Supervisor
Jaesuk Park	CHEM 445	09/2018 – 05/2019	Supervisor
Shine Huang	Volunteer	05/2019 – 08/2019	Supervisor
Annelie Reyes	CHEM 445	09/2019 – 04/2020	Supervisor
Brendan Liaw	CHEM 445	09/2019 – 04/2020	Supervisor
Dania Samara	Volunteer	01/2020 – 04/2020	Supervisor
Anoop Sangha	Volunteer	01/2020 – 04/2020	Supervisor

Teaching

Course	Students	Class Hours	Term	Rating[a]
CHEM 427 – Applications of Materials Chemistry[a]	26	36	2020	4.9/5
CHEM 121 – 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

[a]Based 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)

UBC Committees

- Chemists for Diversity and Inclusion, Faculty Liason (2020-Present)
- Space Committee, Member (2019-Present)
- Graduate Recruiting Committee, Chair (2017-Present)
- 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

- Co-Organizer, "Celebrating the Life of Suning Wang." Symposium, Canadian Chemistry Conference and Exhibition, Montreal, QC (2021)
- Presenter, First-Year Open House Lab Tours (2016, 2018, 2019)
- Co-Organizer, International Conference on Heteroatom Chemistry (with D. Gates, Vancouver, BC, 2016)
- Demonstrator, "Imagine Day" UBC Welcome Event (2016)

Publications

At UBC

2021

67. **Yield Stress and Wall Slip of Kaolinite Networks**
A. Abbasi Moud, J. Poisson, Z. M. Hudson and S. G. Hatzikiriakos
Phys. Fluids **2020**, *33*, 053105.

66. **Deep-Blue Fluorophores with Imidazoacridine Acceptors: Enhancing Photostablility 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.

65. **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.

2020

64. **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.

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. **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.

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. Sauvé, 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. Sauvé, 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. Sauvé, 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. Sauvé, 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. Sauvé, 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. Sauvé, 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. Sauvé, 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.

Prior to UBC

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. Rupar, 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.

23. **Highly Efficient Blue Phosphorescence from Triarylboron-Functionalized Platinum(II) Complexes of *N*-Heterocyclic Carbenes**
Z.M. Hudson, C. Sun, M.G. Helander, Y.-L. Chang, Z.-H. Lu and S. Wang
J. Am. Chem. Soc. **2012**, *134*, 13930-13933.

22. ***N*-Heterocyclic Carbazole-Based Hosts for Simplified Single-Layer Phosphorescent OLEDs with High Efficiency**
Z.M. Hudson, Z.-B. Wang, M.G. Helander, Z.-H. Lu and S. Wang
Adv. Mater. **2012**, *24*, 2922-2928.

21. **Organoboron and Diarylplatinum-Enabled Double Cyclization/Aryl Migration across an Alkyne Bond**
C. Sun, Z.M. Hudson, L. D. Chen and S. Wang
Angew. Chem. Int. Ed. **2012**, *51,* 5671-5674.

20. **Efficient and High Yield One-Pot Synthesis of Cyclometalated Platinum(II) *β*-Diketonates at Ambient Temperature**
Z.M. Hudson, B.A. Blight and S. Wang
Org. Lett. **2012**, *14*, 1700-1703.

2011

19. **Unlocking the Full Potential of Organic Light-Emitting Diodes on Flexible Plastic**
Z.-B. Wang, M.G. Helander, D.P. Puzzo, Z.M. Hudson, S. Wang and Z.-H. Lu
Nature Photonics **2011**, 5, 737-757.

18. **A Polyboryl-Functionalized Triazine as an Electron-Transport Material for OLEDs**
C. Sun, Z.M. Hudson, M.G. Helander Z.-H. Lu and S. Wang
Organometallics **2011**, *30*, 5552-5555.

17. **Nonconjugated Dimesitylboryl-Functionalized Phenylpyridines and Their Cyclometalated Platinum(II) Complexes**
Z.M. Hudson and S. Wang
Organometallics **2011**, *30*, 4695-4701.

16. **Pt(II) Complex Based Phosphorescent Organic Light Emitting Diodes with External Quantum Efficiencies Above 20%**
Z.-B. Wang, M.G. Helander, Z.M. Hudson, J. Qiu, S. Wang and Z.-H. Lu
Appl. Phys. Lett **2011**, *98*, 213301.

15. **Metal-Containing Triarylboranes: Photophysical Properties and Applications**
Z.M. Hudson and S. Wang
Dalton Trans. **2011**, *40*, 7805-7816.

14. **Probing the Structural Origins of Vapochromism of a Triarylboron-Functionalized Pt(II) Acetylide by Optical and Multinuclear Solid-State NMR Spectroscopy**
Z.M. Hudson, C. Sun, K.J. Harris, B.E.G. Lucier, R.W. Schurko and S. Wang
Inorg. Chem. **2011**, *50*, 3447-3457.

13. **Tuning and Switching MLCT Phosphorescence of $[Ru(bpy)_3]^{2+}$ Complexes with Triarylboranes and Anions**
Y. Sun, Z.M. Hudson, Y.-L. Rao and S. Wang
Inorg. Chem. **2011**, *50*, 3373-3378.

12. **Triarylboron-functionalized 8-Hydroxyquinolines and their Aluminum(III) Complexes**
V. Zlojutro, Y. Sun, Z.M. Hudson and S. Wang
Chem. Commun. **2011**, 3837-3839.

11. **Switchable Three-State Fluorescence of a Nonconjugated Donor-Acceptor Triarylborane**
Z.M. Hudson, X.-Y. Liu and S. Wang
Org. Lett. **2011**, *13*, 300-303.

10. **Highly Efficient Orange Electrophosphorescence from a Trifunctional Organoboron-Pt(II) Complex**
Z.M. Hudson, M.G. Helander, Z.-H. Lu and S. Wang
Chem. Commun. **2011**, *47*, 755-757.

2010

9. **Reactivity of Aryldimesitylboranes under Suzuki-Miyaura Coupling Conditions**
N. Wang, Z.M. Hudson and S. Wang
Organometallics, **2010**, *29*, 4007-4011.

8. **Enhancing Phosphorescence and Electrophosphorescence Efficiency of Cyclometalated Pt(II) Compounds with Triarylboron**
Z.M. Hudson, C. Sun, M.G. Helander, H. Amarne, Z.-H. Lu and S. Wang
Adv. Funct. Mater., **2010**, *20*, 3426-3439.

7. **Linear and Star-Shaped Benzimidazolyl Derivatives: Syntheses, Photophysical Properties and Use as Highly Efficient Electron Transport Materials in OLEDs**
W. White, Z.M. Hudson, X. Feng, S. Han, Z.-H. Lu and S. Wang
Dalton Trans., **2010**, *39*, 892-899.

2009

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
J. Am. Chem. Soc., **2009**, *131*, 14549–14559.

5. **The Structure of an Anionic Coordination Polymer $\{K_2[Pt^{II}_2\ Ag^{I}_8(2,2'\text{-bipy})_2(O_2CCF_3)_{14}]\}_n$**
Z.M. Hudson, Y. Sun, B. Ross, R.Y. Wang and S. Wang.
Acta Cryst. C, **2009**, *65*, m328-m330.

4. **Impact of Donor–Acceptor Geometry and Metal Chelation on Photophysical Properties and Applications of Triarylboranes**
   Z.M. Hudson and S. Wang
   Acc. Chem. Res., **2009**, *42*, 1584-1596.

3. **Switchable Ambient-Temperature Singlet-Triplet Dual Emission in Triarylboron-Pt(II) Complexes**
   Z.M. Hudson, S.-B. Zhao and S. Wang
   Chem. Eur. J., **2009**, *15*, 6131-6137.

2008

2. **Impact of the Linker on the Electronic and Luminescent Properties of Diboryl Compounds: Molecules with Two $BMes_2$ Groups and The Peculiar Behavior of 1,6-$(BMes_2)_2$pyrene**
   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 Fluorenol Liquid Crystals**
   J.C. Roberts, Z.M. Hudson and R.P. Lemieux
   J. Mater. Chem., **2008**, *18*, 3361–3365.

Patents

5. **Beverage Cartridge Comprising at Least Two Sealed Chambers**
   D.J. Footz, K.K.P. Kerman and Z.M. Hudson
   U.S. Provisional Patent Application No. 63/022,163, filed May 18, 2020.

4. **A Method of Manufacturing of a Compostable Packaging Article Comprising at Least Two Compostable Materials**
   D.J. Footz and Z.M. Hudson
   U.S. Provisional Patent Application No. 63/026,576, filed May 18, 2020.

3. **Host Materials for Single-Layer Phosphorescent OLEDs**
   Z.M. Hudson, S. Wang, M.G. Helander, Z.-B. Wang and Z.H. Lu.
   U.S. Patent Application No. 61/819,231 and Canadian Patent Application No. 2,814,679. Filed May 3, 2013.

2. **Luminescent Compounds and Methods of Using Same**
   Z.M. Hudson, X. Wang and S. Wang.
   U.S. Patent Application No. 61/780,123 and Canadian Patent Application No. 2,809,478, filed March 13, 2013.
   PCT International Application No. 2012-025-03PCT, filed March 13, 2014.

1. **Methods of Making Luminescent Compounds**
   Z.M. Hudson and S. Wang.
   U.S. Patent Application No. 61/780,156 and Canadian Patent Application No. 2,809,518, filed March 13, 2013.

Invited Lectures

* = Rescheduled due to COVID-19

Award Lectures:

1. *Interface-Dependent Aggregation-Induced Delayed Fluorescence in Bottlebrush Polymer Nanofibers.
   103rd Canadian Chemistry Conference and Exhibition, Winnipeg, Manitoba, Canada (May 2020)
   CSC Emerging Materials Investigator Lecture

2. Multiblock Nanofibers from Organic Electronic Materials
   ACS National Meeting, San Francisco, California, USA (Aug. 2020 – Virtual Lecture)
   ACS PMSE Early Investigator Lecture

3. *Multiblock Nanofibers from Organic Electronic Materials
   IUPAC-MACRO2020 – the 48th World Polymer Congress, Jeju, Republic of Korea (Jun. 2020)
   CNC-IUPAC Travel Award Lecture

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 2020)

7. *Multiblock Nanofibers from Organic Electronic Materials
   The International Congress of Pacific Basin Chemical Societies, Honolulu, Hawaii, USA (Dec. 2020)

8. *Energy Transfer Processes in Multiblock Bottlebrush Nanofibers from Organic Semiconductors
   The International Congress of Pacific Basin Chemical Societies, Honolulu, Hawaii, USA (Dec. 2020)

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. Conjugated polymers for Optoelectronics (CHM 2128 Guest Lecture)
    University of Ottawa, Ontario, Canada (Feb. 2020)

13. Multiblock Bottlebrush Nanofibers from Organic Electronic Materials
    Queen's University, Kingston, Ontario, Canada (Feb. 2020)

14. Multiblock Bottlebrush Nanofibers from Organic Electronic Materials
    Simon Fraser University, Burnaby, British Columbia, Canada (Feb. 2020)

15. *Multiblock Bottlebrush Nanofibers from Organic Electronic Materials
    Western University, London, Ontario, Canada (Mar. 2020)

16. *Multiblock Bottlebrush Nanofibers from Organic Electronic Materials
    York University, Toronto, Ontario, Canada (Apr. 2020)

17. *Multiblock Bottlebrush Nanofibers from Organic Electronic Materials
    University of Toronto, Toronto, Ontario, Canada (Apr. 2020)

18. Beyond OLEDs: Emerging Applications of Thermally Activated Delayed Fluorescence
    University of Toronto, Toronto, Ontario, Canada (May 2020 – Virtual Lecture)