

SUNING WANG

Curriculum Vitae (2019)

Contact Information Department of Chemistry, Queen's University
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Education

1982 – 1986 Ph.D. Department of Chemistry, Yale University, New Haven, CT, USA
Supervisor: Richard D. Adams
1978 – 1982 B.Sc. Department of Chemistry, Jilin University, Chang-Chun, Jilin, China

Academic Employment

2004 – present Queen's University Research Chair
2003 – 2011 Associate Head of Chemistry, Queen's University
2000 – present Professor, Chemistry, Queen's University
1996 – 2000 Associate Professor, Chemistry, Queen's University, Kingston, ON, Canada
1993 – 1996 Associate Professor, Chemistry & Biochemistry, University of Windsor
1990 – 1993 Assistant Professor, Chemistry & Biochemistry, University of Windsor, Windsor,
ON, Canada
1986 – 1989 Postdoctoral Fellow, Chemistry, Texas A&M University, College Station, TX,
USA; Supervisor: John P. Fackler, Jr.

Industrial Employment

1989 – 1990 Digital Specialty Chemicals, Mississauga, Ontario, Canada

Awards and Honors

International

2018 – present Guest Professorship in Jiangnan University, Wuhan, China
2014 – 2018 Guest/visiting Professorship, Beijing Institute of Technology, School of
Chemistry, China
2018 Author profile by Angewandte Chemie, International Edition
2012 – 2016 Director of the Beijing Key Laboratory of Optoelectronic Materials, Beijing
Institute of Technology, Beijing, China
2012 Fellow of the Royal Society of Chemistry, UK
2011 – present Adjunct/Guest Professhipr, Beijing Institute of Technology, China
2008 – 2011 Sea and Sky Scholar at the Dalian Institute of Science and Technology, China
2002 – 2005 Outstanding Oversea Chinese Scholarship at Jilin University, awarded by the
Government of China

- 2002 – present Guest Professorship at the School of Chemistry, Jilin University, China
1993 International Union of Pure and Applied Chemistry, Travel Award
1987 – 1989 Robert Welch Postdoctoral Fellowship, Texas, USA
1982 – 1983 US-China Chemistry Graduate Program (“The Doering Program”) Fellowship

National/Internal

- 2019 Allie Vibert “VI” Douglas Distinguished University Professor (one of the 10 inaugural distinguished University Professors at Queen’s University)
2018 The Canadian Association for Graduate Studies Award for Outstanding Graduate Mentorship (**Wang is the inaugural winner of this award**)
2017 Queen’s University Prize for Excellence in Graduate Student Supervision
2015 Fellow of the Royal Society of Canada, Member of the Academy of Science
2012 – 2014 Killam Research Fellowship, Canada Council for the Arts
2010, 2012 Excellence in Teaching Award, Chemistry Graduating Class, Queen’s University
2007 Queen’s University Prize for Excellence in Research
2007 Alcan Award for Distinguished Contributions in Inorganic Chemistry, Canadian Society for Chemistry
2004 – present Queen’s University Research Chair
2002 Rutherford Memorial Medal (Chemistry), Royal Society of Canada
2002 Fellow of Chemical Institute of Canada
2001 Award of Merit, Federation of Chinese Canadian Professionals (Ontario), Education Foundation
1996 – 2001 Queen's University National Scholar

Key Professional Services

- 2019-2021 Editorial advisory board, *Materials Chemistry Frontiers* (Royal Society of Chemistry)
2019 International advisory board of the 2nd International Conference on Boron Chemistry (ICBC-II), Taiyuan, China, July 14-18, 2019.
2016 Organizer and Host of Boron in the Americas (BORAM) conference, Kingston, Ontario, June 25-28, 2016.
2016 Organizer and Host of the Sino-German Bilateral Meeting on Main Group Element Chemistry, Beijing, China, April 11-15.
2015 – present International Advisory Board, the International Meeting on Boron Chemistry (IME Boron)
2014 – present International Advisory Board, the Boron in the Americas conference (BorAm)
2013 – present Editorial advisory board, *Inorganic Chemistry Frontiers* (Royal Society of Chemistry)
2013 NSERC Collaborative research and development grant site visit committee, University of Windsor
2011-2015 Associate Editor/Editorial Advisory Board, the Royal Society of Chemistry, *Advances*

2011 – 2016	Editorial advisory board, <i>Comments in Inorganic Chemistry</i>
2011 – 2013	Editorial advisory board, <i>Inorganica Chimica Acta</i>
2010 – 2012	Editorial advisory board, <i>Inorganic Chemistry</i> (American Chemical Society)
2010 – 2013	Queen's University, Senate advisory research committee, Subcommittee IV
2007 – 2009	Editorial advisory board, <i>Organometallics</i> , (American Chemical Society)
2006 – 2008	NSERC Discovery Research Grant Selection Committee (#24)
2006	NIH Study Panel (Sensors and probes)
2005-2008	Editorial advisory Board, <i>Canadian Journal of Chemistry</i>
2004, 2008	NSF grant selection panels (Organic photonics, electronics and magnetism, Division of Electric and Communication Systems, 2004; Organic dynamics, Division of Chemistry, 2008)
2002-2012	The North American Review Board of <i>Dalton Transactions</i>
2002-2005	NSERC Strategic Research Grant Selection Committee (the panel on Value-added products)
2002-2004	Member of the Nano-technology Advisory Committee at Queen's University
1997-2013	Symposium Organizer for Canadian Society for Chemistry Conferences in 1997, 2001, and 2013; Pacifichem conferences in 2005 and 2010

Membership in Professional Societies

Royal Society of Canada
Chemical Institute of Canada
American Chemical Society
Royal Society of Chemistry

List of Publications and Patents

Total number of publications (1985-2019): 317

h index: 62 (Thomson Reuters Web of Science), 64 (Google Scholar)

i10 index: 252 (Google Scholar)

I. Publications in Peer Reviewed Journals and Book Chapters

2019

Book Chapter/Review Article

317. Z. Huang,* **S. Wang***, R. D. Dewhurst, N. V. Ignat'ev, M. Finze,* H. Braunschweig,* "Boron: Its role in energy related research and applications", *Angew. Chem. Int. Ed.* **2019**, DOI: 10.1002/anie.201911108.
316. S. K. Mellerup, **S. Wang***, "Boron-Based Stimuli Responsive Materials", *Chem. Soc. Rev.* **2019**, 48, 3537-3549 (**invited review**).

315. S. K. Møllerup, **S. Wang**, "Photochemical Transformation Involving Organoboron", a chapter in *"The Chemistry of Organoboron Compounds"*, *Patai's Chemistry of Functional Groups*, Wiley, **2019**, in press (**invited Book chapter**, accepted in December 2018)
314. S. K. Møllerup, **S. Wang***, "Boron-Doped Molecules for Optoelectronics", the Inaugural Issue of *Trends in Chemistry*, (Cell Press), **2019**, 1, 77–89. (**invited Review**). Selected by Cell Press for as a highlighted article in *Trends Collection on Conservation*, 2019, May.

Original articles

313. P. Novoseltseva, H. Li, X. Wang, F. Sauriol, **S. Wang***, "Structural Dynamics and Stereoselectivity of Chiral Benzylidene-amine N,C-chelate Borane Photo-thermal Isomerization", *Chem. Eur. J.*, **2020**, 26, accepted.
312. J. A. Knöller, G. Meng, X. Wang, D. Hall, A. Pershin, D. Beljonne, Y. Olivier, S. Laschat, E. Zysman-Colman*, and **S. Wang***, "Intramolecular Borylation via Sequential B-Mes Bond Cleavage for the Divergent Synthesis of B,N,B doped Benzo[4]helicenes", *Angew. Chem. Int. Ed.* **2019**, DOI: 10.1002/anie.201912340 and 10.1002/ange.201912340.
311. B. Deng, X. Wang, **S. Wang***, "Dearomatizing and Derivatizing a Mesityl Group on Boron by One-Pot Photoisomerization and [4+2] Diels–Alder Addition", *Chem. Eur. J.*, **2019**, 25, 14694–14700.
310. L. Dong, F. Saraci, K. Yuan, X. Wang, **S. Wang***, "Push–pull isomers of indolizino[6,5,4,3-def] phenanthridine decorated with a triarylboron moiety", *Org. Biomol. Chem.*, **2019**, 17, 6470–6477
309. X. Li, Y. Shi, N. Wang,* T. Peng,* and **S. Wang**, "Photoisomerization of PtII Complexes Containing Two Different Photochromic Chromophores: Boron Chromophore versus Dithienylethene Chromophore", *Chem. Eur. J.* **2019**, 25, 5757 – 5767.
308. Q. Zhu, **S. Wang**, and P. Chen*, "Diazocine Derivatives: A Family of Azobenzenes for Photochromism with Highly Enhanced Turn-On Fluorescence", *Org. Lett.* **2019**, 21, 4025–4029.
307. H. -J. Li, S. K. Møllerup, X. Wang, and **S. Wang***. "D- π -A Triarylboranes as Reversible Fluorescent Probes for CO₂ and Temperature". *Org. Lett.* **2019**, 21(8), 2838–2842.
306. Z. He, S. K. Møllerup, L. Liu, X. Wang, C. Dao, and **S. Wang***, "Reversible Photoisomerization from Borepin to Boratanorcaradiene and Double Aryl Migration from Boron to Carbon." *Angew. Chem. Int. Ed.* **2019**, 58, 6683–6689.
305. G. Meng, X. Chen, X. Wang, N. Wang, T. Peng*, **S. Wang***, "Isomeric Bright Sky-Blue TADF Emitters Based on Bisacridine Decorated DBNA: Impact of Donor Locations on Luminescent and Electroluminescent Properties", *Adv. Opt. Mater.*, **2019**, 7, 1900130 (selected for back cover by the editor).
304. L. Liu, X. Wang, F. Hussain, C. Zeng, B. Wang, Z. Li, I. Kozin, and **S. Wang***, "Multi-responsive Tetradentate Phosphorescent Metal Complexes as Highly Sensitive and Robust Luminescent Oxygen Sensors: Pd(II) versus Pt(II) and 1,2,3-Triazolyl versus 1,2,4-Triazolyl", *ACS Appl. Mater. Interfaces*, **2019**, 11 (13), 12666–12674.
303. C.-J. Sun, N. Wang, T. Peng, X. Yin, **S. Wang**, P. Chen,* "BN-Functionalized Benzotrithiophene-Based Azaborines: Synthesis, Structures, and Anion Binding Properties", *Inorg. Chem.* **2019**, 58(6), 3591–3595.

302. X. Wang, **S. Wang***, "Phosphorescent Pt(II) Emitters for OLEDs: From Triarylboron-Functionalized Bidentate Complexes to Compounds with Macrocyclic Chelating Ligands", *Chemical Records*, **2019**, *19*, 1–18 (**invited Personal Account**).
301. H.-J. Li, S. K. Møllerup, X. Wang, and **S. Wang***, "Impact of Intramolecular H Bond and $n-\pi^*$ Interactions on Photophysical and CO₂ Sensing Properties of Laterally Appended D- π -A Triarylboron Compounds", *Tetrahedron*, **2019**, *75*, 809 – 816. (**invited contribution to the special issue of "Frustrated Lewis Acids and Organoboranes"**).
300. C. Zeng, K. Yuan, N. Wang, T. Peng*, G. Wu, **S. Wang***, "The Opposite and Amplifying Effect of B \leftarrow N Coordination on Photophysical Properties of Regioisomers with an Unsymmetrical Backbone", *Chem. Sci.* **2019**, *10*, 1724 - 1734.
299. J. Wang, N. Wang, G. Wu, **S. Wang***, X.Y. Li*, "Multicolor emission from non-conjugated polymers based on a single switchable boron chromophore", *Angew. Chem. Int. Ed.* **2019**, *58*, 3082-3086.
298. F. Hussain, X. Wang, **S. Wang***, "Impact of Bidentate N,C-Chelate Ligands on the Performance of Phosphorescent Pt(II) Complexes as Oxygen Sensors", *J. Organomet. Chem.* **2019**, *880*, 300-311 (**invited contribution to the special issue in honor of Professor Richard Puddephatt**).

2018

Book Chapter

297. S. K. Møllerup, **S. Wang**, "Photoresponsive Organoboron Systems", a chapter in "Main Group Strategies towards Functional Organic Materials", T. Baumgartner, F. Jäkle, ed., Wiley, 2018, ISBN: 978-1-119-23597-2, Chapter 3, pp 47–78 (**invited**).

Original articles

296. S. K. Møllerup, G. Yousefalizadeh, **S. Wang***, and K. Stamplecoskie* "Experimental Evidence for a Triplet Biradical Excited-State Mechanism in the Photoreactivity of N,C-Chelate Organoboron Compounds", *J. Phys. Chem. A.* **2018**, *122*, 9267-9274.
295. K. Yuan, G. Yousefalizadeh, F. Saraci, T. Peng, I. Kozin, K. G. Stamplecoskie*, and **S. Wang***, "Impact of Ferrocene Substitution on the Electronic Properties of BODIPY Derivatives and Analogues", *Inorg. Chem.* **2018**, *57*, 14698-14704.
294. D.-T. Yang, T. Nakamura, Z. He, X. Wang, A. Wakamiya*, T. Peng, and **S. Wang*** "Doping Polycyclic Arenes with Nitrogen–Boron–Nitrogen (NBN) Units", *Org. Lett.*, **2018**, *20*(21), 6741–6745.
293. A. John, M. Bolte, H.-W. Lerner, G. Meng, **S. Wang**, T. Peng,* M. Wagner,* "Doubly boron-doped pentacenes as emitters for OLEDs", *J. Mater. Chem. C.* **2018**, *6*, 10881-10887.
292. Q. Hou, L. Liu, S. K. Møllerup, N. Wang, T. Peng, P. Chen* **S. Wang***, "Stimuli-Responsive B/N Lewis Pairs Based on the Modulation of B–N Bond Strength", *Org. Lett.* **2018**, *20*(20), 6467–6470.
291. C. Li, S. K. Møllerup, X. Wang, **S. Wang*** "Accessing Two-Stage Regioselective Photoisomerization in Unsymmetrical N,C-Chelate Organoboron Compounds: Reactivity of B(ppz)(Mes)Ar", *Organometallics*, **2018**, *37*(19), 3360–3367.
290. S. K. Møllerup, C. Li, X. Wang, **S. Wang*** "Controlling Isomerization Selectivity in Chiral, Photochromic N,C-Chelate Organoboron Systems with Extended π -Conjugation", *J. Org. Chem.*, **2018**, *83*, 11970–11977.

289. N. Wang,* J. Wang, D. Zhao, S. K. Møllerup, T. Peng, H. Wang, **S. Wang**, "Lanthanide Complexes with Photochromic Organoboron Ligand: Synthesis and Luminescence Study", *Inorg. Chem.*, **2018**, *57*, 10040–10049.
288. J. Radtke, S. K. Møllerup, M. Bolte, H.-W. Lerner, **S. Wang**,* M. Wagner,* Aryl Insertion vs. Aryl-Aryl Coupling in C,C-Chelated Organoborates: the "Missing Link" of Tetraarylborate Photochemistry, *Org. Lett.* **2018**, *20*, 3966–3970.
287. H. Li, S. K. Møllerup, X. Wang, **S. Wang**,* "Transforming benzylideneamine N,C-chelate boron compounds to BN-cycloocta-/cyclohepta-trienes bearing a tetrasubstituted B=N unit via photoisomerization" *Chem. Commun*, **2018**, *54*, 8245–8248
286. S. K. Møllerup, **S. Wang***, Isomerization and Rearrangement of Boriranes: From Chemical Rarities to Functional Materials, *SCIENCE CHINA Materials*, **2018**, *61(10)*, 1249–1256 (**invited**).
285. S. K. Møllerup, C. Li, J. Radtke, X. Wang, Q.-S. Li,* **S. Wang*** "Photochemical Generation of Chiral N,B,X-Heterocycles by Heteroaromatic CX Bond Scission (X=S, O) and Boron Insertion", *Angew. Chem. Int. Ed.*, **2018**, *57*, 9634–9639. (**Hot paper, selected for cover; and highlighted by ChemistryView**)
284. S. He, X. Wang, G. Xiang, K. Lac, **S. Wang*** Z. Ding,* "Electrogenerated Chemiluminescence from the Monomer of a Tetradentate Chelate Pt (II) Compound", *Electrochimica Acta*, **2018**, *271*, 448–453.
283. T. Zeng*, S. K. Møllerup, D. Yang, X. Wang, **S. Wang**, K. Stampelcoskie*, "Identifying (BN)₂-pyrenes as a New Class of Singlet Fission Chromophores: Significance of Azaborine Substitution", *J. Phys. Chem. Lett.*, **2018**, *9*, 2919–2927.
282. Y.G. Shi, S. K. Møllerup, K. Yuan, G.-F. Hu, F. Sauriol, T. Peng, N. Wang,* P. Chen,* **S. Wang***, "Stabilising Fleeting Intermediates of Stilbene Photocyclization with Amino-borane Functionalisation: The Rare Isolation of Persistent Dihydrophenanthrenes and Their [1,5] H-shift Isomers", *Chem. Sci.*, **2018**, *9*, 3844–3855.
281. K. Yuan, X. Wang, **S. Wang***, "Cascade Dehydrogenative Hydroboration for the Synthesis of Azabo-rabenzofulvenes", *Org. Lett.*, **2018**, *20(6)*, 1617–1620.
280. Y. G. Shi, J.-W. Wang, H. J. Li, G.-F. Hu, X. Li, S. K. Møllerup, N. Wang, T. Peng,* **S. Wang***, "A Simple Multi-Responsive System Based on Aldehyde Functionalized Amino-Boranes", *Chem. Sci.*, **2018**, *9*, 1902–1911. (**Highlighted by** T. Swager, C. J. Lin in *Synfacts*, **2018**, *14(05)*, 0477.)
279. **S. Wang**,* K. Yuan, M.F. Hu, X. Wang, T. Peng, N. Wang*, Q. Li*, "Cleavage of Unstrained C-C Bonds in Acenes by Boron and Light: Transformation of Naphthalene to Benzoborepin", *Angew. Chem. Int. Ed.*, **2018**, *57(4)*, 1073–1077.

2017

Original articles

278. S. M. McDonald, S. K. Møllerup, C. Barran, X. Wang, **S. Wang***, "Binding Modes and Reactivity of Pyrido[2,1-a]isoindole as a Neutral Carbon Donor with Main-Group and Transition-Metal Elements" *Organometallics*, **2017**, *36(20)*, 4054–4060.
277. A. L. Brazeau, K. Yuan, S.-B. Ko, I. Wyman, **S. Wang***, "Anion Sensing with a Blue Fluorescent Triarylboron-Functionalized Bisbenzimidazole and Its Bisbenzimidazolium Salt", *ACS Omega*, **2017**, *2*, 8625–8632. (**Invited**)

276. K. Yuan, X. Wang, S. K. Møllerup, I. Kozin, **S. Wang***, "Spiro-BODIPYs with a Diaryl Chelate: Impact on Aggregation and Luminescence", *J. Org. Chem.*, **2017**, *82*(24), 13481–13487. (**Most read paper in Nov. – Dec. 2017**)
275. N. Wang,* M. Hu, S. K. Møllerup, X. Wang, F. Sauriol, T. Peng*, **S. Wang**, "Triaryl-Boron Functionalized Dinuclear Platinum Complexes Linked by Photoisomerizable Bpe Ligand: Luminescence and Isomerism", *Inorg. Chem.*, **2017**, *56*(21), 12783–12794.
274. S. K. Møllerup, L. Häfele, A. Lorbach, X. Wang, **S. Wang***, "Triplet Energy and π -Conjugation Effects on Photoisomerization of Chiral N,C-Chelate Organoborons with PAH Substituents", *Org. Lett.*, **2017**, *19*(14), 3851–3854.
273. L.-J. Liu, X. Wang, N. Wang, T. Peng,* **S. Wang***, "Bright, Multi-responsive, Sky-Blue Platinum(II) Phosphors Based on a Tetradentate Chelating Framework", *Angew. Chem. Int. Ed.*, **2017**, *56*(31), 9160–9164. (**Hot paper**)
272. Y.-G. Shi, X. Wang, N. Wang, T. Peng,* **S. Wang***, "Influence of Extended Conjugation on Photophysical/Electronic Properties and Photoelimination of BN-Heterocycles", *Organometallics*, **2017**, *36*(14), 2677–2684. (**Invited**)
271. D.-T. Yang, Y.-G. Shi, T. Peng, **S. Wang***, "BN-Heterocycles Bearing Two BN Units: Influence of the Linker and the Location of BN Units on Electronic Properties and Photoreactivity", *Organometallics*, **2017**, *36*(14), 2654–2660. (**Invited**)
270. J. Wang, B. Jin, N. Wang*, T. Peng, X. Li*, Y. Luo, **S. Wang***, "Organoboron-Based Photochromic Copolymers for Erasable Writing and Patterning", *Macromolecules*, **2017**, *50*, 4629–4638.
269. K. Yuan, **S. Wang***, "trans-Aminoboration across Internal Alkynes Catalyzed by B(C₆F₅)₃ for the Synthesis of Borylated Indoles", *Org. Lett.*, **2017**, *19*(6), 1462–1465. (**ACS Editor's Choice article, 2017 most read article for 12 months**)
268. S. K. Møllerup, C. Li, T. Peng, **S. Wang***, "Regioselective Photoisomerization/C-C Bond Formation of Asymmetric B(ppy)(Mes)(Ar): The Role of Aryl Groups on Boron", *Angew. Chem. Int. Ed.*, **2017**, *56*(22), 6093–6097. (**Invited**)
267. G. Xiang, X. Wang, M. S. M. Li, K. Lac, **S. Wang***, Z. Ding*, "Probing Excimers of Pt(II) Compounds with Phenyl-1,2,3-Triazolyl and Pyridyl-1,2,4-Triazolyl Chelate Ligands by Means of Electrochemiluminescence", *ChemElectroChem*, **2017**, *4*, 1757–1762.
266. C. Zeng, N. Wang, T. Peng,* **S. Wang***, "Copper(I) Complexes Bearing 1,2-Phenyl-Bridged P^N, P^NP, and N^PN Chelate Ligands: Structures and Phosphorescence." *Inorg. Chem.*, **2017**, *56*(3), 1615–1625.
265. X. Wang, T. Peng,* C. Nguyen, Z.-H. Lu, N. Wang, W. Wu, Q. Li, **S. Wang***, "Highly Efficient Deep-Blue Electrophosphorescent Pt(II) Compounds with Non-Distorted Flat Geometry: Tetradentate versus Macrocyclic Chelate Ligands", *Adv. Funct. Mater.*, **2017**, *27*(4), 1604318.

2016

Original articles

264. **S. Wang***, T.-Z. Wu, H.-J. Park, L.-X. Chao, S. K. Møllerup, G.-Q. Yang, T. Peng, N. Wang, J.-B. Peng* "Lanthanide dot3a Complexes Bearing a Triarylborane-Functionalized Picolinate Pendant: Temperature and Anion Dependent Eu(III) and Tb(III) Emission", *Adv. Optical Mater.*, **2016**, *4*(11), 1882–1892.

263. K. Yuan, X. Wang, S. K. Møllerup, I. Wyman, G. Schatte, Z. Ding, **S. Wang***, "Triarylborane-Supported Polyferrocenyl Systems: Impact of the Linking Unit on Electronic and Electrochemical Properties", *Organometallics*, **2016**, 35(17), 3051–3059.
262. S. K. Møllerup, Y.-L. Rao, H. Amarné, **S. Wang***, "Tuning the Colors of the Dark Isomers of Photochromic Boron Compounds with Fluoride Ions: Four-State Color Switching", *Org. Lett.*, **2016**, 18(17), 4436–4439.
261. S. K. Møllerup, K. Yuan, C. Nguyen, Z.-H. Lu, **S. Wang***, "Donor-Appended N,C-Chelate Organoboron Compounds: Influence of Donor Strength on Photochromic Behaviour", *Chem. Eur. J.*, **2016**, 22(35), 12464–12472.
260. D.-T. Yang, S. K. Møllerup, J.-B. Peng, X. Wang, Q.-S. Li,* **S. Wang***, "Substituent Directed Phototransformations of BN-Heterocycles: Elimination vs Isomerization via Selective B–C Bond Cleavage", *J. Am. Chem. Soc.*, **2016**, 138, 11513–11516.
259. Y. Li, S. K. Møllerup, F. Sauriol, G. Schatte, **S. Wang***, "Unusual Fragmentation and Transformation of an N-Heterocyclic Carbene by a Stable Phosphonium-Borane Peri-Functionalized Naphthalene", *Chem. Eur. J.*, **2016**, 22, 2473–2480.
259. A. Rodrigue-Witchel, D. L. Rochester, S.-B. Zhao, K. B. Lavelle, J. A. Gareth Williams, **S. Wang**, W. B. Connick, C. Reber, "Pressure-induced Variations of MLCT and Ligand-centered Luminescence Spectra in Square-planar Platinum(II) Complexes," *Polyhedron*, **2016**, 108, 151–155. **(Invited)**
258. Y.-G. Shi, D.-T. Yang, S. K. Møllerup, N. Wang, T. Peng, **S. Wang***, "1,1-Hydroboration of Fused Azole-Isoindole Analogues as an Approach for Construction of BN-Heterocycles and Azole-Fused BN-Naphthalenes " *Org. Lett.* **2016**, 18, 1626–1629. **(Highlighted by T. M. Swager, R. Zhu, in Synfacts, 2016, 12, 0583.)**
257. K. Yuan, K. Yuan, N. Suzuki, S. K. Møllerup, X. Wang, S. Yamaguchi, **S. Wang***, "Pyridyl Directed Catalyst-Free *trans*-Hydroboration of Internal Alkynes", *Org. Lett.*, **2016**, 18, 720–723.

2015

Book chapter

256. Z. M. Hudson, X. Wang, **S. Wang**, "Triarylboron-functionalized Metal Complexes for OLEDs" in *Organometallics and Related Molecules for Energy Conversion*, p207–239, W. Y. Wong ed., Springer, 2015. **(invited)**

Original articles

255. Y. Li, S. K. Møllerup, F. Sauriol, G. Schatte, **S. Wang***, "Unusual Fragmentation and Transformation of an N-Heterocyclic Carbene by a Stable Phosphonium-Borane Peri-Functionalized Naphthalene", *Chem. Eur. J.*, **2016**, 22, 2473–2480.
254. M. Hesari, K. N. Swanick, J.-S. Lu, R. Whyte, **S. Wang***, Z. Ding*, "Highly Efficient Dual-Color Electroluminescence from BODIPY-Capped PbS Nanocrystals", *J. Am. Chem. Soc.*, **2015**, 137, 11266–11269.
253. **S. Wang***, D. T. Yang, J. Lu, H. Shimogawa, S. Gong,* X. Wang, S. K. Møllerup, A. Wakamiya, Y. L. Chang, C. Yang, Z. H. Lu*, "In Situ Solid-State Generation of (BN)₂-Pyrenes and Electroluminescent Devices", *Angew. Chem. Int. Ed.* **2015**, 54(50), 15074–15078.

252. S. M. McDonald, S. K. Møllerup, J. Peng, D. Yang, Q.-S. Li, **S. Wang***, "Thermal and Photolytic Transformation of NHC-B,N-Heterocycles: Controlled Generation of Blue Fluorescent 1,3-Azaborinine Derivatives and 1*H*-Imidazo[1,2-*a*]indoles by External Stimuli", *Chem. Eur. J.*, **2015**, *40*, 13961–13970. (**VIP paper, selected for the front cover**)
251. D.-T. Yang, J. Radtke, S. K. Møllerup, K. Yuan, X. Wang, M. Wagner*, **S. Wang***, "One-Pot Synthesis of Brightly Fluorescent Mes₂B-Functionalized Indolizine Derivatives via Cycloaddition Reactions", *Org. Lett.*, **2015**, *17*, 2486–2489.
250. D.-T. Yang, S. M. Møllerup, X. Wang, J.-S. Lu, **S. Wang***, Reversible 1,1-Hydroboration: Boryl Insertion into a C-N Bond and Competitive HBR₂ vs. R-H Elimination. *Angew. Chem., Int. Ed.*, **2015**, *54*, 5498. (**Hot paper, selected for inside cover**)
249. S.-B. Ko, H.-J. Park, S. Gong, X. Wang, Z.-H. Lu, **S. Wang***, "Blue Phosphorescent *N*-Heterocyclic Carbene Chelated Pt(II) Complexes with an α -Duryl- β -Diketonato Ancillary Ligand", *Dalton Trans*, **2015**, *44*(18), 8433–8443. (**Invited contribution**)
248. M. Hesari, J. S. Lu, **S. Wang***, Z. Ding*, "Efficient Electrochemiluminescence of a Boron-Dipyrromethene (BODIPY) Dye", *Chem. Commun.* **2015**, *51*(6), 1081–1084.

2014

Original articles

247. S. K. Møllerup, **S. Wang***, "Benzothiazoline Three-Coordinated Organoboron Compounds with a B=N Bond: Dual Emission and Temperature-Dependent Excimer Fluorescence", *Organometallics*, **2014**, *33*, 5483–5491.
246. X. Wang, S. Gong, D. Song, Z. H. Lu, **S. Wang***, "Highly Efficient and Robust Blue Phosphorescent Pt(II) Compounds with a Phenyl-1,2,3-triazolyl and a Pyridyl-1,2,4-triazolyl Chelate Core", *Adv. Funct. Mater.*, **2014**, *24*, 7257–7271.
245. Y. L. Chang, Y. L. Rao, S. L. Gong, G. L. Ingram, **S. Wang***, Z. H. Lu*, "Exciton-Stimulated Molecular Transformation in Organic Light-Emitting Diodes", *Adv. Mater.*, **2014**, *26*, 6729–6733.
244. H. J. Park, S. B. Ko, I. W. Wyman, **S. Wang***, "Selective Sensitization of Eu(III) and Tb(III) Emission with Triarylboron-functionalized Dipicolinic Acids", *Inorg. Chem.* **2014**, *53*, 9751–9760.
243. M.-N. Belzile, X. Wang, Z. M. Hudson, **S. Wang***, Impact of Constitutional Isomerism on Phosphorescence and Anion-Sensing Properties of Donor-Acceptor Organoboron Pt(II) Complexes", *Dalton Trans*. **2014**, *43*, 13696–13703.
242. L. F. Smith, B. A. Blight, H.-J. Park, **S. Wang***, "Sensitizing Tb(III) and Eu(III) Emission with Triarylboron Functionalized 1,3-diketonato Ligands", *Inorg. Chem.* **2014**, *53*, 8036–8044. (**Selected for TOC Highlight on the journal's webpage**)
241. Y.-L. Rao, C. Hörl, H. Braunschweig, **S. Wang***, "Reversible Photo-thermal Isomerization of Azaboratabisnorcaradiene to Azaborabenzotropolidene", *Angew. Chem. Int. Ed.* **2014**, *53*, 9095–9096. (**Hot paper, selected for inside cover**)
240. Y. L. Chang, S. Gong, X. Wang, R. White, C. Yang, **S. Wang**, Z. H. Lu, "Highly Efficient Greenish-blue Platinum-based Phosphorescent Organic Light-emitting Diodes on a High Triplet Platform", *Appl. Phys. Lett.*, **2014**, *104*, 173303-1 – 173303-4.

239. Y. L. Rao, T. Kusamoto, R. Sakamoto, H. Nishihara, **S. Wang***, "Reactivity and Electronic Properties of a Ferrocene Molecule Bearing an N,C-chelated BMes₂ Unit", *Organometallics*, **2014**, *33*, 1787–1793.
238. Y. F. Li, Y. Kang, J.-S. Lu, I. Wyman, S.-B. Ko, **S. Wang***, "A Dual-Emissive Phosphine-Borane Lewis Pair with a U-Shaped Linker: Impact of Methylation and Complexation on Fluoride Binding Affinity", *Organometallics*, **2014**, *33*, 964–973.
237. X. Wang, Y.-L. Chang, J. -S. Lu, T. Zhang, Z. H. Lu, **S. Wang***, "Bright Blue and White Electrophosphorescent Triarylboron-Functionalized C^N-Chelate Pt(II) Compounds: Impact of Intramolecular H Bonds and Ancillary Ligands", *Adv. Funct. Mater.*, **2014**, *24*, 1911–1927.
236. S.-B. Ko, J.-S. Lu, **S. Wang***, "Chelation Assisted Photoelimination of B,N-Heterocycles", *Org. Lett.*, **2014**, *16*, 616–619.

2013

Original articles

235. H. Oh, K.-M. Park, H. Hwang, S. Oh, J. H. Lee, J.-S. Lu, **S. Wang***, Y. J. Kang*, "Effective Alkoxylation of Phosphorescent Heteroleptic Ir(III) compounds Bearing Fluorinated Bipyridine Ligands", *Organometallics*, **2013**, *32*, 6427–6436.
234. Y.-L. Chang, B. A. Kamino, Z. Wang, M. G. Helander, Y. Rao, L. Chai, **S. Wang**, T. P. Bender, Z.-H. Lu*, "Highly efficient Greenish-Yellow Phosphorescent Organic Light-Emitting Diodes Based on Interzone Exciton Transfer", *Adv. Funct. Mater.* **2013**, *23*, 3204–3211.
233. B. A. Blight, S.-B. Ko, J.-S. Lu, L. F. Smith, **S. Wang**, "Triarylboron-Functionalized Dibenzoylmethane and Its Phosphorescent Platinum(II) Complexes", *Dalton Trans*, **2013**, *42*, 10089–10092.
232. Y.-F. Li, Y. J. Kang, S.-B. Ko, Y. L. Rao, F. Sauriol, **S. Wang**, "Highly Congested Donor–Acceptor P–B Compound: Synthesis and Properties of a BMes₂- and a PPh₂-Functionalized 1,8-Naphthalene", *Organometallics*, **2013**, *32*, 3063–3068.
231. J. S. Lu, S. -B. Ko, N. R. Walters, Y. Kang, F. Sauriol, **S. Wang***, "Formation of Azaborines by Photoelimination of B,N-Heterocyclic Compounds", *Angew. Chem. Int. Ed.* **2013**, *52*, 4544–4548
- **Hot article, selected for cover**
 - **Highlighted** by T. M. Swager, D. K. Frantz in *Synfacts*, **2013**, *9(7)*, 0719
230. Y. L. Rao, H. Amarne, L. D. Chen, N. J. Mosey, **S. Wang*** "Photo- and Thermal-Induced Multistructural Transformation of 2-Phenylazoly Chelate Boron Compounds", *J. Am. Chem. Soc.*, **2013**, *135*, 3407–3410.
229. B. A. Blight, R. Guillet-Nicolas, F. Kleitz, R.-Y. Wang, **S. Wang***, "A Luminescent Triarylboron-Functionalized Zinc-Carboxylate MOF", *Inorg. Chem.* **2013**, *52*, 1673–1675. (**Most read article in the first quarter of 2013**)
228. S.-B. Ko, J.-S. Lu, Y. Kang, **S. Wang***, "Impact of a Picolinate Ancillary Ligand on Phosphorescence and Fluoride Sensing Properties of BMes₂-Functionalized Pt(II) Compounds", *Organometallics*, **2013**, *32*, 599–608.
227. N. Wang, S.-B. Ko, J.-S. Lu, L. D. Chen, **S. Wang***, "Tuning the Photoisomerization of an N^C-Chelate Organoboron Compound with a Metal Acetylide Unit" *Chem. Eur. J.*, **2013**, *19*, 5314–5323.

226. Y. J. Kang,* Y.-L. Chang, J.-S. Lu, S.-B. Ko, Y. L. Rao, M. Varlan, Z.-H. Lu, **S. Wang***, "Highly Efficient Deep-Blue Phosphorescent and Electroluminescent Ir(III) Compounds", *J. Mater. Chem. C*, **2013**, *1*, 441–450.
225. Y. L. Rao, H. Amarne, J. S. Lu, **S. Wang***, "Impact of A Dithienyl Unit on Photostability of N, C-Chelating Boron Compounds", *Dalton Trans.*, **2013**, *42*, 638–644. (**Invited article**)

2012

Review article (Invited)

224. Y. L. Rao, H. Amarne, **S. Wang***, "Photochromic Organoboron Compounds", *Coord. Chem. Rev.*, **2012**, *256*, 759-770.

Original articles

223. J. S. Lu, S. B. Ko, N. R. Walters, **S. Wang***, "Decorating BODIPY with Three- and Four-Coordinate Boron Groups", *Org. Lett.*, **2012**, *14*, 5660–5663.
222. J. Park, Y. L. Rao, M. Varlan, J. H. Kim, S. B. Ko, **S. Wang***, Y. J. Kang*, "Synthesis and Characterization of Fluorene and Carbazole Dithienosilole Derivatives for Potential Applications in Organic Light Emitting Diodes", *Tetrahedron*, **2012**, *68*, 9278–9283.
221. Z. M. Hudson, S. B. Ko, S. Yamaguchi*, **S. Wang***, "Modulating the Photoisomerization of N,C-chelate Organoboranes with Triplet Acceptors", *Org. Lett.*, **2012**, *14*, 5610–5613.
220. M. Varlan, B. A. Blight, **S. Wang***, "Selective Activation of Lanthanide Luminescence with Triarylboron-functionalized Ligands and Visual Fluoride Indicators", *Chem. Commun.*, **2012**, *48*, 12059–12061. (**Selected by the journal as a back cover**)
219. Z. M. Hudson, C. Sun, M. Helander, Y.-L. Chang, Z.-H. Lu, **S. Wang**, "Highly Efficient Blue Phosphorescence from Triarylboron-Functionalized Platinum(II) Complexes of N-Heterocyclic Carbenes" *J. Am. Chem. Soc.*, **2012**, *134*, 13930–13933.
218. N. Wang, T. M. McCormick, S.-B. Ko, **S. Wang***, "Pt(II) and Pd(II) Complexes with a *trans*-Chelating Bis-pyridyl Ligand", *Eur. J. Inorg.*, **2012**, 4463–4469.
217. Y.-L. Rao, L. D. Chen, N. J. Mosey, **S. Wang***, "Stepwise Intramolecular Photoisomerization of NHC-Chelate Dimesitylboron Compounds with C-C Bond Formation and C-H Bond Insertion", *J. Am. Chem. Soc.*, **2012**, *134*, 11026–11034.
216. Y.-L. Rao, D. Schoenmakers, Y.-L. Chang, J.-S. Lu, Z.-H. Lu, Y. J. Kang,* **S. Wang***, "Bluish-Green BMes₂-Functionalized Pt(II) Complexes for High Efficiency PhOLEDs: Impact of the BMes₂ Location on Emission Color", *Chem. Eur. J.*, **2012**, *18*, 11306–11316.
215. Z. M. Hudson, Z. B. Wang, M. G. Helander, Z.-H. Lu, **S. Wang***, "N-Heterocyclic Carbazole-Based Hosts for Simplified Single-Layer Phosphorescent OLEDs with High Efficiency." *Adv. Mater.*, **2012**, *24*, 2922–2928.
214. C. Sun, Z. M. Hudson, L. D. Chen, **S. Wang***, "Double Cyclization/Aryl Migration across an Alkyne Bond Enabled by Organoboryl and Diarylplatinum Groups." *Angew. Chem. Int. Ed.*, **2012**, *51*, 5671–5674.
213. N. Wang, J.-S. Lu, T. M. McCormick, **S. Wang***, "Ru-Pt and Ru-Pd Heterobimetallic Complexes Based on a New Ligand with Two Distinct Chelate Sites." *Dalton Trans.*, **2012**, *41*, 5553–5561.

212. Z. M. Hudson, B. A. Blight, and **S. Wang***, "Efficient and High-Yield One-Pot Synthesis of Cyclometalated Platinum(II) β -Diketonates at Ambient Temperature", *Org. Lett.*, **2012**, *14*, 1700–1703. (**Highlighted by** T. M. Swager, O. Haze in *Synfacts*, **2012**, *8(6)*, 0616.)
211. B. A. Blight, A. F. Stewart, N. Wang, J. S. Lu, S. Wang*, "Triarylboron-Functionalized Cu(II) Carboxylate Paddlewheel Complexes", *Inorg. Chem.*, **2012**, *51*, 778–780.

2011

Review Articles (Invited)

210. Y. L. Rao, **S. Wang***, "Four-Coordinate Organoboron Compounds with a π -Conjugated Chelate Ligand for Optoelectronic Applications", *Inorg. Chem.*, **2011**, *50*, 12263–12274. (**Invited forum article, selected for the front cover**)
209. Z. M. Hudson, S. Wang*, "Metal-Containing Triarylboron Compounds for Optoelectronic Applications", *Dalton Trans.*, **2011**, *40*, 7805–7816. (**Invited perspective article, selected for the front cover**)

Original articles

208. Z. M. Hudson, **S. Wang***, "Nonconjugated Dimesitylboryl-functionalized Phenylpyridines and their Cyclometalated Platinum(II) Complexes." *Organometallics*, **2011**, *30*, 4695–4701.
207. C. Sun, Z. M. Hudson, M. G. Helander, Z. H. Lu, **S. Wang***, "A Polyboryl-Functionalized Triazine as an Electron Transport Material for OLEDs", *Organometallics*, **2011**, *30*, 5552–5555.
206. J. Lu, H. Fu, Y. Zhang, Z. J. Jakubek, Y. Tao, **S. Wang***, "A Dual Emissive BODIPY Dye and Its Use in Functionalizing Highly Monodispersed PbS Nanoparticles", *Angew. Chem. Int. Ed.*, **2011**, *50*, 11658–11620.
205. Z. B. Wang, M. Helander, J. Qiu, M. Puzzo, M. Greiner, Z. Hudson, **S. Wang**, Z. W. Liu, Z. H. Lu*, "Unlocking the full potential of organic light-emitting diodes on flexible plastic", *Nature Photonics*, **2011**, *5*, 753–757.
204. C. Baik, **S. Wang***, "Inhibiting Olefin *cis*, *trans*-Photoisomerization and Enhancing Electron-accepting Ability of a Diboryl Compound by Metal Chelation", *Chem. Commun.*, **2011**, *46*, 9432–9434.
203. Y. L. Rao, **S. Wang***, "Impact of Cyclometalation and π -Conjugation on Photoisomerization of an N,C-Chelate Organoboron Compound" *Organometallics*, **2011**, *30*, 4453–4458.
202. X. D. Zhang, J. W. Ye, **S. Wang**, W. T. Gong, Y. Lin, G. L. Ning, Guiling "Heterocyclic Radical Mediated Synthesis and Fluorescence Properties of Conjugated Polyene Ketones" , *Org. Lett.*, **2011**, *13*, 3608–3611 .
201. Z. B. Wang, M. G. Helander, Z. M. Hudson, J. Qiu, **S. Wang**, Z. H. Lu, "Pt(II) Complex Based Phosphorescent Organic Light Emitting Diodes with External Quantum Efficiencies above 20%", *Appl. Phys. Lett.*, **2011**, *98*, 213301/1-213301/3.
200. Z. M. Hudson, C. Sun, K. J. Harris, B. E. G. Lucier, R. W. Schurko*, **S. Wang***, "Probing the Structural Origins of Vapochromism of a Triarylboron-Functionalized Pt(II) Acetylide by Optical and Multinuclear Solid-State NMR Spectroscopy", *Inorg. Chem.*, **2011**, *50*, 3447–3457.
199. Y. Sun, Z. M. Hudson, Y. L. Rao, **S. Wang***, "Tuning and Switching MLCT Phosphorescence of [Ru(bpy)₃]²⁺ Complexes with Triarylboranes and Anions", *Inorg. Chem.*, **2011**, *50*, 3373–3378.

198. V. Zlojutro, Y. Sun, Z. M. Hudson and **S. Wang***, "Triarylboron-Functionalized 8-Hydroxyquinolines and Their Aluminum(III) Complexes." *Chem. Commun.*, **2011**, 47, 3837–3839. **(Most accessed article)**
197. C. Sun, J. S. Lu and **S. Wang***, "Donor-Acceptor Assisted Alkyne Hydration: A Luminescent Boron-Stabilized Enol", *Org. Lett.*, **2011**, 13, 1226–1229.
196. Z. M. Hudson, X. Y. Liu, **S. Wang***, "Switchable Three-State Fluorescence of a Nonconjugated Donor-Acceptor Triarylborane", *Org. Lett.*, **2011**, 13, 300–303.
195. H. Amarne, C. Baik, R. Y. Wang, J. S. Lu, **S. Wang***, "Photoisomerization of 1-phenyl-2-(pyridin-2-yl)-indole BMes₂: The dark isomer", *Organometallics*, **2011**, 30, 665–668.
194. Z. M. Hudson, M. G. Helander, Z. H. Lu, **S. Wang***, "Highly Efficient Orange Electrophosphorescence from a Trifunctional Organoboron–Pt(II) Complex", *Chem. Commun.*, **2011**, 47, 755–757.

2010

Review articles (Invited)

193. S. B. Zhao and **S. Wang***, "Luminescence and Reactivity of 7-azaindole Derivatives and Complexes", *Chem. Soc. Rev.*, **2010**, 39, 3142–3156.

Original articles

192. S. K. Murphy, J. S. Lu, **S. Wang***, "Single Chromophore Isomerization in Silyl Bridged Dimers of an N,C-Chelate Boryl Photochromic Dye", *Org. Lett.*, **2010**, 12, 5266–5269.
191. C. Baik, S. K. Murphy, **S. Wang***, "Switching a Single Boryl Center in π -Conjugated Photochromic Poly-boryl Compounds and Its Impact on Fluorescence Quenching", *Angew. Chem. Int. Ed.*, **2010**, 49, 8224–8227.
190. N. Wang, Z. M. Hudson, **S. Wang***, "Reactivity of Aryldimesitylboranes under Suzuki-Miyaura Coupling Conditions." *Organometallics*, **2010**, 29, 4007–4011.
189. Z. M. Hudson, C. Sun, M. G. Helander, H. Amarne, Z. H. Lu and **S. Wang***, "Enhancing Phosphorescence and Electrophosphorescence of Cyclometalated Pt(II) Compounds with Triarylboron", *Adv. Funct. Mater.*, **2010**, 20, 3426–3439. **(Highlighted by the journal as a Frontispiece)**
188. Y. Sun, **S. Wang***, "Extending π -Conjugation of Triarylborons with a 2,2-Bpy Core: Impact of Donor-Acceptor Geometry on Luminescence, Anion Sensing, and Metal Ion Binding." *Inorg. Chem.*, **2010**, 49, 4394–4404. **(Selected by the editor as cover page)**
187. S. Martic, G. Wu*, **S. Wang***, "Probing GC Formation and G-octamer-to-GC Transformation by N²-Functionalized Fluorescent Guanosines", *Can. J. Chem.*, **2010**, 88, 524–532.
186. H. Amarne, C. Baik, S. K. Murphy, **S. Wang***, "Steric and Electronic Influence on Photochromic Switching of N,C-chelate Four-Coordinate Organoboron Compounds" *Chem. Eur. J.*, **2010**, 16, 4750–4761. **(Highlighted by the editor as a Frontispiece)**
185. S. B. Zhao, Q. Cui, **S. Wang*** "New Bimetallic Reactivity in Pt^{II}/Pt^{IV} Transformation Mediated by A Benzene Ring ", *Organometallics*, **2010**, 29, 998–1003.
184. W. White, Z. M. Hudson, X. Feng, S. Han, Z. H. Lu, **S. Wang***, "Linear and Star-shaped Benzimidazolyl Derivatives: Syntheses, Photophysical Properties and Use as Highly Efficient Electron Transport Materials in OLEDs". *Dalton Trans.*, **2010**, 39, 892–899.

2009

Review Articles (Invited)

183. Z. M. Hudson, S. Wang*, "Impact of Donor-Acceptor Geometry and Metal Chelation on Photophysical Properties and Applications of Triarylboranes" *Acc. Chem. Res.*, **2009**, *42*, 1584–1596. (cited 403 times)
- As of November/December 2015, this Highly Cited Paper (Web of Science) received enough citations to place it in the top 1% of its academic field based on a highly cited threshold for the field and publication year.

Original articles

182. C. Baik, Z. M. Hudson, H. Amarné, S. Wang*, "Enhancing the Photochemical Stability of N,C-Chelate Boryl Compounds: C-C Bond Formation versus C=C Bond *cis, trans*-Isomerization", *J. Am. Chem. Soc.*, **2009**, *131*, 14549–14559. (Highlighted by T. M. Swager, B. Van Veller in *Synfacts*, **2009** (12), 1348)
181. Z. M. Hudson, Y. Sun, B. Ross, R. Y. Wang, S. Wang*, "The anionic coordination polymer $\{K_2[Pt^{II}_2Ag^I_8(2,2'\text{-bipyridine})_2(O_2CCF_3)_{14}]\}_n$." *Acta Cryst., C*, **2009**, *C65*, m328–m330.
180. Y. L. Rao, S. Wang*, "Impact of Constitutional Isomers of (BMes₂)phenylpyridine on Structure, Stability, Phosphorescence, and Lewis Acidity of Mononuclear and Dinuclear Pt(II) Complexes", *Inorg. Chem.*, **2009**, *48*, 7698–7713.
179. Z. M. Hudson, S. B. Zhao, R. Y. Wang, S. Wang*, "Switchable Ambient-Temperature Singlet-Triplet Dual Emission in Nonconjugated Donor-Acceptor Triarylboron-Pt(II) Complexes" *Chem. Eur. J.*, **2009**, *15*, 6131–6137. (Hot article and selected for cover page; highlighted in *Synfacts* **2009**(9), 0981)
178. S. B. Zhao, R. Y. Wang, S. Wang*, "Reactivity of SiMe₃- and SnR₃-Functionalized Bis(7-azaindol-1-yl)-methane with $[PtR_2(\mu\text{-SMe}_2)]_n$ (R = Me, Ph) and the Resulting Pt(II) and Pt(IV) Complexes", *Organometallics*, **2009**, *28*, 2572–2582.
177. Y. Sun, S. Wang*, "Conjugated Triarylboron Donor-Acceptor Systems Supported by 2,2'-Bipyridine: Metal Chelation Impact on Intraligand Charge Transfer Emission, Electron Accepting Ability, and "Turn-on" Fluoride Sensing", *Inorg. Chem.*, **2009**, *48*, 3755–3767.
176. E. Wong, J. Li, C. Seward, S. Wang*, "Cu(I) and Ag(I) Complexes of 7-Azaindolyl and 2,2'-Dipyridylamino Substituted 1,3,5-Triazine and Benzene: the Central Core Impact on Structure, Solution dynamics and Fluorescence of the Complexes", *Dalton Trans.*, **2009**, 1776–1785.
175. Y. Sun, B. Ross, R. Y. Wang, S. Wang*, "Pt(2,2'-bpy)(O₂CCF₃)₂ as a Terminator for $[Ag(O_2CCF_3)]_n$ Aggregates: Syntheses and Structures of Heterobimetallic Pt^{II}Ag^I Complexes", *Can. J. Chem.* **2009**, *87*, 188–196. (Invited article).

2008

Original articles

174. S. B. Zhao, P. Wucher, Z. M. Hudson, T. M. McCormick, X. Y. Liu, S. Wang*, X. D. Feng, Z. H. Lu, "Impact of the Linker on the Electronic and Luminescent Properties of Diboryl

- Compounds: Molecules with two BMes₂ Groups and the Peculiar Behavior of 1,6-(BMes₂)₂pyrene", *Organometallics*, **2008**, *27*, 6446–6456.
173. S. B. Zhao, G. H. Liu, D. T. Song, **S. Wang***, "Impact of the Linker Groups in Bis(7-azaindol-1-yl) Chelate Ligands on Structures and Stability of Pt(N,N-L)₂ Complexes", *Dalton Trans.*, **2008**, 6953–6965. (**Hot article, selected for cover page**)
172. T. M. McCormick, **S. Wang***, "Racemic Atropisomeric N,N-Chelate Ligands for Recognizing Chiral Carboxylates via Zn(II) Coordination: Structure, Fluorescence and Circular Dichroism", *Inorg. Chem.*, **2008**, *47*, 10017–10024.
171. Y. L. Rao, H. Amarne, S. B. Zhao, T. M. McCormick, S. Martic, Y. Sun, R. Y. Wang, **S. Wang***, "Reversible Intramolecular C-C Bond Formation/Breaking and Color Switching Mediated by a N,C-Chelate in (2-ph-py)BMes₂ and (5-BMes₂-2-ph-py)BMes₂", *J. Am. Chem. Soc.*, **2008**, *130*, 12898–12900.
170. S. Martic, G. Wu*, **S. Wang***, "N²-Functionalized Blue Luminescent Guanosines by 2,2'-Dipyridylamino and 2-(2'-pyridyl)benzimidazolyl Chelate Groups and Their Interactions with Zn(II) Ions", *Inorg. Chem.*, **2008**, *47*, 8315–8323.
169. S. Martic, X. Y. Liu, **S. Wang***, G. Wu*, "Self-Assembly of N²-Modified Guanosine Derivatives: Formation of Discrete G-Octamers", *Chem. Eur. J.*, **2008**, *14*, 1196–1204.
168. D. R. Bai, S. J. Han, Z. H. Lu, **S. Wang***, "Bright Blue luminescent Pyrenyl-Containing Organosilicon Compounds with Contrasting Charge Transport Functionality: SiPh₂(p-C₆H₄-pyrenyl)(p-C₆H₄-N-benzimidazolyl) and SiPh₂(p-C₆H₄-pyrenyl)(p-C₆H₄-NPh(1-naph))", *Can. J. Chem.*, **2008**, *86*, 230–237.
167. F. H. Li, W. L. Jia, **S. Wang**, Y. Q. Zhao, Z. H. Lu, "Blue Organic Light-emitting Diodes Based on Mes₂B[p-4,4'-biphenyl-NPh(1-naphthyl)]", *J. Appl. Phys.*, **2008**, *103*, 034509/1-034509/6.
166. S. B. Zhao, G. Wu, **S. Wang***, "Steric Impact of Neutral N,N-Chelates on the Structure and Stability of Five-Coordinate Platinum(IV) Complexes: *fac*-Pt^{IV}Me₃ Complexes of BAB and BAM", *Organometallics*, **2008**, *27*, 1030–1033.

2007

Original articles

165. S. B. Zhao, T. M. McCormick, **S. Wang***, "Ambient-Temperature Metal-to-Ligand Charge-Transfer Phosphorescence Facilitated by Triarylboron: Bnpa and Its Metal Complexes", *Inorg. Chem.*, **2007**, *46*, 10965–10967.
164. T. M. McCormick, Q. Liu and **S. Wang***, "Luminescent Atropisomeric N,N-Chelating Ligands from Copper Catalyzed One-pot C-N and C-C Coupling Reactions", *Org. Lett.*, **2007**, *9*, 4087–4090.
163. D. R. Bai, X. Y. Liu, **S. Wang***, "Charge Transfer Emission Involving Three-Coordinate Organoboron: V-Shape versus U-shape and Impact of the Spacer on Dual Emission and Fluorescent Sensing", *Chem. Eur. J.*, **2007**, *13*, 5713–5723. (**Hot article, highlighted by the journal**)
162. Y. Sun, N. Ross, S. B. Zhao, K. Huszarik, W. L. Jia, R. Y. Wang, D. Macartney, **S. Wang***, "Enhancing Electron Accepting Ability of Triarylboron via π -Conjugation with 2,2'-Bipy and Metal Chelation: 5,5'-Bis(BMes₂)-2,2'-bipy and its metal complexes", *J. Am. Chem. Soc.*, **2007**, *129*, 7510–7511.

161. Y. Cui, F. H. Li, Z. H. Lu, and **S. Wang***, "Three-coordinate Organoboron with a B=N bond: Substituent Effect, Luminescence/Electroluminescence and Reactions with Fluorides", *Dalton Trans.*, **2007** (25), 2634–2643.
160. S. B. Zhao, R. Y. Wang, **S. Wang***, "Intramolecular C-H Activation Directed Self-Assembly of an Organoplatinum Molecular Square", *J. Am. Chem. Soc.*, **2007**, 129, 3092–3093.

2006

Original articles

159. S. B. Zhao, G. Wu, **S. Wang***, "Impact of Steric Blocking on Diastereoselective C–H Activation of Ethylbenzene by Cationic Pt(II) Complexes with 7-Azaindolyl Derivative" *Organometallics*, **2006**, 25, 5979–5989.
158. Y. Cui, **S. Wang***, "Diboron and Trioboron Compounds Based on Linear and Star-shaped Conjugated Ligands with 8-Hydroxyquinolate Functionality: Impact of Intermolecular Interaction and Boron Coordination on Luminescence" *J. Org. Chem.*, **2006**, 71, 6485–6496.
157. X. Y. Liu, I. Kwan, **S. Wang***, G. Wu*, "G-Quartet Formation from an N²-Modified Guanosine Derivatives" *Org. Lett.*, **2006**, 8, 3685–3688.
156. X. Y. Liu, D. R. Bai, **S. Wang*** "Charge Transfer Emission in Non-planar Three-coordinate Organoboron Compounds for Fluorescent Sensing of Fluoride". *Angew. Chem. Int. Ed.*, **2006**, 45, 5475–5478. (cited 335 times)
- **As of November/December 2015, this Highly Cited Paper (Web of Science) received enough citations to place it in the top 1% of its academic field based on a highly cited threshold for the field and publication year**
155. L. De La Durantaye, T. McCormick, W. L. Jia, **S. Wang***, "Interaction of 2-(2'-Pyridyl)benzimidazolyl Derivative Ligands with Group 12 Metal Ions: Coordination, Structures and Luminescence", *Dalton Trans.*, **2006** (48), 5675–5682.
154. S. B. Zhao, R. Y. Wang, **S. Wang***, "Dinuclear Cu^I Complexes of 1,2,4,5-Tetra(7-azaindolyl)benzene: Persistent 3-Coordinate Geometry, Luminescence and Reactivity", *Inorg. Chem.*, **2006**, 45, 5830–5840.
153. W. H. Huang, W. L. Jia, **S. Wang***, "7-Azaindolyl and Indolyl Functionalized Starburst Molecules with a 1,3,5-Triazine or a Benzene Core: Syntheses and Luminescence", *Can. J. Chem.*, **2006**, 84, 477–485. (Invited article)
152. T. McCormick, W. L. Jia, **S. Wang***, "Phosphorescent Cu(I) Complexes of 2-(2'-pyridylbenzimidazolyl) benzene: Impact of Phosphine Ancillary Ligands on Electronic and Photophysical Properties of the Cu(I) Complexes", *Inorg. Chem.*, **2006**, 45, 147–155.
151. D. R. Bai, **S. Wang***, "Organoplatinum Polymorphs with Varying Molecular Conformation, Intermolecular Interaction and Luminescence" *Organometallics*, **2006**, 25, 1517.
150. W. L. Jia, Y. F. Hu, J. Gao, **S. Wang***, "Linear and Star-shaped Polynuclear Ru(II) Complexes of 2-(2'-pyridyl)benzimidazolyl Derivatives: Syntheses, Photophysical Properties and Red Light-Emitting Devices", *Dalton Trans*, **2006** (14), 1721–1728.
149. J. H. Lee, Y. Y. Yuan, Y. J. Kang, W. L. Jia, Z. H. Lu, **S. Wang***, "2,5-Functionalized Spiro-Bisoles As Highly Efficient Yellow Emitters in Electroluminescent Devices", *Adv. Funct. Mater.* **2006**, 16, 681–686.

2005

Review articles (Invited)

148. C. M. Seward, **S. Wang***, "Starburst Complexes of Di-2-Pyridylamine Derivatives with a Benzene or 1,3,5-Triazine Core" *Comments on Inorg. Chem.*, **2005**, 26, 103–125.

Original articles

147. Q. Yue, J. Yang, G. H. Li, G. D. Li, W. Xu, J. S. Chen, * **S. Wang**, "Three-dimensional 3d-4f heterometallic coordination polymers: Synthesis, structures, and magnetic properties", *Inorg. Chem.* **2005**, 44, 5241–5246.
146. W. L. Jia, M. J. Moran, Y. Y. Yuan, Z. H. Lu and **S. Wang***, "(1-Naphthyl)phenylamino Functionalized Three-Coordinate Organoboron Compounds: Syntheses, Structures, and Applications in OLEDs", *J. Mater. Chem.*, **2005**, 15, 3326–3333.
145. W. L. Jia, T. McCormick, Y. Tao, J. P. Lu, **S. Wang***, "New Phosphorescent Polynuclear Cu(I) Compounds Based on Linear and Star-shaped 2-(2'-Pyridyl)benzimidazolyl Derivatives: Syntheses, Structures, Luminescence and Electroluminescence", *Inorg. Chem.* **2005**, 44, 5706–5712.
144. R. Y. Wang, W.L. Jia, H. Aziz, G. Vamvounis, **S. Wang***, N. X. Hu, Z. D. Popović, J. A. Coggan, "1-Methyl-2-(Anthryl)-Imidazo[4,5-f] [1,10]-Phenanthroline: A Highly Efficient Electron Transport Compound and a Bright Blue Emitter for Electroluminescent Devices", *Adv. Funct. Mater.* **2005**, 15, 1483–1487.
143. S. B. Zhao, D. T. Song, W. L. Jia, **S. Wang*** Regioselective C-H Activation of Toluene with a 1,2-Bis(*N*-7-azaindolyl)benzene Platinum(II) Complex", *Organometallics*, **2005**, 24, 3290–3296.
142. Y. Cui, Q. D. Liu, D. R. Bai, W. L. Jia, Y. Tao, **S. Wang***, "Organoboron Compounds with a 8-Hydroxyquinolato Chelate and Its Derivatives: Substituent Effects on Structures and Luminescence", *Inorg. Chem.* **2005**, 44, 601–609.
141. Q. D. Liu, W. L. Jia, **S. Wang***, "Blue Luminescent 2-(2'-pyridyl)benzimidazole Derivative Ligands and Their Orange Luminescent Mononuclear and Polynuclear Organoplatinum(II) Complexes", *Inorg. Chem.*, **2005**, 44, 1332–1343.
140. Q. D. Liu, M. S. Mudadu, R. Thummel, Y. Tao, **S. Wang***, From Blue to Red: Syntheses, Structures, Electronic, and Electrochemical Properties of Tunable Luminescent *N,N*- Chelate Boron Complexes." *Adv. Funct. Mater.*, **2005**, 15, 143–154.
139. W.-L. Jia, R.-Y. Wang, D. T. Song, S. Ball, A. McLean, **S. Wang***, "7-Azaindolyl and 2,2'-Dipyridylamino Functionalized Molecular Stars with a 6-fold Symmetry: Self-assembly, Luminescence and Coordination Compounds", *Chem., Eur. J.*, **2005**, 11, 832–842.
138. D. T. Song, W. L. Jia, G. Wu, **S. Wang***, Cu(I) and Zn(II) Complexes of 7-Azaindole-Containing Scorpionates: Structures, Luminescence and Fluxionality. *Dalton Trans.*, **2005**, 433–438.
137. W. L. Jia, X. D. Feng, D. R. Bai, Z. H. Lu, **S. Wang***, "Mes₂B(*p*-4,4'-biphenyl-NPh(1-naphthyl)): A Novel Multi-functional Molecule for Electroluminescent Devices" *Chem. Mater.*, **2005**, 17, 164–170.

2004

Review articles (Invited)

136. D. T. Song, **S. Wang***, "C-H and C-Cl Activation by Mononuclear and Dinuclear Platinum Complexes with 7-Azaindoyl Containing Chelates" *Commen. Inorg. Chem.*, **2004**, 25, 1–18.
135. **S. Wang***, C. Seward, "Luminescent materials", an invited chapter in "Encyclopedia of Supramolecular Chemistry" Jerry L. Atwood, Jonathan W. Steed, Ed., Dekker: New York, **2004**, 816–820.

Original articles

134. R. Y. Wang, Z. P. Zheng, Q. D. Liu, **S. Wang***, "Cluster and polynuclear compounds. A Tetranuclear lanthanide-hydroxo Complex Featuring a Cubane-like $[\text{Ln}_4(\text{OH})_4]^{8+}$ Cluster Core, $[\text{Nd}_4(\text{OH})_4(\text{H}_2\text{O})_{10}(\text{alanine})_6][\text{ClO}_4]_8$." *Inorg. Syn.*, **2004**, 34 184–187.
133. J. H. Lee, Q. D. Liu, D. R. Bai, Y. Kang, Y. Tao, **S. Wang***, "2,3,4,5-Tetra-functionalized siloles: Syntheses, Structures, Luminescence and Electroluminescence", *Organometallics*, **2004**, 23, 6205–6213. **(Highlighted by ACS Heart Cut, January 10, 2005)**
132. D. R. Bai, **S. Wang***, "A Comparative Study on Tetrahedral and Tripodal Luminescent Silane and Methane Compounds with 2,2'-Dipyridylamino Group", *Organometallics*, **2004**, 23, 5958–5966.
131. W. L. Jia, T. M^cCormick, Q. D. Liu, H. Fukutani, R. -Y. Wang, Y. Tao, **S. Wang***, "Diarylamino Functionalized Pyrene Derivatives for Use in Blue OLEDs and Complex Formation" *J. Mater. Chem.*, **2004**, 14, 3344–3350.
130. Q. D. Liu, R. Y. Wang, **S. Wang***, "Blue Phosphorescent Zn(II) and Orange Phosphorescent Pt(II) Complexes of 4,4'-Diphenyl-6,6'-dimethyl-2,2'-bipyrimidine" *Dalton Trans.*, **2004**, 2073–2079.
129. C. Seward, W. L. Jia, R. Y. Wang, G. D. Enright, **S. Wang***, "Luminescent 2D Macrocyclic Networks Based on Starburst Molecules: $[\text{Ag}(\text{O}_3\text{SCF}_3)]_{1.5}(\text{tdapb})$ and $[\text{Ag}(\text{NO}_3)]_3(\text{tdapb})$, $\text{tdapb} = 1,3,5\text{-tris}(4\text{-}(2,2'\text{-dipyridylamino})\text{phenyl})\text{benzene}$ " *Angew. Chem. Int. Ed.*, **2004**, 43, 2933–2936.
128. J. H. Lee, M. Motala, Q. D. Liu, J. Dane, J. Gao, **S. Wang***, "Photoluminescence, Electroluminescence and Complex Formation of Novel N-7-azaindoyl and 2,2'-dipyridylamino Functionalized Siloles", *Chem. Mater.* **2004**, 16, 1869-1877.
127. D. T. Song, W. L. Jia, **S. Wang***, C-H Activation by a Diplatinum(II) Complex: Isolation and Structures of $[\text{Pt}_2(\text{CH}_3)(\text{SMe}_2)\text{Ph}_2(\text{ttab})][\text{BAr}'_4]$ and $[\text{Pt}_2(\text{H}_2\text{O})_2\text{Ph}_2(\text{ttab})][\text{BAr}'_4]_2$ ($\text{ttab} = 1,2,4,5\text{-Tetrakis}(1\text{-}N\text{-}7\text{-azaindoyl})\text{benzene}$)" *Organometallics*, **2004**, 23, 1194–1196.
126. W. L. Jia, D.-R. Bai, T. M^cCormick, Q. D. Liu, M. Motala, R. Y. Wang, C. Seward, Y. Tao, **S. Wang***, "Three-Coordinate Organoboron Compounds BAr_2R ($\text{Ar} = \text{Mesityl}$, $\text{R} = 7\text{-azaindoyl}$ or 2,2'-Dipyridylamino Functionalized Aryl or Thienyl) for Electroluminescent Devices and Supramolecular Assembly", *Chem., Eur. J.*, **2004**, 10, 994–1006. **(Hot article, highlighted by the journal)**
125. C. Seward, W. L. Jia, R.Y. Wang, **S. Wang***, "Pd(II) Complexes of Bowls, Pinwheels, Cages, and N,C,N-Pincers of Starburst Ligands 1,3,5-tris(di-2-pyridylamino)benzene and 2,4,6-tris(di-2-pyridylamino)-1,3,5-triazene" *Inorg. Chem.* **2004**, 43, 978–985.

2003**Original articles**

124. D. T. Song, **S. Wang***, "Pd(II), Zn(II) and Ag(I) Complexes of Tetrakis(*N*-7-azaindolyl)benzene: Variation of Bonding Modes, Extended Structures and Luminescence", *Eur. J. Inorg. Chem.*, **2003**, 3774–3782.
123. Y. J. Kang, J. H. Lee, D. T. Song, **S. Wang***, "Platinum(II) Diimine Complexes of Acetylides containing 7-azaindolyl and 2,2'-dipyridylamino Functional Groups", *Dalton Trans.*, **2003** (18), 3493–3499.
122. W. L. Jia, Q. D. Liu, R. Y. Wang, **S. Wang***, "Novel Phosphorescent Cyclometalated Organotin(IV) and Organolead(IV) Complexes of 2,6-Bis(2'-indolyl)pyridine and 2,6-Bis(2'-7-azaindolyl)pyridine" *Organometallics*, **2003**, 22, 4070–4078.
121. Q. D. Liu, W. L. Jia, G. Wu, **S. Wang***, "Binuclear and Starburst Organoplatinum(II) Complexes of 2,2'-Dipyridylamino Derivative Ligands: Structures, Fluxionality and Luminescence", *Organometallics*, **2003**, 22, 3781–3791.
120. D. T. Song, **S. Wang***, "Benzene C-H Activation by Two Isomeric Pt(II) Complexes of Bis(*N*-7-azaindolyl)methane" *Organometallics*, **2003**, 22, 2187–2189.
119. W. Chen, Q. Yue, C. Chen, H. M. Yuan, W. Xu, J. S. Chen*, **S. Wang**, "Assembly of a Manganese(II) pyridine-3,4-dicarboxylate Polymeric Network based on Infinite M-O-C Chains", *Dalton Trans.* **2003**, 28–30.
118. G. Wu*, A. Wong, **S. Wang**, "Solid State ²⁵Mg NMR, X-ray Crystallographic and Quantum Mechanical Study of Bis(pyridine)5,10,15,20-tetraphenylporphyrinato)magnesium(II)", *Can. J. Chem.*, **2003**, 81, 275–283.
117. W. Chen, J. Wang, C. Chen, Q. Yue, H. M. Yuan, J. S. Chen*, **S. Wang**, "Photoluminescent Metal-Organic Polymer Constructed from Trimetallic Clusters and Mixed Carboxylates", *Inorg. Chem.* **2003**, 42, 944–946. (Cited 594 times)
116. Y. Kang, C. Seward, D. Song, **S. Wang***, "Blue Luminescent Rigid Molecular Rods Bearing *N*-7-azaindolyl and 2,2'-dipyridylamino and their Zn(II) and Ag(I) Complexes" *Inorg. Chem.* **2003**, 42, 2789–2797.
115. W. L. Jia, D. Song, **S. Wang***, "Blue Luminescent Three-Coordinate Organoboron Compounds with 2,2'-Dipyridylamino Functional Group", *J. Org. Chem.* **2003**, 68, 701–705.
114. W. L. Jia, Q. D. Liu, D. Song, **S. Wang***, "New Blue Phosphorescent Organosilicon Compounds Based on 2,2'-dipyridylaminophenyl and 2,2'-dipyridylaminobiphenyl", *Organometallics*, **2003**, 22, 321–327.
113. C. Seward, J. Chan, D. Song, **S. Wang***, "Anion Dependent Structures of Luminescent Silver(I) complexes", *Inorg. Chem.* **2003**, 42, 1112–1120.
112. Q. D. Liu, **S. Wang***, "Preparation of Two Luminescent Complexes Alq₃ (q = 8-hydroxyquinolinolato) and Eu(tta)₃(phen) (tta = thenoyltrifluoroacetato, phen = 1, 10-phenanthroline)" *J. Chem. Edu.*, **2003**, 80, 1474–1475.

2002

Original articles

111. J. P. Fackler, Jr.*, E. Galarza, G. Garzon, A. M. Mazany, H. H. Murray, O. Rawashdeh, A. Manal, R. Raptis, R. J. Staples, W. E. Van Zyl, **S. Wang**, E. Cerrada, M. Laguna, "Compounds of General Interest. The Diphenylmethylenethiophosphinate (MTP) Ligand in Gold(I), Platinum(II), Lead(II), Thallium(I), and Mercury(II) Complexes, sym-Au₂(MTP)₂,

- (PPN)[Au(MTP)₂], Au₂Pt(MTP)₄, Au₂Pb(MTP)₄, AuTl(MTP)₄, Hg(MTP)₂, Hg(MTP)₂(AuCl)₂, and Hg^{II}Au^I(MTP)₂Au^{III}Cl₄" *Inorg. Syn.*, **2002**, 33, 171–180.
110. D. Song, K. Sliwowski, J. Pang, **S. Wang***, "Diplatinum-Center Mediated Transformation of A Substituted Benzene to A Cyclohexadienyl Dianion and The Breaking of C-Cl Bonds: Syntheses and Structures of Pt₂R₄(ttab) and Pt₂(CH₃)₄(ttab)Cl₂", *Organometallics*, **2002**, 21, 4978–4983.
109. D. Song, H. Schmider, **S. Wang***, "Isomerism of Bis(7-azaindoly) methane", *Org. Lett.* **2002**, 4, 4049–4052.
108. Q. D. Liu, M. S. Mudadu, H. Schmider, R. Thummel*, Y. Tao, **S. Wang***, "Tuning the Luminescence and Electroluminescence of Diphenylboron Complexes of 5-Substituted 2-(2'-Pyridyl)indoles", *Organometallics*, **2002**, 21, 4743–4749.
107. R. Wang, D. Song, C. Seward, Y. Tao*, **S. Wang***, "Syntheses, Structures and Electroluminescence of Ln₂(acac-azain)₄(μ-acac-azain)₂, acac-azain = 1-(N-7-azaindoly)-1, 3-butanedionato, Ln = Tb(III) and Y(III)", *Inorg. Chem.*, **2002**, 41, 5187–5192.
106. Y. J. Kang, **S. Wang***, "Syntheses and Photophysical Properties of Rigid-Rod Conjugated Compounds based on N-7-azaindole and 2, 2'-dipyridylamine", *Tetrahedra. Lett.*, **2002**, 43, 3711–3713.
105. Q. D. Liu, L. Thorne, D. T. Song, C. Seward, M. D'Iorio, Y. Tao,* **S. Wang***, "New Red-orange Phosphorescent/Electroluminescent Cycloplatinated Complexes of 2,6-Bis(2'-indolyl)pyridine", *Dalton Trans.*, **2002** (16), 3234–3240.
104. Y. J. Kang, D. T. Song, H. Schmider, **S. Wang***, "Novel Blue Phosphorescent Group 15 Compounds MR₃, M = P, Sb, Bi, R = p-(N-7-azaindoly)phenyl" *Organometallics*, **2002**, 21, 2413–2421.
103. C. Seward, J. Pang, **S. Wang***, "Luminescent Star-shaped Zn(II) and Pt(II) Complexes Based on Star-shaped 2,2'-dipyridylamino Derivative Ligands", *Eur. J. Inorg. Chem.*, **2002**, 6, 1390–1399.
102. D. Song, **S. Wang***, " Structures of Pt₂(CH₃)₄(S(CH₃)₂)₂ and Pt₃Ph₆(S(CH₃)₂)₃", *J. Organomet. Chem.*, **2002**, 648, 302–305.
101. J. Pang, Y. Tao, X.-P. Yang, M. D'Iorio, **S. Wang***, "Syntheses, Structures, and Electroluminescence of New Blue Luminescent Star-shaped Compounds Based on 1,3,5-triazine and 1,3,3-trisubstituted Benzene", *J. Mater. Chem.*, **2002**, 12, 206–212.
100. R. Y. Wang, D. T. Song, **S. Wang***, "Toward Constructing Nanoscale Hydroxo-lanthanide Clusters: Syntheses and Characterizations of Novel Tetradecanuclear Hydroxo-lanthanide Clusters", *Chem. Comm.*, **2002** (4), 368–369.

2001

Review article (Invited)

99. **S. Wang**, "Luminescence and Electroluminescence of Al(III), B(III), Be(II) and Zn(II) Complexes with Nitrogen Donors", *Coord. Chem. Rev.*, **2001**, 215, 79–98. (Cited 452 times)

Original articles

98. D. T. Song, S.-F. Liu, R. Y. Wang, **S. Wang***, "Syntheses and Structures of New Blue Luminescent B(III) and Al(III) Complexes: $\text{BPh}_2(\text{acac-azain})$ and $\text{Al}(\text{CH}_3)(\text{acac-azain})_2$, acac-azain = 1-*N*-7-azaindoyl-1,3-butanedionato", *J. Organomet. Chem.*, **2001**, 631, 175–180.
97. D. T. Song, Q. Wu, A. Hook, I. Kozin, **S. Wang***, "Syntheses and Structures of New Luminescent Cyclometalated Palladium(II) and Platinum(II) Complexes: $\text{M}(\text{Bab})\text{Cl}$, $\text{M}(\text{Br-Bab})\text{Cl}$, $\text{M} = \text{Pd}(\text{II})$, $\text{Pt}(\text{II})$, and $\text{Pd}_3\text{Cl}_4(\text{Tab})_2$, Bab=1,3-bis(7-azaindoyl)phenyl, Br-Bab = 1-Bromo-3,5-bis(7-azaindoyl)-phenyl, Tab=1,3,5-tris(7-azaindoyl)phenyl", *Organometallics*, **2001**, 20, 4683–4689.
96. J. Pang, E. J.-P. Marcotte, C. Seward, R. S. Brown,* **S. Wang***, "A Blue Luminescent Starburst Zn(II) Complex that Can Detect Benzene", *Angew. Chem., Int. Ed.*, **2001**, 40, 4042–4045.
95. C. Seward, **S. Wang***, "Structural and Luminescent Variation of $[\text{Eu}(\text{tta})_3\text{L}]$ Complexes, L = 4,4'-bipyridine, *trans*-1,2-(4-pyridyl)ethylene, 4,4'-bipyridine-*N, N'*-dioxide, tta = thenoyltrifluoro-acetonato", *Can. J. Chem.* **2001**, 79, 1187–1193.
94. C. Seward, N.-X. Hu, **S. Wang***, "1D Chain and 3D Grid Green Luminescent Tb(III) Coordination Polymers: $\{\text{Tb}(\text{O}_2\text{CPh})_3(\text{CH}_3\text{OH})_2(\text{H}_2\text{O})\}_n$ and $\{\text{Tb}_2(\text{O}_2\text{CPh})_6(4,4'\text{-bipy})\}_n$ ", *Dalton Trans.* **2001** (2), 134–137.
93. Q. Wu, J. A. Lavigne, Y. Tao, M. D'Iorio, **S. Wang***, "Novel Blue Luminescent / Electroluminescent 7-azaindole Derivatives: 1,3-Di(*N*-7-azaindoyl)benzene, 1-Bromo-3,5-Di(*N*-7-azaindoyl)benzene, 1,3,5-Tri(*N*-7-azaindoyl)benzene and 4,4'-Di(*N*-7-azaindoyl)biphenyl" *Chem. Mater.*, **2001**, 13, 71–77.
92. W.-Y. Yang, L. Chen, **S. Wang***, "Syntheses, Structures, and Luminescence of Novel Lanthanide Complexes of Tripyridylamine, *N,N,N',N'*-Tetra(2-pyridyl)-1,4-phenylenediamine, and *N,N,N',N'*-Tetra(2-pyridyl)-biphenyl-4,4'-diamine", *Inorg. Chem.*, **2001**, 40, 507–515.

2000

Original articles

91. S. F. Liu, C. Seward, H. Aziz, N.-X. Hu, Z. Popović, **S. Wang***, "Syntheses, Structures, and Luminescence /Electroluminescence of $\text{BPh}_2(\text{mqp})$, $\text{Al}(\text{CH}_3)(\text{mqp})$ and $\text{Al}(\text{mqp})_3$, mqp = 2-(4'-methylquinolinyl)-2-phenolato", *Organometallics*, **2000**, 19, 5709–5714.
90. Q. Wu, A. Hook and **S. Wang***, "A Blue Luminescent Starburst Molecule and Its Orange Luminescent Trinuclear Pd(II) Complex: 1,3,5-tris(*N*-7-azaindoyl)benzene (TABH) and $\text{Pd}^{\text{II}}_3(\text{TAB})_2\text{Cl}_4$ ", *Angew. Chem. Int. Ed.*, **2000**, 39, 3933–3935.
89. Q. Wu, J. A. Lavigne, Y. Tao, M. D'Iorio, and **S. Wang***, "New Blue Luminescent /Electroluminescent Zn(II) Compounds of 7-azaindole and *N*-(2-pyridyl)-7-azaindole: $\text{Zn}(7\text{-azaindole})_2(\text{CH}_3\text{COO})_2$, $\text{Zn}(\text{NPA})-(\text{CH}_3\text{COO})_2$, and $\text{Zn}(\text{NPA})(\text{S}(+)\text{-CH}_3\text{CH}_2\text{CH}(\text{CH}_3)\text{COO})_2$, NPA = *N*-(2-pyridyl)-7-azaindole", *Inorg. Chem.*, **2000**, 39, 5248–5254.
88. A. Wong, S. Sham, **S. Wang**, G. Wu*, "A Solid-State Cesium-133 Nuclear Magnetic Resonance and X-ray Crystallographic Study of Cesium Macrocylic Complexes", *Can. J. Chem.* **2000**, 78, 975–985.
87. Y. S. Zhang, S. Wang,* C. Bridges, and J. Greedan, "Co(II) and Mn(II) Complexes of 2,2'-thiodiethanol: $[\text{Co}^{\text{II}}(2,2'\text{-thiodiethanol})_2\text{Cl}_2]$ and $[\text{Mn}(2,2'\text{-thiodiethanol})\text{Cl}_2]_{\infty}$ ", *Can. J. Chem.*, **2000**, 78, 1289–1294.

86. W. Yang, H. Schmider, Q. Wu, Y. S. Zhang, **S. Wang***, "Syntheses, Structures, and Fluxionality of Blue Luminescent Zinc(II) Complexes: $Zn(2,2',2''\text{-tpa})Cl_2$, $Zn(2,2',2''\text{-tpa})_2(O_2CCF_3)_2$, and $Zn((2,2',3''\text{-tpa})_4(O_2CCF_3)_2$, tpa = tripyridylamine." *Inorg. Chem.*, **2000**, 39, 2397–2404.
85. S. F. Liu, Q. Wu, H. L. Schmider, H. Aziz, N.-X. Hu, Z. Popović, and **S. Wang***, "Syntheses, Structures, and Electroluminescence of New Blue/Green Luminescent Chelate Compounds: $Zn(2\text{-py-in})_2(THF)$, $BPh_2(2\text{-py-in})$, $Be(2\text{-py-in})_2$, and $BPh_2(2\text{-py-aza})$, 2-py-in = 2-(2-pyridyl)indole, 2-py-aza = 2-(2-pyridyl)-7-azaindole." *J. Am. Chem. Soc.*, **2000**, 122, 3671–3678.
84. J. Ashenurst, **S. Wang**, G. Wu*, "Probing the Origin of Disorder in Polynuclear Aluminum 7-Azaindolyl Complexes by ^{27}Al Multiple-Quantum Magic-Angle-Spinning NMR." *J. Am. Chem. Soc.*, **2000**, 122, 3528–3529.
83. J. Ashenurst, G. Wu, **S. Wang***, "Syntheses, Structures, Solution and Solid-State ^{27}Al NMR Studies of Blue Luminescent Mononuclear Aluminum Complexes: $Al(7\text{-azain})_2(7\text{-azain-H})(CH_3)$, $Al(7\text{-azain})_3(7\text{-azain-H})$, $Al(7\text{-azain})(7\text{-azain-H})(OCH(CF_3)_2)_2$, 7-azain-H = 7-azaindole." *J. Am. Chem. Soc.*, **2000**, 122, 2541–2547.
82. Q. Wu, M. Esteghamatian, N.-X. Hu, Z. Popovic, G. Enright, **S. Wang***, Y. Tao, M. D'Iorio, "Synthesis, Structure, and Electroluminescence of BR_2q , R = Ph, Et, 2-naphthyl, q = 8-hydroxyquinolato." *Chem. Mater.*, **2000**, 12, 79–83. (Cited 413 times)
81. Q. Wu, Y. Zhang, and **S. Wang***, "A Novel Mg_6 Cluster Molecule: $Mg_6(\mu_3\text{-OH})_2(\mu_3\text{-Br})_2(\mu\text{-Br})_8(THF)_8$." *J. Cluster Science*, **2000**, 11, 253–260.

1999

Book chapter

80. **S. Wang** and J. P. Fackler, Jr., "Rearrangements of Gold and Silver Compounds", a book chapter in "The Chemistry of Organic Derivatives of Gold and Silver." *Patai's Chemistry of Functional Groups*, John Wiley & Sons, **1999**, 431–450. (invited)

Original articles

79. N.-X. Hu,* M. Esteghamatian, S. Xie, Z. Popovic, B. Ong, A. -M. Hor, and **S. Wang**, "A New Class of Blue Emitting Materials Based on 1,3,5-oxadiazole Metal Chelate Compounds for Electroluminescent Devices." *Adv. Mater.*, **1999**, 11, 1460–1463.
78. N.-X. Hu,* S. Xie, Z. Popovic, B. Ong, A. -M. Hor, and **S. Wang**, "5,11-Di-1-naphthyl-indolo[3,2-b]-carbazole: Atropisomerism and Novel Hole Transport Molecule for Organic Light-Emitting Diodes." *J. Amer. Chem. Soc.*, **1999**, 121, 5097–5098.
77. Y. Zhang, G. D. Enright, S. R. Breeze, **S. Wang***, "Coordination Polymers of Cobalt(II): $[Co(4,4'\text{-bpy})_2(O_2CCF_3)_2]_n$ and $[Co(4,4'\text{-bpy})(O_2CCH_3)_2(H_2O)_2]_n$." *New J. Chem.*, **1999**, 23, 625–628.
76. Q. G. Wu, G. Wu, L. Brancalon, and **S. Wang***, " $B_3O_3Ph_3(7\text{-azaindole})$: Structure, Luminescence, and Fluxionality." *Organometallics*, **1999**, 18, 2553–2556.
75. Y. Zhang, S. R. Breeze, **S. Wang***, J. E. Greedan, N. P. Raju, and L. J. Li, "Polynuclear Co(II) and Cu(II) Complexes of Tetraacetylene: $Cu_2(dpa)_2(tae)(O_2CCF_3)_2$, $\{[Cu_2(dpa)_2(tae)(4,4'\text{-bipy})-(O_2CCF_3)_2]_n\}$, and $[Co_2(dpa)_4(tae)](O_2CCH_3)_2(H_2O)_2$, dpa = 2,2'-dipyridylamine, tae = tetraacetylene dianion." *Can. J. Chem.*, **1999**, 77, 1424–1435.

74. Q. Wu, M. Esteghamatian, N. X. Hu, Z. Popovic, G. Enright, S. R. Breeze, **S. Wang***, "Isomerism and Blue Electroluminescence of A Novel Organoboron Compound: $B_2(O)(7\text{-azain})_2Ph_2$, 7-azain = 7-azaindole anion." *Angew. Chem. Int. Ed.*, **1999**, 38, 985–988.
73. S. R. Breeze, **S. Wang***, "The Preparation of YBCO Epitaxial Superconducting Film by a Chemical Solution Deposition Process." *J. Mate. Science*, **1999**, 34, 1099–1106.

1998

Review article (Invited)

72. **S. Wang**, "Bimetallic Copper and Lanthanides, Copper and Alkaline-Earth Metal Complexes Containing Aminoalcohol Ligands." *Polyhedron*, **1998**, 17, 831–843.

Original articles

71. J. Ashenhurst, L. Brancalion, S. Gao, W. Liu, H. Schmider, **S. Wang***, G. Wu, and Q. G. Wu, "Blue Luminescent Organoaluminum Compounds: $Al(CH_3)_2(dpa)$, $Al_2(CH_3)_5(dpa)_2$, $Al_4(O)_2(CH_3)_6(dpa)_2$, and $Al(pfap)_3$, dpa = deprotonated di-2-pyridylamine, pfap = deprotonated 2-pentafluoroanilinopyridine." *Organometallics*, **1998**, 17, 5334–5341.
70. S. Gao, Q. Wu, G. Wu, **S. Wang***, "Highly Fluxional Blue Luminescent Aluminum Complexes: $Al(CH_3)(7\text{-azain-2-Ph})_2(7\text{-azainH-2-Ph})$, $Al_3(\mu_3-O)(CH_3)_3(7\text{-azain-2-Ph})_4$, and $Al_3((\mu_3-O)(CH_3)_3(7\text{-azain-2-CH}_3)_4$, 7-azain = 7-azaindole anion." *Organometallics*, **1998**, 17, 4666–4674.
69. Y. Zhang, **S. Wang***, G. D. Enright, S. R. Breeze, "Tetraacetylene Dianion (tae) as a Bridging Ligand for Chiral Molecular Square Complexes: Structure and Synthesis of $Co^{II}_4(tae)_4(dpa)_4$, dpa = di-2-pyridylamine." *J. Am. Chem. Soc.*, **1998**, 120, 9398–9399.
68. J. Ashenhurst, L. Brancalion, A. Hassan, W. Liu, H. Schmider, **S. Wang***, Q. Wu, "Blue Luminescent Organoaluminum Compounds: $Al_2(CH_3)_4(7\text{-azain})_2$, $Al_2(CH_3)_2(7\text{-azain})_4$, $Al_2(CH_3)(OCH(CF_3)_2)_3(7\text{-azain})_2$, $Al_2(\mu-OCH(CF_3)_2)(CH_3)(7\text{-azain})_2(OCH(CF_3)_2)_2$, $Al_3(\mu_3-O)(CH_3)(7\text{-azain})_4(OCH(CF_3)_2)_2$, and $Al_4(\mu_3-O)_2(7\text{-azain})_6(OCH(CF_3)_2)_2$, 7-azain = deprotonated 7-azaindole." *Organometallics*, **1998**, 17, 3186–3195.
67. S. R. Breeze, **S. Wang***, J. E. Greedan, N. P. Raju, "Thioalcohols as Bridging Ligands in Polynuclear Ln^{III}/Cu^{II} and Ba^{II}/Cu^{II} Complexes. Syntheses, Structures, and Magnetic Properties of $Pr_2Cu_4(tde)_3(tdeH)_2(hfacac)_4(\text{O}^{\ominus})$, $Ba_2Cu_2(tdeH)_2(hfacac)_4$, and $Cu_4(tde)_2(hfacac)_4$, tdeH = $HOCH_2CH_2SCH_2CH_2O$, tde = $S(CH_2CH_2O)_2$." *Dalton Trans.*, **1998** (14), 2327–2334.
66. A. Hassan, **S. Wang***, "The First Blue Luminescent Diborate Compound: $B_2(O)(C_2H_5)_2(7\text{-azain})_2$, 7-azain = 7-azaindole anion." *Chem. Commun.*, **1998**, 339–340.

1997

Original articles

65. W. Liu, A. Hassan, **S. Wang***, "Novel Oxo-Bridged Blue Luminescent Organoaluminum Complexes: $Al_4(CH_3)_6(O)_2(dpa)_2$ and $Al_3(7\text{-azain})_4(OCH(CF_3)_2)_2(CH_3)(O)$, dpa = deprotonated di-2-pyridylamine, 7-azain = deprotonated 7-azaindole." *Organometallics*, **1997**, 16, 4257–4259.

64. A. Hassan, **S. Wang***, "Organobismuth(V) Complexes containing Bifunctional Ligands, $\text{BiAr}_3(\text{O}_2\text{CR})_2$: Hydrogen Bonded Extended Structures and Stereoselectivity." *Dalton Trans.* **1997**, 2009–2017.
63. S. Kawata, S. R. Breeze, **S. Wang***, J. E. Greedan, N. P. Raju, "Structural Interconversion Facilitated by a bifunctional ligand: A covalently linked 2D Cu^{II} sheet $[\text{Cu}(\text{3-pyOH})_2(\text{O}_2\text{CCF}_3)_2]_n$ and a hydrogen-bond linked 2D Cu^{II} sheet $[\text{Cu}(\text{3-pyOH})_2(\text{O}_2\text{CCF}_3)_2(\text{thf})_2]_n$ " *Chem. Commun.* **1997**, 717–718.

1996

Original articles

62. S. R. Breeze, **S. Wang***, J. E. Greedan, N. P. Raju, "Copper and Bismuth Complexes Containing Dipyridyl *gem*-Diolato Ligands: $\text{Bi}_2[(2\text{-Py})_2\text{CO}(\text{OH})]_2(\text{O}_2\text{CCF}_3)_4(\text{THF})_2$, $\text{Cu}[(2\text{-Py})_2\text{CO}(\text{OH})]_2(\text{HO}_2\text{CCH}_3)_2$, and $\text{Cu}_4[(2\text{-Py})_2\text{CO}(\text{OH})]_2(\text{O}_2\text{CCH}_3)_6(\text{H}_2\text{O})_2$, A Ferromagnetically Coupled Tetranuclear Copper(II) Chain." *Inorg. Chem.*, **1996**, 35, 6944–6951.
61. A. Hassan, S. R. Breeze, S. Courtenay, C. Desplippe, and **S. Wang***, "Organobismuth(III) and Organobismuth(V) Complexes Containing Pyridyl and Amino Functional Groups. Syntheses and Characterizations of $\text{Bi}^{\text{III}}\text{Ar}_3$ (Ar = *p*- $\text{C}_6\text{H}_4(\text{NMe}_2)$, *p*- $\text{C}_6\text{H}_4\text{CH}_2(\text{NPr}^i)_2$, *p*- $\text{C}_6\text{H}_4\text{[CH}_2\text{N(2-Py)}_2\text{]}$), $\text{Bi}^{\text{V}}\text{Ar}_3\text{L}_2$, $[\text{Bi}^{\text{V}}\text{Ar}_3\text{Cl}]_2\text{O}$, $[\text{Bi}^{\text{V}}\text{Ar}_4][\text{PF}_6]$, and $[\text{Bi}^{\text{V}}\text{Ar}_4]_2[\text{Ag}_2\text{Cl}_4]$ (Ar = *p*- $\text{C}_6\text{H}_4(\text{NMe}_2)$, or *p*- $\text{C}_6\text{H}_4\text{[CH}_2\text{N(2-Py)}_2\text{]}$, L = Cl, CH_3CO_2^- , CF_3CO_2^- " *Organometallics*, **1996**, 15, 5613–5612.
60. S. J. Trepanier, **S. Wang***, "Alkylaluminum Complexes Containing Pyridyl Amido Ligands. Syntheses and Characterization of $\text{AlMe}_2[\text{N}(\text{CH}_2\text{-2-Py})_2]$, $\text{Al}_2\text{Me}_5[\text{N}(\text{CH}_2\text{-2-Py})_2]$, and $\text{Al}_2\text{Me}_4[2,3,5,6\text{-tetra(2-pyridyl) piperazyl}]$, An Unusual Carbon-Carbon Bond Coupling Product." *Can. J. Chem.* **1996**, 74, 2032–2040.
59. S. R. Breeze, **S. Wang***, "Synthesis and Characterization of $\text{SrCu}_2(\text{O}_2\text{CR})_3(\text{bdmap})_3$ and $\text{Bi}_2(\text{O}_2\text{CCH}_3)_4(\text{bdmap})_2(\text{H}_2\text{O})$ (R = CH_3 , CF_3 , bdmap = 1,3-bis(dimethylamino)-2-propanolato)", *Inorg. Chim. Acta*, **1996**, 250, 163–171.
58. S. J. Trepanier, **S. Wang***, "Alkylaluminum Complexes Containing Pyridyl Amido Ligands. Syntheses, Structures, and NMR Spectroscopic Studies of $[\text{Al}(\text{CH}_3)_2(\text{NHCH}_2\text{-2-Py})]_2$, $[\text{Al}(\text{CH}_3)_2(\text{NHCH}_2\text{-4-Py})]_2$, $[\text{Al}(\text{CH}_3)_2(\text{HNCH}_2\text{-4-Py})\text{Al}(\text{CH}_3)_3]_2$ and $\text{Al}(\text{CH}_3)_3(\text{NH}_2\text{CH}_2\text{-4-Py})\text{Al}(\text{CH}_3)_3$ ", *Organometallics*, **1996**, 15, 760–765.
57. S. R. Breeze, **S. Wang***, "Perturbation of the Electronic Structure of a $\text{Cu}(\text{II})$ ion by a $\text{Cu}^{\text{I}}\text{Cl}$ Moiety in a Class I Mixed Valence Copper Complex $\text{Cu}^{\text{II}}(\text{Me}_5\text{dien})\text{Cl}_2(\text{Cu}^{\text{I}}\text{Cl})$." *Inorg. Chem.*, **1996**, 35, 3404–3408.
56. **S. Wang**, " $\text{Cu}_3(\text{bdmap})_4\text{Cl}_2(\text{CH}_3\text{OH})$, bdmap = 1,3-bis(dimethylamino)-2-propanolato: A Clamp-Shaped molecule." *Acta Cryst.* **1996**, C52, 41–43.
55. S. R. Breeze, **S. Wang***, "Fluxionality in Polynuclear Copper(II) Complexes Containing Aminoalcoholato Ligands: Syntheses, Structures, Magnetism and ^1H NMR Spectroscopic Investigation of $\text{Cu}_2(\text{OCH}_2\text{CH}_2\text{NMe}_2)_2(\text{OAc})_2$, $\text{Cu}_2(\text{OCH}_2\text{CH}_2\text{NMe}_2)_2(\text{OAc})_2(\text{H}_2\text{O})_2$, and $\text{Cu}_4(\text{O})(\text{bdmmp})_2\text{Br}_4$." *Dalton Trans.* **1996**, 1341–1349.

1995

Review articles (Invited)

54. **S. Wang**, "Polynuclear Copper(II) Complexes Containing Aminoalcoholato Ligands." *J. Cluster Science*, **1995**, 6, 463–484.

Original articles

53. S. J. Trepanier, **S. Wang***, "Syntheses and Structures of A Four-coordinate Mononuclear Dialkylaluminum Complex and a Cyclic Trinuclear Alkylaluminum Complex with a Bidentate Amido Ligand, $\text{Al}(\text{CH}_3)_2(\text{PhNCH}_2\text{CH}_2\text{NH}_2)$ and $[\text{Al}(\text{CH}_3)(\mu\text{-PhNCH}_2\text{CH}_2\text{NH})]_3$." *Dalton Trans.*, **1995**, 2425–2429.
52. R. J. Staples, T. Carlson, **S. Wang**, J. P. Fackler,* Jr., "Dimethyldiphenyl phosphonium Iodide, $[\text{PPh}_2(\text{CH}_3)_2]^+\text{I}^-$ and Dimethyldiphenylphosphonium Bromide, $[\text{PPh}_2(\text{CH}_3)_2]^+\text{Br}^-$." *Acta Cryst.* **1995**, C51, 498–500.
51. L. Chen, S. R. Breeze, R. Rousseau, **S. Wang***, L. K. Thompson, "Polynuclear Copper-Lanthanide Complexes with Aminoalcohol Ligands. Syntheses, Structures, Magnetic and Spectroscopic Studies of $\text{Cu}(\text{bdmmp})_2(\text{H}_2\text{O})$, $\text{PrCu}(\text{bdmmp})(\text{bdmmpH})(\text{OH})(\text{hfacac})_3$, $[\text{LaCu}(\text{bdmmp})(\text{bdmmpH})(\text{OH})(\text{O}_2\text{CCF}_3)_3]_3$, and $\text{Cu}_4(\text{bdmmp})_2(\text{O})(\text{O}_2\text{CCF}_3)_4$, $\text{bdmmpH} = 2,6\text{-bis}[(\text{dimethylamino})\text{methyl}]-4\text{-methylphenol}$, $\text{hfacac} = \text{hexafluoroacetylacetonato}$." *Inorg. Chem.*, **1995**, 34, 454–465.
50. **S. Wang***, Z. Pang, K. D. L. Smith, C. Deslippe, Y. Hua, "The Decomposition and Cycloaddition Reactions of the hfacac Ligand, and the Syntheses and Structures of $\text{Ln}_2(\text{hfacac})_2(\text{bdmap})_2(\text{H}_2\text{O})_2(\text{THF})_2$, $\text{LnCu}(\text{bdmapH})_2(\text{hfacac})_2(\text{O}_2\text{CCF}_3)\text{L}$, and $\text{LnCu}_2(\text{hfacac})(\text{bdmap})_3(\text{O}_2\text{CCH}_3)_2(\text{O}_2\text{CCF}_3)(\text{hfacacH})$, $\text{Ln} = \text{Y, Pr, Nd}$, $\text{hfacac} = \text{hexafluoroacetylacetonato}$, $\text{bdmap} = 1,3\text{-bis}(\text{dimethylamino})\text{-2-propanolato}$, $\text{L} = 2\text{-methyl-2,4,6-tris}(\text{trifluoromethyl})\text{-1,3-dioxane-4,6-diolato}$." *Inorg. Chem.* **1995**, 34, 908–917.
49. J. P. Fackler*, Jr., C. A. Lopez, R. J. Staples, **S. Wang**, R. E. P. Winpenny and R. P. Lattimer, "Self Assembly of Isostructural Copper(I)-Silver(I) Butterfly Clusters with 2-Mercaptothiazoline: Syntheses and Structures of $(\text{PPh}_3)_2\text{Cu}_4(\text{C}_3\text{H}_4\text{NS}_2)_4$, $[(\text{C}_5\text{H}_5\text{N})\text{Cu}_4(\text{C}_3\text{H}_4\text{NS}_2)_4]_n$, $(\text{PPh}_3)_2\text{Ag}_4(\text{C}_3\text{H}_4\text{NS}_2)_4$, and $(\text{PPh}_3)_2\text{Ag}_2\text{Cu}_2(\text{C}_3\text{H}_4\text{NS}_2)_4$." *Croat. Chem. Acta.*, **1995**, 68, 793–823.

1994

Original articles

48. S. J. Trepanier, **S. Wang***, "Oxygen-Induced Structural Transformation of Polynuclear Organoaluminum Complexes with Bidentate Imido Ligands: Syntheses and Crystal Structures of $\text{Al}_4(8\text{-imidoquinoline})_2\text{Me}_8$ and $\text{Al}_4(8\text{-imidoquinoline})_2\text{Me}_7(\text{OCH}_3)$." *Angew. Chem. Int. Ed.*, **1994**, 33, 1265–1266.
47. S. J. Trepanier, **S. Wang***, "Syntheses and Structures of Alkylaluminum Complexes with a Tridentate Amido Ligand, $\text{Al}(\text{CH}_3)_2(\text{Et}_2\text{NCH}_2\text{CH}_2\text{NCH}_2\text{CH}_2\text{NEt}_2)$ and $\text{Al}_3(\text{CH}_3)_8(\text{Et}_2\text{NCH}_2\text{CH}_2\text{NCH}_2\text{CH}_2\text{NEt}_2)$." *Organometallics*, **1994**, 13, 2213–2217.
46. S. R. Breeze, L. Chen, **S. Wang***, "Cation-Anion Interactions Involving Hydrogen Bonds. Syntheses, Structures, and Spectroscopic Studies of $[\text{daH}_2][\text{BiPh}(\text{O}_2\text{CCF}_3)_4]$, $[\text{PyH}]_2[\text{BiPh}(\text{O}_2\text{CCF}_3)_4]$, and $[\text{daH}_2][\text{Bi}(\text{O}_2\text{CCF}_3)_5]$, $\text{da} = \text{diamine}$, $\text{Py} = \text{pyridine}$." *Dalton Trans.*, **1994**, 2545–2557.

45. S. R. Breeze, **S. Wang***, "Syntheses, Structures, and Thermal Properties of Heterometallic Copper(II)-Alkaline Earth Metal(II) Complexes with 1,3-Bis(dimethylamino)-2-propanolato (bdmap) and Trifluoroacetate as Ligands: $\text{CaCu}(\text{bdmap})_2(\text{O}_2\text{CCF}_3)_2(\text{H}_2\text{O})$, $\text{Sr}_2\text{Cu}_2(\text{bdmap})_2(\text{O}_2\text{CCF}_3)_4$, and $\text{Sr}_2\text{Cu}_4(\text{bdmap})_6(\text{O}_2\text{CCF}_3)_4(\text{OH})_2$." *Inorg. Chem.* **1994**, *33*, 5113–5121.
44. **S. Wang***, J. C. Zheng, J. R. Hall, L. K. Thompson, "Crystal Structure and Magnetic Properties of a Cubane-Type Copper Compound $[\text{Cu}(\text{2,2,6,6-Tetramethyl-3,5-heptanedionato})(\text{ethoxo})]_4$." *Polyhedron*, **1994**, *13*, 1039–1044.
43. **S. Wang***, Z. Pang, K. D. L. Smith, M. J. Wagner, "Syntheses and Characterization of Polynuclear Metal Complexes Related to a Chemical Precursor System for the $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Superconductor and Related Polynuclear Metal Complexes." *Dalton Trans.* **1994**, 955–964.
42. R. J. Staples, **S. Wang**, J. P. Fackler,* Jr., "3,5-Diphenyl-1,2-dithiolium Diiodoauride(I)." *Acta Cryst.* **1994**, *C50*, 1580–1582.
41. R. J. Staples, **S. Wang**, J. P. Fackler,* Jr., S. O. Grim, E. D. Laubenfels, " $\{\text{Au}[(n\text{-Bu})\text{PPh}_2]\}(\text{Ph}_2\text{PS})_3\text{C}] - \text{CH}_3\text{CN}$: An Irregular Three-Coordinate Au^{I} Complex." *Acta Cryst.* **1994**, *C50*, 1242–1244.

1993**Original articles**

40. S. J. Trepanier, **S. Wang***, "Structure and Reactivity of the First Lithium Complex with a Tridentate Amide Ligand, $[\text{Li}(\text{Et}_2\text{NCH}_2\text{CH}_2\text{NCH}_2\text{CH}_2\text{NEt}_2)]_2$." *Organometallics*, **1993**, *12*, 4207–4210.
39. **S. Wang***, Z. Pang, J. C. Zheng, M. J. Wagner, "Homonuclear Copper Complexes with Multidentate Aminoalcohol Ligands. The Synthesis and Characterization of a Hexanuclear Copper Complex $\text{Cu}_6^{\text{II}}(\text{bdmap})_3\text{Cl}_6(\text{O})(\text{OH})$ with a Propeller Structure, bdmap = 1,3-bis(dimethylamino)-2-propanol." *Inorg. Chem.*, **1993**, *32*, 5975–5980.
38. **S. Wang***, Z. Pang, K. D. L. Smith, "Synthesis and Crystal Structure of a Dinuclear Yttrium(III)(Lanthanides(III))-Copper(II) Complex with an Unusual 2-methyl-2,4,6-tris(trifluoromethyl)-1,3-dioxane-4,6-diolato Ligand." *Inorg. Chem.*, **1993**, *32*, 4992–4993.
37. S. R. Breeze, **S. Wang***, "Hydrogen-Bond Directed Assembly of one-Dimensional and Two-Dimensional Polymeric Copper(II) Complexes with Trifluoroacetate and Hydroxypyridine as Ligands: A Structural Investigation." *Inorg. Chem.*, **1993**, *32*, 5981–5989.
36. S. R. Breeze, **S. Wang***, "Unusual Structural Variations Observed in the $[\text{Bi}(\text{O}_2\text{CCF}_3)_4\text{Ph}]^{2-}$ Anion: Selective Cation-Anion Interactions Involving Hydrogen Bonds." *Angew. Chem. Int. Ed.*, **1993**, *32*, 589–591.
35. **S. Wang***, S. J. Trepanier, M. J. Wagner, "Molecular Copper-Barium Compounds. Syntheses and Crystal Structures of Two Sandwich Copper-Barium Complexes $\text{BaCu}_4(\text{bdmap})_4(\text{PyO})_4(\text{O}_2\text{CCF}_3)_2$, and $\text{BaCu}_4(\text{deae})_4(\text{PyO})_4(\text{O}_2\text{CCF}_3)_2$, bdmap = 1,3-Bis(dimethylamino)-2-propanolato, PyO = Deprotonated 2-Hydroxypyridine, deae = 2-diethylaminoethanolato." *Inorg. Chem.*, **1993**, *32*, 833–840.

1992

Original articles

34. **S. Wang***, K. D. L. Smith, Z. Pang, M. J. Wagner, "A New Chemical Precursor System to the $\text{Yb}_2\text{Cu}_3\text{O}_{7-x}$ Superconductor Using Acetate and 1,3-Bis(dimethylamino)-2-Propanol (dmapH) Ligands. Isolation and Characterization of a Polynuclear Copper(II) Complex $[\text{Cu}_4(\text{OAc})_6(\text{dmap})_2(\text{H}_2\text{O})_2]_n$ with a Two-dimensional Hydrogen-Bonded Network." *Chem. Commun.* **1992**, 1594–1596.
33. **S. Wang***, Z. Pang, M. J. Wagner, "Comparative Study of Crystal Structures, Thermal and Magnetic Properties of a Y_2Cu_8 and a Nd_2Cu_8 Complexes." *Inorg. Chem.*, **1992**, 31, 5381–5388.
32. J. C. Zheng, R. J. Rouseau, **S. Wang***, "Homonuclear Copper Complexes with Multidentate Aminoalcohol Ligands. Synthesis and Characterization of a Dicationic Copper $\text{Cu}_2(1,3\text{-bis(dimethylamino)-2-propanol})_2\text{Cl}_4$ and a Tricopper Compound $\text{Cu}_3(1,3\text{-bis(dimethylamino)-2-propanolato})_2\text{Cl}_4$." *Inorg. Chem.*, **1992**, 31, 106–110.
31. R. J. Staples, M. N. I. Khan, **S. Wang**, J. P. Fackler,* Jr., "Structure of *trans*-Dicyano-bis(triphenylphosphine)platinum(II) Dimethanol Solvate." *Acta Cryst.* **1992**, C48, 2213–2215.
30. **S. Wang***, S. J. Trepanier, J. C. Zheng, Z. Pang, "Homonuclear and Heteronuclear Metal Complexes with A Cyclic Cu^{II} Unit. Syntheses, Crystal Structures and Magnetic Properties of $[\text{Cu}^{\text{II}}_4(\text{dmap})_3(\text{OH})(\text{O}_2\text{CCH}_3)_2(\text{HO}_2\text{CCH}_3)(\text{H}_2\text{O})][\text{PF}_6]_2$, $[\text{Cu}^{\text{II}}_4(\text{dmap})_2(\text{O}_2\text{CCH}_3)_4][\text{PF}_6]_2$, $[\text{Cu}^{\text{II}}_4(\text{dmap})_2(\text{O}_2\text{CCH}_3)_2(\text{OH})_2][\text{Hg}^{\text{II}}(\text{O}_2\text{CCH}_3)_2\text{Cl}_2][\text{Hg}^{\text{II}}\text{Cl}_2]$, and $[\text{Cu}^{\text{II}}_4(\text{dmap})_2(\text{O}_2\text{CCH}_3)_3(\text{OH})_2(\text{H}_2\text{O})][\text{PF}_6]$, dmap = 1,3-Bis(dimethylamino)-2-propanolato." *Inorg. Chem.*, **1992**, 31, 2118–2127.
29. J. P. Fackler,* Jr., C. A. Lopez, R. J. Staples, **S. Wang**, R. E. P. Winpenny, R. P. Lattimer, "Self Assembly of Isostructural Copper(I)-Silver(I) Butterfly Clusters with 2-Mercaptothiazoline: Syntheses and Structures of $(\text{PPh}_3)_2\text{Cu}_4(\text{C}_3\text{H}_4\text{NS}_2)_4$, $[(\text{C}_5\text{H}_5\text{N})\text{Cu}_4(\text{C}_3\text{H}_4\text{NS}_2)_4]_n$, $(\text{PPh}_3)_2\text{Ag}_4(\text{C}_3\text{H}_4\text{NS}_2)_4$, and $(\text{PPh}_3)_2\text{Ag}_2\text{Cu}_2(\text{C}_3\text{H}_4\text{NS}_2)_4$." *Chem. Commun.*, **1992**, 146–148.

1991

28. **S. Wang**, "Heterometallic Yttrium-Copper Complexes. Synthesis and Crystal Structure of $\text{Y}_2\text{Cu}_8(\mu_4\text{-O})_2(\mu\text{-PyO})_{12}(\mu\text{-Cl})_2(\text{NO}_3)_4(\text{H}_2\text{O})_4$." *Inorg. Chem.*, **1991**, 30, 2252–2253. **(Highlighted by ACS Chemical & Engineering News magazine)**

1987-1990 (Postdoctoral work)

27. **S. Wang**, J. P. Fackler,* Jr., "Gold Thiolate Complexes with Short Intermolecular Au-Au Distances from Reactions of Organic Disulfides with Au(I) Complexes. Synthesis and Crystal Structures of $[\text{Au}_2(\text{PPh}_3)_2(\text{SCH}_2\text{Ph})]\text{NO}_3$ and $\text{Au}^{\text{III}}_2\text{Cl}_4(\text{SPh})_2$." *Inorg. Chem.*, **1990**, 29, 4404–4407.
26. **S. Wang**, J. P. Fackler,* Jr., "The Structure of Bis(μ -methylenediphenylthiophosphinato)-gold(I)mercury(II) Bis(1,1-dicyanoethylene-2,2-dithiolato-*S,S'*)aurate." *Acta Cryst.*, **1990**, C46, 2253–2256.
25. **S. Wang**, J. P. Fackler,* Jr. and T. E. Carlson, "Organosilver Complexes. Synthesis and Crystal Structure of A Ylide Disilver Complexes, $[\text{Ag}(\text{CH}_2\text{PPh}_2\text{S})]_2$." *Organometallics*, **1990**, 9, 1973–1975.

24. **S. Wang**, J. P. Fackler,* Jr., "Heterobimetallic Complexes of Au and Hg. Synthesis and Characterizations of $\text{Hg}(\text{CH}_2\text{P}(\text{S})\text{Ph}_2)_2(\text{AuCl})_2$ and $\text{HgAu}(\text{CH}_2\text{P}(\text{S})\text{Ph}_2)_2\text{AuCl}_4$." *Organometallics*, **1990**, 9, 111–115.
23. M. N. I. Khan, C. King, J. C. Wang, **S. Wang**, J. P. Fackler,* Jr., "Interactions Between NaBH_3CN and $[\text{Pt}(\text{dppm})\text{Cl}]_2$. X-ray Structural Characterization of the Complexes $[\text{Pt}(\text{dppm})(\text{CNBH}_2\text{CN})]_2(\text{CHCl}_3)$, $[\text{Pt}(\text{dppm})(\text{CN})]_2/2(\text{C}_5\text{H}_5\text{N})$ and $[\text{Pt}(\text{dppm})(\text{CNBH}_3)]_2(\text{H}_2\text{O})$. The Isomerization of *trans*- $[\text{Pt}(\text{dppm})(\text{NCBH}_2\text{CN})]_2$ to *trans*- $[\text{Pt}(\text{dppm})(\text{CNBH}_2\text{CN})]_2$." *Inorg. Chem.*, **1989**, 28, 4656–4662.
22. **S. Wang**, G. Garzon, C. King, J. C. Wang, J. P. Fackler,* Jr., "Luminescent Extended One Dimensional Bimetallic Chain Compounds with Relativistic Metal-Metal Bonds. Syntheses, Crystal Structures and Spectroscopic Studies of $\text{AuTl}(\text{mtp})_2$ and $\text{Au}_2\text{Pb}(\text{mtp})_4$, $\text{mtp} = \text{Ph}_2\text{P}(\text{CH}_2\text{S})$." *Inorg. Chem.*, **1989**, 28, 4623–4629.
21. **S. Wang**, J. P. Fackler,* Jr., "Polymeric Mercury Complexes. The Synthesis and Crystal Structures of $[\text{Hg}(\text{C}_5\text{H}_4\text{NS})(\text{CH}_3\text{CO}_2)]_n$, $\text{Hg}(\text{C}_5\text{H}_4\text{NS})_2$ and $\text{Hg}(\text{CH}_2\text{P}(\text{S})\text{Ph}_2)_2$." *Inorg. Chem.*, **1989**, 28, 2615–2619.
20. **S. Wang**, J. P. Fackler,* Jr., "Carbene Double Insertions into Metal-Sulfur Bonds. Synthesis and Characterization of $[\text{HgAu}(\text{CH}_2\text{SPPh}_2\text{CH}_2)_2]\text{PF}_6$, the First Example of Carbene Double Insertions into Metal-Sulfur Bonds." *Organometallics*, **1989**, 8, 1578–1579.
19. M. N. I. Khan, **S. Wang**, J. P. Fackler,* Jr., "Synthesis and Structural Characterization of $[(n\text{-Bu})_4\text{N}]_2[\text{Au}_2(\text{i-MNT})_2]$ (i-MNT=1,1-dicyanoethylene-2,2-dithiolate) and Its Oxidative-addition Products $[\text{Ph}_4\text{As}]_2[\text{Au}_2(\text{i-MNT})_2\text{Cl}_2]$, $[(n\text{-Bu})_4\text{N}]_2[\text{Au}_2(\text{i-MNT})_2\text{Br}_2]$ and $[(n\text{-Bu})_4\text{N}][\text{Au}(\text{i-MNT})_2]$. Spectral Studies of the Disproportionation of $[(n\text{-Bu})_4\text{N}]_2[\text{Au}_2(\text{i-MNT})_2\text{X}_2]$, (X=Cl⁻, Br⁻, I⁻) into $[(n\text{-Bu})_4\text{N}][\text{AuX}_2]$ and $[(n\text{-Bu})_4\text{N}][\text{Au}(\text{i-MNT})_2]$." *Inorg. Chem.*, **1989**, 28, 3579–3588.
18. **S. Wang**, J. P. Fackler,* Jr., "Organometallic Complexes with $\text{Hg}[\text{CH}_2\text{P}(\text{S})\text{Ph}_2]_2$ Unit. Syntheses and Characterization of Two Structural Isomers of $[\text{HgAu}(\text{CH}_2\text{P}(\text{S})\text{Ph}_2)_2][\text{PF}_6]$ and a Precursor $\text{Hg}(\text{CH}_2\text{P}(\text{S})\text{Ph}_2)_2$." *Organometallics*, **1988**, 7, 2415–2417.
17. **S. Wang**, J. P. Fackler,* Jr., J. C. Wang, C. King, "Luminescent Organometallic Compounds with Relativistic Metal-metal Bonds. Synthesis and Characterization of $\text{AuTl}[\text{Ph}_2\text{P}(\text{CH}_2\text{S})_2]$, an One Dimensional Polymer in Solid State." *J. Am. Chem. Soc.*, **1988**, 110, 3308–3310.
16. M. N. I. Khan, S. Wang, D. D. Heinrich, J. P. Fackler,* Jr., "The Structure of Bis(triphenylphosphine)(1,1-dicyanoethylene-2,2-dithiolato)digold(I), $[(\text{AuPPh}_3)_2(\text{S}_2\text{CC}(\text{CN})_2)]$." *Acta Cryst.* **1988**, C44, 822–824.
15. **S. Wang**, J. P. Fackler,* Jr., "Unusual Resonance Structures of Organic Thione Formed and Stabilized by gold(I) Complexation: The Isolation and Characterization of an Alkyl Substituted Thiabenzenthione and Trithiapentalene Coordinated to Au^I." *J. Chem. Soc., Chem. Commun.*, **1988**, 22–24.
14. M. N. I. Khan, **S. Wang**, J. P. Fackler,* Jr., "The First Structurally Characterized Example of a Non-organometallic Au^{II} Dimer. The Syntheses and Crystal and Molecular Structures of $[(n\text{-Bu})_4\text{N}][\text{Au}(\text{i-MNT})_2]$." *Inorg. Chem.*, **1988**, 27, 1672–1673.

1985-1987 (Ph.D. work)

13. R. D. Adams*, **S. Wang**, "Ligand-assisted Addition Reactions. 1. Alkyne Additions and Couplings in the Unsaturated Cluster Complexes $\text{Os}_4(\text{CO})_{11}(\mu_4\text{-R}_2\text{C}_2\text{CO}_2\text{Me})(\mu_4\text{-S})$, (R = H and CO_2Me)", *Organometallics*, **1987**, *6*, 739–748.
12. R. D. Adams*, **S. Wang**, "Cluster Framework Rearrangements. An Unusual Transformation of a Butterflycluster into a Rhombus: The Crystal and Molecular Structures of $\text{Os}_4(\text{CO})_{12}(\mu_3\text{-S})(\mu\text{-HCCR})$, R = Ph, CO_2Me ", *J. Amer. Chem. Soc.*, **1987**, *109*, 924–926.
11. R. D. Adams*, **S. Wang**, "The Coupling of Cumulenes to an Alkyne Ligand in an Osmium Cluster Complex. The Reaction of $\text{Os}_4(\text{CO})_{11}(\mu_4\text{-S})(\text{HCCCO}_2\text{Me})(\mu_4\text{-S})$ with Allene and Methylisocyanate." *Organometallics*, **1987**, *6*, 45–49.
10. R. D. Adams*, **S. Wang**, "Reactivity of Unsaturated Clusters. Multiple Additions of Unsaturated Hydrocarbons to $\text{Os}_4(\text{CO})_{11}(\mu_4\text{-S})(\mu_4\text{-HCCCO}_2\text{Me})$." *Organometallics*, **1986**, *5*, 1274–1276.
9. R. D. Adams*, **S. Wang**, "Facile Activation of Hydrogen by an Unsaturated Metal Carbonyl Cluster. The Addition of H_2 to $\text{Os}_4(\text{CO})_{11}(\mu_4\text{-S})(\mu_4\text{-HCCCO}_2\text{Me})$." *Organometallics*, **1986**, *5*, 1272–1274.
8. R. D. Adams*, **S. Wang**, "Facile Addition of Small Molecules to the Osmium Carbonyl Sulfido Cluster $\text{Os}_4(\text{CO})_{12}(\mu_3\text{-S})$. Syntheses and Crystal and Molecular Structures of $\text{Os}_4(\text{CO})_{12}(\text{NHMe}_2)(\mu_3\text{-S})$ and $\text{Os}_4(\text{CO})_{12}(\mu\text{-H})_2(\mu_3\text{-S})$ " *Inorg. Chem.*, **1986**, *25*, 2534–2538.
7. R. D. Adams*, J. E. Babin, R. Mathab, **S. Wang**, "Cluster Syntheses. 12. Metal-metal Exchange Reactions. Systematics of the Synthesis of Platinum-Osmium Carbonyl Clusters Containing Quadruply Bridging Sulfido Ligands." *Inorg. Chem.*, **1986**, *25*, 1623–1631.
6. R. D. Adams*, J. E. Babin, R. Mathab and **S. Wang**, "Synthesis of Square Pyramidal Platinum-Osmium Carbonyl Clusters by Metal-Metal Exchange. Isolation and Structural Characterization of a Hexanuclear Intermediate." *Inorg. Chem.*, **1986**, *25*, 4-5.
5. R. D. Adams*, I. T. Horvath, **S. Wang**, "Cluster Synthesis. 11. Role of Sulfido Ligands in the Synthesis of Heteronuclear Clusters. Synthesis and Crystal and Molecular Structures of $\text{PtOs}_4(\text{CO})_{11}(\text{PMe}_2\text{Ph})(\mu_3\text{-S})_2$ and $\text{PtOs}_3(\text{CO})_9(\text{PMe}_2\text{Ph})(\mu_3\text{-S})_2$." *Inorg. Chem.*, **1986**, *25*, 1617–1623.
4. R. D. Adams*, **S. Wang**, "Dynamical Skeletal Rearrangement in Transition-Metal Clusters. Evidence for Unusually Facile Metal-Metal Bond Reorganization in $\text{PtOs}_3(\text{CO})_9(\text{PMe}_2\text{Ph})(\mu_3\text{-S})_2$." *Inorg. Chem.*, **1985**, *24*, 4447–4449.
3. R. D. Adams*, H. S. Kim, **S. Wang**, "A New Type of Carbene Catalyst. Direct Evidence for the Involvement of Coordinated Carbene in a Cluster-Catalyzed Transalkylation Reaction between Tertiary Amines." *J. Am. Chem. Soc.*, **1985**, *107*, 6107–6108.
2. R. D. Adams*, **S. Wang**, "Two-site Reactivity in a Ligand-bridged Cluster. The Reaction of $\text{Os}_4(\text{CO})_{12}(\mu_3\text{-S})$ with Terminal Acetylenes." *Organometallics*, **1985**, *4*, 1902–1903.
1. R. D. Adams*, I. T. Horvath, **S. Wang**, "Cluster Synthesis. 9. Importance of Triply Bridging Sulfido Ligands in the Synthesis of Mixed-metal Clusters: Synthesis and Crystal and Molecular Structure of $\text{Os}_3(\text{CO})_9(\mu_3\text{-S})(\mu_4\text{-S})[\text{W}(\text{CO})_5]$." *Inorg. Chem.*, **1985**, *24*, 1728–1730.

II. Patents and Patent Applications

Patents Held

- (1) **S. Wang**, W. Liu, A. Hassan, "Luminescent Compounds and Methods of Making and Using Same", US Patent, US 6,312,835 B1, Issued on November 6, 2001.
- (2) **S. Wang**, W. Liu, A. Hassan, "Luminescent Compounds and Methods of Making and Using Same", US Patent, US 6,500,569 B2, Issued on December 31, 2002
- (3) **S. Wang**, W. Liu, A. Hassan, "Luminescent compounds and methods of making and using same", Canadian patent CA 2,278,198, issued on July 26, 2005.
- (4) **S. Wang**, R. Y. Wang, "Organic Luminescent Compounds and Methods of Making and Using Same", US Patent, US 7,989,089 B2, issued on August 2nd, 2011 (sold to LG Co., Korea).
- (5) H. Amarne, Y. L. Rao, **S. Wang**, "Boron compounds and use thereof", US patent, US 8,697,872, issued on April 15th, 2014; Canadian Patent Application No.: 2,735, 531, filed March 31, 2011, pending. (Licensed to GreenCentre Canada).
- (6) X. Wang, **S. Wang**, "Luminescent Compounds and Methods of Using Same", US patent US10,461,266, issued on October 29, 2019.

Patent Applications Filed

- (7) X. Wang, **S. Wang**, "Luminescent Compounds and Methods of Using Same" (deep blue emitters), US Provisional Patent Application No.: 62/349,757, filed on June 14, 2016.
- (8) Z. M. Hudson, **S. Wang**, M. Helander, Z. B. Wang, Z. H. Lu, "Host Materials for Single-Layer Phosphorescent OLEDs", US patent applications (2011), No. 14/268,292, filed May 2, 2014, pending; Canadian Patent Application No.: 2,814,679, filed on May 3, 2013, pending.
- (9) J. S. Lu, **S. Wang**, S-B. Ko, S. M. McDonald, D. Yang, "Organoboron Compounds and Methods of Making Same", International Patent Application (2013), PCT/CA2014/000297, filed on March 25, 2014, pending.
- (10) Z. M. Hudson, X. Wang, **S. Wang**, "Luminescent Compounds and Methods of Using Same", International Patent Application (2012), PCT/CA2014/000243, filed March 13, 2014, pending; Canadian Patent Application No.: 2,809,478, filed on March 13, 2013.
- (11) M. Varlan, B. Blight, L. Smith, **S. Wang**, "Compounds and methods for enhancing metal luminescence that can be selectively turned off", International Patent Application (2012), PCT/CA2013/000832, filed on September 26, 2013, pending; Canadian Patent Application No.: 2,827,248, filed on September 12, 2013, pending (licensing agreement signed with Jetmate Canada).
- (12) Z. M. Hudson, **S. Wang**, "Methods of Making Luminescent Compounds" Canadian Patent Application No.: 2,809,518, filed on March 13th, 2013, pending.

Key Scholarly Presentations

Invited presentations and seminars: Wang has given about 150 invited seminars, presentations, and lectures at universities, companies, workshops, national and international conferences during her independent research career. Selected examples of invited conference and workshop presentations, and lectures are listed below:

1. 2019 International Conference on Heteroatom Chemistry (ICHAC), Plenary speaker, Prague, Czech Republic, June, 2019 (invited by the international advisory board).
2. ACS National Meeting, symposium "Recent Advances in Photochemistry and

- Photophysics of the P-Block Elements”, Invited speaker, Boston, USA, August 19-23, 2018.
- 43rd International Coordination Chemistry Conference, Symposium “Rational Design of Multifunctional Luminescent Molecules and Their Applications to Coordination Chemistry”, invited speaker, July 30th – August 4th, 2018, Sendai, Japan.
 - The 13th International Symposium on Macrocyclic and Supramolecular Chemistry, invited speaker, July 8-13th, 2018, Quebec City, Quebec.
 - Invited seminar at the Department of Chemistry, York University, ON, October 24th, 2018.
 - The 16th Boron in the Americas Conference, Invited Speaker, Boston, Massachusetts, USA, June 26 – 30, 2018.
 - Honorable speaker for the Applied Chemistry lecture Series, Changchun Institute of Applied Chemistry, Chinese Academy of Science, Changchun, China, April 27, 2018.
 - ACS National Meeting, Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator: Symposium in honor of Dwight S. Seferos, Invited Speaker, New Orleans, Louisiana, USA, March 18 – 22, 2018.
 - Invited seminar at the Department of Chemistry, University of Western Ontario, London, ON, April 4th, 2018.
 - 1st International Symposium of the GRK 2112: Molecular Biradicals: Structure, Properties and Reactivity, Invited Speaker, Würzburg, Germany, February 27 – March 2, 2018.
 - Invited research seminar given at the Brockhouse Institute for Materials Research, McMaster University, December 4th, 2017.
 - 16th International Meeting on Boron Chemistry (IMEBoron XVI), Plenary Speaker, Hong Kong, July 9 – 13, 2017.
 - International Conference of Boron Chemistry (ICBC), Keynote speaker, Henan, China, July 5 – 7, 2017.
 - 100th Canadian Chemistry Conference and Exhibition, Invited speaker in “Main Group Transformations and Catalysis” symposium. Toronto, Ontario, May 28 – June 1, 2017.
 - 100th Canadian Chemistry Conference and Exhibition, Invited speaker in “Dye Chemistry” symposium. Toronto, Ontario, May 28 – June 1, 2017.
 - 100th Canadian Chemistry Conference and Exhibition, Invited speaker in “Electronic Materials and their Chemistry: Organic, Inorganic and Hybrid Materials” symposium. Toronto, Ontario, May 28 – June 1, 2017.
 - Invited seminar by the Center for self-assembled chemical structures (Csacs), McGill University, Montreal, QC, February 21st, 2017.
 - Invited seminar by Csacs, Université de Montréal, Montreal, QC, February 22nd, 2017.
 - Invited seminar at Institut National de la Recherche Scientifique, Énergie, Matériaux et Télécommunications, Montreal, QC, February 23rd, 2017.
 - Sino-German Main Group Chemistry Symposium, Invited Speaker, Presentation title: New Strategies in Constructing Organoboron Functional Materials, Beijing, China, April 11 – 15, 2016.
 - 42nd International Conference on Coordination Chemistry, Invited speaker in “Metal Complexes for Optics: from Fundamental to Applications” symposium. Presentation title: New Strategies in Achieving Efficient and Stable Phosphorescent Blue Emitters, Brest, France, July 3 – 8, 2016. (*Note: the trip was cancelled at the last minute due to conflict*).

22. The Sino-German Bilateral Meeting on Main Group Element Chemistry, Invited Speaker, Beijing, China, April 11 – 15, 2016.
23. 2015 Pacificchem conference, Invited speaker in Symposium on “Photo-functional Chemistry Based on Metal Complexes and/or Supramolecules”, Honolulu, Hawaii, USA, December 15– 20, 2015.
24. 2015 Pacificchem conference, Invited speaker in Symposium on “Organo-Main group Avenues toward Advanced Materials”, Honolulu, Hawaii, USA, December 15– 20, 2015.
25. 27th International Conference on Photochemistry, Invited speaker, Jesu Island, Korea, June 2015 (*the presentation was not delivered due to flight cancellation by the airline*).
26. Japan-Germany Core-to-Core Joint Symposium, Invited speaker, Münster, Germany, November 2014.
27. The Chinese Chemical Society annual meeting, Invited speaker in Photochemistry symposium, Beijing, August 2014.
28. XXIII International Materials Research Congress, Invited speaker in “Organic Electronics” Symposium, Cancun, Mexico, August 17 – 21, 2014.
29. Boron in the Americas conference, Invited speaker, Rutgers University, New Jersey, USA, June 15 – 19, 2014.
30. 97th Canadian Chemistry Conference and Exhibition, Invited speaker in “Materials and Energy Applications of Coordination Compounds” Symposium, Vancouver, British Columbia, June 1 – 6, 2014.
31. 97th Canadian Chemistry Conference and Exhibition, Invited speaker in “Supramolecular Coordination Chemistry” symposium, Joint Japan-Canada Symposium Vancouver, British Columbia, June 1 – 6, 2014.
32. Daejoo Electronic Materials Co. Ltd, Korea, Invited Research Seminar, November 7, 2013.
33. The 2nd Canada-Japan Joint Symposium on Coordination Chemistry, Invited speaker, Okinawa, Japan, November 1 – 3, 2013.
34. The 16th International Workshop on *Inorganic and Organic Electroluminescence*, 2012 International Conference on the Science and Technology of Emissive Displays and Lighting, Invited speaker, Hong Kong, December 10 – 14, 2012.
35. 38th ACS Northeast regional meeting, Invited speaker in the Frontier in Inorganic Chemistry symposium, Rochester, New York, September 30 – October 3, 2012.
36. ACS national meeting, invited speaker at the “Synthetic Inorganic Chemistry” symposium, Philadelphia, Pennsylvania, USA, August 19 – 23, 2012.
37. 95th Canadian Chemistry Conference and Exhibition, Invited speaker in the “Main group chemistry” symposium, Calgary, Alberta, May 26 – 30, 2012.
38. The Canada-Japan Supramolecular Nanomaterials Symposium, Invited speaker, Whistler, British Columbia, May 13 – 16, 2012.
39. GRK1221 symposium, “Electronic properties of π -Conjugated Materials”, Invited speaker, Würzburg, Germany, September 27 – 30, 2011.
40. IUPAC 2011 World Chemistry Congress, Invited speaker in “Main Group Chemistry” Symposium, San Juan, Puerto Rico, July 31 – August 7, 2011.
41. 14th International Meeting on Boron Chemistry (IMEBoron XIV), Invited speaker, Niagara Falls, Ontario, September 11 – 15, 2011.

42. 2011 Inorganic Exchange Workshop, Plenary speaker, Montréal, Québec, August 17 – 18, 2011.
43. 94th Canadian Chemistry Conference and Exhibition, Invited speaker, in “Optoelectronic Materials” Symposium, Montréal, Québec, June 5 – 9, 2011.
44. 94th Canadian Chemistry Conference and Exhibition, Invited speaker in “Advances in Solar Energy Conversion: Solar Cells and Beyond” symposium, Montréal, Québec, June 5 – 9, 2011.
45. Universal Display Corporation, Invited seminar, Ewing, New Jersey, USA, April 18, 2011.
46. Pacificchem 2010, Invited speaker in “Organoboron, Organosilicon, and Organophosphorus as Optoelectronic and Energy-related Materials”, Honolulu, Hawaii, USA, December 15 – 20, 2010.
47. 24th International Conference on Organometallic Chemistry, Invited speaker, Taipei, Taiwan, July 18 – 23, 2010.
48. International Symposium on Organometallic Chemistry, Invited speaker, Hong Kong, July 14 – 17, 2010.
49. Distinguished Seminar Speaker, City University of Hong Kong, Hong Kong, July 15, 2010.
50. Heterocyclic Chemistry Gordon Conference, Invited speaker, Rhode Island, USA, June 20 – 25, 2010.
51. 93rd Canadian Chemistry Conference and Exhibition, Invited speaker in “Boron Chemistry” Symposium, Toronto, Ontario, May 29 – June 3, 2010.
52. ACS national meeting, Invited speaker in “Inorganic Chemistry Award” symposium, San Francisco, California, USA, March 21 – 25, 2010.
53. Japan-Canada Coordination Space symposium, Invited speaker, Banff, Alberta, July 8 – 11, 2009.
54. Solar Cells and Organic Electronics workshop, Invited speaker, University of Toronto, Toronto, Ontario, May 9, 2009.
55. Inter-American Photochemical Society Annual Meeting, Invited speaker, Florida, USA, January 2 – 5, 2009.
56. The Alcan award lecture given at the 90th Canadian Chemistry Conference and Exhibition, Winnipeg, Manitoba, May 26 – 30, 2007.
57. ACS annual meeting, Invited speaker in “Polyfunctional organoboranes – From molecules to materials” symposium, San Francisco, California, USA, September 10 – 14, 2006.
58. 89th Canadian Chemistry Conference and Exhibition, Invited speaker in “Ligand Design in Transition Metal Chemistry”, symposium, Halifax, Nova Scotia, May 27 – 31, 2006.
59. Invited speaker in Advanced Display Workshop (OLED Technology), School of Display Engineering, Hoseo University, Korea, April 27 – 28, 2006.
60. Pacificchem2005 conference, Invited speaker in “The Heavy Glow” symposium, December 15 – 20, 2005.
61. 79th ACS Colloid and Surface Science Symposium, Invited speaker, Potsdam, New York, USA, June 12 – 15, 2005.
62. Ontario “OLEDs Day Symposium”, University of Toronto, Toronto, Ontario, June 2005.
63. 88th Canadian Chemistry Conference and Exhibition, Invited speaker in “New Frontiers in Group 13 Chemistry” symposium, Saskatoon, Saskatchewan, June 2005.

64. ACS Northeastern Regional Meeting, Invited speaker in "Transition Metal Photophysics" symposium, Rochester, New York, USA, November 2004.
65. ACS Southwestern Regional Meeting, Invited speaker in "Optoelectronic properties of Close-shell metal complexes" symposium, Fort Worth, Texas, USA, September 2004.
66. Invited Research Seminar given at the Xerox Research Center of Canada, Mississauga, Ontario, November 2003.
67. Invited Research Seminar given at the Canadian Bank Notes Company, Ottawa, Ontario, August 2003.
68. Invited seminar given at the "OLEDs Day" Workshop, organized by Materials Manufacturing Ontario, July 2003.
69. 39th IUPAC Congress and 86th Conference of The Canadian Society for Chemistry, Invited speaker in "*Supramolecular Synthesis of Advanced Materials*" symposium, Ottawa, Ontario, August 2003.
70. ACS Northeast Regional Meeting, Invited speaker in "Brilliant Chemistry: Light Emission and/or Harvesting via Organic and Organometallic materials" symposium, Saratoga, New York, USA, June 2003.
71. Invited Research seminar given at the Eastman Kodak Company, Rochester, New York, USA, April 2002.
72. Canada-France conference on "Molecular Organic Photonics and Electronics", Invited speaker, Montebello, Québec, October 2001.
73. ACS National Meeting, Invited speaker in "Inorganic Award" Symposium, San Diego, California, USA, April 2001.
74. Invited Research Seminar given at the Steacie Institute, National Research Council, Ottawa, Ontario, October 2000.
75. 83rd Canadian Chemistry Conference and Exhibition, Invited speaker in "Recent Advances and New Directions in Materials Science" symposium, Calgary, Alberta, May 2000.
76. ACS national meeting, Invited speaker in the CGP symposium, San Francisco, California, USA, March 2000.
77. 82nd Canadian Chemistry Conference and Exhibition, Invited speaker in Materials Chemistry symposium, Toronto, Ontario, May 1999.
78. ACS national meeting, Invited speaker in Organometallic Chemistry Award Symposium, Anaheim, California, USA, April 1999.
79. 81st Canadian Chemistry Conference and Exhibition, Invited speaker in Inorganic Materials Symposium, Whistler, British Columbia, May 1998.
80. Invited speaker in the Symposium on Frontiers of Chemistry, CWCYC-2, The Hong Kong University of Science and Technology, Hong Kong, December 1997.
81. 79th Canadian Chemistry Conference and Exhibition, Invited speaker in the Molecular Magnetism symposium, St John's, Newfoundland, June 1996.
82. Northeastern ACS Meeting, Invited speaker in the Symposium "Organoaluminum Chemistry" Rochester, New York, USA, October 1995.
- 75th Canadian Chemistry Conference and Exhibition, Invited speaker in the Workshop of Toward New Materials through Inorganic and Organometallic chemistry, Edmonton, Alberta, June 1992.