

## Suning Wang

## Curriculum Vitae (updated June, 2007)

### **Education**

- 1982-1987 Ph.D. Department of Chemistry, Yale University, New Haven, CT  
Supervisor: Richard D. Adams  
Thesis title: Reactions of Tetranuclear and Pentanuclear Osmium Carbonyl Cluster Compounds with Small Molecules
- 1978-1982 B.Sc. Department of Chemistry, Ji Lin University, Chang-Chun, PRC  
Research thesis title: Improving the Performance of Zeolites

### **Academic Employment**

- 2003- Associate Head of Chemistry  
2000- Chemistry, Queen's University, Kingston, Ontario Professor
- 1996-2000 Chemistry, Queen's University, Kingston, Ontario Associate Professor
- 1993-1996 Chemistry & Biochemistry, University of Windsor, Windsor, Ontario Associate Professor
- 1990-1993 Chemistry & Biochemistry, University of Windsor, Windsor, Ontario Assistant Professor
- 1986-1989 Chemistry, Texas A&M University, College Station, Texas, Postdoctoral Fellow  
Supervisor: John P. Fackler, Jr.  
Research projects: Organometallic gold, platinum, and silver complexes; Metal-metal bondings and luminescence

### **Industrial Employment**

- 1989-1990 Digital Specialty Chemicals, Ltd., Mississauga Organic/Organometallic syntheses

### **Membership in Professional Societies**

Chemical Institute of Canada, American Chemical Society, Materials Research Society

### **Awards and Honors**

- 2007 The Canadian Society for Chemistry, Alcan Award**
- 2004-2009 Queen's University Research Chair
- 2002 Fellow of the Chemical Institute of Canada
- 2002-present Guest Professor at the School of Chemistry, Jilin University, PRC
- 2001 The Federation of Chinese Canadian Professionals (Ontario), Education Foundation, 2001 Award of Merit
- 2000 The Rutherford Memorial Medal of the Royal Society of Canada (Chemistry)**
- 1996 - 2001 Queen's University National Scholar
- 1993 International Union of Pure and Applied Chemistry, Travel Award
- 1987 - 1989 Robert Welch Fellowship
- 1982 - 1983 US-China Chemistry Graduate Program (CGP, "The Doering Program") Fellowship

## Professional Service

- Editorial board, *Organometallics*, 2007-2010
- *Canadian Journal of Chemistry*, Editorial Board, 2005-2008
- Associate Head, Department of Chemistry, Queen's University, 2002-present
- Member of the Nano-technology Advisory Committee at Queen's University 2002-2004
- The North American Review Board of *Dalton Transactions*
- NIH Study Panel "Device and Detection Sciences", 2006
- NSF "Organic photonics and Electronics" grant proposal review panel, 2004
- Symposium Organizer for CSC annual meetings in 1997 and 2001, Pacificchem 2005
- NSERC Strategic Research Grant Committee (the panel on Value-added products) 2002-2005
- NSERC discovery research grant selection committee (Organic and Inorganic), 2005-2008

## Patents

- (1) S. Wang, W. Liu, A. Hassan, "**Luminescent Compounds and Methods of Making and Using Same**", US Pat., (2001) No. 6,312,835, Issued on November 6, 2001.
- (2) S. Wang, W. Liu, A. Hassan, "**Luminescent Compounds and Methods of Making and Using Same**", US Pat, (2001) No. 6,500,569, Issued on December 31, 2001
- (3) S. Wang, W. Liu, A. Hassan, "**Luminescent compounds and methods of making and using same**", Canadian Pat. Appl. No 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 Pat. Appl. Publ, 2004, US 2004265628.
- (5) S. Wang, W. L. Jia, "**Organic Luminescent Compounds and Methods of Making and Using Same**", US Pat. Appl. Publ, 2004, US 2004265629.
- (6) S. Wang, W.-L. Jia, X. Feng, Z.-H. Lu "**Organoboron Luminescent Compounds and Methods of Making and Using Same**" US Pat. Appl. Publ, 2006, US 2006036114.
- (7) S. Wang, R. Y. Wang, "**Organic Luminescent Compounds and Methods of Making and Using Same**", Canadian Patent Application, No. 2,425,819, filed on April 17, 2003.
- (8) S. Wang, W. L. Jia, "**Organic Luminescent Compounds and Methods of Making and Using Same**", Canadian Pat. Appl., No. 2,446,604, filed on April 16, 2004.
- (9) S. Wang, W.-L. Jia, X. Feng, Z.-H. Lu "**Organoboron Luminescent Compounds and Methods of Making and Using Same**" Canadian Pat. Appl., No. 2,478,041. Filed on August 13, 2004.

## Publications in Peer Reviewed Journals and Book Chapters

### 2007

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", *Organic Lett.* **2007**, submitted in June, 2007.
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**, advanced article released on web in May, 2007.
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  $\pi$ -Conjugation with 2,2'-Bipy and Metal Chelation: 5,5'-Bis(BMes<sub>2</sub>)-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**, 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

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 triboron 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.* **2006**, *45*, 5475-5478.
155. L. De La Durantaye, T. M<sup>c</sup>Cormick, 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**, 5675-5682.
154. S. B. Zhao, R. Y. Wang, S. Wang,\* “Dinuclear Cu<sup>I</sup> 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.*, invited contribution to the Walter Szarek special issue, **2006**, *84*, 477-485.
152. T. M<sup>c</sup>Cormick, 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*, **2006**, 1721-1728.
149. J. H. Lee, Y. Y. Yuan, Y. J. Kang, W. L. Jia, Z. H. Lu, S. Wang,\* “2,5-Functionalized Spiro-Bisiloles As Highly Efficient Yellow Emitters in Electroluminescent Devices”, *Adv. Funct. Mater.* **2006**, *16*, 681-686.

## 2005

### Review articles

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*(1-2), 103-125.

### Journal 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. M<sup>c</sup>Cormick, Y. Tao, J. P. Lu, S. Wang<sup>\*</sup>, “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,<sup>\*</sup> 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,<sup>\*</sup> 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, Suning Wang “Blue Luminescent 2-(2'-pyridyl)benzimidazole Derivative Ligands and Their Orange Luminescent Mononuclear and Polynuclear Organoplatinum(II) Complexes”, *Inorganic chemistry*, **2005**, *44*, 1332-1343.
140. Q. D. Liu, M. S. Mudadu, R. Thummel, Y. Tao, S. Wang<sup>\*</sup> From Blue to Red: Syntheses, Structures, Electronic, and Electrochemical Properties of Tunable Luminescent *N,N* Chelate Boron Complexes.” *Adv. Funct. Mater.* **2005**, *15*, 143-155.
139. W.-L. Jia, R.-Y. Wang, D. T. Song, S. Ball, A. McLean, S. Wang<sup>\*</sup> “7-Azaindolyl and 2,2'-Dipyridylamino Functionalized Molecular Stars with a 6-fold Symmetry: Self-assembly, Luminescence and Coordination Compounds”, *Chemistry, Eur. J.*, **2005**, *11*, 832-842.
138. D. T. Song, W. L. Jia, G. Wu, S. Wang<sup>\*</sup> 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<sup>\*</sup> “Mes<sub>2</sub>B(*p*-4,4'-biphenyl-NPh(1-naphthyl)): A Novel Multi-functional Molecule for Electroluminescent Devices” *Chem. Mater.*, **2005**, *17*, 164-170.

## 2004

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136. D. T. Song, S. Wang<sup>\*</sup>, “C-H and C-Cl Activation by Mononuclear and Dinuclear Platinum Complexes With 7-Azaindolyl Containing Chelates” *Commen. Inorg. Chem.*, **2004**, *25*, 1-18.
135. S. Wang,<sup>\*</sup> 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.

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134. R. Y. Wang, Z. P. Zheng, Q. D. Liu, S. Wang “Cluster and polynuclear compounds. A tetranuclear lanthanide-hydroxo complex featuring the cubane-like [Ln<sub>4</sub>(OH)<sub>4</sub>]<sup>8+</sup> cluster core, [Nd<sub>4</sub>(OH)<sub>4</sub>(H<sub>2</sub>O)<sub>10</sub>(alanine)<sub>6</sub>][ClO<sub>4</sub>]<sub>8</sub>.” *Inorg. Syn.* **2004**, *34* 184-187.
133. J. H. Lee, Q. D. Liu, D. R. Bai, Y. Kang, Y. Tao, S. Wang<sup>\*</sup>, “2,3,4,5-Tetra-functionalized siloles: Syntheses, Structures, Luminescence and Electroluminescence”, *Organometallics*, **2004**, *23*, 6205-6213.
132. D. R. Bai, S. Wang<sup>\*</sup>, “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<sup>c</sup>Cormick, Q. D. Liu, H. Fukutani, R. -Y. Wang, Y. Tao, S. Wang<sup>\*</sup>, “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: [Ag(O<sub>3</sub>SCF<sub>3</sub>)]<sub>1,5</sub>(tdapb) and [Ag(NO<sub>3</sub>)]<sub>3</sub>(tdapb), tdapb = 1,3,5-tris(4-(2,2'-dipyridylamino)phenyl)benzene" *Angew. Chem. Int. Ed. Engl.* **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 [Pt<sub>2</sub>(CH<sub>3</sub>)(SMe<sub>2</sub>)Ph<sub>2</sub>(ttab)][BAR'<sub>4</sub>] and [Pt<sub>2</sub>(H<sub>2</sub>O)<sub>2</sub>Ph<sub>2</sub>(ttab)][BAR'<sub>4</sub>]<sub>2</sub> (ttab = 1,2,4,5-Tetrakis(1-*N*-7-azaindoyl)benzene)" *Organometallics*, **2004**, *23*, 1194-1196.
126. W. L. Jia, D.-R. Bai, T. M<sup>c</sup>Cormick, Q. D. Liu, M. Motala, R. Y. Wang, C. Seward, Y. Tao, S. Wang\* "Three-Coordinate Organoboron Compounds BAR<sub>2</sub>R (Ar = Mesityl, R = 7-azaindoyl or 2,2'-dipyridylamino Functionalized Aryl or Thienyl) for Electroluminescent Devices and Supramolecular Assembly", *Chem., Eur. J.*, **2004**, *10*, 994 – 1006.
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

124. D. T. Song, S. Wang\* "Pd(II), Zn(II) and Ag(I) Complexes of Tetrakis(*N*-7-azaindoyl)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-azaindoyl and 2,2'-dipyridylamino Functional groups", *J. Chem. Soc. Dalton Trans.*, **2003**, 3234-3240.
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-azaindoyl)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-azaindoyl)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 <sup>25</sup>Mg NMR, X-ray Crystallographic and Quantum Mechanical Study of Bis(pyridine)<sub>5</sub>,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.
116. Y. Kang, C. Seward, D. Song, S. Wang, "Blue luminescent rigid molecular rods bearing *N*-7-azaindoyl 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  $Alq_3$  ( $q = 8$ -hydroxyquinolinolato) and  $Eu(tta)_3(phen)$  ( $tta =$  thenoyltrifluoroacetato,  $phen = 1, 10$ -phenanthroline)” *J. Chem. Edu.* **2003**, *80*, 1474-1475.

## 2002

### Journal 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,  $sym-Au_2(MTP)_2$ ,  $(PPN)[Au(MTP)_2]$ ,  $Au_2Pt(MTP)_4$ ,  $Au_2Pb(MTP)_4$ ,  $AuTl(MTP)_4$ ,  $Hg(MTP)_2$ ,  $Hg(MTP)_2(AuCl)_2$ , and  $Hg^{II}Au^I(MTP)_2Au^{III}Cl_4$ ” *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  $Pt_2R_4(ttab)$  and  $Pt_2(CH_3)_4(ttab)Cl_2$ ”, *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  $Ln_2(acac-azain)_4(\mu-acac-azain)_2$ ,  $acac-azain = 1-(N-7-azaindoly)-1, 3$ -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”, *Tetrahedron Letters*, **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**, 3234-3240.
104. Y. J. Kang, D. T. Song, H. Schmider, S. Wang\* “Novel Blue Phosphorescent Group 15 Compounds  $MR_3$ ,  $M = P, Sb, Bi$ ,  $R = p-(N-7-azaindoly)phenyl$ ” *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  $Pt_2(CH_3)_4(S(CH_3)_2)_2$  and  $Pt_3Ph_6(S(CH_3)_2)_3$ ”, *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 of  $s$ -Triazine Skeleton and 1,3,5-Trisubstituted Benzene Skeleton 2,2’-Dipyridylamine Derivatives”, *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 Tetradeca-nuclear Hydroxo-lanthanide Clusters”, *J. Chem. Soc. Chem. Comm.* **2002**, 368-369.

## 2001

### Review article

99. S. Wang, "Luminescence and Electroluminescence of Al(III), B(III), Be(II) and Zn(II) Complexes with Nitrogen Donors", *Coordination Chemistry Reviews*, **2001**, 215, 79-98.

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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: BPh<sub>2</sub>(acac-azain) and Al(CH<sub>3</sub>)(acac-azain)<sub>2</sub>, acac-azain = 1-*N*-7-azaindoly-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: M(Bab)Cl, M(Br-Bab)Cl, M = Pd(II), Pt(II), and Pd<sub>3</sub>Cl<sub>4</sub>(Tab)<sub>2</sub>, Bab=1,3-bis(7-azaindoly)phenyl, Br-Bab = 1-Bromo-3,5-bis(7-azaindoly)-phenyl, Tab=1,3,5-tris(7-azaindoly)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.
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