

WENBIN LIN

1. PERSONAL

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2. EDUCATION

Ph.D., 1994, University of Illinois at Urbana-Champaign, Urbana, Illinois (with Professors Gregory S. Girolami and Ralph G. Nuzzo)

B.S., 1988, University of Science and Technology of China, Hefei, China

3. PROFESSIONAL EXPERIENCE

University of North Carolina Chapel Hill, North Carolina 7/11 – present, Kenan Distinguished Professor of Chemistry and Pharmacy

University of North Carolina Chapel Hill, North Carolina 7/07 – 6/11, Professor of Chemistry; 7/08-6/11, Professor of Pharmacy

University of North Carolina Chapel Hill, North Carolina 7/03 – 06/07, Associate Professor of Chemistry.

University of North Carolina Chapel Hill, North Carolina 7/01 – 6/03, Assistant Professor of Chemistry.

Brandeis University Waltham, Massachusetts 7/97 – 6/01, Assistant Professor of Chemistry.

NSF Postdoctoral Fellow., 1994-97, Northwestern University (with Ipatieff Professor Tobin J. Marks)

4. HONORS AND AWARDS

Kenan Distinguished Professorship, UNC-Chapel Hill, 2011

AAAS Fellow, elected in 2011

Selected to be on the “top 100 chemists” list based on per article citations from 2000-2010

Selected to be on the “top ten chemists” list based on per article citations from 1999-2009

Specially Appointed Professor, Hokkaido University, Japan, 2008

Reynold Research Leave Award, UNC-CH, 2007-2008

Camille Dreyfus Teacher-Scholar Award, 2001 – 2006

Arnold and Mabel Beckman Young Investigator Award, 2000 – 2003

Research Corporation Cottrell Scholar Award, 2000 - 2002

Alfred P. Sloan Research Fellowship, 2000 – 2002

DuPont Educational Aid Award, 2000

National Science Foundation CAREER Award, 1999 - 2004

National Science Foundation Postdoctoral Fellowship, 1995 - 97

T.S.Piper Award for Graduate Research in Chemistry, University of Illinois, 1994

University of Illinois Department of Chemistry Fellowship, 1991 - 93

Univ. of Sci&Tech of China Yi-li-da Award for Excellence of Undergraduate Research, 1988

University of Science and Technology of China Fellowship, 1984-86

LECTURESHIPS

Inaugural Eastman Lecturer, UIUC, 2011

Naff Symposium Lecturer, Univ of Kentucky, 2008

Advance distinguished lectureship, Kansa State University, 2007

OTHER ACADEMIC ACTIVITIES

Advisory Board Member, *ACS Catal.*, 2011-present

Advisory Board Member, *Chem. Sci.*, 2010-present

Advisory Board Member, *CrystEngComm*. 2006-2008
Advisory Board Member, *Chinese J. Struct. Chem.* since 2004
Member of Overseas Advisory Group, Chinese Academies of Sciences since 2004
Member, American Chemical Society
Member, Materials Research Society

5. PUBLICATIONS

204. "Mixed-motif interpenetration and cross-linking of high-connectivity networks lead to robust and porous metal-organic frameworks with high gas uptake capacities." Wen, L.; Cheng, P.; Lin, W. submitted to *Chem. Sci*.
203. "A high connectivity metal-organic framework with exceptional hydrogen and methane uptake capacities." Liu, D.; Wu, H.; Wang, S.; Xie, Z.; Li, J.; Lin, W. submitted to *Angew. Chem. Int. Ed.*
202. "Light-Harvesting Crosslinked Polymers for Efficient Photocatalysis." Wang, C.; Xie, Z.; deKrafft, K.E.; Lin, W. Submitted to *ACS Applied Materials and Interfaces*.
201. "Pt Nanoparticles@Photoactive Metal-Organic Frameworks: Efficient Hydrogen Evolution via Synergistic Photo-excitation and Electron Injection. Wang, C.; deKrafft, K.E.; Lin, W. submitted to *J. Am. Chem. Soc.*
200. "Chiral metal-organic frameworks with tunable open channels as single-site asymmetric cyclopropanation catalysts." Falkowski, J.M.; Liu, S.; Wang, C.; Lin, W. submitted to *Chem. Commun.*
199. "Asymmetric Metal-Organic Framework Brønsted Acid Catalysts with Enzyme-like Stereocontrol." Zheng, M.; Wang, C.; Liu, S.; Lin, W. submitted.
198. "Metal-Organic Framework Templated Synthesis of Fe₂O₃/TiO₂ Nanocomposite for Photocatalytic Hydrogen Production." deKrafft, K.E.; Wang, C.; Lin, W. submitted to *Adv. Mater.* **2012**, in press.
197. "Chiral Porous Metal-Organic Frameworks with Dual Catalytic Sites for Sequential Asymmetric Catalysis." Song, F.; Zhang, T.; Wang, C.; Lin, W. *Proc. Royal Soc. A*, **2012**, in press.
196. "Oxygen sensing via phosphorescence quenching of doped metal-organic frameworks." Barrett, S.M.; Wang, C.; Lin, W. *J. Mater. Chem.* **2012**, in press.
195. "Metal-organic frameworks as single-site solid catalysts for asymmetric reactions." Falkowski, J.M.; Liu, S.; Lin, W. *Israel J. Chem.* **2012**, in press.
194. "Crosslinked polymers with exceptionally high Ru(bipy)₃²⁺ loadings for efficient heterogeneous photocatalysis." Wang, J.-L.; Wang, C.; deKrafft, K.E.; Lin, W. *ACS Catal.* **2012**, *2*, 417-424.
193. "Electrochemical Water Oxidation by Carbon-Grafted Molecular Complexes." deKrafft, K.E.; Wang, C.; Xie, Z.; Xin, S.; Hinds, B.J.; Lin, W. *ACS Applied Materials and Interfaces* **2012**, *4*, 608-613.
192. "Amplified Luminescence Quenching of Emissive Metal-Organic Frameworks." Kent, C.A.; Liu, D.; Meyer, T.J.; Lin, W. submitted to *J. Am. Chem. Soc.* **2012**, in press.
191. "Coercing Bisphosphonates to Kill Cancer Cells with Nanoscale Coordination Polymers." Liu, D.; Kramer, S.A.; Huxford, R.C.; Wang, S.; Della Rocca, J.; Lin, W. *Chem. Commun.* **2012**, *48*, 2668-2670.
190. "Solvent-induced Single-Crystal to Single-Crystal Transformation of a 2-D Coordination Network to a 3-D Metal-organic Framework Greatly Enhances Porosity and Hydrogen Uptake." Wen, L.; Cheng, P.; Lin, W. *Chem. Commun.* **2012**, *48*, 2846-2848.
189. "Immobilization of Chiral Catalysts on Magnetite Nanoparticles for Highly Enantioselective Asymmetric Hydrogenation of Aromatic Ketones." Hu, A.; Liu, S.; Lin, W. *RSC Adv.* **2012**, *2*, 2576-2580.
188. "Are High Drug Loading Nanoparticles the Next Step Forward for Chemotherapy?" Della Rocca, J.; Liu, D.; Lin, W. *Nanomedicine* **2012**, in press.
187. "Mesoporous Silica Nanoparticles with Co-condensed Gadolinium Chelates for Multimodal Imaging." Taylor-Pashow, K.M.L.; Della Rocca, J.; Lin, W. *Nanomaterials.* **2012**, *2*, 1-14.
186. "Highly Porous 4,8-Connected Metal-Organic Frameworks: Synthesis, Characterization, and Hydrogen Storage." Mihalcik, D.J.; Zhang, T.; Ma, L.; Lin, W. *Inorg. Chem.* **2012**, *51*, 2503-2508.
185. "Silica-based Nanoprobes for Biomedical Imaging." Vivero-Escoto, J.L.; Huxford, R.C.; Lin, W. *Chem. Soc. Rev.* **2012**, in press.

184. "Rational Synthesis of Noncentrosymmetric Metal-Organic Frameworks for Second-Order Nonlinear Optics." Wang, C.; Zhang, T.; Lin, W. *Chem. Rev.* **2012**, 112, 1084-1104.
183. "Nanoscale Coordination Polymers for Targeted Delivery of Antifolates to Cancer Cells." Huxford, R.C.; deKrafft, K.E.; Boyle, W.S.; Liu, D.; Lin, W. *Chem. Sci.* **2012**, 3, 198-204.
182. "Debio 0507 Primarily Forms Diaminocyclohexane-Pt-d(GpG) and -d(ApG) DNA Adducts In HCT116 Cells". King, C.L.; Ramachandran, S.; Chaney, S.G.; Collins, L.; Swenberg, J.A.; deKrafft, K.E.; Lin, W.; Cicurel, L.; Barbier, M. *Cancer Chemother. Pharmacol.* **2012**, in press.
181. "Trigger-Releasable Polysilsesquioxane Nanoparticles for Targeted Platin-Based Cancer Chemotherapy." Della Rocca, J.; Comstock-Duggan, E.; Huxford, R.C.; Lin, W. *Angew. Chem.* **2011**, 50, 10330-10334.
180. "Multifunctional Mesoporous Silica Nanospheres as Biodegradable Contrast Agents for Target-Specific Magnetic Resonance Imaging." Vivero-Escoto, J.L.; Taylor-Pashow, K.M.L.; Huxford, R.C.; Della Rocca, J.; Okoruwa, C.; An, H.; Lin, W.; Lin, W. *Small*, **2011**, 7, 3519-3528.
179. "Light-Harvesting in Microscale Metal-Organic Frameworks by Energy Migration and Interfacial Electron Transfer Quenching." Kent, C.A.; Liu, D.; Ma, L.; Papanikolas, J.M.; Meyer, T.J.; Lin, W. *J. Am. Chem. Soc.* **2011**, 133, 12940-12943.
178. "Doping Metal-Organic Frameworks for Water Oxidation, Carbon Dioxide Reduction, and Organic Photocatalysis." Wang, C.; Xie, Z.; deKrafft, K.E.; Lin, W. *J. Am. Chem. Soc.* **2011**, 133, 13445-13454.
177. "Actuation of Asymmetric Cyclopropanation Catalysts: Reversible Single-Crystal to Single-Crystal Reduction of Metal-Organic Frameworks." Falkowski, J.M.; Wang, C.; Lin, W. *Angew. Chem. Int. Ed.* **2011**, 50, 8674-8678.
176. "A Chiral Metal-Organic Framework for Sequential Asymmetric Catalysis." Song, F.; Wang, C.; Lin, W. *Chem. Commun.* **2011**, 47, 8256-8258.
175. "Highly Porous Crosslinked Polymers for Catalytic Asymmetric Diethylzinc Addition to Aldehydes." Ma, L.; Wanderley, M.; Lin, W. *ACS Catalysis* **2011**, 1, 691-697.
174. "Metal Organic Frameworks for Biomedical Imaging." Della Rocca, J.; Lin, W. In *Metal-Organic Frameworks: Applications from Catalysis to Gas Storage*, Farrusseng, D. Ed. Wiley-VCH, Weinheim, Germany, **2011**, 251-266.
173. "Nanoscale Metal-Organic Frameworks for Biomedical Imaging and Drug Delivery." Della Rocca, J.; Liu, D.; Lin, W. *Acc. Chem. Res.* **2011**, 44, 957-968.
172. "Asymmetric Catalysis with Chiral Porous Metal-Organic Frameworks: Critical Issues." Wang, C.; Zheng, M.; Lin, W. *J. Phys. Chem. Lett.*, **2011**, 2, 1701-1709.
171. "Synthesis of Fatty Acid Methyl Esters from Extremely Low Quality Greases by Homogeneous and Solid Phase Catalysts." Ngo, H.L.; Vanselous, H.; Xie, Z.; Kasprzyk, S.; Haas, M.; Lin, W. *J. Am. Oil Chem. Soc.* **2011**, 88, 1417-1424. (DOI: 10.1007/s11746-011-1804-1)
170. "Phosphorescent Nanoscale Metal-Organic frameworks as Contrast Agents for Optical Imaging." Liu, D.; Huxford, R.C.; Lin, W. *Angew. Chem. Int. Ed.* **2011**, 50, 3696-3700.
169. "Diffusion-Controlled Luminescence Quenching in Metal-Organic Frameworks." Wang, C.; Lin, W. *J. Am. Chem. Soc.* **2011**, 133, 4232-4235.
168. "Highly Stable and Porous Crosslinked Polymers for Efficient Photocatalysis." Xie, Z.; Wang, C.; deKrafft, K.E.; Lin, W. *J. Am. Chem. Soc.* **2011**, 133, 2056-2059. (Highlighted in 7 February 2011 issue of *Chem & Eng News*)
167. "Single-Crystal to Single-Crystal Crosslinking of An Interpenetrating Chiral Metal-Organic Framework and Its Implication in Asymmetric Catalysis." Ma, L.; Wu, C.-D.; Wanderley, M.M.; Lin, W. *Angew. Chem. Int. Ed.* **2010**, 49, 8244-8248.
166. "Three-Dimensional Metal-Organic Frameworks Based on Tetrahedral and Square Planar Building Blocks: Hydrogen Sorption and Dye Uptake Studies." Liu, D.; Xie, Z.; Ma, L.; Lin, W. *Inorg. Chem.* **2010**, 49, 9107-9109.
165. "Isorecticular Chiral Metal-Organic Frameworks for Asymmetric Alkene Epoxidation: Tuning Catalytic Activity by Controlling Framework Catenation and Varying Open Channel Sizes." Song, F.; Wang, C.; Falkowski, J.M.; Ma, L.; Lin, W. *J. Am. Chem. Soc.* **2010**, 132, 15390-15398.

164. "Energy Transfer Dynamics in Metal-Organic Frameworks." Kent, C.A.; Mehl, B.P.; Ma, L.; Papanikolas, J.M.; Meyer, T.J.; Lin, W. *J. Am. Chem. Soc.* **2010**, *132*, 12767-12769.
163. "Nanoscale Metal-organic Frameworks: Magnetic Resonance Imaging Contrast Agents and Beyond." Della Rocca, J.; Lin, W. *Eur. J. Inorg. Chem.* **2010**, 3725-3734.
162. "Asymmetric Catalysis with Chiral Porous Metal-Organic Frameworks." Lin, W. *Topics in Catalysis*, **2010**, *53*, 869-875.
161. "Hybrid Nanomaterials for Biomedical Applications." Taylor-Pashow, K.M.L.; Della Rocca, J.; Huxford, R.C.; Lin, W. *Chem. Commun.* **2010**, *46*, 5832-5849.
160. "A series of isorecticular chiral metal-organic frameworks as a tunable platform for asymmetric catalysis." Ma, L.; Falkowski, J.M.; Abney, C.; Lin, W. *Nature Chem.* **2010**, *2*, 838-846.
159. "Porous Phosphorescent Coordination Polymers for Oxygen Sensing." Xie, Z.; Ma, L.; deKrafft, K.E.; Jin, A.; Lin, W. *J. Am. Chem. Soc.* **2010**, *132*, 922-923.
158. "Metal-Organic Frameworks as Potential Drug Carriers." Huxford, R.C.; Della Rocca, J.; Lin, W. *Curr. Opinion Chem. Biol.* **2010**, *14*, 262-268.
157. "Mesoporous Silica-Supported Diarylammonium Catalysts for Esterification of Free Fatty Acids in Greases." Ngo, H.L.; Zafiropoulos, N.A.; Foglia, T.A.; Samulski, E.T.; Lin, W. *J. Am. Oil Chem. Soc.* **2010**, *87*, 445-452.
156. "Rational Design of Noncentrosymmetric Metal-Organic Frameworks for Second Order Nonlinear Optics." Lin, W.; Wu, S. In *Metal-Organic Frameworks: Design and Applications*, MacGillivray, L.R. Ed. Wiley, Hoboken, NJ, **2010**, 193-214.
155. "Designing Metal-Organic Frameworks for Catalytic Applications." Ma, L.; Lin, W. *Topics Curr. Chem.* **2010**, Vol 293, pp 175-205 (M. Schröder, Ed).
154. "Freeze Drying Significantly Increases Permanent Porosity and Hydrogen Uptake in New 4,4-Connected Metal-Organic Frameworks." Ma, L.; Jin, A.; Xie, Z.; Lin, W. *Angew. Chem. Int. Ed.* **2009**, *48*, 9905-9908.
153. "Iodinated Nanoscale Coordination Polymers as Potential Contrast Agents for Computed Tomography." deKrafft, K.E.; Xie, Z.; Cao, G.; Tran, S.; Ma, L.; Zhou, O.Z.; Lin, W. *Angew. Chem. Int. Ed.* **2009**, *48*, 9901-9905.
152. "Mesoporous Silica Nanosphere-Supported Chiral Ruthenium Catalysts: Synthesis, Characterization, and Asymmetric Hydrogenation Studies." Mihalcik, D.J.; Lin, W. *ChemCatChem*, **2009**, *1*, 406-413.
151. "Post-Synthetic Modifications of Iron-Carboxylate Nanoscale Metal-Organic Frameworks for Imaging and Drug Delivery." Taylor-Pashow, K.M.L.; Della Rocca, J.; Xie, Z.; Tran, S.; Lin, W. *J. Am. Chem. Soc.* **2009**, *131*, 14261-14263.
150. "Multimodal optical and Gd-based nanoparticles for targeted monocyte imaging in inflammatory arthritis." Kim, J.S.; An, H.; Rieter, W.J.; Esserman, D.; Taylor-Pashow, K.M.L.; Sartor, R.B.; Lin, W.; Lin, W.; Tarrant, T.K. *Clin. Exp. Rheum.*, **2009**, *27*, 580-580.
149. "Hybrid Silica Nanoparticles for Luminescent Spore Detection." Taylor, K.M.L.; Lin, W. *J. Mater. Chem.* **2009**, *22*, 905-912.
148. "Magnetic Nanoparticles for Early Detection of Cancer by Magnetic Resonance Imaging." Lin, W.; Hyeon, T.; Lanza, G.M.; Zhang, M.; Meade, T. *MRS Bulletin.* **2009**, *34*, 441-448.
147. "Asymmetric oxadiazole mesogens as candidates for low-temperature biaxial nematics." Zafiropoulos, A.; Lin, W.; Samulski, E.T.; Dingemans, T.J.; Picken, S.J. *Liquid Cryst.* **2009**, *36*, 649-656.
146. "Development of an Ultra Performance LC/MS method to quantitate cisplatin 1,2 intrastrand GG adducts." Baskerville-Abraham, I.M.; Boysen, G.; Troutman, J.M.; Mutlu, E.; Collins, L.; deKrafft, K.E.; Lin, W.; Prey, J.; Pendyala, L.; King, C.h; Chaney, S. G.; Swenberg, J.A. *Chem.Res.Toxicol.* **2009**, *22*, 905-912.
145. "Unusual Interlocking and Interpenetration Lead to Highly Porous and Robust Metal-Organic Frameworks." Ma, L.; Lin, W. *Angew. Chem. Int. Ed.* **2009**, *48*, 3637-3640.
144. "Highly Porous and Robust 4,8-Connected Metal-Organic Frameworks for Hydrogen Storage." Ma, L.; Mihalcik, D.J.; Lin, W. *J. Am. Chem. Soc.* **2009**, *131*, 4610-4612.

143. "Enantioselective Catalysis with Homochiral Metal-Organic Frameworks." Ma, L.; Abney, C.; Lin, W. *Chem. Soc. Rev.* **2009**, *38*, 1248-1256.
142. "Self-Supported Asymmetric Catalysts" Lin, W.; Mihalcik D.J. In *Recoverable and Recyclable Catalysts*, Benaglia, M. Ed. Wiley, Wiltshire, U.K., **2009**, 155-177,
141. "Modular Synthesis of Functional Nanoscale Coordination Polymers." Lin, W.; Rieter, W.L.; Taylor, K.M.L. *Angew. Chem. Int. Ed.* **2009**, *48*, 650-658.
140. "3D Metal-Organic Frameworks Based on Functionalized Tetracarboxylate Linkers: Synthesis, Structures, and Gas Sorption Studies." Wu, S.; Ma, L.; Long, L.-S.; Zheng, L.-S.; Lin, W. *Inorg. Chem.* **2009**, *48*, 2436-2442.
139. "Chirality-Controlled and Solvent-Templated Catenation Isomerism in Metal-Organic Frameworks." Ma, L.; Lin, W. *J. Am. Chem. Soc.* **2008**, *130*, 13834-13835. [[pdf](#)]
138. "Surfactant-Assisted Synthesis of Nanoscale Gadolinium Metal-Organic Frameworks for Potential Multimodal Imaging." Taylor, K.M.L.; Jin, A.; W.J.; Lin, W. *Angew. Chem. Int. Ed.* **2008**, *47*, 7722-7725. (Highlighted in 25 August 2008 issue of *Chem & Eng News*)
137. "Manganese-Based Nanoscale Metal-Organic Frameworks for Magnetic Resonance Imaging." Taylor, K.M.L.; Rieter, W.J.; Lin, W. *J. Am. Chem. Soc.* **2008**, *130*, 14358-14359.
136. "Nanoscale Coordination Polymers for Platinum-Based Anticancer Drug Delivery." Rieter, W.J.; Pott, K.M.; Taylor, K.M.L.; Lin, W. *J. Am. Chem. Soc.* **2008**, *130*, 11584-11585. (Highlighted in 18 August 2008 issue of *Chem & Eng News*) [[pdf](#)]
135. "Hierarchically Ordered Homochiral Metal-Organic Frameworks Built from Exceptionally Large Rectangles and Squares." Wu, C.-D.; Ma, L.; Lin, W. *Inorg. Chem.* **2008**, *47*, 11446-11448.
134. "3D Metal-organic Frameworks Based on Elongated Tetra-carboxylate Building Blocks for Hydrogen Storage." Ma, L.; Lee, J.; Li, J.; Lin, W. *Inorg. Chem.* **2008**, *47*, 3955-3957. [[pdf](#)]
133. "Mesoporous Silica Nanosphere-Supported Ruthenium Catalysts for Asymmetric Hydrogenation." Mihalcik, D.J.; Lin, W. *Angew. Chem. Int. Ed.* **2008**, *47*, 6229-6232.
132. "Designing Functional Hybrid Nanomaterials by Combining Molecular Chemistry with Nanotechnology." Kim, J.S.; Lin, W. In *50th Anniversary Celebration of USTC*, Chen, S.; Lin, W. Eds. USTC Press, Hefei, Anhui, P.R. China, 2008.
131. "Chiral Nanoporous Materials." Lin, W.; Lee, S.J. In *Chirality at the Nanoscale*, Amabilino, D.B. Ed. Wiley-VCH: Weinheim, **2009**, 391-409 (Chapter 12).
130. "Chiral Metalloacycles for Asymmetric Catalysis." Lin, W. In *Supramolecular Catalysis*, van Leeuwen, P.N.M. Ed. Wiley-VCH, Weinheim, **2008**, 93-111.
129. "Mesoporous Silica Nanospheres as Highly Efficient MRI Contrast Agents." Taylor, K.M.L.; Kim, J.S.; Rieter, W.J.; An, H.; Lin, W.; Lin, W. *J. Am. Chem. Soc.* **2008**, *130*, 2154-2155. [[pdf](#)]
128. "New All-aromatic Liquid Crystal Architectures." Zafiropoulos, N.A.; Choi, E.-J.; Dingemans, T.; Lin, W.; Samulski, E.T. *Chem. Mater.* **2008**, *20*, 3821-3831. [[pdf](#)]
127. "Chiral Metalloacycles: Rational Synthesis and Novel Applications." Lee, S.J.; Lin, W. *Accounts Chem. Res.* **2008**, *41*, 521-537. [[pdf](#)]
126. "Efficient Two-Step Synthesis of Biodiesel from Greases." Ngo, H.L.; Zafiropoulos, N.A.; Foglia, T.A.; Samulski, E.T.; Lin, W. *Energy & Fuels* **2008**, *22*, 626-634. [[pdf](#)]
125. "Surface Modification and Functionalization of Nanoscale Metal-Organic Frameworks for Controlled Release and Luminescence Sensing." Rieter, W.J.; Taylor, K.M.L.; Lin, W. *J. Am. Chem. Soc.* **2007**, *129*, 9852-9853. [[pdf](#)]
124. "Catalytic synthesis of biodiesel from high free fatty acid-containing feedstocks." Zafiropoulos, N.A.; Ngo, H.L.; Foglia, T.A.; Samulski, E.T.; Lin, W. *Chem. Commun.* **2007**, 3670-3672. (Highlighted in 5 July 2007 issue of *Chemical Science*) [[pdf](#)]
123. "Synthesis and X-ray structures of cadmium coordination polymers based on new pyridine-carboxylate and imidazole-carboxylate linkers." Wu, C.-D.; Ayyappan, P.; Evans, O.R.; Lin, W. *Cryst. Growth Design.* **2007**, *7*, 1690-1694. [[pdf](#)]

122. "Metal-Organic Frameworks for Asymmetric Catalysis and Chiral Separations." Lin, W. *MRS Bulletin*, **2007**, 32, 544-548.
121. "Self-Assembled Hybrid Nanoparticles for Cancer-Specific Multimodal Imaging." Kim, J.S.; Rieter, W.J.; Taylor, K.M.L.; An, H.; Lin, W.; Lin, W. *J. Am. Chem. Soc.* **2007**, 129, 8962-8963. [[pdf](#)]
120. "Hybrid Silica Nanoparticles for Multimodal Imaging." Rieter, W.J.; Kim, J.S.; Taylor, K.M.L.; An, H.; Lin, W.; Tarrant, T.; Lin, W. *Angew. Chem. Int. Ed.* **2007**, 46, 3680-3682.
119. "Branched-Chain Fatty Acids via Zeolite-Catalyzed Skeletal Isomerization." Ngo, H.L.; Foglia, T.A.; Nuñez, A.; Lin, W. *Eur. J. Lipid Sci. Tech.* **2007**, 109, 214-224. (Highlighted in *Lipid Technology*, **2007**, 19 (6), 139)
118. "Highly-Efficient Purification of Native His₆-tagged Proteins by Multivalent NTA-modified Magnetic Nanoparticles." Kim, J.S.; Valencia, C.A.; Liu, R.; Lin, W. *Bioconjugate Chem.* **2007**, 18, 333-341. [[pdf](#)]
117. "Heterogeneous Asymmetric Catalysis with Homochiral Metal-Organic Frameworks: Network Structure-Dependent Catalytic Activity." Wu, C.-D.; Lin, W. *Angew. Chem. Int. Ed.* **2007**, 46, 1075-1078. (Highlighted in 5 January 2007 issue of *Science*) [[pdf](#)]
116. "Homochiral Porous Solids Based on 1D Coordination Polymers Built from 46-Membered Macrocycles." Wu, C.-D.; Lin, W. *Dalton Trans.* **2006**, 4563-4569.
115. "Uniaxial and Biaxial Nematic Liquid Crystals." Dingeman, T.J.; Madsen, L.A.; Zafiroopoulos, N.A.; Lin, W.; Samulski, E.T. *Phil. Trans. R. Soc. A*, **2006**, 364, 2681-2696.
114. "Pd-Catalyzed Intermolecular Asymmetric Hydroamination with 4,4'-Disubstituted BINAP and SEGPHOS." Hu, A.; Ogasawara, M.; Sakamoto, T.; Okada, A.; Nakajima, K.; Takahashi, T.; Lin, W. *Adv. Synth. Catal.* **2006**, 348, 2051-2056.
113. "Directed Assembly of Mesoscopic Metalloclusters with Controllable Size, Chirality, and Functionality Based on the Robust Pt-Alkynyl Linkage." Jiang, H.; Lin, W. *J. Am. Chem. Soc.* **2006**, 128, 11286-11297. [[pdf](#)]
112. "1D and 2D Homochiral Metal-Organic Frameworks Built from a New Chiral Elongated Binaphthalene-Derived Bipyridine." Wu, C.-D.; Zhang, L.; Lin, W. *Inorg. Chem.* **2006**, 45, 7278-7285. [[pdf](#)]
111. "Nanoscale Metal-Organic Frameworks as Potential Multimodal Contrast Enhancing Agents." Rieter, B.J.; Taylor, K.M.L.; An, H.; Lin, W.; Lin, W. *J. Am. Chem. Soc.* **2006**, 128, 9024-9025. (Highlighted in 14 July 2006 issue of *Science*). [[pdf](#)]
110. "Magnetically Recoverable Chiral Catalysts Immobilized on Magnetite Nanoparticles for Asymmetric Hydrogenation of Aromatic Ketones." Hu, A.; Yee, G.T.; Lin, W. *J. Am. Chem. Soc.* **2005**, 127, 12486-12487. (Highlighted in 2 September 2005 issue of *Science* and several other magazines including *ChemWeek*, *Platinum Today*, and *In Pharma*) [[pdf](#)]
109. "Homochiral porous metal-organic frameworks: Why and how?" Lin, W. *J. Solid State Chem.* **2005**, 178, 2486-2490.
108. "A Homochiral Porous Metal-Organic Framework for Highly Enantioselective Heterogeneous Asymmetric Catalysis." Wu, C.-D.; Hu, A.; Zhang, L.; Lin, W. *J. Am. Chem. Soc.* **2005**, 127, 8940-8941. [[pdf](#)]
107. "Applications of 4,4'-(Me₃Si)₂-BINAP in Transition-Metal-Catalyzed Asymmetric Carbon-Carbon Bond-Forming Reactions." Ogasawara, M.; Ngo, H.L.; Sakamoto, T.; Takahashi, T.; Lin, W. *Org. Lett.* **2005**, 7, 2881-2884. [[pdf](#)]
106. "Platinum-Functionalized Chiral Molecular Squares as Light-Emitting Materials." Zhang, L.; Niu, Y.-H.; Jen, A.K.-Y.; Lin, W. *Mater. Res. Soc. Symp. Proc.* **2005**, 846 (Organic and Nanocomposite Optical Materials), 53-58.

105. "A Chiral Porous 3D Metal-Organic Framework with an Unprecedented 4-Connected Network Topology." Wu, C.-D.; Lin, W. *Chem. Commun.* **2005**, 3673-3675.
104. "Chiral Molecular Polygons Based on the Pt-Alkynyl Linkage. Self-Assembly, Characterization, and Functionalization." Jiang, H.; Lin, W. *J. Organomet. Chem.* **2005**, 690, 5159-5169.
103. "Highly Porous, Homochiral Metal-Organic Frameworks: Solvent-Exchange-Induced Single-Crystal to Single-Crystal Transformations." Wu, C.D.; Lin, W. *Angew. Chem. Int. Ed.* **2005**, *44*, 1958-1961.
102. "A Highly Electroluminescent Molecular Square." Zhang, L.; Niu, Y.-H.; Jen, A. K.-Y.; Lin, W. *Chem. Commun.* **2005**, 1002-1004.
101. "Hybrid Organic-Inorganic Solids for Heterogeneous Asymmetric Catalysis." Ngo, H.L.; Lin, W. *Top. Catal.* **2005**, *34*, 85-92.
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6. Invited Seminars/Conference and Workshop Talks

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| 2/17/12 | MIT-Bruker Symposium on Metal-Organic Frameworks |
| 1/5/12 | Nuclear Resources Project presentation, Oak Ridge National Lab (TN) |
| 12/16/11 | Zhejiang University (Chemistry), P.R. China |
| 12/10/11 | Plenary lecture, Workshop on Novel Functional Molecules for Biological Applications, Chinese University of Hong Kong, P.R. China |
| 12/9/11 | Tongji University (Chemistry), P.R. China |
| 11/15/11 | Yale University (Chemistry) |
| 10/27/11 | Plenary lecture, 35 th Macromolecular Sci & Eng Symposium, Univ of Michigan |
| 10/18/11 | Eastman Lecture, UIUC (Chemistry) |
| 9/21-23/11 | Alliance For Cancer Nanotechnology Investigator Meeting, Boston, MA |
| 8/18-19/11 | Triangle Solar Fuel Workshop, Santa Fe, NM |
| 8/4-5/11 | Nuclear Resources Workshop, Oak Ridge National Lab, TN |
| 6/21/11 | GRC on Supramolecules and Assemblies (Lucca, Italy) |
| 5/27/11 | DOE EFRC Energy Forum (Washington, D.C.) |
| 4/26/11 | MRS Meeting Nanomaterial Characterization Symposium (San Fransisco, CA) |
| 2/15/11 | Washington Univ at St Louis (BME) |
| 2/14/11 | Univ of Missouri at St. Louis (Chemistry) |
| 1/13/11 | SERC invited talk, Chapel Hill, NC |
| 12/16/10 | PacfiChem, Honolulu, HI (invited talks in both MOF and Nanomedicine symposia) |
| 12/1-3/10 | MRS Fall Meeting, Boston, MA (co-organizer) |
| 11/15-17/10 | NCI Cancer Nanotechnology Alliance Kickoff Meeting |

11/5/10 Nankai University, China
 11/4/10 Shanghai Jiaotong University, China
 10/31/10 AsAC Conference Keynote Lecturer, Bushan, Korea
 10/13-15/10 DOE Nuclear Resources Workshop, Boston, MA
 9/2/10 Virginia Commonwealth University
 8/22/10 ACS National Meeting Molecular Imaging Symposium, Boston, MA
 7/2/10 Fuzhou University, China
 7/1/10 Fujian Institute of Research on the Structure of Matter (CAS), China
 6/22/10 Zhejiang University "Seeking Truth" lecturer
 6/11/10 Shangdong Univesity Crystal Growth Mechanism Conference, China
 5/18/10 NSF Inorganic Chemistry Workshop, Sante Fe, NM
 4/30/10 University of California at San Diego
 3/22/10 Supported Molecular Catalysts symposium, San Fransisco ACS Meeting
 2/19/10 NCSU Department of Chemistry
 1/31/10 Society of Nuclear Medicine Winter Summit, Albuquerque, NM
 10/22/09 National Cancer Institute Nanotechnology Alliance Meeting, Los Angeles, CA
 9/19/09 Wake Forest University Center for Nanotechnology and Molecular Materials Symposium
 9/14-18/09 ISHHC XIV symposium, Stockholm, Sweden
 6/21-26/09 Inorganic Chemistry Gordon Conference, Biddeford, ME
 6/17-19/09 MOFCAT conference (closing lecture), Oslo, Norway
 3/16/09 Zing conference on Coordination Chemistry, Antigua
 2/25/09 Division of Molecular Pharmaceutics, UNC School of Pharamcy
 2/11/09 National University of Singapore Dept of Chemistry
 2/10/09 Institute of Bioengineering and Nanotechnology, Singapore
 2/6/09 UC-Berkeley Dept of Chemistry
 2/5/09 UC-Davis Dept of Chemistry
 2/4/09 UC-Santa Cruz Dept of Chemistry
 12/5/08 Tripathy Sukant Memorial Symposium, UMass-Lowell
 12/3/08 Materials Research Society Meeting, Boston MA
 11/14/08 C-CCNE Symposium, Chapel Hill, NC
 9/19/08 Queen's University Dept of Chemistry
 9/17/08 Univ of Toronto Dept of Chemistry
 9/9/08 CCNE Investigator conference, Chicago
 7/28/08 University of Toyama Dept of Applied Chemistry
 7/24/09 Hokkaido University Catalysis Research Center
 7/17/08 Xiamen University College of Chemistry
 7/10/08 East China University of Science and Technology Dept of Polymer Sci &Eng
 7/8/08 Kyoto University (Japan)
 7/7/08 National Institute of Advanced Industrial Science and Technology, Osaka, Japan
 5/9/08, University of Iowa
 4/6-10/08 invited talks at Metal-organic Framework and Tobin J. Marks symposia
 4/4/08 Naff Symposium Speaker, Univ of Kentucky
 3/28/08 National Cancer Institute Workshop on in vivo imaging and diagnostics
 3/25/08 Syracuse University
 3/24/08 University of Rochester
 3/2-5/08 keynote lecture at SupraCat Conference in Barcelona, Spain
 11/16/07 New York University
 11/7/07 invited talk at AIChE National Meeting (Salt Lake City, Utah)
 11/2/07 College of Chemistry and Chemical Engineering, Zhongshan University, China
 11/1/07 College of Chemistry and Chemical Engineering, Xiamen University, China
 10/26/06 5th Chinese Structural Chemistry National Meeting, Fuzhou, China
 10/17/07 National Cancer Institute Nanotechnology Alliance Meeting
 9/21/07 College of William & Mary

9/6/07 Clemson University
 9/4/07 Army Research Office pre-MURI meeting
 8/28/07 Northwestern University Catalysis Research Center Annual meeting
 8/19/07 Invited talk at 234th National ACS meeting in Boston, MA
 Xxx Invited seminar at NCI-Frederick
 Xxx Advance distinguished lectureship at Kansa State University
 Xxx American Crystallographic Association meeting in Orlando, FL
 Xxx Gordon Research Conference on Zeolites and Mesoporous Materials
 12/20/06 Fine Particle Society Annual Meeting, San Diego, CA
 10/17/06 University of Chicago
 10/26/06 University of Notre Dame
 10/12/06 14th NSF Workshop in Materials Chemistry (St. Louis, MO)
 7/8/06 Sino-US Joint Meeting in Nanoscience (Shanghai, China)
 4/21/06 Iowa State University
 12/17/05 PacifiChem2005, Honolulu, HI
 12/9/05 Oak Ridge National Lab
 11/18/05 Seoul National University (Korea)
 11/17/05 Pohang University of Science and Technology (Korea)
 11/14/05 First International Symposium on Chemistry of Coordination Space (Nagoya, Japan)
 10/28/05 13th NSF Workshop in Materials Chemistry (Alexandria, VA)
 10/21/05 University of California at Riverside
 10/7/05 Florida State University
 8/22/05 Fujian Institute of Research on the Structure of Matter, CAS
 5/3/05 University of Washington, Seattle
 5/2/05 Washington State University, Pullman
 3/4/05 University of Nebraska-Lincoln
 Feb 05 NSF/EPSCRC Workshop on Complex Systems in Boston, MA
 12/21/04 University of Science and Technology of China
 Dec 04 6th Chinese Young Chemist conference in Hong Kong
 6/8/04 NSF Inorganic workshop in Sedona, AZ
 3/11/04 Indiana University
 12/8/03 Institute of Chemistry, CAS
 12/6/03 University of Science and Technology of China
 12/1/03 Fujian Institute of Research on the Structure of Matter, CAS
 11/24/03 14th Catalysis Research Center International Conference in Hokkaido Univ, Japan
 11/16/03 55th SERMACS Meeting, Atlanta, GA
 10/17/03 University of Kentucky
 9/7/03 226th National ACS meeting in New York, NY
 Aug 03 Beckman Young Investigator Annual Meeting
 Aug 03 Canadian Society of Chemistry/IUPAC Conference, Ottawa, Canada
 4/7/03 University of Florida
 3/23/03 225th National ACS meeting in New Orleans, LA
 3/21/03 University of Virginia
 3/13/03 University of Alabama
 2/14/03 University of South Carolina
 2/7/03 Georgia Institute of Technology
 12/7/02 University of Houston
 12/6/02 Texas A&M University
 11/13/02 54th SERMACS, Charleston, SC.
 10/31/02 Purdue University
 10/29/02 University of Illinois at Urbana-Champaign
 10/28/02 Northwestern University
 10/21/02 University of Cincinnati

June 02 Canadian Chemical Society Annual Meeting in Vancouver, Canada
 4/16/02 Colorado State University
 04/07/02 223th National ACS Meeting, Orlando, FL
 3/28/02 University of Massachusetts at Ahmerst
 12/7/01 Virginia Polytechnic Institute and State University
 10/18/01 9th NSF Workshop in Materials Chemistry (Madison, WI)
 Jan 01 University of North Carolina at Chapel Hill
 Dec 00 Wayne State University
 Dec 00 University of Chicago
 Oct 00 University of Southern California
 Sept 00 Dalton Discussion on Inorg. Cryst. Eng. sponsored by RSC, Bologna, Italy
 July 00 NSF Inorganic Chemistry Workshop, Baltimore, MD
 6/17/00 Gordon Conference Organic Structures and Properties: Extended Systems, Connecticut
 College
 April 00 Georgetown University
 April 00 Boston College
 March 00 219th National ACS Meeting, San Fransisco, CA
 Nov 99 Materials Society Society Meeting in Boston, MA
 Aug 99 Chairing a Novel Materials session in 218th National ACS Meeting in New Orlean, LA
 March 99 217th National ACS Meeting in Anaheim, CA
 Feb 99 Dartmouth College
 Dec 98 Materials Research Society Meeting in Boston, MA
 10/15/98 6th NSF Materials Chemistry Workshop, Morristown, NJ
 Oct 98 University of New Hampshire
 Sept 98 Union College
 Aug 98 Chairing a Solid State Chemistry session in 216th National ACS meeting in Boston, MA
 April 98 Clark University
 Feb 98 University of Massachussetts Lowell
 Dec 97 Materials Research Society Meeting in Boston, MA
 Oct 97 Saint Anselm College