

# WENBIN LIN

## 1. PERSONAL

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Chicago, IL 60637

## 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

**The University of Chicago**, James Franck Professor of Chemistry, 7/13 -; Member of UChicago Comprehensive Cancer Center, 2/14-; Professor of Radiation and Cellular Oncology, 2/18- .

**University of North Carolina** Chapel Hill, North Carolina 7/11 – 6/13, 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

James Franck Professorship, The University of Chicago, July 2013-

Kenan Distinguished Professorship, UNC-Chapel Hill, 2011-2013

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

Nakamoto Distinguished Lecture in Chemistry, Marquette University, 2018

Inaugural Eastman Lecturer, UIUC, 2011

Naff Symposium Lecturer, Univ of Kentucky, 2008

Advance distinguished lectureship, Kansa State University, 2007

## OTHER ACADEMIC AND ENTREPRENEURAL ACTIVITIES

RiMO Therapeutics Inc, Founder and Chairman, 2015-present  
Coordination Pharmaceuticals Inc, Founder and Chairman, 2015-present  
Acting Chair, Physical Science Panel of Hong Kong Research Grants Council, 2012-2013  
Regular Member, NIH NANO Study Section, 2012-2016  
Member, Physical Science Panel of Hong Kong Research Grants Council, 2009-2014  
Advisory Board Member, *Mater. Chem. Frontiers* 2016-present  
Advisory Board Member, *Inorg. Chem. Frontiers* 2014-present  
Advisory Board Member, *Chem. Mater.*, 2013-present  
Advisory Board Member, *Asian J. Org. Chem.*, 2012-present  
Advisory Board Member, *ACS Catal.*, 2011-2015  
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 (total citations > 34,000; h-index ≥ 93)

311. “Low-dose X-ray Radiotherapy-Radiodynamic Therapy by Nanoscale Metal-Organic Frameworks Enhances Checkpoint Blockade Cancer Immunotherapy.” Lu, K.; He, C.; Guo, N.; Chan, C.; Ni, K.; Tang, H.; Pelizzari, C.; Fu, Y.-X.; Weichselbaum, R.R.; Lin, W. *Nat. Biomed. Eng.* **2018**, xx.
310. “Nanoscale Metal-Organic Frameworks for Phototherapy of Cancer.” Lan, G.; Ni, K.; Lin, W. *Coord. Chem. Rev.* **2018**, in press.
309. “Titanium(III)-Oxo Clusters in a Metal-Organic Framework Support Single-Site Co(II)-Hydride Catalysts for Arene Hydrogenation.” Ji, P.; Song, Y.; Drake, T.; Veroneau, S.S.; Lin, Z.; Pan, X.; Lin, W. *J. Am. Chem. Soc.* **2018**, *140*, 443-440.
308. “Metal-Organic Layers Stabilize Earth-Abundant Metal-Terpyridine Diradical Complexes for Catalytic C-H Activation.” Lin, Z.; Thacker, N.C.; Sawano, T.; Drake, T.; Ji, P.; Lan, G.; Cao, L.; Liu, S.; Wang, C.; Lin, W. *Chem. Sci.* **2018**, *9*, 143-151. DOI: 10.1039/C7SC03537C.
307. “Charge-Regulated Sequential Adsorption of Anionic Catalysts and Cationic Photosensitizers into Metal-Organic Frameworks Enhances Photocatalytic Proton Reduction.” Li, H.; Yao, S.; Wu, H.-L.; Qu, J.-Y.; Zhang, Z.-M.; Lu, T.-B.; Lin, W.; Wang, E.B. *Applied Catal. B: Environ.* **2018**, *224*, 46-52. DOI: 10.1016/j.apcatb.2017.10.031.
306. “Molecular Iridium Complexes in Metal-Organic Frameworks Catalyze CO<sub>2</sub> Hydrogenation via Concerted Proton and Hydride Transfer.” An, B.; Zeng, L.; Jia, M.; Li, Z.; Lin, Z.; Song, Y.; Zhou, Y.; Cheng, J.; Wang, C.; Lin, W. *J. Am. Chem. Soc.* **2017**, *139*, 17747-17750. doi: 10.1021/jacs.7b10922
305. “Electrocatalytic Reduction of CO<sub>2</sub> to CO with 100% Faradaic Efficiency by Pyrolyzed Zeolitic Imidazolate Frameworks Supported on Carbon Nanotube Networks.” Guo, Y.; Yang, H.; Zhou, X.; Liu, K.; Zhang, C.; Zhou, Z.; Wang, C.; Lin, W. *J. Mater. Chem. A*, **2017**, *5*, 24867-24873.
304. “Trivalent Zirconium and Hafnium MOFs for Catalytic 1,4-Dearomative Additions of Pyridines and Quinolines.” Ji, P.; Feng, X.; Veroneau, S.S.; Song, Y.; Lin, W. *J. Am. Chem. Soc.* **2017**, *139*, 15600-15603.
303. “Warm-White Light-Emitting Diode Based on a Dye-Loaded Metal-Organic Framework for Fast White-Light Communication.” Wang, Z.; Wang, Z.; Lin, B.; Hu, X.; Wei, Y.; Zhang, C.; An, B.; Wang, C.; Lin, W. *ACS Appl. Mater. Interfaces*, **2017**, *9*, 35253-35259. (none)
302. “Pyrolysis of Metal-Organic Frameworks to Hierarchical Porous Cu/Zn-Nanoparticle@Carbon Materials for Efficient CO<sub>2</sub> Hydrogenation.” Zhang, J.; An, B.; Hong, Y.; Meng, Y.; Hu, X.; Wang, C.; Lin, J.; Lin, W.; Wang, Y. *Mater. Chem. Front.* **2017**, *1*, 2405-2409.
301. “Nanoscale Metal-Organic Layers for Deeply Penetrating X-ray-Induced Photodynamic Therapy.” Lan, G.; Ni, K.; Xu, R.; Lu, K.; Lin, Z.; Chan, C.; Lin, W. *Angew. Chem. Int. Ed.* **2017**, *56*, 12102-12106. doi: 10.1002/anie.201704828.

300. "Transformation of Metal-Organic Framework Secondary Building Units into Hexanuclear Zr-Alkyl Catalysts for Ethylene Polymerization." Ji, P.; Solomon, J.B.; Lin, Z.; Johnson, A.; Jordan, R.F.; Lin, W. *J. Am. Chem. Soc.* **2017**, *139*, 11325-11328.
299. Through-space Förster-type Energy Transfer in Isostructural Zirconium and Hafnium-based Metal-Organic Layers." Wang, Z.; Liu, Y.; Wang, Z.; Cao, L.; Zhao, Y.; Wang, C.; Lin, W. *Chem. Commun.* **2017**, *53*, 9356-9359. (none)
298. "Surface Modification of Two-Dimensional Metal-Organic Layers Creates Biomimetic Catalytic Microenvironments for Selective Oxidation." Shi, W.; Cao, L.; Zhang, H.; Zhou, X.; An, B.; Lin, Z.; Dai, R.; Li, J.; Wang, C.; Lin, W. *Angew. Chem. Int. Ed.* **2017**, *56*, 9704-9709.
297. "Single-Site Cobalt Catalysts at New  $Zr_{12}(\mu_3-O)_8(\mu_3-OH)_8(\mu_3-OH)_6$  Metal-Organic Framework Nodes for Highly Active Hydrogenation of Nitroarenes, Nitriles, and Isocyanides." Ji, P.; Manna, K.; Lin, Z.; Feng, X.; Urban, A.; Song, Y.; Lin, W. *J. Am. Chem. Soc.* **2017**, *139*, 7004-7011.
296. "Exciton Migration and Amplified Quenching on Two-Dimensional Metal-Organic Layers." Cao, L.; Lin, Z.; Shi, W.; Wang, Z.; Zhang, C.; Hu, X.; Wang, C.; Lin, W. *J. Am. Chem. Soc.* **2017**, *139*, 7020-7029.
295. "Confinement of Ultrasmall Cu/ZnO<sub>x</sub> Nanoparticles in Metal-Organic Frameworks for Selective Methanol Synthesis from Catalytic Hydrogenation of CO<sub>2</sub>." An, B.; Zhang, J.; Cheng, K.; Ji, P.; Wang, C.; Lin, W. *J. Am. Chem. Soc.* **2017**, *139*, 3834-3840.
294. "Electron Crystallography Reveals Atomic Structures of Metal-Organic Nanoplates with  $M_{12}(\mu_3-O)_8(\mu_3-OH)_8(\mu_2-OH)_6$  (M=Zr and Hf) Secondary Building Units." Dai, R.; Fei Peng, F.; Ji, P.; Lu, K.; Wang, C.; Sun, J.; Lin, W. *Inorg. Chem.* **2017**, *56*, 8128-8134.
293. "Successful Coupling of a Bis-Amidoxime Uranophile with a Hydrophilic Backbone for Selective Uranium Sequestration." Piechowicz, M.; Abney, C.W.; Thacker, N.C.; Gilhula, J.C.; Wang, Y.; Veroneau, S.S.; Hu, A.; Lin, W. *ACS Appl. Mater. Interfaces*, **2017**, *9*, 27894-27904. (DOE sea water)
292. "In vivo delivery and therapeutic effects of a microRNA on colorectal liver metastases." Oshima, G.; Guo, N.; He, C.; Stack, M.E.; Poon, C.; Uppal, A.; Wightman, S.C.; Parekh, A.; Skowron, K.B.; Posner, M.C.; Lin, W.; Khodarev, N.N.; Weichselbaum, R.R. *Mol. Ther.* **2017**, *25*, 1588-1595.
291. Functionalized Porous Organic Polymer for Efficient Uranium Adsorption from Aqueous Solutions." Baiyan Li, B.; Sun, Q.; Zhang, Y.; Abney, C.W.; Aguila, B.; Lin, W.; Ma, S. *ACS Appl. Mater. Interfaces*, **2017**, *9*, 12511-12517. (DOE sea water)
290. "Two-dimensional Metal-Organic Layers as A Bright and Processable Phosphor for Fast White-Light Communication." Hu, X.; Zhang, C.; Lin, B.; Wang, Z.; Cao, L.; Wang, T.; Zhang, J.; Wang, C.; Lin, W.; *Eur. J. Chem.* **2017**, *23*, 8390-8394.
289. "Phenanthroline-Based Metal-Organic Frameworks for Fe-Catalyzed C<sub>sp</sub><sup>3</sup>-H Amination." Thacker, N.C.; Ji, P.; Lin, Z.; Urban, A.; Lin, W. *Faraday Disc.* **2017**, *201*, 315-327.
288. "Networking Pyrolyzed Zeolitic Imidazolate Frameworks by Carbon Nanotubes Improves Conductivity and Enhances Oxygen-Reduction Performance in Polymer Electrolyte Membrane Fuel Cells." Zhang, C.; Wang, Y.-C.; An, B.; Huang, R.; Wang, C.; Zhou, Z.; Lin, W. *Adv. Mater.* **2017**, *29*, 1604556. doi: 10.1002/adma.201604556.
287. "Photodynamic Therapy Mediated by Nontoxic Core-Shell Nanoparticles Synergize with Immune Checkpoint Blockade to Elicit Antitumor Immunity and Antimetastatic Effect on Breast Cancer." Duan, X.; Chan, C.; Guo, N.; Han, W.; Weichselbaum, R.R.; Lin, W. *J. Am. Chem. Soc.* **2016**, *138*, 16686-16696.
286. "Cerium-Hydride Secondary Building Units in a Porous Metal-Organic Framework for Catalytic Hydroboration and Hydrophosphination." Ji, P.; Sawano, T.; Lin, Z.; Urban, A.; Boures, D.; Lin, W. *J. Am. Chem. Soc.* **2016**, *138*, 14860-14863.
285. "Nanoscale coordination polymers co-deliver carboplatin and gemcitabine for highly effective treatment of platinum-resistant ovarian cancer." Poon, C.; Duan, X.; Chan, C.; Han, W.; Lin, W. *Mol. Pharm.* **2016**, *13*, 3665-3675. DOI: 10.1021/acs.molpharmaceut.6b00466.
284. "Highly Efficient Cooperative Catalysis by Co<sup>III</sup>(Porphyrin) Pairs in Interpenetrating Metal-organic Frameworks." Lin, Z.; Zhang, Z.-M.; Chen, Y.-S.; Lin, W. *Angew. Chem. Int. Ed.* **2016**, *55*, 13739-13743.
283. "Single-Site Cobalt Catalysts at New  $Zr_8(\mu_2-O)_8(\mu_2-OH)_4$  Metal-Organic Framework Nodes for Highly Active Hydrogenation of Alkenes, Imines, Carbonyls, and Heterocycles." Ji, P.; Manna, K.;

- Lin, Z.; Urban, A.; Greene, F.X.; Lan, G.; Lin, W. *J. Am. Chem. Soc.* **2016**, *138*, 12234-12242. DOI: 10.1021/jacs.6b06759.
282. "A Chlorin-based Nanoscale Metal-Organic Framework Systemically Rejects Colorectal Cancers via Synergistic Photodynamic Therapy and Checkpoint Blockade Immunotherapy." Lu, K.; He, C.; Guo, N.; Chan, C.; Ni, K.; Weichselbaum, R.R.; Lin, W. *J. Am. Chem. Soc.* **2016**, *138*, 12502-12510. DOI: 10.1021/jacs.6b06663.
281. "A Report of Emergent Uranyl Binding Phenomena by an Amidoxime Phosphonic Acid Co-Polymer." Abney, C.W.; Das, S.; Mayes, R.T.; Kuo, L.-J. Wood, J.; Gill, G.; Piechowicz, M.; Lin, Z.; Lin, W.; Dai, S. *Phys. Chem. Chem. Phys.* **2016**, in press.
280. "Metal-Organic Frameworks Stabilize Mono(phosphine)-Metal Complexes for Broad-Scope Catalytic Reactions." Sawano, T.; Lin, Z.; Boures, D.; An, B.; Wang, C.; Lin, W. *J. Am. Chem. Soc.* **2016**, *138*, 9783-9786.
279. "Preface for the Forum on Metal-Organic Frameworks for Energy-Related Applications." Lin, W.; Long, J.R. *Inorg. Chem.* **2016**, *55*, 7189-7191.
278. "Chemoselective Single-Site Earth-Abundant Metal Catalysts at Metal-Organic Framework Nodes." Manna, K.; Ji, P.; Lin, Z.; Greene, F.X.; Urban, A.; Thacker, N.C.; Lin, W. *Nat. Commun.* **2016**, *7*: 12610.
277. "Core-Shell Nanoscale Coordination Polymers Combine Chemotherapy and Photodynamic Therapy to Potentiate Checkpoint Blockade Cancer Immunotherapy." He, C.; Duan, X.; Guo, N.; Chan, C.; Poon, C.; Weichselbaum, R.R.; Lin, W. *Nat. Commun.* **2016**, *7*: 12499.
276. "Metal-Organic Framework Nodes Support Single-Site Magnesium-Alkyl Catalysts for Hydroboration and Hydroamination Reactions." Manna, K.; Ji, P.; Greene, F.X.; Lin, W. *J. Am. Chem. Soc.* **2016**, *138*, 7488-7491. DOI: 10.1021/jacs.6b03689.
275. "Nanoscale Coordination Polymers Co-deliver Chemotherapeutics and siRNAs to Eradicate Tumors of Cisplatin-Resistant Ovarian Cancer." He, C.; Poon, C.; Chan, C.; Yamada, S.D.; Lin, W. *J. Am. Chem. Soc.* **2016**, *138*, 6010-6019. DOI: 10.1021/jacs.6b02486.
274. "Hierarchical Integration of Photosensitizing Metal-Organic Frameworks and Nickel-Containing Polyoxometalates for Efficient Visible-Light-Driven Hydrogen Evolution." Kong, X.-J.; Lin, Z.; Zhang, Z.-M.; Zhang, T.; Lin, W. *Angew. Chem. Int. Ed.* **2016**, *55*, 6411-6416. DOI: 10.1002/anie.201600431.
273. "Förster Energy Transport in Metal-Organic Frameworks Is Beyond Step-by-Step Hopping." Zhang, Q.; Zhang, C.; Cao, L.; Wang, Z.; An, B.; Lin, Z.; Huang, R.; Zhang, Z.-M.; Wang, C.; Lin, W. *J. Am. Chem. Soc.* **2016**, *138*, 5308-5315. DOI: 10.1021/jacs.6b01345.
272. "Cation-mediated optical resolution and anticancer activity of chiral polyoxometalates built from entirely achiral building blocks." Zhang, Z.-M.; Duan, X.; Yao, S.; Wang, Z.; Lin, Z.; Li, Y.-G.; Long, L.-S.; Wang, E.-B.; Lin, W. *Chem. Sci.* **2016**, *7*, 4220-4229. DOI: 10.1039/C5SC04408A.
271. "Pyrolysis of Metal-Organic Frameworks to Fe<sub>3</sub>O<sub>4</sub>@Fe<sub>3</sub>C<sub>2</sub> Core-Shell Nanoparticles for Fischer-Tropsch Synthesis." An, B.; Cheng, K.; Wang, C.; Wang, Y.; Lin, W. *ACS Catal.* **2016**, *6*, 3610-3618.
270. "Nanoscale Metal-Organic Frameworks for Ratiometric Oxygen Sensing in Live Cells." Xu, R.; Wang, Y.; Duan, X.; Lu, K.; Micheroni, D.; Hu, A.; Lin, W. *J. Am. Chem. Soc.* **2016**, *138*, 2158-2161. DOI: 10.1021/jacs.5b13458.
269. "Metal-Organic Frameworks Stabilize Solution-Inaccessible Cobalt Catalysts for Highly Efficient Broad-Scope Organic Transformations." Zhang, T.; Manna, K.; Lin, W. *J. Am. Chem. Soc.* **2016**, *138*, 3241-3249. DOI: 10.1021/jacs.6b00849.
268. "Self-Supporting Metal-Organic Layers as Single-Site Solid Catalysts." Cao, L.; Lin, Z.; Peng, F.; Wang, W.; Huang, R.; Wang, C.; Yan, J.; Liang, J.; Zhang, Z.; Zhang, T.; Long, L.-S.; Sun, J.; Lin, W. *Angew. Chem. Int. Ed.* **2016**, *55*, 4962-4966. DOI: 10.1002/anie.201512054.
267. "Robust and Porous  $\beta$ -Diketiminato Functionalized Metal-Organic Frameworks for Earth-Abundant Metal-Catalyzed C-H Amination and Hydrogenation." Thacker, N.C.; Lin, Z.; Zhang, T.; Gilhula, J.C.; Abney, C.W.; Lin, W. *J. Am. Chem. Soc.* **2016**, *138*, 3501-3509. DOI: 10.1021/jacs.5b13394.
266. "A rhenium-functionalized metal-organic framework as a single-site catalyst for photochemical reduction of carbon dioxide." Huang, R.; Peng, Y.; Wang, C.; Shi, Z.; Lin, W. *Eur. J. Inorg. Chem.* **2016**, DOI: ejic.201600064.

265. "Sulfur-Doping Achieves Efficient Oxygen Reduction in Pyrolyzed Zeolitic Imidazolate Frameworks." Zhang, C.; An, B. Yang, L.; Wu, B.; Shi, W.; Wang, Y.-C.; Long, L.-S.; Wang, C.; Lin, W. *J. Mater. Chem. A.*, **2016**, *4*, 4457-4463. DOI: 10.1039/C6TA00768F.
264. "Graphene-Immobilized fac-Re(bipy)(CO)<sub>3</sub>Cl for Syngas Generation from Carbon Dioxide." Zhou, X.; Micheroni, D.; Lin, Z.; Poon, C.; Li, Z.; Lin W. *ACS Appl. Mater. Interfaces*, **2016**, *8*, 4192-4198. DOI: 10.1021/acsami.5b11958.
263. "XAFS investigation of polyamidoxime-bound uranyl contests the paradigm from small molecule studies." C. W. Abney, C.A.; Mayes, R.T.; Piechowicz, M.; Lin, Z.; Bryantsev, V.S.; Veith, G.M.; Dai, S.; Lin, W. *Energy Environ. Sci.* **2016**, *9*, 448-453. DOI: 10.1039/c5ee02913a.
262. "Nanoparticle formulations of cisplatin for cancer therapy." Duan, X.; He, C.; Kron, S.J.; Lin, W. *WIREs Nanomed. Nanobiotechnol.* **2016**, *8*, 776-791. doi: 10.1002/wnan.1390.
261. "Design, Synthesis, and Characterization of a Bifunctional Chelator with Ultrahigh Capacity for Uranium Uptake from Seawater Simulant." Piechowicz, M.; Abney, C.A.; Zhou, X.; Thacker, N.C.; Li, Z.; Lin, W. *Ind. Eng. Chem. Res.* **2016**, DOI: 10.1021/acs.iecr.5b03304.
260. "Pre-concentration and energy transfer enable the efficient luminescence sensing of transition metal ions by metal-organic frameworks." Lin, X.; Hong, Y.; Zhang, C.; Huang, R.; Wang, C.; Lin, W. *Chem. Commun.* **2015**, *95*, 16996-16999. doi: 10.1039/c5cc06453h.
259. "Introduction: Nanoparticles in Medicine." Lin, W. *Chem. Rev.* **2015**, *115*, 10407-10409. DOI: 10.1021/acs.chemrev.5b00534.
258. "Hybrid Nanoparticles for Combination Therapy of Cancer." He, C.; Lu, J.; Lin, W. *J. Controlled Release*, **2015**. DOI: 10.1016/j.jconrel.2015.09.029.
257. "The First Chiral Diene-Based Metal-Organic Frameworks for Highly Enantioselective Carbon-Carbon Bond Formation Reactions." Sawano, T.; Ji, P.; McIsaac, A.R.; Lin, Z.; Abney, C.W.; Lin, W. *Chem. Sci.* **2015**, *219*, 224-236. DOI: 10.1039/C5SC02100F.
256. "Robust, Chiral, and Porous BINAP-Based Metal-Organic Frameworks for Highly Enantioselective Cyclization Reactions." Sawano, T.; Thacker, N.C.; Lin, Z.; McIsaac, A.R.; Lin, W. *J. Am. Chem. Soc.* **2015**, *137*, 12241-12248. DOI: 10.1021/jacs.5b09225.
255. "Nanomedicine Applications of Hybrid Nanomaterials Built from Metal-Ligand Coordination Bonds: Nanoscale Metal-Organic Frameworks and Nanoscale Coordination Polymers." He, C.; Liu, D.; Lin, W. *Chem. Rev.* **2015**, *115*, 11079-11108. DOI: 10.1021/acs.chemrev.5b00125.
254. "A Chlorin-Based Nanoscale Metal-Organic Framework for Photodynamic Therapy of Colon Cancers." Lu, K.; He, C.; Lin, W. *J. Am. Chem. Soc.*, **2015**, *137*, 7600-3. doi: 10.1021/jacs.5b04069.
253. "Nanomedicine for Combination Therapy of Cancer." He, C.; Chan, C.; Weichselbaum, R.R.; Fleming, G.F.; Yamada, S.D.; Lin, W. *EBioMedicine*, **2015**, *2*, 366-7. doi: 10.1016/j.ebiom.2015.05.013.
252. "Highly Active Hydrogen Evolution Electrodes via Co-Deposition of Platinum and Polyoxometalates." Zhang, C.; Hong, Y.; Dai, R.; Lin, X.; Long, L.S.; Wang, C.; Lin, W. *ACS Appl. Mater. Interfaces*, **2015**, *7*, 11648-53. doi: 10.1021/acsami.5b02899.
251. "Hybrid nanoparticles for cancer imaging and therapy." He, C.; Lin, W. *Cancer Treat. Res.*, **2015**, *166*, 173-92. doi: 10.1007/978-3-319-16555-4\_8
250. "Polymeric micelle-mediated delivery of DNA-targeting organometallic complexes for resistant ovarian cancer treatment." Duan, X.; Liu, D.; Chan, C.; Lin, W. *Small*, **2015**, *11*, 3962-3972. DOI: 10.1002/sml.201500288.
249. "Photosensitizing Metal-Organic Framework Enabling Visible-Light-Driven Proton Reduction by a Wells-Dawson-Type Polyoxometalate." Zhang, Z.-M.; Zhang, T.; Wang, C.; Lin, Z.; Long, L.-S.; Lin, W. *J. Am. Chem. Soc.*, **2015**, *137*, 3197-3200. DOI: 10.1021/jacs.5b00075.
248. "Bipyridine- and Phenanthroline-Based Metal-Organic Frameworks for Highly Efficient and Tandem Catalytic Organic Transformations via Directed C-H Activation." Manna, K.; Zhang, T.; Greene, F.X.; Lin, W. *J. Am. Chem. Soc.* **2015**, *137*, 2665-2673. DOI: 10.1021/ja512478y.
247. "Enzymatic Synthesis of Periodic DNA Nanoribbons for Intracellular pH Sensing and Gene Silencing." Chen, G.; Liu, D.; He, C.; Gannett, T.R.; Lin, W.; Weizmann, Y. *J. Am. Chem. Soc.*, **2015**, *137*, 3844-3851. DOI: 10.1021/ja512665z.

246. “Self-Assembled Nanoscale Coordination Polymers Carrying Oxaliplatin and Gemcitabine for Synergistic Combination Therapy of Pancreatic Cancer.” Poon, C.; He, C.; Liu, D.; Lu, K.; Lin, W. *J. Controlled Release* **2015**, *201*, 90-99. DOI: 10.1016/j.jconrel.2015.01.026
245. “Self-Assembled Core-Shell Nanoparticles for Combined Chemotherapy and Photodynamic Therapy of Resistant Head and Neck Cancers.” He, C.; Liu, D.; Lin, W. *ACS Nano.*, **2015**, *9*, 991-1003. DOI: 10.1021/nn506963h.
244. “Gadolinium Nicotinate Clusters as Potential MRI Contrast Agents.” Lin, X.; Zhang, Q.; Chen, J.; Kong, X.; Long, L.; Wang, C.; Lin, W. *RSC Adv.* **2015**, *5*, 2914-2919. DOI: 10.1039/c4ra07853e.
243. “Self-assembled nanoscale coordination polymers carrying siRNAs and cisplatin for effective treatment of resistant ovarian cancer.” He, C.; Liu, D.; Lin, W. *Biomaterials.* **2015**, *36*, 124-133. DOI: 10.1016/j.biomaterials.2014.09.017.
242. “Polysilsesquioxane Nanoparticles for Triggered Release of Cisplatin and Effective Cancer Chemoradiotherapy.” Della Rocca, J.; Werner, M.E.; Kramer, S.A.; Huxford-Phillips, R.C.; Sukumar, R.; Cummings, N.D.; Vivero-Escoto, J.L.; Andrew Z. Wang, A.Z.; Lin, W. *Nanomedicine*, **2015**, *11*, 31-38. DOI:10.1016/j.nano.2014.07.004.
241. “Metal-Organic Framework Templated Inorganic Sorbents for Rapid and Efficient Extraction of Heavy Metals.” Abney, C.W.; Gilhula, J.C.; Lu, K.; Lin, W. *Adv. Mater.* **2014**, *26*, 7993-7997. DOI: 10.1002/adma.201403428.
240. “Nanoscale Metal-Organic Framework for Highly Effective Photodynamic Therapy of Resistant Head and Neck Cancer.” Lu, K.; He, C.; Lin, W. *J. Am. Chem. Soc.* **2014**, *136*, 16712-16715. DOI: 10.1021/ja508679h.
239. “Graphene-Immobilized Monomeric Bipyridine- $M^{(x+)}$  ( $M^{(x+)} = Fe^{(3+)}$ ,  $Co^{(2+)}$ ,  $Ni^{(2+)}$ , or  $Cu^{(2+)}$ ) Complexes for Electrocatalytic Water Oxidation.” Zhou, X.; Zhang, T.; Abney, C.W.; Li, Z.; Lin, W. *ACS Appl Mater Interfaces.* **2014**, *6*, 18475-18479. DOI: 10.1021/am506435u.
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1. "Crystal and Molecular Structure of Sr[Co(HEDTA)(H<sub>2</sub>O)]<sub>2</sub>(H<sub>2</sub>O)<sub>4</sub>." Li, J.; Lin, W.; Zheng, Y.; Wu, X. *Huaxue Wuli Xuebao* (Eng), **1989**, *2*, 379-383.

## 6. Invited Seminars/Conference and Workshop Talks

- |          |  |
|----------|--|
| 1/28/18  | Solar Fuels Gordon Research Conference, Ventura, CA  |
| 11/10/17 | University of Iowa Department of Chemistry Colloquium  |
| 10/3/17  | NCI Cancer Nanotechnology Investigator Meeting (Innovative Nanotechnology for Cancer Immunotherapy)  |
| 10/1/17  | USTC New York Summit (Life Science Symposium -- Innovative Nanotechnology for Cancer Immunotherapy)  |
| 6/10/17  | 16th International Photodynamic Association World Congress in Coimbra, Portugal (Nanoparticle-Based Photodynamic Therapy to Enhance Checkpoint Blockade Immunotherapy)   |
| 6/7/17   | RSC Bioorthogonal and Bioresponsive Symposium in Edinburgh, UK (Leveraging Inorganic Chemistry for Cancer Therapy)   |
| 6/6/17   | Faraday Discussion: New Directions in Porous Crystalline Materials in Edinburgh, UK (Phenanthroline-based Metal-organic Frameworks for Fe-Catalyzed C <sub>sp</sub> <sup>3</sup> -H Amination)   |
| 5/16/17  | Catalysis Club of Chicago 2017 Spring Symposium (Metal-organic Frameworks for Sustainable Catalysis)   |
| 4/2-4/17 | National ACS Meeting in San Francisco, CA ("Metal-Organic Frameworks for Sustainable Catalysis" in Marks Symposium; "Hybrid Nanomaterials for Treating Resistant Cancers" in Feng Symposium; "Metal-Organic Frameworks for Artificial Photosynthesis" in Fuels division symposium) |

1/28/17 SPIE Photodynamic Therapy Meeting in San Francisco, CA (Nanoscale Metal-Organic Frameworks for Photodynamic Therapy and Cancer Immunotherapy)

11/1/16 NCI Cancer Nanotechnology Investigator Meeting

10/13/16 5<sup>th</sup> International Solar Fuels and Solar Cells symposium in Dalian, PRC (Metal-Organic Frameworks for Artificial Photosynthesis)

9/7/16 Virginia Tech Department of Chemistry Symposium

9/1/16 University of Tennessee Department of Chemistry Colloquium (Metal-organic Frameworks for Sustainable Catalysis and Cancer Therapy)

8/21-23/16 Beijing Union Medical College Visiting Professorship (Metal-Organic Frameworks: Current Status and Future Perspectives, Metal-Organic Frameworks for Sustainable Catalysis, and Hybrid Molecular Materials for Cancer Therapy)

4/28/16 Carnegie Mellon University Department of Chemistry Seminar

3/15/16 National ACS Meeting in San Diego, CA (Hybrid Molecular Materials for Cancer Therapy)

2/3/16 Northeastern University Department of Chemistry Seminar

12/14/15 ChemSpec Corporation Seminar (Metal-Organic Frameworks for Sustainable Catalysis)

12/12/15 South China University of Technology College of Chemistry and Chemical Engineering Seminar (Metal-organic Frameworks for Cancer Therapy)

10/13/15 ExxonMobil Seminar (Metal-Organic Frameworks for Sustainable Catalysis)

10/9/15 UChicago Comprehensive Cancer Center Translational Seminar (Self-assembled multi-modality nanoparticles for personalized treatment of resistant ovarian cancer)

9/10/15 UOP TCO Invitational Seminar Series (Metal-Organic Frameworks for Sustainable Catalysis)

9/4/15 University of Nebraska Department of Chemistry Colloquium

7/15/15 Zhejiang University Department of Chemistry (Metal-organic Frameworks as A Tunable Platform for Designing Functional Molecular Materials)

6/16-17/15 Hong Kong University Department of Chemistry Seminars ()

5/18/15 University of Washington Department of Materials Science and Engineering Seminar

2/17/15 Argonne National Lab CSE Colloquium

11/5/14 Argonne National Lab Materials Science Division Colloquium

10/2/14 NCI Cancer Nanotechnology Investigator Meeting

9/24/14 University of Wisconsin Inorganic Chemistry Seminar

9/19/14 University of South Carolina Chemistry Seminar

9/17/14 University of Pennsylvania Targeted Therapeutics and Translational Medicine Seminar Series

9/5/14 Fujian Institute on Research of Structure of Matter

8/10-14/14 San Francisco National ACS Meeting (8/10, nano-bio – Tian; 8/12, solar energy – Morris)

7/28-29/14 Seawater U Resource Meeting, Sequim, WA (PNNL Marine Lab)

7/18/14 Xi'an Jiaotong University Advanced Materials Institute

7/11/14 Fudan University School of Life Sciences

7/11/14 East China University of Science and Technology School of Materials Sciences

6/22-27/14 Metals in Medicine Gordon Research Conference Invited Talk (Proctor Academy, NH)

6/8-13/14 Inorganic Chemistry Gordon Research Conference Invited Talk (College of NE, Maine)

5/15/14 Northwestern University BME/Radiology Seminar (downtown Chicago)

4/29/14 Purdue University Inorg Chem Seminar, West Lafayette, IN

3/25/14 Boston College Phys. Chem Seminar, Chestnut Hill, MA

3/24/14 Brandeis Univ Dept of Chem Colloquium, Waltham, MA

3/11/14 Univ of Missouri Kansas City School of Pharmacy, Kansas City, MO

2/3/14 Univ of Georgia Inorg. Chem. Seminar, Athens, GA

12/12/13 International Symposium on MOF and Related Open Framework Materials, Macao, China

11/15/13 Univ of Texas-Dallas NanoScience Seminar, Dallas, TX

11/12/13 Nitto Denko Company, San Diego, CA

11/6/13 4th Asian Conference on Coordination Chemistry (ACCC 4), Jeju, Korea

9/19/13 NCI Alliance For Cancer Nanotechnology Investigator Meeting, Bethesda, MD

7/30/13 7<sup>th</sup> Chinese Coordination Chemistry Conference, Beijing, China

7/1/13 DOE Catalysis Conference, Annapolis, MD

4/7-10/13 New Orleans National ACS Meeting, New Orleans, LA

3/18/13 PittCon New Reagents and New Technologies for Biological Imaging, Philadelphia, PA  
 3/6/13 Texas A&M Univ Inorg Chem Seminar, College Station, TX  
 11/15/12 Alliance For Cancer Nanotechnology Investigator Meeting, Houston, TX  
 11/14/12 Rutgers University at Newark  
 11/13/12 Rutgers University at New Brunswick  
 11/8/12 Stanford University Nano-Bio seminar series  
 10/24/12 6<sup>th</sup> Chinse Structural Chemistry Conference, Suzhou, China  
 10/15/12 University of Chicago  
 9/28/12 University of Memphis  
 9/16/12 MOF2012, Edingurgh, UK  
 9/10/12 University of Colorado at Boulder  
 8/??/12 ACS National Meeting in Philadelphia, PA  
 7/26/12 Director's Colloquium at Savannah River National Laboratory  
 5/12/12 Emory University  
 4/27/12 Northwestern University  
 3/21/12 MIT/Harvard Inorganic Seminar  
 2/18/12 MIT/Bruker Symposium  
 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<sup>th</sup> 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 Supramolecues 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 ISHC 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 Pharmacy  
 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 5<sup>th</sup> 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 234<sup>th</sup> National ACS meeting in Boston, MA  
 Xxx Invited seminar at NCI-Frederick  
 Xxx Advance distinguished lectureship at Kansas 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 14<sup>th</sup> 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 13<sup>th</sup> 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 6<sup>th</sup> 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 14<sup>th</sup> Catalysis Research Center International Conference in Hokkaido Univ, Japan  
 11/16/03 55<sup>th</sup> SERMACS Meeting, Atlanta, GA  
 10/17/03 University of Kentucky  
 9/7/03 226<sup>th</sup> 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  
 3/23/03 225<sup>th</sup> 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 54<sup>th</sup> 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  
 04/07/02 223<sup>th</sup> National ACS Meeting, Orlando, FL  
 3/28/02 University of Massachusetts at Amherst  
 12/7/01 Virginia Polytechnic Institute and State University  
 10/18/01 9<sup>th</sup> 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 00 219<sup>th</sup> National ACS Meeting, San Francisco, CA  
 Nov 99 Materials Society Meeting in Boston, MA  
 Aug 99 Chairing a Novel Materials session in 218<sup>th</sup> National ACS Meeting in New Orleans, LA

March 99 217<sup>th</sup> National ACS Meeting in Anaheim, CA  
Feb 99 Dartmouth College  
Dec 98 Materials Research Society Meeting in Boston, MA  
10/15/98 6<sup>th</sup> 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 216<sup>th</sup> National ACS meeting in Boston, MA  
April 98 Clark University  
Feb 98 University of Massachusetts Lowell  
Dec 97 Materials Research Society Meeting in Boston, MA  
Oct 97 Saint Anselm College

### **Current Funding:**

1U01CA198989-01 (PI: Lin) 09/25/2015-09/24/2020 1.50 summer  
NIH (NCI) \$370,401 direct/year  
“Nanoscale Metal-organic Frameworks for light-triggered and X-ray induced Photodynamic Therapy of Head and Neck Cancers”  
Role: PI

CHE-1464941 (PI: Lin) 06/15/15-05/31/2019 0.5 summer  
NSF/CHE \$112,343 direct/year  
“Chiral Porous Metal-Organic Frameworks as A Tunable Platform for Asymmetric Catalysis”  
Role: PI

DMR-1420709 (PI: Gardel) 08/01/14-08/31/2020 0.25 academic  
NSF \$12,658 direct/year  
“University of Chicago Materials Research Science and Engineering Center”  
Role: Seed Investigator

N/A (PI: Lin) 12/01/2017-11/30/2018 N/A  
University of Chicago Cancer Center \$50,000 direct  
“Innovative Nanotechnology Enables Synergistic Radiotherapy-Radiodynamic Therapy and Chemotherapy to Enhance Immunotherapy of Triple Negative Breast Cancer”  
Role: PI

N/A (PI: Lin) 01/01/2015-12/31/2018 N/A  
Cancer Research Fund \$120,000 direct  
“Nanoparticle delivery of cisplatin and anti-BCL2 therapy for Small Cell Lung Cancer”  
Role: PI

1R01CA216436-01A1 (PI: Lin) 02/15/2018-02/28/2023 1.0 summer  
NIH-NCI \$293,814 direct/year  
“Nanoscale Coordination Polymers Co-deliver Chemotherapeutics and siRNAs for Efficacious Treatment of Resistant Ovarian Cancer”  
Role: PI

### **Selected Pending Funding**

1 R01 CA223184-01A1 (PI: Lin) 05/15/2018-05/31/2023 1.0 month  
NIH (2% score) \$345,152 direct/year (requested)  
Targeted Nanomedicines with Synergistic Chemotherapeutics to Enhance Immunotherapy of Metastatic Colorectal Cancer  
Role: PI

N/A (PI: Lin) 05/1/2018 – 4/30/2021 0.5 summer  
DoD (selected for funding) \$333,333 direct/year  
“Combining Nanotechnology and Radiation to Enhance Checkpoint Blockade Immunotherapy of Advanced Prostate Cancer”  
The goal of this proposal is to develop effective prostate cancer treatment strategies by combining nanotechnology, X-ray radiation, and immune checkpoint blockade.  
Role: PI

### **Selected Immediate Past Funding:**



1. Project Title: *Functional Materials Via Crystal and Nano-Engineering of Metal-Organic Frameworks (PI)*  
 Source of Support: NSF (DMR-0906662)                                      Project Location: Univ of Chicago  
 Total Award Amount: \$417,000 (total) - NCE                                      Award Period: 09/01/09-04/30/14  
 Person-months Per Year Committed to the Project: 0 calender month
  
2. Project Title: *Nanoscale Metal-organic Frameworks for Imaging and Therapy of Pancreatic Cancer (PI)*  
 Source of Support: NIH (NCI)    Project Location: Univ of Chicago  
 Total Award Amount: ~\$2,000,000 (total)                                      Award Period: 09/01/10-08/31/15  
 Person-months Per Year Committed to the Project: 1 summer month
  
3. Project Title: *Chiral Porous Metal-Organic Frameworks as A Tunable Platform for Asymmetric Catalysis (PI)*  
 Source of Support: NSF (CHE)    Project Location: Univ of Chicago  
 Total Award Amount: \$525,754 (total)                                      Award Period: 08/01/11-07/31/14  
 Person-months Per Year Committed to the Project: 1 summer month
  
4. Project Title: *Development of Novel Sorbents for Uranium Extraction from Seawater (PI)*  
 Source of Support: DOE (NE)    Project Location: Univ of Chicago  
 Total Award Amount: \$800,000 (total)                                      Award Period: 09/01/11-08/31/16  
 Person-months Per Year Committed to the Project: 0.5 summer month
  
5. Project Title: *Development of Environmentally Friendly and Economically Feasible Engineering Processes for High-Value Biobased Products (co-PI; PI: Ngo)*  
 Source of Support: DOE-USDA    Project Location: Univ of Chicago  
 Total Award Amount: \$220,000 (total)                                      Award Period: 10/01/13-09/30/17  
 Person-months Per Year Committed to the Project: 0.5 calender month
  
6. Project Title: *Hierarchical Metal-organic Framework Assemblies for Solar Energy Harvesting and Storage (PI)*  
 Source of Support: NSF-(DMR)    Project Location: Univ of Chicago  
 Total Award Amount: \$425,000 (total)                                      Award Period: 11/01/13-10/31/16  
 Person-months Per Year Committed to the Project: 0.5 calender month
  
7. Project Title: *New Gas Sorption Materials (Subcontract)*  
 Source of Support: SRNL-LDRD    Project Location: Univ of Chicago  
 Total Award Amount: \$40,000 (total seed funds)                                      Award Period: 03/18/14-9/30/14  
 Person-months Per Year Committed to the Project: 0 calender month