

# MIRCEA DINCĂ

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## Professional Appointments

W. M. Keck Professor of Energy, Massachusetts Institute of Technology	July 2020 – present
Professor of Chemistry, Massachusetts Institute of Technology	July 2020 – present
Associate Editor, <i>Chemical Science</i> (Royal Society of Chemistry)	October 2017 – present
Associate Professor of Chemistry, Massachusetts Institute of Technology	July 2015 – June 2020
Assistant Professor of Chemistry, Massachusetts Institute of Technology	July 2010 – June 2015
Postdoctoral Associate, MIT (Advisor: Daniel G. Nocera)	August 2008 – July 2010

## Education

Ph.D. in Inorganic Chemistry (Advisor: Jeffrey R. Long)	University of California, Berkeley, May 2008
<i>Thesis Title:</i> Hydrogen Storage in Microporous Metal-Organic Frameworks with Exposed Metal Sites	
B.A. magna cum laude in Chemistry (Advisor: Jeffrey Schwartz)	Princeton University, June 2003

## Awards and Honors

Blavatnik National Award Laureate – Chemistry	2021
Mislow Honorary Lectureship, Princeton University	2021
Thomson-Reuters/Clarivate Analytics Highly Cited Chemists List	2014-2021
Fellow of the Royal Society of Chemistry (FRSC)	2021
Blavatnik National Awards Finalist – Chemistry	2018
ACS Award in Pure Chemistry	2018
Alan T. Waterman Award – National Science Foundation	2016
Camille Dreyfus Teacher-Scholar Award	2016
Dalton Lectureship – UC Berkeley	2016
Dream Chemistry Award (Polish Academy of Sciences)	2015
ExxonMobil ACS Solid State Chemistry Faculty Fellowship	2015
NSF CAREER Award	2015
Keith Fagnou Lectureship – University of Ottawa	2015
Cottrell Scholar Award – Research Corporation for Science Advancement	2014
Alfred P. Sloan Research Fellowship	2014
Dreyfus Fellowship in Environmental Chemistry	2013
3M Non-Tenured Faculty Award	2013
Selected US (ACS) Representative for Transatlantic Frontiers of Chemistry Conference	2013
MIT Technology Review TR-35 Award	2012
DOE Young Investigator Award	2011
ICMR International Research Fellowship	2008
ITRI/Berkeley Research Center Predoctoral Fellowship, UC Berkeley	2006-2008
ICMR Travel Grant, Hydrogen Storage Symposium, Santa Barbara, CA	2006
ICYS-ICMR Travel Grant, Summer School on Nanomaterials, Tsukuba, Japan	2006
ACS Fuel Division Travel Grant, ACS Meeting, San Francisco, CA	2006
Everett S. Wallis Prize in Organic Chemistry, Princeton University	2003
First Prize, International Science Olympiad (Chemistry), Yakutsk, Russia	1998

## Publications

(Google Scholar citations: ~27,800; *h*-index: 72; <https://scholar.google.com/citations?hl=en&user=RWC2ERYAAAAJ>)

- (168) Sun, C.; Oppenheim, J. J.; Skorupskii, G.; Yang, L. M.; **Dincă, M.** “Reversible Topochemical Polymerization and Depolymerization of a Crystalline Three-Dimensional Porous Organic Polymer with C–C Bond Linkages”  
*Submitted.*
- (167) Yang, L.; Oppenheim, J. J.; **Dincă, M.** “Strong Magnetic Exchange Coupling in a Radical-Bridged Trinuclear Nickel Complex”  
*Submitted.*
- (166) Oppenheim, J. J.; Bagi, S.; Chen, T.; Sun, C.; Yang, L.; Muller, P.; Roman-Leshkov, Y.; **Dincă, M.** “Isolation of a rare side-on V(III)-(η<sup>2</sup>-O<sub>2</sub>) through the intermediacy of a low-valent V(II) in a metal-organic framework”  
*Submitted.*
- (165) Qu, Y.; Arguilla, M. Q.; Zhang, Q.; He, X.; **Dincă, M.** “Ultrathin, High-Aspect Ratio, and Free-Standing Magnetic Nanowires by Exfoliation of Ferromagnetic Quasi-One Dimensional van der Waals Lattices”

- J. Am. Chem. Soc.* **2021**, *143*, in press.
- (164) Kharod, R. A.; Andrews, J. L.; **Dincă, M.** “Teaching metal–organic frameworks to conduct: Ion and electron transport in MOFs”  
*Submitted.*
- (163) Skorupskii, G.; Le, K.; Cordova, D. L. M.; Yang, L.; Chen, T.; Hendon, C. H.; Arguilla, M. Q.; **Dincă, M.** “Above-room-temperature charge density wave order and metallic conductivity in metal-organic frameworks”  
*Submitted.*
- (162) Oppenheim, J. J.; Mancuso, J. L.; Wright, A. M.; Rieth, A. J.; Hendon, C. H.; **Dincă, M.** “Divergent Adsorption Behavior Controlled by Primary Coordination Sphere Anions in the Metal-Organic Framework, Ni<sub>2</sub>X<sub>2</sub>BTDD”  
*J. Am. Chem. Soc.* **2021**, *143*, 16343-16347.
- (161) Mariano, R. G.; Rabinowitz, J. A.; Oppenheim, J. J.; Chen, T.; **Dincă, M.** “Controlling mass transport enables catalytic O<sub>2</sub> electroreduction rates exceeding 150 mA cm<sup>-2</sup> with hexaiminotriphenylene-based conductive 2D MOFs”  
*Submitted.*
- (160) Banda, H.; Dou, J.-H.; Chen, T.; Zhang, Y.; **Dincă, M.** “Dual-ion intercalation and high volumetric capacitance in a two-dimensional non-porous coordination polymer”  
*Angew. Chem. Int. Ed.* **2021**, *60*, in press.
- (159) Yang, L.; **Dincă, M.** “Redox ladder of Ni<sub>3</sub> complexes with closed-shell, mono-, and diradical triphenylene units: molecular models for conductive 2D MOFs”  
*Angew. Chem. Int. Ed.* **2021**, *60*, in press.
- (158) Berry, T.; Morey, J. R.; Arpino, K. E.; Dou, J.-H.; Felser, C.; **Dincă, M.**; McQueen, T. M. “Thermodynamic and transport properties of two-dimensional metal–organic Kagomé lattices with disorder”  
*Submitted.*
- (157) Neumann, C. N.; Payne, M. T.; Rozeveld, S.; Wu, Z.; Zhang, G.; Comito, R. J.; Miller, J. T.; **Dincă, M.** “Structural Evolution of MOF-Derived RuCo, a General Catalyst for the Guerbet Reaction”  
*ACS Appl. Mater. Interf.* **2021**, *7*, in press.
- (156) Qian, Q.; Wright, A. M.; **Dincă, M.**; Smith, Z. P. “Low-Temperature H<sub>2</sub>S/CO<sub>2</sub>/CH<sub>4</sub> Separation in Mixed-Matrix Membranes Containing MFU-4l”  
*Chem. Mater.* **2021**, *33*, 6825-6831.
- (155) Payne, M. T.; Neumann, C. N.; Stavitski, E.; **Dincă, M.** “Complexes of Platinum Group Metals with a Conformationally Locked Scorpionate in a Metal Organic Framework: An Unusually Close Apical Interaction of Pd(II)”  
*Inorg. Chem.* **2021**, *60*, 11764-11774.
- (154) Lyu, P.; Wright, A.; López-Olvera, A.; Mileo, P. G. M.; Zárate, J. A.; Martínez-Ahumada, E.; Williams, D. R.; Martis, V.; **Dincă, M.**; Maurin, G.; Ibarra, I. A. “Ammonia capture via an unconventional reversible guest-induced metal-linker bond dynamics in a highly stable Metal-Organic Framework”  
*Chem. Mater.* **2021**, *33*, 6186-6192.
- (153) Pearson, M. A.; **Dincă, M.**; Johnson, J. A. “Integrated Polymer–MOF Hybrids through RAFT Polymerization”  
*submitted.*
- (152) Protesescu, L.; Calbo, J.; Williams, K.; Tisdale, W.; Walsh, A.; **Dincă, M.** “Colloidal Nano-MOFs Nucleate and Stabilize Ultra-Small Quantum Dots of Lead Bromide Perovskites”  
*Chem. Sci.* **2021**, *12*, 6129-6135.
- (151) Neumann, C. N.; Rozeveld, S. J.; **Dincă, M.** “MOF-Derived RuCo Catalyzes the Formation of Plasticizer Alcohol from Renewable Precursors”  
*ACS Catal.*, **2021**, *11*, 8521-8526.
- (150) Freund, R.; Zaremba, O.; Arnauts, G.; Ameloot, R.; Skorupskii, G.; **Dincă, M.**; Bavykina, A.; Gascon, J.; Ejsmont, A.; Gościańska, J.; Kalmutzki, M.; Lächelt, U.; Ploetz, E.; Diercks, C. S.; Wuttke, S. “The Current Status of MOF and COF Applications after 25 Years”  
*Angew. Chem. Int. Ed.* **2021**, *60*, in press.
- (149) Osterrieth, J.; ... Sun, C.; **Dincă, M.**; Fairen-Jimenez, D. *et al.* “How reproducible are surface areas calculated from the BET equation?”  
*Submitted.*
- (148) Bagi, S.; Wright, A. M.; **Dincă, M.**; Román-Leshkov, Y. “Accelerated synthesis of a Ni<sub>2</sub>Cl<sub>2</sub>(BTDD) metal–organic framework in a continuous flow reactor for atmospheric water capture”  
*ACS Sust. Chem. Eng.* **2021**, *9*, 3996-4003.
- (147) Borysiewicz, M. A.; Dou, J.-H.; Stassen, I.; **Dincă, M.** “Why conductivity is not always king - physical properties governing the capacitance of 2-D Metal-Organic Framework - based EDLC supercapacitor electrodes: a Ni<sub>3</sub>(HITP)<sub>2</sub> case study”  
*Faraday Disc.* **2021**, *231*, 298-304.

- (146) Banda, H.; Dou, J.-H.; Chen, T.; Libretto, N. J.; Chaudhary, M.; Bernard, G. M.; Miller, J. T.; Michaelis, V. K.; **Dincă, M.** "High capacitance supercapacitors from Li<sup>+</sup> intercalation in non-porous, electrically conductive 2D coordination polymers" *J. Am. Chem. Soc.* **2021**, *143*, 2285-2292.
- (145) Sun, C.; Yang, L.; Ortuno, M. A.; Wright, A. M.; Chen, T.; Head, A. R.; Lopez, N.; **Dincă, M.** "Spectroscopic Evidence of Hyponitrite Radical Intermediate in NO Disproportionation at a MOF-supported Mononuclear Copper Site" *Angew. Chem. Int. Ed.* **2021**, *60*, 7845-7850.
- (144) Wright, A. M.; Sun, C.; **Dincă, M.** "Thermal Cycling of a MOF-Based NO Disproportionation Catalyst" *J. Am. Chem. Soc.* **2021**, *143*, 681-686.
- (143) Ha, D.-G.; Rezaee, M.; Han, Y.; Siddiqui, S. A.; Day, R. W.; Xie, L. S.; Modtland, B. J.; Muller, D. A.; Kong, J.; Kim, P.; **Dincă, M.**; Baldo, M. A. "Large single crystals of a two-dimensional  $\pi$ -conjugated metal-organic framework via biphasic solution-solid growth" *ACS Central Sci.* **2021**, *7*, 104-109.
- (142) Dou, J.-H.; Arguilla, M. Q.; Luo, Y.; Li, J.; Zhang, W.; Sun, L.; Mancuso, J. L.; Yang, L.; Chen, T.; Parent, L. R.; Skorupskii, G.; Libretto, N. J.; Sun, C.; Miller, J. T.; Kong, J.; Hendon, C. H.; Sun, J.; **Dincă, M.** "Atomically Precise Single Crystal Structures of Electrically Conducting 2D MOFs" *Nature Mater.* **2021**, *20*, 222-228.
- (141) Korzyński, M. D.; Xie, L. S.; **Dincă, M.** "Structural Characterization of a High-Nuclearity Niobium(V) Carboxylate Cluster Based on Pivalic Acid" *Helv. Chim. Acta.* **2020**, *103*, e2000186.
- (140) Oppenheim, J. J.; Skorupskii, G.; **Dincă, M.** "Aperiodic Metal–Organic Frameworks" *Chem. Sci.* **2020**, *11*, 11094-11103.
- (139) **Dincă, M.**; Long, J. R. "Introduction: Porous Framework Chemistry" *Chem. Rev.* **2020**, *120*, 8037-8038. (Editorial)
- (138) Chen, T.; Dou, J.-H.; Yang, L.; Sun, C.; Libretto, N. J.; Skorupskii, G.; Miller, J. T.; **Dincă, M.** "Continuous Electrical Conductivity Variation in M<sub>3</sub>(hexaminotriphenylene)<sub>2</sub> (M = Co, Ni, Cu) MOF Alloys" *J. Am. Chem. Soc.* **2020**, *142*, 12367-12373.
- (137) Byun, Y.; Xie, L. S.; Fritz, P.; Ashirov, T.; **Dincă, M.**; Coskun, A. "Three-dimensional Porous Organic Semiconductor Based on Fully sp<sup>2</sup>-Hybridized Graphitic Polymer" *Angew. Chem. Int. Ed.* **2020**, *59*, 15166-15170.
- (136) Xie, L. S.; Park, S. S.; Chmielewski, M. J.; Liu, H.; Kharod, R. A.; Yang, L.; Campbell, M. G.; **Dincă, M.** "Isorecticular Linker Substitution in Conductive Metal–Organic Frameworks with Through-Space Transport Pathways" *Angew. Chem. Int. Ed.* **2020**, *59*, 19791-19794.
- (135) Shen, J.; He, X.; Ke, T.; Krishna, R.; Bao, Z.; Xing, H.; **Dincă, M.**; Zhang, Z.; Yang, Q.; Ren, Q. "Simultaneous interlayer and intralayer space control in two-dimensional metal–organic frameworks for acetylene/ethylene separation" *Nature Commun.* **2020**, *11*, 6259(1-10).
- (134) Skorupskii, G.; **Dincă, M.** "Electrical conductivity in a porous, cubic rare-earth catecholate" *J. Am. Chem. Soc.* **2020**, *142*, 6920-6924.
- (133) He, X.; Looker, B. G.; Dinh, K. T.; Stubbs, A. W.; Chen, T.-Y.; Meyer, R. J.; Serna, P.; Roman-Leshkov, Y.; Lancaster, K. M.; **Dincă, M.** "Cerium(IV) Enhances the Catalytic Oxidation Activity of Single-Site Cu Active Sites in MOFs" *ACS Catal.* **2020**, *10*, 7820-7825.
- (132) Bechu, D.; Xie, L. S.; Le Breton, N.; Choua, S.; **Dincă, M.**; Hosseini, M. W.; Baudron, S. A. "Interdigitated conducting tetrathiafulvalene-based coordination networks" *Chem. Commun.* **2020**, *56*, 2407-2410.
- (131) Bour, J. R.; Wright, A. M.; He, X.; **Dincă, M.** "Bioinspired Chemistry at MOF Secondary Building Units" *Chem. Sci.* **2020**, *11*, 1728-1737.
- (130) Xie, L. S.; Skorupskii, G.; **Dincă, M.** "Electrically Conductive Metal-Organic Frameworks" *Chem. Rev.* **2020**, *120*, 8536-8580. (Review)
- (129) Bi, S.; Banda, H.; Chen, M.; Niu, L.; Chen, M.; Wu, T.; Wang, J.; Wang, R.; Feng, J.; Chen, T.; **Dincă, M.**; Kornyshev, A. A.; Feng, G. "Molecular understanding of charge storage and charging dynamics in supercapacitors with MOF electrodes and ionic liquid electrolytes" *Nature Mater.* **2020**, *19*, 552-558.
- (128) He, L.; Yang, L.; **Dincă, M.**; Zhang, R.; Li, J. "Observation of Ion Electrosorption in Metal-Organic Framework Micropores with in operando Small-Angle Neutron Scattering" *Angew. Chem. Int. Ed.* **2020**, *59*, 9773-9779.
- (127) Park, H. D.; Comito, R. J.; Wu, Z.; Zhang, G.; Ricke, N. D.; Sun, C.; Van Voorhis, T.; Miller, J. T.; Román-Leshkov, Y.; **Dincă, M.** "Gas Phase Ethylene Polymerization by Single-Site Cr Centers in a Metal-Organic Framework"

- ACS Catal.* **2020**, *10*, 3864-3870.
- (126) Cadiou, A.; Xie, L.; Shkurenko, A.; Qureshi, M.; Tchalala, M.; Park, S.; Kolobov, N.; Bavykina, A.; Eddaoudi, M.; **Dincă, M.**; Hendon, C.; Gascon, J. "Towards new 2D zirconium-based metal-organic frameworks: synthesis, structures and electronic properties"  
*Chem. Mater.* **2020**, *32*, 97-104.
- (125) Skorupskii, G.; Trump, B. A.; Kasel, T. W.; Brown, C. M.; Hendon, C. H.; **Dincă, M.** "Efficient and tunable one-dimensional charge transport in layered lanthanide metal-organic frameworks"  
*Nature Chem.* **2020**, *12*, 131-136.
- (124) Day, R. D.; Bediako, K. D.; Rezaee, M.; Parent, L.; Skorupskii, G.; Arguilla, M.; Hendon, C. H.; Stassen, I.; Gianneschi, N.; Kim, P.; **Dincă, M.** "Single crystals of electrically conductive 2D MOFs: structural and electrical transport properties"  
*ACS Central Science* **2019**, *5*, 1959-1964.
- (123) Jover, J.; Brozek, C. K.; **Dincă, M.**; Lopez, N. "Computational exploration of NO single-site disproportionation on Fe-MOF-5"  
*Chem. Mater.* **2019**, *31*, 8875-8885.
- (122) Neumann, C. N.; Rozeveld, S.; Yu, M.; Rieth, A. J.; Comito, R. J.; Wu, Z.; Zhang, G.; Miller, J. T.; **Dincă, M.** "MOF-Derived Guerbet Catalyst Effectively Differentiates Between Ethanol and Butanol"  
*J. Am. Chem. Soc.* **2019**, *141*, 17477-17481.
- (121) Rieth, A. J.; Wright, A. M.; **Dincă, M.** "Kinetic Stability of Metal-Organic Frameworks: Consequences for Corrosive and Coordinating Gas Capture"  
*Nature Rev. Mater.* **2019**, *4*, 708-725.
- (120) Rieth, A. J.; Hunter, K. M.; **Dincă, M.**; Paesani, F. "Hydrogen Bonding Structure of Confined Water Templated by a Metal-Organic Framework with Open Metal Sites"  
*Nature Commun.* **2019**, *10*, 4771(1-7).
- (119) Yin, Z.; Su, C.; Yan, Q.-B.; Lin, H.; Sun, L.; Xu, W.; Yamada, T.; Warner, J. H.; **Dincă, M.**; Kong, J.; Hu, J.; Su, G.; Li, J. "Waterproof molecular monolayers stabilize 2D materials"  
*Proc. Nat. Acad. Sci. USA* **2019**, *116*, 20844-20849.
- (118) Stubbs, A. W.; **Dincă, M.** "Selective oxidation of C-H bonds through a Mn<sup>III</sup>-hydroperoxo in Mn<sup>II</sup>-exchanged CFA-1"  
*Inorg. Chem.* **2019**, *58*, 13221-13228.
- (117) Xie, L.; Alexandrov, E. V.; Skorupskii, G.; Propserpio, D. M.; **Dincă, M.** "Diverse  $\pi$ - $\pi$  stacking motifs modulate electrical conductivity in tetrathiafulvalene-based metal-organic frameworks"  
*Chem. Sci.* **2019**, *10*, 8558-8565.
- (116) Rieth, A. J.; Wright, A. M.; Skorupskii, G.; Mancuso, J. L.; Hendon, C. H.; **Dincă, M.** "Record-Setting Sorbents for Reversible Water Uptake by Systematic Anion-Exchanges in Metal-Organic Frameworks"  
*J. Am. Chem. Soc.* **2019**, *141*, 13858-13866.
- (115) Stassen, I.; Dou, J.-H.; Hendon, C. H.; **Dincă, M.** "Chemiresistive Sensing of Ambient CO<sub>2</sub> by an Autogenously Hydrated Cu<sub>3</sub>(hexaminobenzene)<sub>2</sub> Framework"  
*ACS Central Science* **2019**, *5*, 1425-1431.
- (114) Korzyński, M. D.; Braglia, L.; Borfecchia, E.; Lomachenko, K. A.; Baldansuren, A.; Hendon, C. H.; Lamberti, C.; **Dincă, M.** "Quo vadis niobium? Divergent coordination behavior of early-transition metals towards MOF-5"  
*Chem. Sci.* **2019**, *10*, 5906-5910.
- (113) Yang, L.; He, X.; **Dincă, M.** "Triphenylene-Bridged Trinuclear Complexes of Cu: Models for Spin Interactions in Two-Dimensional Electrically Conductive MOFs"  
*J. Am. Chem. Soc.* **2019**, *141*, 10475-10480.
- (112) Miner, E. M.; Park, S. S.; **Dincă, M.** "High Li<sup>+</sup> and Mg<sup>2+</sup> Conductivity in a Cu-azolate Metal-Organic Framework"  
*J. Am. Chem. Soc.* **2019**, *141*, 4422-4427.
- (111) Miner, E. M.; **Dincă, M.** "Metal- and covalent-organic frameworks (MOFs and COFs) as solid-state electrolytes for metal-ion batteries"  
*Phil. Trans. A* **2019**, *377*, 20180225 (1-18).
- (110) Dinh, K. T.; Sullivan, M. M.; Serna, P.; Meyer, R. J.; **Dincă, M.**; Román-Leshkov, Y. "Continuous Partial Oxidation of Methane to Methanol Catalyzed by Diffusion-Paired Cu Dimers in Copper-Exchanged Zeolites"  
*J. Am. Chem. Soc.* **2019**, *141*, 11641-11650.
- (109) Metzger, E. D.; Comito, R. J.; Wu, Z.; Zhang, G.; Dubey, R. C.; Xu, W.; Miller, J. T.; **Dincă, M.** "Highly Selective Heterogeneous Ethylene Dimerization with a Scalable and Chemically Robust MOF Catalyst"  
*ACS Sust. Chem. Eng.* **2019**, *7*, 6654-6661.
- (108) Sun, C.; Skorupskii, G.; Dou, J.-H.; Wright, A. M.; **Dincă, M.** "Reversible Metalation and Catalysis with a Scorpionate-like Metaloligand in a Metal-Organic Framework"

- J. Am. Chem. Soc.* **2018**, *140*, 17394-17398.
- (107) Korzyński, M. D.; Braglia, L.; Borfecchia, E.; Lamberti, C.; **Dincă, M.** "Molecular niobium precursors in various oxidation states: an XAS case study"  
*Inorg. Chem.* **2018**, *57*, 13998-14004.
- (106) Wright, A. M.; Wu, Z.; Zhang, G.; Mancuso, J. L.; Comito, R. J.; Day, R. W.; Hendon, C. H.; Miller, J. T.; **Dincă, M.** "A Structural Mimic of Carbonic Anhydrase in a Metal-Organic Framework"  
*Chem* **2018**, *4*, 2894-2901.
- (105) Xie, L.; **Dincă, M.** "Novel Topology in Semiconducting Tetrathiafulvalene Lanthanide Metal-Organic Frameworks"  
*Isr. J. Chem.* **2018**, *58*, 1119-1122.
- (104) Rieth, A. J.; Wright, A. M.; Rao, S.; Kim, H.; LaPotin, A. D.; Wang, E. N.; **Dincă, M.** "Tunable Metal-Organic Frameworks Enable High Efficiency Cascaded Adsorption Heat Pumps"  
*J. Am. Chem. Soc.* **2018**, *140*, 17591-17596.
- (103) Park, H. D.; **Dincă, M.**; Román-Leshkov, Y. "Continuous-flow Production of Succinic Anhydrides via Catalytic  $\beta$ -Lactone Carbonylation by  $\text{Co}(\text{CO})_4\text{Cr-MIL-100}$ "  
*J. Am. Chem. Soc.* **2018**, *140*, 10669-10672.
- (102) Rieth, A. J.; **Dincă, M.** "Programming Framework Materials for Ammonia Capture"  
*ACS Central Science* **2018**, *4*, 666-667. (invited contribution)
- (101) Sun, L.; Hendon, C. H.; **Dincă, M.** "Coordination-induced Reversible Electrical Conductivity Variation in the MOF-74 Analogue  $\text{Fe}_2(\text{DSBDC})$ "  
*Dalton Trans.* **2018**, *47*, 11739-11743.
- (100) Miner, E. M.; Wang, L.; **Dincă, M.** "Modular  $\text{O}_2$  Electroreduction Activity in Triphenylene-Based Metal-Organic Frameworks"  
*Chem. Sci.* **2018**, *9*, 6286-6291.
- (99) Dinh, K. T.; Sullivan, M. M.; Serna, P.; Meyer, R. J.; **Dincă, M.**; Román-Leshkov, Y. "A Viewpoint on Partial Oxidation of Methane to Methanol Using Cu- and Fe-exchanged Zeolites"  
*ACS Catalysis* **2018**, *8*, 8306-8313.
- (98) Xie, L. S.; Sun, L.; Wan, R.; Park, S. S.; DeGayner, J. A.; Hendon, C. H.; **Dincă, M.** "Tunable Mixed-Valence Doping towards Record Electrical Conductivity in a Three-Dimensional Metal-Organic Framework"  
*J. Am. Chem. Soc.* **2018**, *140*, 7411-7414.
- (97) Comito, R. J.; Wu, Z.; Zhang, G.; Lawrence, J. A.; Korzyński, M. D.; Kehl, J. A.; Miller, J. T.; **Dincă, M.** "Stabilized Vanadium Catalyst for Olefin Polymerization by Site Isolation in a Metal-Organic Framework"  
*Angew. Chem. Int. Ed.* **2018**, *57*, 8135-8139.
- (96) Korzyński, M. D.; Consoli, D. F.; Zhang, S.; Román-Leshkov, Y.; **Dincă, M.** "Activation of Methyltrioxorhenium for Olefin Metathesis in a Zirconium-Based Metal-Organic Framework"  
*J. Am. Chem. Soc.* **2018**, *140*, 6956-6960.
- (95) Rieth, A. J., **Dincă, M.** "Controlled Gas Uptake in Metal-Organic Frameworks with Record Ammonia Sorption"  
*J. Am. Chem. Soc.* **2018**, *140*, 3461-3466.
- (94) Wright, A. M.; Rieth, A. J.; Yang, S.; Wang, E. N.; **Dincă, M.** "Precise Control of Pore Hydrophilicity Enabled by Post-Synthetic Cation Exchange in Metal-Organic Frameworks"  
*Chem. Sci.* **2018**, *9*, 3856-3859.
- (93) Rieth, A. J.; **Dincă, M.** "Tricking Inert Metals into Water-Adsorbing MOFs"  
*Joule* **2018**, *2*, 18-24. (solicited contribution)
- (92) Wang, X.; Zhang, X.; Sun, L.; Lee, D.; Lee, S.; Wang, M.; Zhao, J.; Shao-Horn, Y.; **Dincă, M.**; Palacios, T.; Gleason, K. K. "High Electrical Conductivity and Carrier Mobility in oCVD PEDOT Thin Films by Engineered Crystallization and Acid Treatment"  
*Science Advances* **2018**, *4*, eaat5780 (1-9). (DOI: 10.1126/sciadv.aat5780).
- (91) Park, S. S.; Rieth, A. J.; Hendon, C. H.; **Dincă, M.** "Selective Vapor Pressure Dependent Proton Transport in a Metal-Organic Framework with Two Distinct Hydrophilic Pores"  
*J. Am. Chem. Soc.* **2018**, *140*, 2016-2019.
- (90) Stubbs, A. W.; Braglia, L.; Borfecchia, E.; Meyer, R. J.; Roman-Leshkov, Y.; Lamberti, C.; **Dincă, M.** "Selective Catalytic Olefin Epoxidation with  $\text{Mn}^{\text{II}}$  - Exchanged MOF-5"  
*ACS Catalysis* **2018**, *8*, 596-601.
- (89) Miner, E. M.; Gul, S.; Ricke, N. D.; Pastor, E.; Yano, J.; Yachandra, V. K.; Van Voorhis, T.; **Dincă, M.** "Mechanistic Evidence for Ligand-Centered Electrocatalytic Oxygen Reduction with the Conductive MOF  $\text{Ni}_3(\text{hexaminotriphenylene})_2$ "  
*ACS Catalysis* **2017**, *7*, 7726-7731.

- (88) Dou, J.-H.; Sun, L.; Ge, Y.; Li, W.; Hendon, C. H.; Li, J.; Gul, S.; Yano, J.; Stach, E. A.; **Dincă, M.** "Signature of Metallic Behavior in the Metal-Organic Frameworks  $M_3(\text{hexaiminobenzene})_2$  ( $M = \text{Ni, Cu}$ )" *J. Am. Chem. Soc.* **2017**, *139*, 13608-13611.
- (87) Dubey, R. J.-C.; Comito, R. J.; Wu, Z.; Zhang, G.; Rieth, A. J.; Hendon, C. H.; Miller, J. T.; **Dincă, M.** "Highly Stereoselective Heterogeneous Diene Polymerization by Co-MFU-4l: A Single-Site Catalyst Prepared by Cation Exchange" *J. Am. Chem. Soc.* **2017**, *139*, 12664-12669.
- (86) Sun, L.; Liao, B.; Sheberla, D.; Kraemer, D.; Zhou, J.; Stach, E. A.; Zakharov, D.; Stavila, V.; Talin, A. A.; Allendorf, M. D.; Chen, G.; Léonard, F.; **Dincă, M.** "A Microporous and Naturally Nanostructured Thermoelectric Metal–Organic Framework with Ultralow Thermal Conductivity" *Joule* **2017**, *1*, 168-177.
- (85) Rieth, A. J.; **Dincă, M.** "Moisture Farming with Metal-Organic Frameworks" *Chem* **2017**, *2*, 757-759. (solicited contribution)
- (84) Hendon, C. H.; Rieth, A. J.; Korzyński, M. D.; **Dincă, M.** "Grand Challenges and Future Opportunities for Metal-Organic Frameworks" *ACS Central Science* **2017**, *3*, 554-563.
- (83) Campbell, M. G.; **Dincă, M.** "Metal-Organic Frameworks as Active Materials in Electronic Sensor Devices" *Sensors* **2017**, *17*, 1108.
- (82) Comito, R. J.; Metzger, E. D.; Wu, Z.; Zhang, G.; Hendon, C. H.; Miller, J. T.; **Dincă, M.** "Selective Dimerization of Propylene with Ni-MFU-4l" *Organometallics* **2017**, *36*, 1681-1683.
- (81) Park, H. D.; **Dincă, M.**; Román-Leshkov, Y. "Heterogeneous Epoxide Carbonylation by Cooperative Ion-pair Catalysis in  $\text{Co}(\text{CO})_4^-$ -incorporated Cr-MIL-101" *ACS Central Science* **2017**, *3*, 444-448.
- (80) Sun, L.; Hendon, C. H.; Park, S. S.; Tulchinsky, Y.; Wan, R.; Wang, F.; Walsh, A.; **Dincă, M.** "Is Iron Unique in Promoting Electrical Conductivity in MOFs?" *Chem. Sci.* **2017**, *8*, 4450-4457.
- (79) Park, S. S.; Tulchinsky, Y.; **Dincă, M.** "Single-Ion  $\text{Li}^+$ ,  $\text{Na}^+$ , and  $\text{Mg}^{2+}$  Solid Electrolytes Supported by a Mesoporous Anionic Cu-azolate MOF" *J. Am. Chem. Soc.* **2017**, *139*, 13260-13263.
- (78) Tulchinsky, Y.; Hendon, C. H.; Lomachenko, K. A.; Borfecchia, E.; Melot, B. C.; Hudson, M. R.; Tarver, J. D.; Korzyński, M. D.; Stubbs, A. W.; Kagan, J. J.; Lamberti, C.; Brown, C. M.; **Dincă, M.** "Reversible Capture and Release of Elemental Halogens with a Redox-Active Metal-Organic Framework" *J. Am. Chem. Soc.* **2017**, *139*, 5992-5997.
- (77) DeGayner, J. A.; Jeon, I.-R.; Sun, L.; **Dincă, M.**; Harris, T. D. "2D Conductive Iron-Quinoid Magnets Ordering up to  $T_N = 105$  K via Heterogeneous Redox Chemistry" *J. Am. Chem. Soc.* **2017**, *139*, 4175-4184.
- (76) Rieth, A. J.; Yang, S.; Wang, E. N.; **Dincă, M.** "Record Atmospheric Fresh Water Capture and Heat Transfer at the Water Uptake Reversibility Limit" *ACS Central Science* **2017**, *3*, 668-672.
- (75) Korzyński, M.; **Dincă, M.** "Oxidative Dehydrogenation of Propane in the Realm of Metal-Organic Frameworks" *ACS Central Science* **2017**, *3*, 10-12 (solicited contribution).
- (74) Li, M. M.; **Dincă, M.** "Pt Electrodes Enable the Formation of  $\mu_4\text{-O}$  Centers in MOF-5 from Multiple Oxygen Sources" *ACS Appl. Mater. Inter.* **2017**, *9*, 33528-33532.
- (73) Park, S. S.; Hendon, C. H.; Fielding, A. J.; Walsh, A.; O'Keeffe, M.; **Dincă, M.** "The Organic Secondary Building Unit: Strong Intermolecular  $\pi$  Interactions Define Topology in MIT-25, a Mesoporous MOF with Proton-Replete Channels" *J. Am. Chem. Soc.* **2017**, *139*, 3619-3622.
- (72) Brozek, C. K.; Ozarowski, A.; Stoian, S. A.; **Dincă, M.** "Dynamic Structural Flexibility of Fe-MOF-5 Evidenced by  $^{57}\text{Fe}$  Mössbauer Spectroscopy" *Inorg. Chem. Front.* **2017**, *4*, 782-788.
- (71) Metzger, E. D.; Comito, R. J.; Hendon, C. H.; **Dincă, M.** "Mechanism of Single-Site Molecule-Like Catalytic Ethylene Dimerization in Ni-MFU-4l" *J. Am. Chem. Soc.* **2017**, *139*, 757-762.
- (70) Lu, J.; Ozel, O.; Belvin, C.; Li, X.; Skorupskii, G.; Sun, L.; Ofori-Okai, B. K.; **Dincă, M.**; Gedik, N.; Nelson, K. A. "Rapid and Precise Determination of Absolute Zero-Field Splittings by Terahertz Time-Domain Electron Paramagnetic Resonance Spectroscopy"

- Chem. Sci.* **2017**, *8*, 7312-7323.
- (69) Sheberla, D.; Bachman, J. C.; Elias, J. S.; Sun, C.-J.; Shao-Horn, Y.; **Dincă, M.** "Conductive MOF electrodes for stable supercapacitors with high areal capacitance"  
*Nature Mater.* **2017**, *16*, 220-224.
- (68) Wu, M.; Wang, Z.; Liu, J.; Li, W.; Fu, H.; Sun, L.; Liu, X.; Pan, M.; Weng, H.; **Dincă, M.**; Fu, L.; Li, J. "Conetronics in 2D Metal-Organic Frameworks: Double/Half Dirac Cones and Quantum Anomalous Hall Effect"  
*2D Materials* **2017**, *4*, 015015.
- (67) Li, W.; Sun, L.; Qi, J.; Jarillo-Herrero, P.; **Dincă, M.**; Li, J. "High Temperature Ferromagnetism in  $\pi$ -Conjugated Two-Dimensional Metal-Organic Frameworks"  
*Chem. Sci.* **2017**, *8*, 2859-2867.
- (66) Miner, E. M.; **Dincă, M.** "Evolved Oxygen Evolution Catalysts"  
*Nature Energy* **2016**, *1*, 16186 (1-2) (solicited contribution).
- (65) Sun, L.; Park, S. S.; Sheberla, D.; **Dincă, M.** "Measuring and Reporting Electrical Conductivity in Metal-Organic Frameworks: Cd<sub>2</sub>(TTFB) as a Case Study"  
*J. Am. Chem. Soc.* **2016**, *138*, 14772-14782.
- (64) **Dincă, M.**; Léonard, F. "Metal-organic frameworks for electronics and photonics"  
*MRS Bull.* **2016**, *41*, 854-857.
- (63) Rieth, A. J.; Tulchinsky, Y.; **Dincă, M.** "High and Reversible Ammonia Uptake in Mesoporous Azolate Metal-Organic Frameworks with Open Mn, Co, and Ni Sites"  
*J. Am. Chem. Soc.* **2016**, *138*, 9401-9404.
- (62) Comito, R. J.; Fritzsche, K. J.; Sundell, B. J.; Schmidt-Rohr, K.; **Dincă, M.** "Single-Site Heterogeneous Catalysts for Olefin Polymerization Enabled by Cation Exchange in a Metal-Organic Framework"  
*J. Am. Chem. Soc.* **2016**, *138*, 10232-10237.
- (61) Hendon, C. H.; Walsh, A.; **Dincă, M.** "Frontier Orbital Engineering of Metal-Organic Frameworks with Extended Inorganic Connectivity: Porous Alkaline Earth Oxides"  
*Inorg. Chem.* **2016**, *55*, 7265-7269.
- (60) Han, G. D.; Park, S. S.; Liu, Y.; Zhitomirsky, D.; **Dincă, M.**; Grossman, J. C. "Tunable Phase-Change Solar Thermal Fuels for Synergistic Energy Storage"  
*J. Mater. Chem. A* **2016**, *4*, 16157-16165.
- (59) AlKaabi, K.; Wade, C. R.; **Dincă, M.** "Transparent-to-Dark Electrochromic Behavior in Naphthalene Diimide-Based Mesoporous MOF-74 Analogs"  
*Chem* **2016**, *1*, 264-272.
- (58) Jeon, I.-R.; Sun, L.; Negru, B.; Van Duyne, R. P.; **Dincă, M.**; Harris, T. D. "Solid-State Redox Switching of Magnetic Exchange and Electronic Conductivity in a Benzoquinoid-Bridged Mn<sup>II</sup> Chain Compound"  
*J. Am. Chem. Soc.* **2016**, *138*, 6583-6590.
- (57) Campagnol, N.; Van Assche, T. R. C.; Li, M.; Stappers, L.; **Dincă, M.**; Denayer, J. F. M.; Binnemans, K.; De Vos, D. E.; Fransaeer, J. "On the Electrochemical Deposition of Metal-Organic Frameworks"  
*J. Mater. Chem. A* **2016**, *4*, 3914-3925.
- (56) Metzger, E. M.; Brozek, C. K.; Comito, R. J.; **Dincă, M.** "Selective Dimerization of Ethylene to 1-Butene with a Porous Catalyst"  
*ACS Central Science* **2016**, *2*, 148-153.
- (55) Yamada, M.; Soejima, T.; Tsuji, N.; Hirai, D.; **Dincă, M.**; Aoki, H. "First-Principles Design of a Half-Filled Flat Band of the Kagome Lattice in Two-Dimensional Metal-Organic Frameworks"  
*Phys. Rev. B* **2016**, *94*, 081102(R).
- (54) Miner, E. M.; Fukushima, T.; Sheberla, D.; Sun, L.; Surendranath, Y.; **Dincă, M.** "Electrochemical Oxygen Reduction Catalyzed by Ni<sub>3</sub>(hexaiminotriphenylene)<sub>2</sub>"  
*Nature Commun.* **2016**, *7*, 10942(1-7).
- (53) Akimbekov, Z.; Wu, D.; Brozek, C. K.; **Dincă, M.**; Navrotsky, A. "Thermodynamics of Solvent Interaction with the Metal Organic Framework MOF-5"  
*Phys. Chem. Chem. Phys.* **2016**, *118*, 1158-1162.
- (52) Sun, L.; Campbell, M. G.; **Dincă, M.** "Electrically Conductive Porous Metal-Organic Frameworks"  
*Angew. Chem. Int. Ed.* **2016**, *55*, 3566-3579. (Review)
- (51) Campbell, M. G.; Liu, S. F.; Swager, T. M.; **Dincă, M.** "Chemiresistive Sensor Arrays from Conductive 2D Metal-Organic Frameworks"  
*J. Am. Chem. Soc.* **2015**, *137*, 13780-13783.

- (50) Brozek, C. K.; Michaelis, V. K.; Ong, T.-C.; Bellarosa, L.; López, N.; Griffin, R. G.; **Dincă, M.** “Dynamic DMF binding in MOF-5 enables the formation of metastable cobalt-substituted MOF-5 analogs” *ACS Central Science* **2015**, *1*, 252-260.
- (49) Duhovic, S.; **Dincă, M.** “Synthesis and Electrical Properties of Covalent Organic Frameworks with Heavy Chalcogens” *Chem. Mater.* **2015**, *27*, 5487-5490.
- (48) Brozek, C. K.; **Dincă, M.** “Thermodynamic parameters of cation exchange in MOF-5 and MFU-4l” *Chem. Commun.* **2015**, *51*, 11780-11782.
- (47) Brozek, C. K.; Miller, J. T.; Stoian, S. A.; **Dincă, M.** “NO Disproportionation at a Mononuclear Site-isolated Fe(II) Center in Fe(II)-MOF-5” *J. Am. Chem. Soc.* **2015**, *137*, 7495-7501.
- (46) Sun, L.; Hendon, C. H.; Minier, M. A.; Walsh, A.; **Dincă, M.** “Million-Fold Electrical Conductivity Enhancement in Fe<sub>2</sub>(DEBDC) versus Mn<sub>2</sub>(DEBDC) (E = S, O)” *J. Am. Chem. Soc.* **2015**, *137*, 6164-6167.
- (45) Bellarosa, L.; Brozek, C. K.; Garcia-Melchor, M.; **Dincă, M.**; Lopez, N. “When the Solvent Locks the Cage: Theoretical Insight into the Transmetalation of MOF-5 Lattices and its Kinetic Limitations” *Chem. Mater.* **2015**, *27*, 3422-3429.
- (44) Li, M.; **Dincă, M.** “On the Mechanism of MOF-5 Formation under Cathodic Bias” *Chem. Mater.* **2015**, *27*, 3203-3206.
- (43) Campbell, M. G.; Sheberla, D.; Liu, S. F.; Swager, T. M.; **Dincă, M.** “Chemiresistive Sensing in Cu<sub>3</sub>(hexaiminotriphenylene)<sub>2</sub>, an Electrically Conductive 2D Metal-Organic Framework” *Angew. Chem. Int. Ed.* **2015**, *54*, 4349-4352.
- (42) Park, S. S.; Hontz, E. R.; Sun, L.; Hendon, C. H.; Walsh, A.; Van Voorhis, T.; **Dincă, M.** “Cation-Dependent Intrinsic Electrical Conductivity in Isostructural Tetrathiafulvalene-Based Microporous Metal-Organic Frameworks” *J. Am. Chem. Soc.* **2015**, *137*, 1774-1777.
- (41) Sheberla, D.; Sun, L.; Blood-Forsythe, M. A.; Er, S.; Wade, C. R.; Brozek, C. K.; Aspuru-Guzik, A.; **Dincă, M.** “High Electrical Conductivity in Ni<sub>3</sub>(2,3,6,7,10,11-hexamino-triphenylene)<sub>2</sub>, a Semiconducting Metal-Organic Graphene Analogue” *J. Am. Chem. Soc.* **2014**, *136*, 8859-8862.
- (40) Brozek, C. K.; **Dincă, M.** “Cation Exchange at the Secondary Building Units of Metal-Organic Frameworks” *Chem. Soc. Rev.* **2014**, *43*, 5456-5467 (**Review**).
- (39) Brozek, C. K.; Bellarosa, L.; Soejima, T.; Clark, T. V.; López, N.; **Dincă, M.** “Solvent-Dependent Cation Exchange in Metal-Organic Frameworks” *Chem. Eur. J.* **2014**, *20*, 6871-6874.
- (38) Cozzolino, A. F.; Brozek, C. K.; Palmer, R. D.; Yano, J.; Li, M.; **Dincă, M.** “Ligand Redox Non-innocence in the Stoichiometric Oxidation of Mn<sub>2</sub>(2,5-dioxidoterephthalate) (Mn-MOF-74)” *J. Am. Chem. Soc.* **2014**, *136*, 3334-3337.
- (37) Li, M.; **Dincă, M.** “Selective Formation of Biphasic Thin Films of Metal-Organic Frameworks by Potential-Controlled Cathodic Electrodeposition” *Chem. Sci.* **2014**, *5*, 107-111.
- (36) Shustova, N. B.; Cozzolino, A. F.; Reineke, S.; Baldo, M.; **Dincă, M.** “Selective Turn-On Ammonia Sensing Enabled by High-Temperature Fluorescence in Metal-Organic Frameworks with Open Metal Sites” *J. Am. Chem. Soc.* **2013**, *135*, 13326-13329.
- (35) Wade, C. R.; Li, M.; **Dincă, M.** “Facile Deposition of Multicolored Electrochromic MOF Thin Films” *Angew. Chem. Int. Ed.* **2013**, *52*, 13377-13381.
- (34) Brozek, C. K.; **Dincă, M.** “Ti<sup>3+</sup>-, V<sup>2+/3+</sup>-, Cr<sup>2+/3+</sup>-, Mn<sup>2+</sup>-, and Fe<sup>2+</sup>-Substituted MOF-5 and Redox Reactivity in Cr- and Fe-MOF-5” *J. Am. Chem. Soc.* **2013**, *135*, 12886-12891.
- (33) Brozek, C. K.; Cozzolino, A. F.; Teat, S. J.; Chen, Y.-S.; **Dincă, M.** “Quantification of Site-Specific Cation Exchange in Metal-Organic Frameworks using Multi-Wavelength Anomalous X-ray Dispersion” *Chem. Mater.* **2013**, *25*, 2998-3002.
- (32) Sun, L.; Miyakai, T.; Seki, S.; **Dincă, M.** “Mn<sub>2</sub>(2,5-disulfhydrylbenzene-1,4-dicarboxylate): a Microporous MOF with Infinite (-Mn-S-)∞ Chains and High Intrinsic Charge Mobility” *J. Am. Chem. Soc.* **2013**, *135*, 8185-8188.
- (31) Wade, C. R.; Corrales-Sanchez, T.; Narayan, T. C.; **Dincă, M.** “Post-Synthetic Tuning of Hydrophilicity in Pyrazolate MOFs to Modulate Water Adsorption Properties” *Energy Environ. Sci.* **2013**, *6*, 2172-2177.



- (30) Bertrand, G. H. V.; Michaelis, V. K.; Ong, T.-C.; Griffin, R. G.; **Dincă, M.** "Thiophene-Based Covalent-Organic Frameworks"  
*Proc. Nat. Acad. Sci. USA* **2013**, *110*, 4923-4928.
- (29) McCarthy, B. D.; Hontz, E.R.; Yost, S. R.; Van Voorhis, T.; **Dincă, M.** "Charge Transfer or J-Coupling? Assignment of an Unexpected Red-Shifted Absorption Band in a Naphthalenediimide-Based Metal-Organic Framework"  
*J. Phys. Chem. Lett.* **2013**, *4*, 453-458.
- (28) Shustova, N. B.; Cozzolino, A. F.; **Dincă, M.** "Conformational Locking by Design: Relating Strain Energy with Luminescence and Stability in Rigid Metal-Organic Frameworks"  
*J. Am. Chem. Soc.* **2012**, *134*, 19596-19599.
- (27) Shustova, N. B.; Ong, T.-C.; Cozzolino, A. F.; Michaelis, V. K.; Griffin, R. G.; **Dincă, M.** "Phenyl Ring Dynamics in a Tetraphenylethylene-Bridged Metal-Organic Framework: Implications for the Mechanism of Aggregation-Induced Emission"  
*J. Am. Chem. Soc.* **2012**, *134*, 15061-15070.
- (26) Narayan, T. C.; Miyakai, T.; Seki, S.; **Dincă, M.** "High Charge Mobility in a Tetrathiafulvalene-Based Microporous Metal-Organic Framework"  
*J. Am. Chem. Soc.* **2012**, *134*, 12932-12935.
- (25) Brozek, C. K.; **Dincă, M.** "Lattice-Imposed Geometry in Metal-Organic Frameworks: Lacunary Zn<sub>4</sub>O Clusters in MOF-5 Serve as Tripodal Chelating Ligands for Ni<sup>2+</sup>"  
*Chem. Sci.* **2012**, *3*, 2110-2113.
- (24) Wade, C. R.; **Dincă, M.** "Investigation of the Synthesis, Activation, and Isothermic Heats of CO<sub>2</sub> Adsorption of the Isostructural Series of Metal-Organic Frameworks M<sub>3</sub>(BTC)<sub>2</sub> (M = Cr, Fe, Ni, Cu, Mo, Ru)"  
*Dalton Trans.* **2012**, *41*, 7931-7938.
- (23) Shustova, N. B.; McCarthy, B. M.; **Dincă, M.** "Turn-On Fluorescence in Tetraphenylethylene-Based Metal-Organic Frameworks: an Alternative to Aggregation-Induced Emission"  
*J. Am. Chem. Soc.* **2011**, *133*, 20126-20129.
- (22) Li, M.; **Dincă, M.** "Reductive Electrosynthesis of Crystalline Metal-Organic Frameworks"  
*J. Am. Chem. Soc.* **2011**, *133*, 12926-12929.

#### Graduate and postdoctoral studies:

- (21) Sumida, K.; Stück, D.; Mino, L.; Chai, J.-D.; Zavorotynska, O.; Murray, L. J.; **Dincă, M.**; Chavan, S.; Bordiga, S.; Head-Gordon, M.; Long, J. R. "Impact of Metal and Anion Substitutions on the Hydrogen Storage Properties of M-BTT Metal-Organic Frameworks"  
*J. Am. Chem. Soc.* **2013**, *135*, 1083-1091.
- (20) Sumida, K.; Her, J.-H.; **Dincă, M.**; Murray, L. J.; Schloss, J.; Pierce, C. J.; Thompson, B. A.; Fitzgerald, S.; Brown, C. M.; Long, J. R. "Neutron Scattering and Spectroscopic Studies of Hydrogen Adsorption in Cr<sub>3</sub>(BTC)<sub>2</sub> – A Metal-Organic Framework with Exposed Cr<sup>2+</sup> Sites"  
*J. Phys. Chem. C* **2011**, 8414-8421.
- (19) Murray, L. J.; **Dincă, M.**; Yano, J.; Chavan, S.; Bordiga, S.; Brown, C. M.; Long, J. R. "Highly Selective and Reversible O<sub>2</sub> Binding in Cr<sub>3</sub>(1,3,5-benzenetricarboxylate)<sub>2</sub>"  
*J. Am. Chem. Soc.* **2010**, *132*, 7856-7857.
- (18) Kanan, M. W.; Yano, J.; Surendranath, Y.; **Dincă, M.**; Yachandra, V. K.; Nocera, D. G. "Structure and Valency of a Cobalt-Phosphate Water Oxidation Catalyst Determined by in situ X-ray Spectroscopy"  
*J. Am. Chem. Soc.* **2010**, *132*, 13692-13701.
- (17) McAlpin, J. G.; Surendranath, Y.; **Dincă, M.**; Stich, T. A.; Stoian, S. A.; Casey, W.; Nocera, D. G.; Britt, R. D. "EPR Evidence for Co(IV) Species Produced During Water Oxidation at Neutral pH"  
*J. Am. Chem. Soc.* **2010**, *132*, 6882-6883.
- (16) **Dincă, M.**; Surendranath, Y.; Nocera, D. "A Nickel-Based Water Oxidation Catalyst that Functions under Benign Conditions"  
*Proc. Nat. Acad. Sci. USA* **2010**, *107*, 10337-10341.
- (15) Choi, H. J.; **Dincă, M.**; Daïlly, A.; Long, J. R. "Hydrogen Storage in Water-Stable Metal-Organic Frameworks Incorporating 1,3- and 1,4-Benzenedipyrazolate"  
*Energy Environ. Sci.* **2010**, *3*, 117-123.
- (14) Surendranath, Y.; **Dincă, M.**; Nocera, D. G. "Electrolyte-Dependent Electrosynthesis and Activity of Cobalt Based Water Oxidation Catalysts"  
*J. Am. Chem. Soc.* **2009**, *131*, 2615-2620.
- (13) Murray, L. J.; **Dincă, M.**; Long, J. R. "Hydrogen Storage in Metal-Organic Frameworks"

- Chem. Soc. Rev.* **2009**, 38, 1294-1314. (Review)
- (12) **Dincă, M.**; Dailly, A.; Long, J. R. "Structure and Charge Control in Metal-Organic Frameworks Based on the Tetrahedral Ligand Tetrakis(4-tetrazolylphenyl)methane"  
*Chem. Eur. J.* **2008**, 14, 10280-10285.
- (11) Choi, H. J.; **Dincă, M.**; Long, J. R. "Broadly Hysteretic H<sub>2</sub> Adsorption in the Microporous Metal-Organic Framework Co(1,4-benzenedipyrazolate)"  
*J. Am. Chem. Soc.* **2008**, 130, 7848-7850.
- (10) **Dincă, M.**; Long, J. R. "Hydrogen Storage in Microporous Metal-Organic Frameworks with Exposed Metal Sites"  
*Angew. Chem. Int. Ed.* **2008**, 47, 6766-6779. (Review)
- (9) Horike, S.; **Dincă, M.**; Tamaki, K.; Long, J. R. "Size-Selective Lewis-Acid Catalysis in a Microporous Metal-Organic Framework with Exposed Mn<sup>2+</sup> Coordination Sites"  
*J. Am. Chem. Soc.* **2008**, 130, 5854-5855.
- (8) **Dincă, M.**; Harris, T. D.; Iavarone, A. T.; Long, J. R. "Synthesis and Characterization of the Cubic Coordination Cluster [Co<sup>II</sup><sub>6</sub>Co<sup>II</sup><sub>2</sub>(IBT)<sub>12</sub>]<sup>14-</sup> (H<sub>3</sub>IBT = 4,5-bis(tetrazol-5-yl)imidazole)"  
*J. Mol. Struct.* **2008**, 890, 139-143.
- (7) **Dincă, M.**; Dailly, A.; Tsay, C.; Long, J. R. "Expanded Sodalite-Type Metal-Organic Frameworks: Increased Stability and H<sub>2</sub> Adsorption through Ligand-Directed Catenation"  
*Inorg. Chem.* **2008**, 47, 11-13.
- (6) **Dincă, M.**; Long, J. R. "High-Enthalpy Hydrogen Adsorption in Cation-Exchanged Variants of the Microporous Metal-Organic Framework Mn<sub>3</sub>[(Mn<sub>4</sub>Cl)<sub>3</sub>(BTT)<sub>8</sub>(CH<sub>3</sub>OH)<sub>10</sub>]<sub>2</sub>"  
*J. Am. Chem. Soc.* **2007**, 129, 11172-11176.
- (5) **Dincă, M.**; Han, W. S.; Liu, Y.; Dailly, A.; Brown, C. M.; Long, J. R. "Observation of Cu<sup>II</sup>-H<sub>2</sub> Interactions in a Fully-Desolvated, Sodalite-Type Metal-Organic Framework"  
*Angew. Chem. Int. Ed.* **2007**, 46, 1419-1422.
- (4) **Dincă, M.**; Dailly, A.; Liu, Y.; Brown, C. M.; Neumann, D. A.; Long, J. R. "Hydrogen Storage in a Metal-Organic Framework with Exposed Mn<sup>2+</sup> Coordination Sites"  
*J. Am. Chem. Soc.* **2006**, 128, 16876-16883.
- (3) **Dincă, M.**; Yu, A. F.; Long, J. R. "Microporous Metal-Organic Frameworks Incorporating 1,4-Benzeneditetrazolate: Syntheses, Structures, and Hydrogen Storage Properties"  
*J. Am. Chem. Soc.* **2006**, 128, 8904-8913.
- (2) **Dincă, M.**; Long, J. R. "Strong H<sub>2</sub> Binding and Selective Gas Adsorption within the Three-dimensional Coordination Solid Mg<sub>3</sub>(O<sub>2</sub>C-C<sub>10</sub>H<sub>6</sub>-CO<sub>2</sub>)<sub>3</sub>"  
*J. Am. Chem. Soc.* **2005**, 127, 9376-9377.
- (1) Abergel, R. J.; **Dincă, M.** "9,10-dibromotriptycene"  
*Acta Crystallogr.* **2004**, E60, o1248-o1249.

### Patents/Patent Applications

- (1) Nocera, D. G.; Kanan, M. W.; Surendranath, Y.; **Dincă, M.** "Catalyst Compositions and Electrodes for Photosynthesis Replication and Other Electrochemical Techniques" **2009** – US Patent Serial No. 12/486,694.
- (2) **Dincă, M.**; Li, M. "Methods for Electrochemically Induced Cathodic Deposition of Crystalline Metal-Organic Frameworks" – US Patent Serial No. 13/439,355, US Patent 8,764,887 (**2014**).
- (3) **Dincă, M.**; Wade, C. R. "Compositions and methods comprising porous metal-organic frameworks and related uses" **2014** – US Patent Application No. 14/270,385.
- (4) **Dincă, M.**; Sheberla, D.; Sun, L.; Wade, C. R.; Campbell, M. G. "Compositions and methods comprising conductive metal-organic frameworks and uses thereof" **2014** – Patent #: US10174063 (issued Jan 8, **2018**); US Patent #10,822,364 (issued Nov 20, **2020**).
- (5) **Dincă, M.**; Metzger, E. M.; Brozek, C. K. "Compositions and methods for selective olefin oligomerization comprising metal-organic frameworks" **2016** – US Provisional Application 62/218,003; (issued Dec 3, **2019**; US Patent 10,493,441).
- (6) **Dincă, M.**; Comito, R. J. "Compositions and methods for olefin polymerization comprising metal-organic frameworks" (Filing Date **2016** – US Patent Appl. 62/218,003 and 62/306,028; (issued 10/15/**2019**: US Patent #10,442,875)
- (7) **Dincă, M.**; Rieth, A. J.; Tulchinsky, Y. "Compositions comprising metal-organic frameworks for the uptake of compounds and related methods" **2016** – Patents US 2017/0341010 A1; WO 2017/205752.
- (8) **Dincă, M.**; Roman-Leshkov, Y.; Park, H. "Compositions comprising metal-organic frameworks and related methods and uses including heterogeneous catalysis" **2016** – US Provisional patent 62/403,938.
- (9) **Dincă, M.**; Dou, J.-H.; Borysiewicz, M.; Parenti, R.; Banda, H. "Metal-Organic Frameworks for Supercapacitor Electrodes" (USPTO Filing Date 09/30/2019, US Provisional # 62/908,297)
- (10) **Dincă, M.**; Neumann, C. M. "Methods and Compositions for the Catalytic Upgrading of Alcohols" (US Patent Number 10,882,807 issued 1/5/2021).

## Invited Lectures (past and future)

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- (1) *Mislow Honorary Lectureship*, Princeton Univ – Princeton NJ, November **2021**
- (2) EuroMOF 2021 – Poland, September **2021** (keynote speaker, remote)
- (3) Technical University of Munich (TUM) – Munich, Germany September **2021**
- (4) Université de Pau et des Pays de l'Adour (UPPA) – Pau, France, July **2021**
- (5) 1st POSTECH CHEMISTRY SYMPOSIUM SERIES (PCSS) – POSTECH, South Korea, August **2021** (remote)
- (6) Clarkson University, Dept. of Chemistry and Biomolecular Science – Potsdam NY, February **2021** (remote)
- (7) KAIST Emerging Materials e-Symposium – KAIST, South Korea, September **2020** (remote)
- (8) 2020 Clean Energy Institute Conference on Energy Conversion & Storage – Seattle WA, September **2020** (remote)
- (9) Université de Montpellier – Montpellier, France, February **2020**
- (10) University of Groningen, Zernike Institute for Advanced Materials – Groningen, Netherlands, February **2020**
- (11) NYU Abu Dhabi – Abu Dhabi, United Arab Emirates, January **2020**
- (12) Chem2Dmat International Conference – Dresden, Germany, September **2019** (keynote)
- (13) 111 Project, Jilin University – Changchun, China, August **2019**
- (14) Northeast Normal University – Changchun, China, August **2019**
- (15) Uppsala University – Uppsala, Sweden, June **2019** (student-invited)
- (16) Stockholm University – Stockholm, Sweden, June **2019**
- (17) Gordon Research Conference: Self-Assembly and Supramolecular Chemistry – Les Diablerets, Switzerland, May **2019**
- (18) Simon Fraser University – Victoria BC, Canada, March **2019** (student-invited)
- (19) University of British Columbia – Vancouver BC, Canada, March **2019**
- (20) University of Victoria – Victoria BC, Canada, March **2019**
- (21) University of Massachusetts – Lowell MA, March **2019**
- (22) University of Colorado – Boulder CO, February **2019**
- (23) University of California – Irvine CA, February **2019**
- (24) University of California – Riverside CA, February **2019**
- (25) ITQ – Valencia, Spain, January **2019**
- (26) The Dow Chemical Company – Midland MI, September **2018**
- (27) International Conference on Coordination Chemistry – Sendai, Japan, August **2018**
- (28) Jilin University – Changchun, China, August **2018**
- (29) Chongqing Normal University – Chongqing, China, July **2018**
- (30) Chongqing University – Chongqing, China, July **2018**
- (31) Max Planck Institute for Solid State Research – Stuttgart, Germany, May **2018**
- (32) Ludwig Maximilian University – Munich, Germany, May **2018**
- (33) University of Liverpool, Department of Chemistry – Liverpool, UK, April **2018**
- (34) Ecole Polytechnique Federale Lausanne (EPFL) – Lausanne, Switzerland, April **2018**
- (35) 255<sup>th</sup> ACS National Meeting – New Orleans LA, March **2018**
- (36) University of Fribourg – Fribourg, Switzerland, March **2018**
- (37) ETH Zurich – Zurich, Switzerland, March **2018**
- (38) NRG2018, Challenges and Opportunities in Energy Research – Sion, Switzerland, March **2018**
- (39) University of Strasbourg – Strasbourg, France, February **2018**
- (40) Paul Scherer Institute – Viligen, Switzerland, February **2018**
- (41) Institut Català de Nanociència i Nanotecnologia (ICN2) – Barcelona, Spain, January **2018**
- (42) University of Pittsburgh – Pittsburgh PA, November **2017**
- (43) Wayne State University, Department of Chemistry – Detroit MI, November **2017**
- (44) University of Texas - San Antonio, Department of Chemistry – San Antonio TX, November **2017**
- (45) Texas A&M University, Department of Chemistry – College Station TX, November **2017**
- (46) Dartmouth University, Department of Chemistry – Hanover NH, September **2017**
- (47) US-Japan Bilateral Meeting/JSSC Meeting, Hokkaido Univ. – Sapporo, Japan, September **2017**
- (48) Tohoku University – Sendai, Japan, September **2017**
- (49) Romanian International Conference on Chemistry and Chemical Engineering – Brasov, Romania, September **2017**
- (50) 254<sup>th</sup> National ACS Meeting, Nocera 60<sup>th</sup> Symposium – Washington DC, August **2017**
- (51) Gordon Research Conference: Nanoporous Materials – Proctor Academy, NH, August **2017**
- (52) St. Petersburg State University – St. Petersburg, Russia, July **2017**
- (53) Moscow State University – Moscow, Russia, July **2017**
- (54) 100<sup>th</sup> Canadian Society Conference (CSC2017) – Toronto ON, May **2017**
- (55) 253<sup>rd</sup> National ACS Meeting, ACS *Central Science* Symposium – San Francisco CA, April **2017**
- (56) Aramco Research Division, KAUST Site – Thuwal, Saudi Arabia, February **2017**
- (57) New Materials Horizon Symposium, KAUST Research Conference – Thuwal, Saudi Arabia, February **2017**
- (58) International Workshop on Advanced Materials – Al Hamra Fort, Ras al Khaimah, UAE, February **2017**
- (59) Johns Hopkins University, Department of Chemistry – Baltimore MD, February **2017**
- (60) Colorado School of Mines, Department of Chemical and Biological Engineering – Golden CO, January **2017**
- (61) ETH Zurich – Switzerland, November **2016**
- (62) University of Wisconsin, Department of Chemistry – Madison WI, October **2016**

- (63) Washington State University, Chemical Engineering Department – Pullman WA, October **2016**
- (64) Tsinghua University – Beijing, China, August **2016**
- (65) Institute of Chemistry of the Chinese Academy of Sciences – Beijing, China, August **2016**
- (66) Peking University – Beijing, China, August **2016**
- (67) Fudan University – Shanghai, China, August **2016**
- (68) Shanghai Tech – Shanghai, China, August **2016**
- (69) Shanghai Jiaotong University – Shanghai, China, August **2016**
- (70) Changchun Institute of Applied Chemistry – Changchun, China, August **2016**
- (71) Northeast Normal University – Changchun, China, August **2016**
- (72) Gordon Research Conference: Solid State Chemistry – New London NH, July **2016**
- (73) Analog Devices, Inc. – Wilmington MA, July **2016**
- (74) Los Alamos National Laboratory – Los Alamos NM, July **2016**
- (75) Gordon Research Conference: Crystal Engineering – Stowe VT, June **2016**
- (76) Cambridge University, Department of Chemistry – Cambridge, UK, June **2016**
- (77) Imperial College, Condensed Matter Colloquium – London, UK, June **2016**
- (78) University of Kent – Canterbury, England, June **2016**
- (79) Universite Catholique de Louvain – Louvain, Belgium, June **2016**
- (80) KU Leuven – Leuven, Belgium, June **2016**
- (81) Ghent University – Ghent, Belgium, June **2016**
- (82) Michigan State University, Department of Chemistry – East Lansing MI, April **2016**
- (83) 251<sup>st</sup> National ACS Meeting, ExxonMobil ACS Solid State Fellowship Symposium (DIC) – San Diego, CA **2016**
- (84) University of California, Berkeley, *Dalton* Lectureship – Berkeley CA, March **2016**
- (85) Exxon Mobil Corporate Strategic Research – NJ, February **2016**
- (86) University of Bucharest, Department of Chemistry – Bucharest, Romania, February **2016**
- (87) Brandeis University, Department of Chemistry – Waltham MA, January **2016**
- (88) Pacificchem 2015 – Honolulu HI, December **2015**
- (89) University of Tokyo, Department of Chemistry – Tokyo, Japan, December **2015**
- (90) Natural Institute of Natural Sciences, Institute of Molecular Sciences – Okazaki, Japan, December **2015**
- (91) Kyushu University, Department of Chemistry and Biochemistry – Fukuoka, Japan, December **2015**
- (92) Kyoto University, Graduate School of Engineering – Kyoto, Japan, December **2015**
- (93) California Institute of Technology, Chemistry and Chemical Engineering – Pasadena CA, November **2015**
- (94) University of California, Department of Chemistry – Santa Barbara, November **2015**
- (95) University of Southern California – Los Angeles CA, November **2015**
- (96) University of California, Department of Chemistry and Biochemistry – Los Angeles CA, November **2015**
- (97) 1<sup>st</sup> EuroMOF Conference – Potsdam, Germany, October **2015 (plenary)**
- (98) Harvard University, Department of Chemistry and Chemical Biology – Cambridge MA, October **2015**
- (99) McGill University, Department of Chemistry – Montreal, Canada, September **2015**
- (100) Princeton University, Department of Chemistry – Princeton NJ, September **2015**
- (101) Indian Institute of Technology (IIT) Bombay – Mumbai, India, August **2015**
- (102) National Chemical Laboratory – Pune, India, August **2015**
- (103) Tata Institute of Fundamental Research – Mumbai, India, August **2015**
- (104) 250<sup>th</sup> National ACS Meeting, Colloids Division – Boston MA, August **2015**
- (105) 250<sup>th</sup> National ACS Meeting, Energy and Fuels Division – Boston MA, August **2015**
- (106) Gordon Research Conference: Nanoporous Materials – Holderness NH, August **2015**
- (107) *CrystEngComm* RSC Lecturer at Amer. Crystallogr. Assoc. National Meeting – Philadelphia PA, July **2015**
- (108) University of Bologna – Bologna, Italy, July **2015**
- (109) University of Calabria – Cosenza, Italy, July **2015**
- (110) University of Torino – Torino, Italy, July **2015**
- (111) Politecnico di Torino – Torino, Italy, July **2015**
- (112) University of Pennsylvania, Department of Chemistry – Philadelphia PA, May **2015**
- (113) University of California, Department of Chemistry – San Diego CA, May **2015**
- (114) University of Ottawa, *Keith Fagnou Lectureship* – Ottawa, Canada, March **2015**
- (115) Gordon Research Conference, Inorganic Reaction Mechanisms – Galveston TX, March **2015**
- (116) The Ohio State University, Department of Chemistry and Biochemistry – Columbus OH, March **2015**
- (117) University of South Florida, Department of Chemistry – Tampa FL, February **2015**
- (118) Columbia University, Department of Chemistry – New York NY, January **2015**
- (119) University of Chicago, Department of Chemistry – Chicago IL, January **2015**
- (120) New England Catalysis Meeting @ MIT – Cambridge MA, January **2015**
- (121) Yale University, Department of Chemistry – New Haven CT, November **2014**
- (122) University of California, Department of Chemistry – Berkeley CA, November **2014**
- (123) Stanford University, Department of Chemistry – Palo Alto CA, November **2014**
- (124) Northwestern University, Department of Chemistry – Evanston IL, November **2014**
- (125) University of Minnesota: Twin Cities, Department of Chemistry – Minneapolis MN, October **2014**
- (126) Macalester College, Department of Chemistry – St Paul MN, October **2014**
- (127) 3M – St. Paul MN, October **2014**

- (128) University of Iowa, Department of Chemistry – Iowa City IA, October **2014**
- (129) Korea University – Seoul, South Korea, October **2014**
- (130) MOF2014 Conference – Kobe, Japan, September **2014**
- (131) University of Florida – Gainesville FL, September **2014**
- (132) 248<sup>th</sup> ACS National Meeting: IC Lectureship (J.R. Long) Symposium – San Francisco, August **2014**
- (133) 248<sup>th</sup> ACS National Meeting: MOF Symposium (Energy & Fuels) – San Francisco, August **2014**
- (134) Gordon Research Conference, Electrodeposition – UNE, Biddeford ME, July **2014**
- (135) MOFs: Experiments and Simulations TSRC Workshop – Telluride CO, July **2014**
- (136) Gordon Research Conference, Inorganic Chemistry – UNE, Biddeford ME, June **2014**
- (137) Centre de Recherché Paul Pascal, University of Bordeaux – Bordeaux, France, June **2014**
- (138) Swiss Federal Institute of Technology (EPFL) – Lausanne, Switzerland, June **2014**
- (139) International Symposium on Nanostructured Functional Materials – Warsaw, Poland, June **2014**
- (140) Brown University, NSF Center for Chemical Innovation – Providence RI, May **2014**
- (141) Washington University in St Louis, Department of Chemistry – St Louis MO, March **2014**
- (142) University of Massachusetts, Department of Chemistry – Dartmouth MA, March **2014**
- (143) Worcester Polytechnic Institute, Department of Chemistry – Worcester MA, February **2014**
- (144) University of Texas El Paso, Department of Chemistry – El Paso TX, February **2014**
- (145) Texas A&M University, Department of Chemistry – College Station TX, February **2014**
- (146) University of Houston, Department of Chemistry – Houston TX, February **2014**
- (147) International Symposium on MOFs and Open Framework Materials – Zhuhai, China, December **2013**
- (148) Hong Kong University of Science and Technology (HKUST) – Hong Kong, December **2013**
- (149) Indiana University, Department of Chemistry – Bloomington IN, November **2013**
- (150) Johns Hopkins University, Department of Chemistry – Baltimore MD, November **2013**
- (151) University of Washington, Department of Chemistry – Seattle WA, October **2013**
- (152) Boston University, Materials Science and Engineering Colloquium – Boston MA, October **2013**
- (153) Pennsylvania State University, Department of Chemistry – State College PA, October **2013**
- (154) Transatlantic Frontiers of Chemistry (TFOC) – Kloster Seeon, Germany, August **2013**
- (155) Boston Regional Inorganic Symposium @ Strem – Newburyport MA, June **2013**
- (156) 245<sup>th</sup> ACS National Meeting: MOF Symposium – New Orleans LA, April **2013**
- (157) 245<sup>th</sup> ACS National Meeting: Cope Award (T. Agapie) Symposium – New Orleans LA, April **2013**
- (158) Kyoto University, Institute for Integrated Cell-Material Sciences – Kyoto, Japan, March **2013**
- (159) University of Tokyo, Department of Chemical System Engineering – Tokyo, Japan, March **2013**
- (160) Osaka University, Graduate School of Engineering – Osaka, Japan, February **2013**
- (161) Cabot Corporation – Billerica MA, January **2013**
- (162) MIT Department of Materials Science and Engineering – November **2012**
- (163) MIT Energy Initiative Conference – Cambridge MA, October **2012**
- (164) Tech Review EmTech Conference, TR-35 Symposium – Cambridge MA, October **2012**
- (165) DuPont Company – Wilmington DE, August **2012**
- (166) 244<sup>th</sup> ACS National Meeting: National Young Awardee Symposium – Philadelphia PA, August **2012**
- (167) National Institute of Standards and Technology – Gaithersburg MD, July **2012**
- (168) Institute of Chemical Technology (ITQ) – Valencia, Spain, May **2012**
- (169) Catalan Institute of Chemical Research (ICIQ) – Tarragona, Spain, May **2012**
- (170) MIT Bruker Symposium: Metal-Organic Frameworks – Cambridge MA, February **2012**
- (171) Mesilla Workshop in Inorganic Chemistry – Mesilla NM, February **2012**
- (172) Harvard Energy Conference – Cambridge MA, January **2012**
- (173) MIT Energy Initiative Seminar Series – Cambridge MA, October **2011**
- (174) MIT Center for Excitonics and Photonics Seminar Series – Cambridge MA, April **2011**
- (175) NSF Workshop on Frontiers in Crystalline Matter – Santa Barbara CA, March **2011**
- (176) University of Wisconsin, Department of Chemistry – Madison WI, January **2010**
- (177) Princeton University, Department of Chemistry – Princeton NJ, December **2009**
- (178) University of Michigan, Department of Chemistry – Ann Arbor MI, December **2009**
- (179) University of Illinois, Department of Chemistry – Urbana-Champaign IL, December **2009**
- (180) Yale University, Department of Chemistry – New Hartford CT, December **2009**
- (181) University of Washington, Department of Chemistry – Seattle WA, November **2009**
- (182) University of Chicago, Department of Chemistry – Chicago IL, November **2009**
- (183) University of Erlangen, Department of Chemistry – Nürnberg, Germany, November **2009**
- (184) Massachusetts Institute of Technology – Cambridge MA, October **2009**
- (185) Lawrence Berkeley National Laboratory Workshop on Nanoscale Assemblies – Berkeley CA, October **2007**