

# Michael J Zdilla

## List of Publications by Year in descending order

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83  
papers

2,155  
citations

270111

25  
h-index

274796

44  
g-index

88  
all docs

88  
docs citations

88  
times ranked

3276  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ubiquity of cubanes in bioinorganic relevant compounds. <i>Coordination Chemistry Reviews</i> , 2022, 450, 214168.	9.5	5
2	Hemicubane topological analogs of the oxygen-evolving complex of photosystem II mediating water-assisted propylene carbonate oxidation. <i>Chemical Communications</i> , 2022, 58, 2532-2535.	2.2	2
3	Mechanism of Ion Conduction and Dynamics in Tris( <i>N,N</i> -dimethylformamide) Perchloratosodium Solid Electrolytes. <i>Journal of Physical Chemistry C</i> , 2022, 126, 4744-4750.	1.5	3
4	Effect of water frustration on water oxidation catalysis in the nanoconfined interlayers of layered manganese oxides birnessite and buserite. <i>Journal of Materials Chemistry A</i> , 2021, 9, 6924-6932.	5.2	15
5	Solvate sponge crystals of (DMF) <sub>3</sub> NaClO <sub>4</sub> : reversible pressure/temperature controlled juicing in a melt/press-castable sodium-ion conductor. <i>Chemical Science</i> , 2021, 12, 5574-5581.	3.7	3
6	Transition-metal-mediated reduction and reversible double-cyclization of cyanuric triazide to an asymmetric bitetrazolate involving cleavage of the six-membered aromatic ring. <i>Chemical Science</i> , 2021, 12, 2268-2275.	3.7	3
7	Multinuclear Clusters of Manganese and Lithium with Silsesquioxane-Derived Ligands: Synthesis and Ligand Rearrangement by Dioxygen- and Base-Mediated Si-O Bond Cleavage. <i>Inorganic Chemistry</i> , 2021, 60, 2866-2871.	1.9	12
8	Metal-Binding Q-Proline Macrocycles. <i>Journal of Organic Chemistry</i> , 2021, 86, 4867-4876.	1.7	6
9	Reimagining the <i>eg</i> <sup>1</sup> Electronic State in Oxygen Evolution Catalysis: Oxidation-Modulated Superlattices as a New Type of Heterostructure for Maximizing Catalysis. <i>Advanced Energy Materials</i> , 2021, 11, 2101636.	10.2	6
10	Reaction Mechanism and Energetics of Decomposition of Tetrakis(1,3-dimethyltetrazol-5-imidoperchloratomanganese(II)) from Quantum-Mechanics-based Reactive Dynamics. <i>Journal of the American Chemical Society</i> , 2021, 143, 16960-16975.	6.6	3
11	Properties and Promise of Catenated Nitrogen Systems As High-Energy-Density Materials. <i>Chemical Reviews</i> , 2020, 120, 5682-5744.	23.0	172
12	Experimental and Theoretical Investigation of the Ion Conduction Mechanism of Tris(adiponitrile)perchloratosodium, a Self-Binding, Melt-Castable Crystalline Sodium Electrolyte. <i>Chemistry of Materials</i> , 2019, 31, 8850-8863.	3.2	9
13	Activation of C-H, N-H, and O-H Bonds via Proton-Coupled Electron Transfer to a Mn(III) Complex of Redox-Noninnocent Octaazacyclotetradecadiene, a Catenated-Nitrogen Macrocyclic Ligand. <i>Journal of the American Chemical Society</i> , 2019, 141, 5699-5709.	6.6	11
14	Solution and Solid State Properties for Low-Spin Cobalt(II) Dibenzotetramethyltetraaza[14]annulene [(tmtaa)Co <sup>II</sup> ] and the Monopyridine Complex. <i>Inorganic Chemistry</i> , 2019, 58, 1224-1233.	1.9	2
15	Unravelling the structural and dynamical complexity of the equilibrium liquid grain-binding layer in highly conductive organic crystalline electrolytes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4394-4404.	5.2	6
16	Systematic Doping of Cobalt into Layered Manganese Oxide Sheets Substantially Enhances Water Oxidation Catalysis. <i>Inorganic Chemistry</i> , 2018, 57, 557-564.	1.9	43
17	Crystal structure and ionic conductivity of the soft solid crystal: isoquinoline <sub>3</sub> (LiCl) <sub>2</sub> . <i>Ionics</i> , 2018, 24, 343-349.	1.2	5
18	Synthesis of a tethered dibenzotetramethyltetraaza[14]annulene macrocycle and the di-nickel( <i>scp</i> ) derivative. <i>New Journal of Chemistry</i> , 2018, 42, 19369-19376.	1.4	1

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19	Synergistic In-Layer Cobalt Doping and Interlayer Iron Intercalation into Layered MnO <sub>2</sub> Produces an Efficient Water Oxidation Electrocatalyst. ACS Energy Letters, 2018, 3, 2280-2285.	8.8	36
20	Magnetism and EPR Studies of Binuclear Ruthenium Hydride Binuclear Species Bearing Redox-Active Ligands. Inorganic Chemistry, 2018, 57, 7036-7043.	1.9	2
21	Crystal structures of sodium-, lithium-, and ammonium 4,5-dihydroxybenzene-1,3-disulfonate (tiron) hydrates. Acta Crystallographica Section E: Crystallographic Communications, 2018, 74, 918-925.	0.2	0
22	The solid-state conformation of the topical antifungal agent <i>o</i> -naphthalen-2-yl <i>N</i> -methyl- <i>N</i> -(3-methylphenyl)carbamothioate. Acta Crystallographica Section C, Structural Chemistry, 2018, 74, 1495-1501.	0.2	2
23	Crystal structures of two 1,3-thiazolidin-4-one derivatives featuring sulfide and sulfone functional groups. Acta Crystallographica Section E: Crystallographic Communications, 2018, 74, 1695-1699.	0.2	0
24	Effect of Interlayer Spacing on the Activity of Layered Manganese Oxide Bilayer Catalysts for the Oxygen Evolution Reaction. Journal of the American Chemical Society, 2017, 139, 1863-1870.	6.6	144
25	Enhanced Davydov Splitting in Crystals of a Perylene Diimide Derivative. Journal of Physical Chemistry Letters, 2017, 8, 1118-1123.	2.1	37
26	Structure of a pentamanganese(II) phenoxide cluster with a central five-coordinate oxide: Mn <sup>II</sup> <sub>5</sub> ( $\frac{1}{4}$ -OPh) <sub>6</sub> ( $\frac{1}{4}$ -OPh) <sub>2</sub> ( $\frac{1}{4}$ -O)(Py) <sub>6</sub> (Py is pyridine). Acta Crystallographica Section C, Structural Chemistry, 2017, 73, 270-275.	0.2	3
27	Synthesis and Structure of 2,5-Bis( <i>N</i> -(2,6-mesityl)iminomethyl)pyrrolylcobalt(II): Evidence for One-Electron-Oxidized, Redox Noninnocent Ligand Behavior. Inorganic Chemistry, 2017, 56, 3377-3385.	1.9	12
28	Reactive Pendant Mn=O in a Synthetic Structural Model of a Proposed S <sub>4</sub> State in the Photosynthetic Oxygen Evolving Complex. Journal of the American Chemical Society, 2017, 139, 4675-4681.	6.6	15
29	Covalent Metal-Metal-Bonded Mn <sub>4</sub> Tetrahedron Inscribed within a Four-Coordinate Manganese Cubane Cluster, As Evidenced by Unexpected Temperature-Independent Diamagnetism. Inorganic Chemistry, 2017, 56, 3733-3737.	1.9	5
30	Redox properties of birnessite from a defect perspective. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9523-9528.	3.3	50
31	Manganese-Mediated Linkage of Perchlorate to Aminotetrazoles Produces Twice the Energy Density of the Unmetalated Salt. Chemistry - A European Journal, 2017, 23, 14138-14142.	1.7	8
32	Synthesis of Two Lead Complexes of Propellant Stabilizer Compounds: In Pursuit of Novel Propellant Additives. ChemistrySelect, 2017, 2, 11673-11676.	0.7	3
33	Structure of salts of lithium chloride and lithium hexafluorophosphate as solvates with pyridine and vinylpyridine and structural comparisons: (C <sub>5</sub> H <sub>5</sub> N)LiPF <sub>6</sub> , [ <i>p</i> -(CH <sub>2</sub> =CH)C <sub>5</sub> H <sub>4</sub> N]LiPF <sub>6</sub> , [(C <sub>5</sub> H <sub>5</sub> N)LiCl] <sub>2</sub> , and [ <i>p</i> -(CH <sub>2</sub> =CH)C <sub>5</sub> H <sub>4</sub> N] <sub>2</sub> Li( $\frac{1}{4}$ -Cl) <sub>2</sub> Li[ <i>p</i> -(CH <sub>2</sub> =CH)C <sub>5</sub> H <sub>4</sub> N]. Acta Crystallographica Section C, Structural Chemistry, 2017, 73, 264-269.	0.2	2
34	Concise Syntheses of bis-Strychnos Alkaloids (â)â€Sungucine, (â)â€Sungucine, and (â)â€Strychnogucine from (â)â€Strychnine. Chemistry - A European Journal, 2016, 22, 11593-11596.	1.7	7
35	Nickel Confined in the Interlayer Region of Birnessite: an Active Electrocatalyst for Water Oxidation. Angewandte Chemie, 2016, 128, 10537-10541.	1.6	28
36	Nickel Confined in the Interlayer Region of Birnessite: an Active Electrocatalyst for Water Oxidation. Angewandte Chemie - International Edition, 2016, 55, 10381-10385.	7.2	112

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37	A Self-Binding, Melt-Castable, Crystalline Organic Electrolyte for Sodium Ion Conduction. <i>Angewandte Chemie</i> , 2016, 128, 15480-15483.	1.6	6
38	Water Oxidation Catalyzed by Cobalt Oxide Supported on the Mattagamite Phase of $\text{CoTe}_2$ . <i>ACS Catalysis</i> , 2016, 6, 7393-7397.	5.5	39
39	Intercalation of Cobalt into the Interlayer of Birnessite Improves Oxygen Evolution Catalysis. <i>ACS Catalysis</i> , 2016, 6, 7739-7743.	5.5	79
40	Asymmetric total synthesis of ( $\hat{\alpha}$ )-melotenine A. <i>Tetrahedron</i> , 2016, 72, 6107-6112.	1.0	10
41	A Self-Binding, Melt-Castable, Crystalline Organic Electrolyte for Sodium Ion Conduction. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15254-15257.	7.2	21
42	A Protocol for Safe Lithiation Reactions Using Organolithium Reagents. <i>Journal of Visualized Experiments</i> , 2016, , .	0.2	3
43	Amorphous aluminum-carbide and aluminum-magnesium-carbide nanoparticles from gas phase activation of trimethylaluminum and octamethyldialuminummagnesium using simultaneous spatially and temporally focused ultrashort laser pulses. <i>Nano Structures Nano Objects</i> , 2016, 6, 1-4.	1.9	8
44	Electronic Structure of Manganese Complexes of the Redox-Non-Innocent Tetrazene Ligand and Evidence for the Metal-Azide/Imido Cycloaddition Intermediate. <i>Chemistry - A European Journal</i> , 2016, 22, 10548-10557.	1.7	14
45	Biomimetic Total Syntheses of ( $\hat{\alpha}$ )-Leucoridines A and C through the Dimerization of ( $\hat{\alpha}$ )-Dihydrovalparicine. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 12632-12635.	7.2	17
46	Frustrated Solvation Structures Can Enhance Electron Transfer Rates. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 4804-4808.	2.1	67
47	Bulk-Phase Ion Conduction in Cocrystalline $\text{LiCl} \cdot \text{N,N}$ -Dimethylformamide: A New Paradigm for Solid Electrolytes Based upon the Pearson Hard-Soft Acid-Base Concept. <i>Chemistry of Materials</i> , 2015, 27, 5479-5482.	3.2	19
48	Decoration of the layered manganese oxide birnessite with $\text{Mn}(\text{O})_2$ gives a new water oxidation catalyst with fifty-fold turnover number enhancement. <i>Dalton Transactions</i> , 2015, 44, 12981-12984.	1.6	40
49	Copper-Intercalated Birnessite as a Water Oxidation Catalyst. <i>Langmuir</i> , 2015, 31, 12807-12813.	1.6	69
50	Heterobimetallic Complexes of Rhodium Dibenzotetramethylaza[14]annulene [(tmtaa)Rh-M]: Formation, Structures, and Bond Dissociation Energetics. <i>Inorganic Chemistry</i> , 2015, 54, 273-279.	1.9	8
51	Mechanistic Elucidation of the Stepwise Formation of a Tetranuclear Manganese Pinned Butterfly Cluster via N-N Bond Cleavage, Hydrogen Atom Transfer, and Cluster Rearrangement. <i>Journal of the American Chemical Society</i> , 2014, 136, 17974-17986.	6.6	10
52	The polyoctahedral silsesquioxane (POSS) 1,3,5,7,9,11,13,15-octaphenylpentacyclo[9.5.1.1 <sup>3,9</sup> .1 <sup>5,15</sup> .1 <sup>7,13</sup> ]octasiloxane (octaphenyl-POSS). <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2014, 70, 971-974.		8
53	Preparation of a twisted basket-Mn <sub>4</sub> N <sub>8</sub> cluster: a two-hydrogen-atom reduced analogue of the Mn <sub>4</sub> N <sub>8</sub> pinned butterfly. <i>Chemical Communications</i> , 2014, 50, 7780.	2.2	3
54	Formation of the tetranuclear, tetrakis-terminal-imido Mn <sub>4</sub> (N <sup>t</sup> Bu) <sub>8</sub> cubane cluster by four-electron reductive elimination of $\text{N}(\text{tBu})_2$ . The role of the s-block ion in stabilization of high-oxidation state intermediates. <i>Chemical Communications</i> , 2014, 50, 1061-1063.	2.2	10

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55	Stable tetramethyl-1,10-phenanthroline osmium( $\text{II}$ ) complex in neutral pH as a photoluminescence-following electron-transfer reagent for the detection of acetaminophen in urine and pharmaceutical formulations. <i>Analytical Methods</i> , 2014, 6, 5818-5829.	1.3	8
56	Acceleration of an Aromatic Claisen Rearrangement via a Designed Spirolygozyme Catalyst that Mimics the Ketosteroid Isomerase Catalytic Dyad. <i>Journal of the American Chemical Society</i> , 2014, 136, 3817-3827.	6.6	27
57	Equilibrium Thermodynamics To Form a Rhodium Formyl Complex from Reactions of CO and $\text{H}_2$ : Metal $\sigma$ Donor Activation of CO. <i>Journal of the American Chemical Society</i> , 2014, 136, 5856-5859.	6.6	22
58	Synthesis and Electrochemical Reactivity of Molybdenum Dicarbonyl Supported by a Redox-Active $\text{N}_2$ -Diimine Ligand. <i>Inorganic Chemistry</i> , 2013, 52, 5457-5463.	1.9	14
59	Evaluation of the $\text{Rh}(\text{II})$ Bond Dissociation Enthalpy for $[(\text{TMTAA})\text{Rh}]_2$ by $^1\text{H}$ NMR $T_2$ Measurements: Application in Determining the $\text{Rh}-\text{C}(\text{O})$ BDE in $[(\text{TMTAA})\text{Rh}]_2\text{CO}$ . <i>Inorganic Chemistry</i> , 2013, 52, 11509-11513.	1.9	15
60	Easy access to the Wilkinson tris(tert-butylimido)nitridomanganate(VII) complex from commercially available starting materials. <i>Inorganic Chemistry Communication</i> , 2013, 37, 225-227.	1.8	4
61	Architectural Spirolygomers Designed for Binuclear Metal Complex Templating. <i>Inorganic Chemistry</i> , 2013, 52, 6457-6463.	1.9	16
62	Total Synthesis of $\alpha$ -Melotene. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 8309-8311.	7.2	45
63	Enantioselective Synthesis of Cocaine C-1 Analogues using Sulfinimines ( <i>N</i> -Sulfinyl Imines). <i>Journal of Organic Chemistry</i> , 2012, 77, 2345-2359.	1.7	29
64	Electronic structure and solution behavior of a tris( $\text{N},\text{N}$ -diphenylhydrazido)manganese(IV) propeller complex. <i>Dalton Transactions</i> , 2012, 41, 8093.	1.6	6
65	Complexes of 2,5-Bis( $\text{N}$ -pyridyl)pyrrolate with Pd(II) and Pt(II): A Monoanionic Iso-Electron Ligand Analog of Terpyridine. <i>Inorganic Chemistry</i> , 2012, 51, 10122-10128.	1.9	25
66	Synthesis, Structure, and Magnetic Studies of Manganese-Oxygen Clusters of Reduced Coordination Number, Featuring an Unchelated, 5-Coordinate Octanuclear Manganese Cluster with Water-Derived Oxo Ligands. <i>Inorganic Chemistry</i> , 2012, 51, 10095-10104.	1.9	11
67	Synthesis of a High-Valent, Four-Coordinate Manganese Cubane Cluster with a Pendant Mn Atom: Photosystem II-Inspired Manganese-Nitrogen Clusters. <i>Inorganic Chemistry</i> , 2012, 51, 3950-3952.	1.9	23
68	Small Molecule Anticonvulsant Agents with Potent In Vitro Neuroprotection. <i>Journal of Molecular Neuroscience</i> , 2012, 47, 368-379.	1.1	6
69	An isolable, metastable, geometrically unique manganese(IV) trihydrazide complex poised for reactivity. <i>Chemical Communications</i> , 2011, 47, 9696.	2.2	10
70	Iron-Mediated Hydrazine Reduction and the Formation of Iron-Arylimide Heterocubanes. <i>Inorganic Chemistry</i> , 2011, 50, 1551-1562.	1.9	25
71	Synthesis of Conformationally Constrained 5-Fluoro- and 5-Hydroxymethanopyrrolidines. Ring-Puckered Mimics of <i>Gauche</i> - and <i>Anti</i> -3-Fluoro- and 3-Hydroxypyrrrolidines. <i>Journal of Organic Chemistry</i> , 2011, 76, 3626-3634.	1.7	14
72	Synthesis of Tetranuclear, Four-Coordinate Manganese Clusters with Pinned Butterfly-Geometry Formed by Metal-Mediated $\text{N}-\text{N}$ Bond Cleavage in Diphenylhydrazine. <i>Journal of the American Chemical Society</i> , 2011, 133, 4208-4211.	6.6	19

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73	Intramolecular Pyridone/Enyne Photocycloaddition: Partitioning of the [4 + 4] and [2 + 2] Pathways. <i>Organic Letters</i> , 2011, 13, 2180-2183.	2.4	20
74	trans-Bis(hinokitiolato)copper(II)trans-bis(hinokitiolato)palladium(II) cocrystals with (5/1) and (3/2) formulations. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2011, 67, m100-m104.	0.4	0
75	Concerted Dismutation of Chlorite Ion: Water-Soluble Iron-Porphyrins As First Generation Model Complexes for Chlorite Dismutase. <i>Inorganic Chemistry</i> , 2009, 48, 2260-2268.	1.9	38
76	H <sub>2</sub> -Driven Deoxygenation of Epoxides and Diols to Alkenes Catalyzed by Methyltrioxorhenium. <i>Inorganic Chemistry</i> , 2009, 48, 9998-10000.	1.9	152
77	Bioinspired Dismutation of Chlorite to Dioxygen and Chloride Catalyzed by a Water-Soluble Iron Porphyrin. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 7697-7700.	7.2	33
78	Mechanism of and exquisite selectivity for O=O bond formation by the heme-dependent chlorite dismutase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 15654-15659.	3.3	80
79	Manganese(III) Corrole-Oxidant Adduct as the Active Intermediate in Catalytic Hydrogen Atom Transfer. <i>Inorganic Chemistry</i> , 2008, 47, 10718-10722.	1.9	26
80	Reactivity of a Sterically Hindered Fe(II) Thiolate Dimer with Amines and Hydrazines. <i>Inorganic Chemistry</i> , 2008, 47, 11382-11390.	1.9	18
81	Hydrogen Atom Transfer Reactions of Imido Manganese(V) Corrole: One Reaction with Two Mechanistic Pathways. <i>Journal of the American Chemical Society</i> , 2007, 129, 11505-11511.	6.6	85
82	Synthesis and Elaboration of the Dinuclear Iron-Imide Cluster Core [Fe <sub>2</sub> ( $\mu_4$ -NR) <sub>2</sub> ] <sup>2+</sup> . <i>Inorganic Chemistry</i> , 2007, 46, 1071-1080.	1.9	30
83	Mechanism of Catalytic Aziridination with Manganese Corrole: The Often Postulated High-Valent Mn(V) Imido Is Not the Group Transfer Reagent. <i>Journal of the American Chemical Society</i> , 2006, 128, 16971-16979.	6.6	129