

# Eric S Wiedner

## List of Publications by Year in descending order

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47  
papers

2,012  
citations

236612

25  
h-index

264894

42  
g-index

49  
all docs

49  
docs citations

49  
times ranked

1946  
citing authors

#	ARTICLE	IF	CITATIONS
1	Role of High-Spin Species and Pendant Amines in Electrocatalytic Alcohol Oxidation by a Nickel Phosphine Complex. ACS Catalysis, 2022, 12, 2729-2740.	5.5	6
2	Molecular Catalysts with Diphosphine Ligands Containing Pendant Amines. Chemical Reviews, 2022, 122, 12427-12474.	23.0	48
3	Thermodynamic Trends for Reduction of CO by Molecular Complexes. Organometallics, 2021, 40, 2039-2050.	1.1	5
4	Cobalt-Group 13 Complexes Catalyze CO <sub>2</sub> Hydrogenation via a Co(III)/Co(I) Redox Cycle. ACS Catalysis, 2020, 10, 2459-2470.	5.5	55
5	Enhanced Hydrogenation of Carbon Dioxide to Methanol by a Ruthenium Complex with a Charged Outer-Coordination Sphere. ACS Catalysis, 2020, 10, 7419-7423.	5.5	25
6	Mechanistic Studies on the Insertion of Carbonyl Substrates into Cu-H: Different Rate-Limiting Steps as a Function of Electrophilicity. Angewandte Chemie, 2020, 132, 8723-8731.	1.6	5
7	Mechanistic Studies on the Insertion of Carbonyl Substrates into Cu-H: Different Rate-Limiting Steps as a Function of Electrophilicity. Angewandte Chemie - International Edition, 2020, 59, 8645-8653.	7.2	16
8	Understanding and Design of Bidirectional and Reversible Catalysts of Multielectron, Multistep Reactions. Journal of the American Chemical Society, 2019, 141, 11269-11285.	6.6	51
9	Thermodynamic Hydricity of [FeFe]-Hydrogenases. Journal of the American Chemical Society, 2019, 141, 7212-7222.	6.6	12
10	Evaluation of attractive interactions in the second coordination sphere of iron complexes containing pendant amines. Dalton Transactions, 2019, 48, 4867-4878.	1.6	12
11	Design and reactivity of pentapyridyl metal complexes for ammonia oxidation. Chemical Communications, 2019, 55, 5083-5086.	2.2	27
12	Electrocatalytic Hydrogen Production by a Nickel Complex Containing a Tetradentate Phosphine Ligand. Organometallics, 2019, 38, 1269-1279.	1.1	25
13	Reversing the Tradeoff between Rate and Overpotential in Molecular Electrocatalysts for H <sub>2</sub> Production. ACS Catalysis, 2018, 8, 3286-3296.	5.5	79
14	Frontispiece: Making a Splash in Homogeneous CO <sub>2</sub> Hydrogenation: Elucidating the Impact of Solvent on Catalytic Mechanisms. Chemistry - A European Journal, 2018, 24, .	1.7	0
15	H <sub>2</sub> Oxidation Electrocatalysis Enabled by Metal-to-Metal Hydrogen Atom Transfer: A Homolytic Approach to a Heterolytic Reaction. Angewandte Chemie, 2018, 130, 13711-13715.	1.6	0
16	H <sub>2</sub> Oxidation Electrocatalysis Enabled by Metal-to-Metal Hydrogen Atom Transfer: A Homolytic Approach to a Heterolytic Reaction. Angewandte Chemie - International Edition, 2018, 57, 13523-13527.	7.2	13
17	Making a Splash in Homogeneous CO <sub>2</sub> Hydrogenation: Elucidating the Impact of Solvent on Catalytic Mechanisms. Chemistry - A European Journal, 2018, 24, 16964-16971.	1.7	25
18	Transition Metal Complexes for Catalytic N <sub>2</sub> Reduction and NH <sub>3</sub> Oxidation: Strategies for Making and Breaking N-H Bonds. ECS Meeting Abstracts, 2018, .	0.0	0

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19	Ammonia Oxidation by Abstraction of Three Hydrogen Atoms from a Mo <sup>IV</sup> -NH <sub>3</sub> Complex. <i>Journal of the American Chemical Society</i> , 2017, 139, 2916-2919.	6.6	54
20	Impact of Weak Agostic Interactions in Nickel Electrocatalysts for Hydrogen Oxidation. <i>Organometallics</i> , 2017, 36, 2275-2284.	1.1	16
21	Catalytic N <sub>2</sub> Reduction to Silylamines and Thermodynamics of N <sub>2</sub> Binding at Square Planar Fe. <i>Journal of the American Chemical Society</i> , 2017, 139, 9291-9301.	6.6	72
22	Changing the Mechanism for CO <sub>2</sub> Hydrogenation Using Solvent-Dependent Thermodynamics. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 15002-15005.	7.2	42
23	Changing the Mechanism for CO <sub>2</sub> Hydrogenation Using Solvent-Dependent Thermodynamics. <i>Angewandte Chemie</i> , 2017, 129, 15198-15201.	1.6	3
24	Hydrogenation of CO <sub>2</sub> at Room Temperature and Low Pressure with a Cobalt Tetraphosphine Catalyst. <i>Inorganic Chemistry</i> , 2017, 56, 8580-8589.	1.9	39
25	Understanding the Relationship Between Kinetics and Thermodynamics in CO <sub>2</sub> Hydrogenation Catalysis. <i>ACS Catalysis</i> , 2017, 7, 6008-6017.	5.5	43
26	Invited: Approaching Hydrogenase-like Performance with Molecular Electrocatalysts for H <sub>2</sub> Production. <i>ECS Meeting Abstracts</i> , 2017, , .	0.0	0
27	Putting chromium on the map for N <sub>2</sub> reduction: production of hydrazine and ammonia. A study of cis-M(N <sub>2</sub> ) <sub>2</sub> (M = Cr, Mo, W) bis(diphosphine) complexes. <i>Chemical Communications</i> , 2016, 52, 9343-9346.	2.2	26
28	Thermodynamic Hydricity of Transition Metal Hydrides. <i>Chemical Reviews</i> , 2016, 116, 8655-8692.	23.0	365
29	Electrochemical Detection of Transient Cobalt Hydride Intermediates of Electrocatalytic Hydrogen Production. <i>Journal of the American Chemical Society</i> , 2016, 138, 8309-8318.	6.6	89
30	Experimental and Computational Mechanistic Studies Guiding the Rational Design of Molecular Electrocatalysts for Production and Oxidation of Hydrogen. <i>Inorganic Chemistry</i> , 2016, 55, 445-460.	1.9	67
31	Kinetic Analysis of Competitive Electrocatalytic Pathways: New Insights into Hydrogen Production with Nickel Electrocatalysts. <i>Journal of the American Chemical Society</i> , 2016, 138, 604-616.	6.6	51
32	Combined Spectroscopic and Electrochemical Detection of a Ni <sup>I</sup> -H <sub>2</sub> N Bonding Interaction with Relevance to Electrocatalytic H <sub>2</sub> Production. <i>Chemistry - A European Journal</i> , 2015, 21, 10338-10347.	1.7	14
33	Frontispiece: Combined Spectroscopic and Electrochemical Detection of a Ni <sup>I</sup> -H <sub>2</sub> N Bonding Interaction with Relevance to Electrocatalytic H <sub>2</sub> Production. <i>Chemistry - A European Journal</i> , 2015, 21, n/a-n/a.	1.7	0
34	Predicting the reactivity of hydride donors in water: thermodynamic constants for hydrogen. <i>Dalton Transactions</i> , 2015, 44, 5933-5938.	1.6	64
35	Nickel phosphine catalysts with pendant amines for electrocatalytic oxidation of alcohols. <i>Chemical Communications</i> , 2015, 51, 6172-6174.	2.2	43
36	Ab Initio-Based Kinetic Modeling for the Design of Molecular Catalysts: The Case of H <sub>2</sub> Production Electrocatalysts. <i>ACS Catalysis</i> , 2015, 5, 5436-5452.	5.5	38

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37	Effects of Phosphine-Carbene Substitutions on the Electrochemical and Thermodynamic Properties of Nickel Complexes. <i>Organometallics</i> , 2014, 33, 2287-2294.	1.1	15
38	Comparison of [Ni(PPh) <sub>2</sub> NPh <sub>2</sub> ](CH <sub>3</sub> CN)] <sup>2+</sup> and [Pd(PPh) <sub>2</sub> NPh <sub>2</sub> ] <sup>2+</sup> as Electrocatalysts for H <sub>2</sub> Production. <i>Organometallics</i> , 2014, 33, 4617-4620.	1.1	13
39	Thermochemical Insight into the Reduction of CO to CH <sub>3</sub> OH with [Re(CO)] <sup>+</sup> and [Mn(CO)] <sup>+</sup> Complexes. <i>Journal of the American Chemical Society</i> , 2014, 136, 8661-8668.	6.6	13
40	Cobalt Complexes Containing Pendant Amines in the Second Coordination Sphere as Electrocatalysts for H <sub>2</sub> Production. <i>Organometallics</i> , 2014, 33, 5820-5833.	1.1	66
41	Synthesis and Electrochemical Studies of Cobalt(III) Monohydride Complexes Containing Pendant Amines. <i>Inorganic Chemistry</i> , 2013, 52, 9975-9988.	1.9	62
42	Thermochemical and Mechanistic Studies of Electrocatalytic Hydrogen Production by Cobalt Complexes Containing Pendant Amines. <i>Inorganic Chemistry</i> , 2013, 52, 14391-14403.	1.9	82
43	Stabilization of Nickel Complexes with NiO <sub>2</sub> -N Bonding Interactions Using Sterically Demanding Cyclic Diphosphine Ligands. <i>Organometallics</i> , 2012, 31, 144-156.	1.1	66
44	Synthesis of Molybdenum Nitrido Complexes for Triple-Bond Metathesis of Alkynes and Nitriles. <i>Inorganic Chemistry</i> , 2011, 50, 5936-5945.	1.9	31
45	Comparison of Cobalt and Nickel Complexes with Sterically Demanding Cyclic Diphosphine Ligands: Electrocatalytic H <sub>2</sub> Production by [Co(P <sup>t</sup> Bu) <sub>2</sub> NPh <sub>2</sub> ](CH <sub>3</sub> CN)] <sup>3+</sup> (BF <sub>4</sub> ) <sup>-</sup> . <i>Organometallics</i> , 2010, 29, 5390-5401.	1.1	105
46	Synthetic, Mechanistic, and Computational Investigations of Nitrile-Alkyne Cross-Metathesis. <i>Journal of the American Chemical Society</i> , 2008, 130, 8984-8999.	6.6	74
47	Catalytic Nitrile-Alkyne Cross-Metathesis. <i>Journal of the American Chemical Society</i> , 2007, 129, 3800-3801.	6.6	55