Eric S Wiedner

List of Publications by Year
in descending order

47	2,012	236612 25	264894 42
papers	citations	h-index	g-index

49	49	49	1946
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Thermodynamic Hydricity of Transition Metal Hydrides. Chemical Reviews, 2016, 116, 8655-8692.	23.0	365
2	Comparison of Cobalt and Nickel Complexes with Sterically Demanding Cyclic Diphosphine Ligands: Electrocatalytic H₂Production by [Co(P^{<i>t</i>}^{Bu}₂N^{Ph}₂)(CH₃CN)₃](BF<sub Organometallics, 2010, 29, 5390-5401.	1.1	105
3	Electrochemical Detection of Transient Cobalt Hydride Intermediates of Electrocatalytic Hydrogen Production. Journal of the American Chemical Society, 2016, 138, 8309-8318.	6.6	89
4	Thermochemical and Mechanistic Studies of Electrocatalytic Hydrogen Production by Cobalt Complexes Containing Pendant Amines. Inorganic Chemistry, 2013, 52, 14391-14403.	1.9	82
5	Reversing the Tradeoff between Rate and Overpotential in Molecular Electrocatalysts for H₂Production. ACS Catalysis, 2018, 8, 3286-3296.	5.5	79
6	Synthetic, Mechanistic, and Computational Investigations of Nitrile-Alkyne Cross-Metathesis. Journal of the American Chemical Society, 2008, 130, 8984-8999.	6.6	74
7	Catalytic N₂ Reduction to Silylamines and Thermodynamics of N₂ Binding at Square Planar Fe. Journal of the American Chemical Society, 2017, 139, 9291-9301.	6.6	72
8	Experimental and Computational Mechanistic Studies Guiding the Rational Design of Molecular Electrocatalysts for Production and Oxidation of Hydrogen. Inorganic Chemistry, 2016, 55, 445-460.	1.9	67
9	Stabilization of Nickel Complexes with Ni0Â·Â·Â·Hâ€"N Bonding Interactions Using Sterically Demanding Cyclic Diphosphine Ligands. Organometallics, 2012, 31, 144-156.	1.1	66
10	Cobalt Complexes Containing Pendant Amines in the Second Coordination Sphere as Electrocatalysts for H₂ Production. Organometallics, 2014, 33, 5820-5833.	1.1	66
11	Predicting the reactivity of hydride donors in water: thermodynamic constants for hydrogen. Dalton Transactions, 2015, 44, 5933-5938.	1.6	64
12	Synthesis and Electrochemical Studies of Cobalt(III) Monohydride Complexes Containing Pendant Amines. Inorganic Chemistry, 2013, 52, 9975-9988.	1.9	62
13	Catalytic Nitrile-Alkyne Cross-Metathesis. Journal of the American Chemical Society, 2007, 129, 3800-3801.	6.6	55
14	Cobalt-Group 13 Complexes Catalyze CO₂ Hydrogenation via a Co(â^'I)/Co(I) Redox Cycle. ACS Catalysis, 2020, 10, 2459-2470.	5.5	55
15	Ammonia Oxidation by Abstraction of Three Hydrogen Atoms from a Moâ€"NH₃ Complex. Journal of the American Chemical Society, 2017, 139, 2916-2919.	6.6	54
16	Kinetic Analysis of Competitive Electrocatalytic Pathways: New Insights into Hydrogen Production with Nickel Electrocatalysts. Journal of the American Chemical Society, 2016, 138, 604-616.	6.6	51
17	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
18	Molecular Catalysts with Diphosphine Ligands Containing Pendant Amines. Chemical Reviews, 2022, 122, 12427-12474.	23.0	48

#	Article	IF	Citations
19	Nickel phosphine catalysts with pendant amines for electrocatalytic oxidation of alcohols. Chemical Communications, 2015, 51, 6172-6174.	2.2	43
20	Understanding the Relationship Between Kinetics and Thermodynamics in CO₂ Hydrogenation Catalysis. ACS Catalysis, 2017, 7, 6008-6017.	5.5	43
21	Changing the Mechanism for CO₂ Hydrogenation Using Solventâ€Dependent Thermodynamics. Angewandte Chemie - International Edition, 2017, 56, 15002-15005.	7.2	42
22	Hydrogenation of CO₂ at Room Temperature and Low Pressure with a Cobalt Tetraphosphine Catalyst. Inorganic Chemistry, 2017, 56, 8580-8589.	1.9	39
23	Ab Initio-Based Kinetic Modeling for the Design of Molecular Catalysts: The Case of H₂ Production Electrocatalysts. ACS Catalysis, 2015, 5, 5436-5452.	5.5	38
24	Synthesis of Molybdenum Nitrido Complexes for Triple-Bond Metathesis of Alkynes and Nitriles. Inorganic Chemistry, 2011, 50, 5936-5945.	1.9	31
25	Design and reactivity of pentapyridyl metal complexes for ammonia oxidation. Chemical Communications, 2019, 55, 5083-5086.	2.2	27
26	Putting chromium on the map for N₂ reduction: production of hydrazine and ammonia. A study of cis-M(N₂)₂ (M = Cr, Mo, W) bis(diphosphine) complexes. Chemical Communications, 2016, 52, 9343-9346.	2.2	26
27	Making a Splash in Homogeneous CO₂ Hydrogenation: Elucidating the Impact of Solvent on Catalytic Mechanisms. Chemistry - A European Journal, 2018, 24, 16964-16971.	1.7	25
28	Electrocatalytic Hydrogen Production by a Nickel Complex Containing a Tetradentate Phosphine Ligand. Organometallics, 2019, 38, 1269-1279.	1.1	25
29	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
30	Impact of Weak Agostic Interactions in Nickel Electrocatalysts for Hydrogen Oxidation. Organometallics, 2017, 36, 2275-2284.	1.1	16
31	Mechanistic Studies on the Insertion of Carbonyl Substrates into Cuâ€H: Different Rateâ€Limiting Steps as a Function of Electrophilicity. Angewandte Chemie - International Edition, 2020, 59, 8645-8653.	7.2	16
32	Effects of Phosphineâ€"Carbene Substitutions on the Electrochemical and Thermodynamic Properties of Nickel Complexes. Organometallics, 2014, 33, 2287-2294.	1.1	15
33	Combined Spectroscopic and Electrochemical Detection of a Ni^Iâ‹…â‹…â‹…Hï£¿N Bonding Interaction with Relevance to Electrocatalytic H₂ Production. Chemistry - A European Journal, 2015, 21, 10338-10347.	1.7	14
34	Comparison of [Ni(P^{Ph}₂N^{Ph}₂)₂(CH₃CN)]²⁺ and [Pd(P^{Ph}₂N^{Ph}₂)₂]²⁺ as Electrocatalysts for H₂ Production. Organometallics, 2014, 33, 4617-4620.	1.1	13
35	Thermochemical Insight into the Reduction of CO to CH3OH with [Re(CO)]+ and [Mn(CO)]+ Complexes. Journal of the American Chemical Society, 2014, 136, 8661-8668.	6.6	13
36	H₂ Oxidation Electrocatalysis Enabled by Metalâ€toâ€Metal Hydrogen Atom Transfer: A Homolytic Approach to a Heterolytic Reaction. Angewandte Chemie - International Edition, 2018, 57, 13523-13527.	7.2	13

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37	Thermodynamic Hydricity of [FeFe]-Hydrogenases. Journal of the American Chemical Society, 2019, 141, 7212-7222.	6.6	12
38	Evaluation of attractive interactions in the second coordination sphere of iron complexes containing pendant amines. Dalton Transactions, 2019, 48, 4867-4878.	1.6	12
39	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
40	Mechanistic Studies on the Insertion of Carbonyl Substrates into Cuâ€H: Different Rateâ€Limiting Steps as a Function of Electrophilicity. Angewandte Chemie, 2020, 132, 8723-8731.	1.6	5
41	Thermodynamic Trends for Reduction of CO by Molecular Complexes. Organometallics, 2021, 40, 2039-2050.	1.1	5
42	Changing the Mechanism for CO 2 Hydrogenation Using Solventâ€Dependent Thermodynamics. Angewandte Chemie, 2017, 129, 15198-15201.	1.6	3
43	Frontispiece: Combined Spectroscopic and Electrochemical Detection of a Niâ‹…â‹…â‹…Hï£¿N Bonding Interaction with Relevance to Electrocatalytic H2Production. Chemistry - A European Journal, 2015, 21, n/a-n/a.	1.7	0
44	Frontispiece: Making a Splash in Homogeneous CO₂ Hydrogenation: Elucidating the Impact of Solvent on Catalytic Mechanisms. Chemistry - A European Journal, 2018, 24, .	1.7	0
45	H 2 Oxidation Electrocatalysis Enabled by Metalâ€toâ€Metal Hydrogen Atom Transfer: A Homolytic Approach to a Heterolytic Reaction. Angewandte Chemie, 2018, 130, 13711-13715.	1.6	0
46	Invited: Approaching Hydrogenase-like Performance with Molecular Electrocatalysts for H2 Production. ECS Meeting Abstracts, 2017, , .	0.0	0
47	Transition Metal Complexes for Catalytic N2 Reduction and NH3 Oxidation: Strategies for Making and Breaking Nâ‰¡N and N-H Bonds. ECS Meeting Abstracts, 2018, , .	0.0	0