

Louise Berben

List of Publications by Year in descending order

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docs citations

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times ranked

2271
citing authors

#	ARTICLE	IF	CITATIONS
1	An Iron Electrocatalyst for Selective Reduction of CO ₂ to Formate in Water: Including Thermochemical Insights. ACS Catalysis, 2015, 5, 7140-7151.	5.5	177
2	Electrocatalytic Hydrogen Production by an Aluminum(III) Complex: Ligand-Based Proton and Electron Transfer. Angewandte Chemie - International Edition, 2015, 54, 11642-11646.	7.2	118
3	Aluminum-Ligand Cooperative N-H Bond Activation and an Example of Dehydrogenative Coupling. Journal of the American Chemical Society, 2013, 135, 9988-9990.	6.6	116
4	Directing the Reactivity of [HFe ₄ N(CO) ₁₂] ⁺ toward H ₂ or CO ₂ Reduction by Understanding the Electrocatalytic Mechanism. Journal of the American Chemical Society, 2011, 133, 18577-18579.	6.6	110
5	Non-innocent ligands. Chemical Communications, 2015, 51, 1553-1554.	2.2	106
6	Catalysis by Aluminum(III) Complexes of Non-Innocent Ligands. Chemistry - A European Journal, 2015, 21, 2734-2742.	1.7	96
7	A Redox Series of Aluminum Complexes: Characterization of Four Oxidation States Including a Ligand Biradical State Stabilized via Exchange Coupling. Journal of the American Chemical Society, 2011, 133, 8662-8672.	6.6	95
8	Making C-H bonds with CO ₂ : production of formate by molecular electrocatalysts. Chemical Communications, 2016, 52, 1768-1777.	2.2	92
9	Tailoring Electrocatalysts for Selective CO ₂ or H ₂ Reduction: Iron Carbonyl Clusters as a Case Study. Inorganic Chemistry, 2016, 55, 378-385.	1.9	81
10	Electrocatalytic Hydrogen Evolution from Water by a Series of Iron Carbonyl Clusters. Inorganic Chemistry, 2013, 52, 12847-12854.	1.9	80
11	Renewable Formate from C-H Bond Formation with CO ₂ : Using Iron Carbonyl Clusters as Electrocatalysts. Accounts of Chemical Research, 2017, 50, 2362-2370.	7.6	78
12	Synthesis of Square-Planar Aluminum(III) Complexes. Angewandte Chemie - International Edition, 2014, 53, 14132-14134.	7.2	66
13	A pendant proton shuttle on [Fe ₄ N(CO) ₁₂] ⁺ alters product selectivity in formate vs. H ₂ production via the hydride [H-Fe ₄ N(CO) ₁₂] ⁺ . Chemical Science, 2016, 7, 2728-2735.	3.7	61
14	Control of Ligand p <i>K_a</i> Values Tunes the Electrocatalytic Dihydrogen Evolution Mechanism in a Redox-Active Aluminum(III) Complex. Inorganic Chemistry, 2017, 56, 8651-8660.	1.9	57
15	Angle-Dependent Electronic Effects in 4,4'-Bipyridine-Bridged Ru ₃ Triangle and Ru ₄ Square Complexes. Inorganic Chemistry, 2006, 45, 6378-6386.	1.9	52
16	Counteractions Direct One- or Two-Electron Oxidation of an Al(III) Complex and Al(III)-Oxo Intermediates Activate C-H Bonds. Journal of the American Chemical Society, 2011, 133, 11865-11867.	6.6	51
17	Reversible Coordination of H ₂ by a Distannyne. Journal of the American Chemical Society, 2018, 140, 590-593.	6.6	50
18	Homoleptic Trimethylsilylacetylide Complexes of Chromium(III), Iron(II), and Cobalt(III): Syntheses, Structures, and Ligand Field Parameters. Inorganic Chemistry, 2005, 44, 8459-8468.	1.9	45

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19	Redox Routes to Substitution of Aluminum(III): Synthesis and Characterization of (IP ₂) ₂ AlX (IP = 1-iminopyridine, X = Cl, Me, SMe.) <i>Tj ETQq1 1 0.784314 rgBT /Overlock 1.9 Tf 50 742 Td (5<</i> 8997-9004.	1.9	40
20	Metal carbonyl clusters of groups 8-10: synthesis and catalysis. <i>Chemical Society Reviews</i> , 2021, 50, 9503-9539.	18.7	40
21	Electrochemical Methods for Assessing Kinetic Factors in the Reduction of CO ₂ to Formate: Implications for Improving Electrocatalyst Design. <i>ACS Catalysis</i> , 2018, 8, 5787-5793.	5.5	38
22	Electrochemical Reduction of N ₂ to NH ₃ at Low Potential by a Molecular Aluminum Complex. <i>Chemistry - A European Journal</i> , 2019, 25, 454-458.	1.7	38
23	Dinitrogen and Acetylide Complexes of Low-Valent Chromium. <i>Inorganic Chemistry</i> , 2008, 47, 4639-4647.	1.9	36
24	A Sterically Demanding Iminopyridine Ligand Affords Redox-Active Complexes of Aluminum(III) and Gallium(III). <i>Inorganic Chemistry</i> , 2012, 51, 1480-1488.	1.9	36
25	Synthesis and characterization of bis(imino)pyridine complexes of divalent Mg and Zn. <i>Dalton Transactions</i> , 2016, 45, 5989-5998.	1.6	35
26	Synthesis and Alkali Metal Ion-Binding Properties of a Chromium(III) Triacetylide Complex. <i>Journal of the American Chemical Society</i> , 2002, 124, 11588-11589.	6.6	33
27	Dispersion-Force-Assisted Disproportionation: A Stable Two-Coordinate Copper(II) Complex. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 10444-10447.	7.2	33
28	Insight into Varied Reaction Pathways for O-H and N-H Bond Activation by Bis(imino)pyridine Complexes of Al(III). <i>Organometallics</i> , 2016, 35, 9-14.	1.1	31
29	Aluminum-Amido-Mediated Heterolytic Addition of Water Affords an Alumoxane. <i>Organometallics</i> , 2013, 32, 6647-6649.	1.1	30
30	(IP) ₂ Ga ^{III} Complexes Facilitate Net Two-Electron Redox Transformations (IP =) <i>Tj ETQq0 0.0 rgBT /Overlock 1.9 Tf 50 742 Td (5<</i>	1.9	29
31	Mixed interlayers at the interface between PEDOT:PSS and conjugated polymers provide charge transport control. <i>Journal of Materials Chemistry C</i> , 2015, 3, 2664-2676.	2.7	26
32	High turnover in electro-oxidation of alcohols and ethers with a glassy carbon-supported phenanthroimidazole mediator. <i>Chemical Science</i> , 2017, 8, 6493-6498.	3.7	24
33	Fast Proton Transfer and Hydrogen Evolution Reactivity Mediated by [Co ₁₃ C ₂ (CO) ₂₄] ⁴⁻ . <i>Journal of the American Chemical Society</i> , 2020, 142, 12299-12305.	6.6	23
34	A redox series of gallium(III) complexes: ligand-based two-electron oxidation affords a gallium-thiolate complex. <i>Dalton Transactions</i> , 2012, 41, 7969.	1.6	22
35	High work-function hole transport layers by self-assembly using a fluorinated additive. <i>Journal of Materials Chemistry C</i> , 2014, 2, 115-123.	2.7	21
36	Organic Electron Delocalization Modulated by Ligand Charge States in [L ₂ M] ⁿ⁺ Complexes of Group 13 Ions. <i>Journal of the American Chemical Society</i> , 2019, 141, 15792-15803.	6.6	20

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37	Syntheses of Square Planar Gallium Complexes and a Proton NMR Correlation Probing Metalloaromaticity. <i>Inorganic Chemistry</i> , 2020, 59, 13517-13523.	1.9	20
38	Secondary Coordination Sphere Design to Modify Transport of Protons and CO ₂ . <i>Inorganic Chemistry</i> , 2019, 58, 16849-16857.	1.9	19
39	Redox-Induced Carbon-Carbon Bond Formation by Using Noninnocent Ligands. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 3831-3835.	1.0	18
40	Considering a Possible Role for [H-Fe ₄ N(CO) ₁₂] ²⁺ in Selective Electrocatalytic CO ₂ Reduction to Formate by [Fe ₄ N(CO) ₁₂] ⁺ . <i>Organometallics</i> , 2018, 37, 1087-1091.	1.1	15
41	New Characterization of V{N(SiMe ₃) ₂ } ₃ : Reductions of Tris[bis(trimethylsilyl)amido]vanadium(III) and -chromium(III) To Afford the Reduced Metal(II) Anions [M{N(SiMe ₃) ₂ } ₃] ⁻ (M = V and Cr). <i>Inorganic Chemistry</i> , 2019, 58, 6095-6101.	1.9	15
42	Electrocatalytic Reduction of CO ₂ into Formate with Glassy Carbon Modified by [Fe ₄ N(CO) ₁₁ (PPh ₂ Ph-linker)] ⁺ . <i>Organometallics</i> , 2019, 38, 1230-1235.	1.1	14
43	Synthesis and characterization of a decacobalt carbonyl cluster with two semi-interstitial phosphorus atoms. <i>Dalton Transactions</i> , 2003, , 2119.	1.6	12
44	Formation of a Stable Complex, RuCl ₂ (S ₂ CPPh ₃)(PPh ₃) ₂ , Containing an Unstable Zwitterion from the Reaction of RuCl ₂ (PPh ₃) ₃ with Carbon Disulfide. <i>Inorganic Chemistry</i> , 2015, 54, 4565-4573.	1.9	12
45	Mild Reduction Route to a Redox-Active Silicon Complex: Structure and Properties of (IP ⁺) ₂ Si and (IP ⁺) ₂ Mg(THF) (IP = \hat{I} -Iminopyridine). <i>Organometallics</i> , 2012, 31, 3463-3465.	1.1	10
46	Dispersion-Force-Assisted Disproportionation: A Stable Two-Coordinate Copper(II) Complex. <i>Angewandte Chemie</i> , 2016, 128, 10600-10603.	1.6	10
47	Quantification of the Electrostatic Effect on Redox Potential by Positive Charges in a Catalyst Microenvironment. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 3066-3073.	2.1	8
48	Cobalt Carbonyl Clusters Enable Independent Control of Two Proton Transfer Rates in the Mechanism for Hydrogen Evolution. <i>ChemElectroChem</i> , 2021, 8, 2488-2494.	1.7	8
49	Quantum chemical studies of redox properties and conformational changes of a four-center iron CO ₂ reduction electrocatalyst. <i>Chemical Science</i> , 2018, 9, 2645-2654.	3.7	6
50	Delocalization tunable by ligand substitution in [L ₂ Al] ⁿ⁺ complexes highlights a mechanism for strong electronic coupling. <i>Chemical Science</i> , 2021, 12, 675-682.	3.7	5
51	A Stable Organo-Aluminum Analyte Enables Multielectron Storage for a Nonaqueous Redox Flow Battery. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8202-8207.	2.1	4
52	Ligand Conjugation Directs the Formation of a 1,3-Dihydropyridinate Regioisomer. <i>Inorganic Chemistry</i> , 2020, 59, 17614-17619.	1.9	4
53	Breaking Scaling Relationships in CO ₂ Electroreduction with Isolelectronic Analogs [Fe ₄ N(CO) ₁₂] ⁺ and [Fe ₃ MnO(CO) ₁₂] ⁺ . <i>Organometallics</i> , 2020, 39, 1658-1663.	1.1	4
54	Aluminum-Ligand Cooperative O-H Bond Activation Initiates Catalytic Transfer Hydrogenation. <i>ChemCatChem</i> , 2022, 14, .	1.8	4

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55	Metal-mediated transformations of small molecules. <i>Chemical Communications</i> , 2014, 50, 7221.	2.2	3
56	Control of Substrates Beyond the Catalyst Active Site. <i>ACS Central Science</i> , 2019, 5, 1485-1487.	5.3	2
57	A Ligand Protonation Series in Aluminum(III) Complexes of Tridentate Bis(enol)amine Ligand. <i>Organometallics</i> , 2018, 37, 4527-4533.	1.1	1
58	Synthesis of Unsupported Primary Phosphido Complexes of Aluminum(III). <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2021, 647, 1824-1829.	0.6	1
59	Frontispiz: Electrocatalytic Hydrogen Production by an Aluminum(III) Complex: Ligand-Based Proton and Electron Transfer. <i>Angewandte Chemie</i> , 2015, 127, n/a-n/a.	1.6	0
60	Frontispiece: Electrocatalytic Hydrogen Production by an Aluminum(III) Complex: Ligand-Based Proton and Electron Transfer. <i>Angewandte Chemie - International Edition</i> , 2015, 54, .	7.2	0
61	Frontispiece: Electrochemical Reduction of N ₂ to NH ₃ at Low Potential by a Molecular Aluminum Complex. <i>Chemistry - A European Journal</i> , 2019, 25, .	1.7	0
62	Cover Feature: Aluminum-Ligand Cooperative O-H Bond Activation Initiates Catalytic Transfer Hydrogenation (<i>ChemCatChem</i> 13/2022). <i>ChemCatChem</i> , 2022, 14, .	1.8	0