

Jenny Y Yang

List of Publications by Year in descending order

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71
papers

3,812
citations

109321

35
h-index

123424

61
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82
all docs

82
docs citations

82
times ranked

3155
citing authors

#	ARTICLE	IF	CITATIONS
1	Using nature's blueprint to expand catalysis with Earth-abundant metals. <i>Science</i> , 2020, 369, .	12.6	306
2	Hydrogen production using cobalt-based molecular catalysts containing a proton relay in the second coordination sphere. <i>Energy and Environmental Science</i> , 2008, 1, 167.	30.8	164
3	Mechanistic Insights into Catalytic H ₂ Oxidation by Ni Complexes Containing a Diphosphine Ligand with a Positioned Amine Base. <i>Journal of the American Chemical Society</i> , 2009, 131, 5935-5945.	13.7	161
4	Moving Protons with Pendant Amines: Proton Mobility in a Nickel Catalyst for Oxidation of Hydrogen. <i>Journal of the American Chemical Society</i> , 2011, 133, 14301-14312.	13.7	151
5	Bioinspiration in light harvesting and catalysis. <i>Nature Reviews Materials</i> , 2020, 5, 828-846.	48.7	136
6	Reversible Electrocatalytic Production and Oxidation of Hydrogen at Low Overpotentials by a Functional Hydrogenase Mimic. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 3152-3155.	13.8	128
7	High-Nuclearity Metal-Cyanide Clusters: Synthesis, Magnetic Properties, and Inclusion Behavior of Open-Cage Species Incorporating [(tach)M(CN) ₃] (M = Cr, Fe, Co) Complexes. <i>Inorganic Chemistry</i> , 2003, 42, 1403-1419.	4.0	125
8	Proton Delivery and Removal in [Ni(P ^R) ₂ N ^R] ²⁺ Hydrogen Production and Oxidation Catalysts. <i>Journal of the American Chemical Society</i> , 2012, 134, 19409-19424.	13.7	122
9	Two Pathways for Electrocatalytic Oxidation of Hydrogen by a Nickel Bis(diphosphine) Complex with Pendant Amines in the Second Coordination Sphere. <i>Journal of the American Chemical Society</i> , 2013, 135, 9700-9712.	13.7	119
10	Hydrogen oxidation catalysis by a nickel diphosphine complex with pendant tert-butyl amines. <i>Chemical Communications</i> , 2010, 46, 8618.	4.1	107
11	Electrocatalytic Oxidation of Formate by [Ni(P ^R) ₂ N ^R](CH ₃ CN) ²⁺ Complexes. <i>Journal of the American Chemical Society</i> , 2011, 133, 12767-12779.	13.7	107
12	Comparison of Cobalt and Nickel Complexes with Sterically Demanding Cyclic Diphosphine Ligands: Electrocatalytic H ₂ Production by [Co(P ^t) ₂ N ^{Ph}](CH ₃ CN) ₃ (BF ₄) ⁻ Organometallics, 2010, 29, 5390-5401.	2.3	105
13	[Ni(P ^{Ph}) ₂ N ^{Bn}](CH ₃ CN) ²⁺ as an Electrocatalyst for H ₂ Production: Dependence on Acid Strength and Isomer Distribution. <i>ACS Catalysis</i> , 2011, 1, 777-785.	11.2	104
14	Distant protonated pyridine groups in water-soluble iron porphyrin electrocatalysts promote selective oxygen reduction to water. <i>Chemical Communications</i> , 2012, 48, 11100.	4.1	104
15	Electrocatalytic Hydrogen Evolution under Acidic Aqueous Conditions and Mechanistic Studies of a Highly Stable Molecular Catalyst. <i>Journal of the American Chemical Society</i> , 2016, 138, 14174-14177.	13.7	92
16	Directing the reactivity of metal hydrides for selective CO ₂ reduction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 12686-12691.	7.1	87
17	Thermodynamic Considerations for Optimizing Selective CO ₂ Reduction by Molecular Catalysts. <i>ACS Central Science</i> , 2019, 5, 580-588.	11.3	86
18	Reduction of oxygen catalyzed by nickel diphosphine complexes with positioned pendant amines. <i>Dalton Transactions</i> , 2010, 39, 3001.	3.3	82

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19	Redox Potential and Electronic Structure Effects of Proximal Nonredox Active Cations in Cobalt Schiff Base Complexes. <i>Inorganic Chemistry</i> , 2017, 56, 3713-3718.	4.0	80
20	Incorporation of redox-inactive cations promotes iron catalyzed aerobic C-H oxidation at mild potentials. <i>Chemical Science</i> , 2018, 9, 2567-2574.	7.4	77
21	Solvation Effects on Transition Metal Hydricity. <i>Journal of the American Chemical Society</i> , 2015, 137, 14114-14121.	13.7	75
22	Uniting biological and chemical strategies for selective CO ₂ reduction. <i>Nature Catalysis</i> , 2021, 4, 928-933.	34.4	72
23	Incorporation of Hydrogen-Bonding Functionalities into the Second Coordination Sphere of Iron-Based Water-Oxidation Catalysts. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 3846-3857.	2.0	70
24	Fast and efficient molecular electrocatalysts for H ₂ production: Using hydrogenase enzymes as guides. <i>MRS Bulletin</i> , 2011, 36, 39-47.	3.5	67
25	Electric Fields in Catalysis: From Enzymes to Molecular Catalysts. <i>ACS Catalysis</i> , 2021, 11, 10923-10932.	11.2	67
26	Catalase and Epoxidation Activity of Manganese Salen Complexes Bearing Two Xanthene Scaffolds. <i>Journal of the American Chemical Society</i> , 2007, 129, 8192-8198.	13.7	66
27	Stabilization of Nickel Complexes with NiO π -N Bonding Interactions Using Sterically Demanding Cyclic Diphosphine Ligands. <i>Organometallics</i> , 2012, 31, 144-156.	2.3	66
28	Cationic Charges Leading to an Inverse Free-Energy Relationship for N π Bond Formation by Mn ^{VI} Nitrides. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 14037-14042.	13.8	59
29	Installation of internal electric fields by non-redox active cations in transition metal complexes. <i>Chemical Science</i> , 2019, 10, 10135-10142.	7.4	55
30	Reducing CO ₂ to HCO ₂ ⁻ at Mild Potentials: Lessons from Formate Dehydrogenase. <i>Journal of the American Chemical Society</i> , 2020, 142, 19438-19445.	13.7	55
31	Promoting proton coupled electron transfer in redox catalysts through molecular design. <i>Chemical Communications</i> , 2019, 55, 10342-10358.	4.1	51
32	Reactivity of a Series of Isostructural Cobalt Pincer Complexes with CO ₂ , CO, and H ₂ . <i>Inorganic Chemistry</i> , 2014, 53, 13031-13041.	4.0	41
33	Reversible and Selective CO ₂ to HCO ₂ ⁻ Electrocatalysis near the Thermodynamic Potential. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 4443-4447.	13.8	40
34	Mechanistic Studies of Hangman Salophen-Mediated Activation of O π Bonds. <i>Inorganic Chemistry</i> , 2006, 45, 7572-7574.	4.0	39
35	Interfacial Electron Transfer of Ferrocene Immobilized onto Indium Tin Oxide through Covalent and Noncovalent Interactions. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 13211-13217.	8.0	37
36	Hangman Salen Platforms Containing Two Xanthene Scaffolds. <i>Journal of Organic Chemistry</i> , 2006, 71, 8706-8714.	3.2	35

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37	Spin-state diversity in a series of Co(II) PNP pincer bromide complexes. Dalton Transactions, 2016, 45, 17910-17917.	3.3	32
38	Inhibiting the Hydrogen Evolution Reaction (HER) with Proximal Cations: A Strategy for Promoting Selective Electrocatalytic Reduction. ACS Catalysis, 2021, 11, 8155-8164.	11.2	32
39	Electronic and steric Tolman parameters for proazaphosphatranes, the superbase core of the tri(pyridylmethyl)azaphosphatrane (TPAP) ligand. Dalton Transactions, 2016, 45, 9853-9859.	3.3	30
40	CO ₂ reduction or HCO ₂ ⁻ oxidation? Solvent-dependent thermochemistry of a nickel hydride complex. Chemical Communications, 2017, 53, 7405-7408.	4.1	30
41	Intramolecular hydrogen-bonding in a cobalt aqua complex and electrochemical water oxidation activity. Chemical Science, 2018, 9, 2750-2755.	7.4	27
42	Electrochemical studies of tris(cyclopentadienyl)thorium and uranium complexes in the +2, +3, and +4 oxidation states. Chemical Science, 2021, 12, 8501-8511.	7.4	25
43	Highly Selective Electrocatalytic CO ₂ Reduction by [Pt(dmpe) ₂] ²⁺ through Kinetic and Thermodynamic Control. Organometallics, 2020, 39, 1491-1496.	2.3	20
44	Cationic Effects on the Net Hydrogen Atom Bond Dissociation Free Energy of High-Valent Manganese Imido Complexes. Journal of the American Chemical Society, 2022, 144, 1503-1508.	13.7	20
45	Hangman Salen Platforms Containing Dibenzofuran Scaffolds. ChemSusChem, 2008, 1, 941-949.	6.8	18
46	Flexibility is Key: Synthesis of a Tripyridylamine (TPA) Congener with a Phosphorus Apical Donor and Coordination to Cobalt(II). Inorganic Chemistry, 2015, 54, 11505-11510.	4.0	18
47	Chemical modification of gold electrodes via non-covalent interactions. Inorganic Chemistry Frontiers, 2016, 3, 836-841.	6.0	18
48	Proton-Coupled Electron Transfer at Anthraquinone Modified Indium Tin Oxide Electrodes. ACS Applied Energy Materials, 2019, 2, 59-65.	5.1	16
49	Kinetic and mechanistic analysis of a synthetic reversible CO ₂ /HCO ₂ ⁻ electrocatalyst. Chemical Communications, 2020, 56, 12965-12968.	4.1	16
50	pH-Dependent Reactivity of a Water-Soluble Nickel Complex: Hydrogen Evolution vs Selective Electrochemical Hydride Generation. Organometallics, 2019, 38, 1286-1291.	2.3	14
51	Single molecule magnet behaviour in a square planar S = 1/2 Co(II) complex and spin-state assignment of multiple relaxation modes. Chemical Communications, 2020, 56, 6711-6714.	4.1	14
52	From Pollutant to Chemical Feedstock: Valorizing Carbon Dioxide through Photo- and Electrochemical Processes. Accounts of Chemical Research, 2022, 55, 931-932.	15.6	13
53	Adaptable ligand donor strength: tracking transannular bond interactions in tris(2-pyridylmethyl)-azaphosphatrane (TPAP). Dalton Transactions, 2018, 47, 14101-14110.	3.3	12
54	SDS-modified Nanoporous Silver as an Efficient Electrocatalyst for Selectively Converting CO ₂ to CO in Aqueous Solution. Chinese Journal of Chemistry, 2019, 37, 337-341.	4.9	12

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55	Manganese amido-imine bisphenol Hangman complexes. <i>Tetrahedron Letters</i> , 2008, 49, 4796-4798.	1.4	11
56	Synthesis and redox properties of heterobimetallic $\text{Re}(\text{bpyCrown-M})(\text{CO})_3\text{Cl}$ complexes, where $\text{M}^{\text{A}} = \text{Na}^+$, K^+ , Ca^{2+} , and Ba^{2+} . <i>Polyhedron</i> , 2021, 208, 115385.	2.2	10
57	Electrochemical Characterization of Isolated Nitrogenase Cofactors from <i>Azotobacter vinelandii</i> . <i>ChemBioChem</i> , 2020, 21, 1773-1778.	2.6	9
58	Decoupling Kinetics and Thermodynamics of Interfacial Catalysis at a Chemically Modified Black Silicon Semiconductor Photoelectrode. <i>ACS Energy Letters</i> , 2020, 5, 1848-1855.	17.4	8
59	Inverse molecular design of alkoxides and phenoxides for aqueous direct air capture of CO_2 . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	8
60	For CO_2 Reduction, Hydrogen-Bond Donors Do the Trick. <i>ACS Central Science</i> , 2018, 4, 315-317.	11.3	7
61	Cationic Charges Leading to an Inverse Free Energy Relationship for $\text{N}^{\text{A}}\text{-N}$ Bond Formation by Mn VI Nitrides. <i>Angewandte Chemie</i> , 2018, 130, 14233-14238.	2.0	7
62	NGenE 2021: Electrochemistry Is Everywhere. <i>ACS Energy Letters</i> , 2022, 7, 368-374.	17.4	6
63	Stabilization of U(III) to Oxidation and Hydrolysis by Encapsulation Using 2.2.2-Cryptand. <i>Inorganic Chemistry</i> , 2020, 59, 17077-17083.	4.0	5
64	Copper tetradentate N_2Py_2 complexes with pendant bases in the secondary coordination sphere: improved ligand synthesis and protonation studies. <i>Journal of Coordination Chemistry</i> , 2016, 69, 1990-2002.	2.2	4
65	Crystal structure of $\text{NiFe}(\text{CO})_5$ [tris(pyridylmethyl)azaphosphatrane]: a synthetic mimic of the NiFe hydrogenase active site incorporating a pendant pyridine base. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2019, 75, 438-442.	0.5	4
66	Molecular Insights into Heterogeneous Processes in Energy Storage and Conversion. <i>ACS Energy Letters</i> , 2019, 4, 2201-2204.	17.4	3
67	Checking in with Women Materials Scientists During a Global Pandemic: May 2020. <i>Chemistry of Materials</i> , 2020, 32, 4859-4862.	6.7	3
68	Reversible and Selective CO_2 to HCO_2^- Electrocatalysis near the Thermodynamic Potential. <i>Angewandte Chemie</i> , 2020, 132, 4473-4477.	2.0	1
69	Selective Electrocatalytic Reduction of CO_2 to HCO_2^- . <i>Trends in Chemistry</i> , 2020, 2, 401-402.	8.5	0
70	Modular synthesis of symmetric proazaphosphatranes bearing heteroatom groups. <i>Tetrahedron Letters</i> , 2020, 61, 152056.	1.4	0
71	Heterogeneous Interfaces through the Lens of Inorganic Chemistry. <i>Inorganic Chemistry</i> , 2021, 60, 6853-6854.	4.0	0