Jenny Y Yang

List of Publications by Year
in descending order

71 papers	3,812 citations	109137 35 h-index	123241 61 g-index
82 all docs	82 docs citations	82 times ranked	3155 citing authors

#	Article	IF	Citations
1	Using natureâ€™s blueprint to expand catalysis with Earth-abundant metals. Science, 2020, 369, .	6.0	306
2	Hydrogen production using cobalt-based molecular catalysts containing a proton relay in the second coordination sphere. Energy and Environmental Science, 2008, 1, 167.	15.6	164
3	Mechanistic Insights into Catalytic H₂ Oxidation by Ni Complexes Containing a Diphosphine Ligand with a Positioned Amine Base. Journal of the American Chemical Society, 2009, 131, 5935-5945.	6.6	161
4	Moving Protons with Pendant Amines: Proton Mobility in a Nickel Catalyst for Oxidation of Hydrogen. Journal of the American Chemical Society, 2011, 133, 14301-14312.	6.6	151
5	Bioinspiration in light harvesting and catalysis. Nature Reviews Materials, 2020, 5, 828-846.	23.3	136
6	Reversible Electrocatalytic Production and Oxidation of Hydrogen at Low Overpotentials by a Functional Hydrogenase Mimic. Angewandte Chemie - International Edition, 2012, 51, 3152-3155.	7.2	128
7	High-Nuclearity Metalâ"Cyanide Clusters:Â Synthesis, Magnetic Properties, and Inclusion Behavior of Open-Cage Species Incorporating [(tach)M(CN)3] (M = Cr, Fe, Co) Complexes. Inorganic Chemistry, 2003, 42, 1403-1419.	1.9	125
8	Proton Delivery and Removal in [Ni(P^R₂N^{R^{â€²}}₂)₂]²⁺ Hydrogen Production and Oxidation Catalysts. Journal of the American Chemical Society, 2012, 134, 19409-19424.	6.6	122
9	Two Pathways for Electrocatalytic Oxidation of Hydrogen by a Nickel Bis(diphosphine) Complex with Pendant Amines in the Second Coordination Sphere. Journal of the American Chemical Society, 2013, 135, 9700-9712.	6.6	119
10	Hydrogen oxidation catalysis by a nickel diphosphine complex with pendant tert-butyl amines. Chemical Communications, 2010, 46, 8618.	2.2	107
11	Electrocatalytic Oxidation of Formate by [Ni(P^R₂N^{Râ€²}₂)₂(CH₃CN)]²⁺ Complexes. Journal of the American Chemical Society, 2011, 133, 12767-12779.	6.6	107
12	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
13	[Ni(P^{Ph}₂N^{Bn}₂)₂(CH₃CN)]²⁺ as an Electrocatalyst for H₂ Production: Dependence on Acid Strength and Isomer Distribution. ACS Catalysis, 2011, 1, 777-785.	5.5	104
14	Distant protonated pyridine groups in water-soluble iron porphyrin electrocatalysts promote selective oxygen reduction to water. Chemical Communications, 2012, 48, 11100.	2.2	104
15	Electrocatalytic Hydrogen Evolution under Acidic Aqueous Conditions and Mechanistic Studies of a Highly Stable Molecular Catalyst. Journal of the American Chemical Society, 2016, 138, 14174-14177.	6.6	92
16	Directing the reactivity of metal hydrides for selective CO ₂ reduction. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12686-12691.	3.3	87
17	Thermodynamic Considerations for Optimizing Selective CO₂ Reduction by Molecular Catalysts. ACS Central Science, 2019, 5, 580-588.	5.3	86
18	Reduction of oxygen catalyzed by nickel diphosphine complexes with positioned pendant amines. Dalton Transactions, 2010, 39, 3001.	1.6	82

#	Article	IF	Citations
19	Redox Potential and Electronic Structure Effects of Proximal Nonredox Active Cations in Cobalt Schiff Base Complexes. Inorganic Chemistry, 2017, 56, 3713-3718.	1.9	80
20	Incorporation of redox-inactive cations promotes iron catalyzed aerobic Câ€“H oxidation at mild potentials. Chemical Science, 2018, 9, 2567-2574.	3.7	77
21	Solvation Effects on Transition Metal Hydricity. Journal of the American Chemical Society, 2015, 137, 14114-14121.	6.6	75
22	Uniting biological and chemical strategies for selective CO2 reduction. Nature Catalysis, 2021, 4, 928-933.	16.1	72
23	Incorporation of Hydrogenâ€Bonding Functionalities into the Second Coordination Sphere of Ironâ€Based Waterâ€Oxidation Catalysts. European Journal of Inorganic Chemistry, 2013, 2013, 3846-3857.	1.0	70
24	Fast and efficient molecular electrocatalysts for H₂ production: Using hydrogenase enzymes as guides. MRS Bulletin, 2011, 36, 39-47.	1.7	67
25	Electric Fields in Catalysis: From Enzymes to Molecular Catalysts. ACS Catalysis, 2021, 11, 10923-10932.	5.5	67
26	Catalase and Epoxidation Activity of Manganese Salen Complexes Bearing Two Xanthene Scaffolds. Journal of the American Chemical Society, 2007, 129, 8192-8198.	6.6	66
27	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
28	Cationic Charges Leading to an Inverse Freeâ€Energy Relationship for Nâˆ’N Bond Formation by Mn^{VI} Nitrides. Angewandte Chemie - International Edition, 2018, 57, 14037-14042.	7.2	59
29	Installation of internal electric fields by non-redox active cations in transition metal complexes. Chemical Science, 2019, 10, 10135-10142.	3.7	55
30	Reducing CO₂ to HCO₂^{â€“} at Mild Potentials: Lessons from Formate Dehydrogenase. Journal of the American Chemical Society, 2020, 142, 19438-19445.	6.6	55
31	Promoting proton coupled electron transfer in redox catalysts through molecular design. Chemical Communications, 2019, 55, 10342-10358.	2.2	51
32	Reactivity of a Series of Isostructural Cobalt Pincer Complexes with CO₂, CO, and H⁺. Inorganic Chemistry, 2014, 53, 13031-13041.	1.9	41
33	Reversible and Selective CO₂ to HCO₂^{âˆ’} Electrocatalysis near the Thermodynamic Potential. Angewandte Chemie - International Edition, 2020, 59, 4443-4447.	7.2	40
34	Mechanistic Studies of Hangman Salophen-Mediated Activation of Oâˆ’O Bonds. Inorganic Chemistry, 2006, 45, 7572-7574.	1.9	39
35	Interfacial Electron Transfer of Ferrocene Immobilized onto Indium Tin Oxide through Covalent and Noncovalent Interactions. ACS Applied Materials & Interfaces, 2018, 10, 13211-13217.	4.0	37
36	Hangman Salen Platforms Containing Two Xanthene Scaffolds. Journal of Organic Chemistry, 2006, 71, 8706-8714.	1.7	35

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37	Spin-state diversity in a series of Co(<scp>ii</scp>) PNP pincer bromide complexes. Dalton Transactions, 2016, 45, 17910-17917.	1.6	32
38	Inhibiting the Hydrogen Evolution Reaction (HER) with Proximal Cations: A Strategy for Promoting Selective Electrocatalytic Reduction. ACS Catalysis, 2021, 11, 8155-8164.	5.5	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.	1.6	30
40	CO₂ reduction or HCO₂^{âˆ’} oxidation? Solvent-dependent thermochemistry of a nickel hydride complex. Chemical Communications, 2017, 53, 7405-7408.	2.2	30
41	Intramolecular hydrogen-bonding in a cobalt aqua complex and electrochemical water oxidation activity. Chemical Science, 2018, 9, 2750-2755.	3.7	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.	3.7	25
43	Highly Selective Electrocatalytic CO₂ Reduction by [Pt(dmpe)₂]²⁺ through Kinetic and Thermodynamic Control. Organometallics, 2020, 39, 1491-1496.	1.1	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.	6.6	20
45	Hangman Salen Platforms Containing Dibenzofuran Scaffolds. ChemSusChem, 2008, 1, 941-949.	3.6	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.	1.9	18
47	Chemical modification of gold electrodes via non-covalent interactions. Inorganic Chemistry Frontiers, 2016, 3, 836-841.	3.0	18
48	Proton-Coupled Electron Transfer at Anthraquinone Modified Indium Tin Oxide Electrodes. ACS Applied Energy Materials, 2019, 2, 59-65.	2.5	16
49	Kinetic and mechanistic analysis of a synthetic reversible CO₂/HCO₂^{âˆ’} electrocatalyst. Chemical Communications, 2020, 56, 12965-12968.	2.2	16
50	pH-Dependent Reactivity of a Water-Soluble Nickel Complex: Hydrogen Evolution vs Selective Electrochemical Hydride Generation. Organometallics, 2019, 38, 1286-1291.	1.1	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.	2.2	14
52	From Pollutant to Chemical Feedstock: Valorizing Carbon Dioxide through Photo- and Electrochemical Processes. Accounts of Chemical Research, 2022, 55, 931-932.	7.6	13
53	Adaptable ligand donor strength: tracking transannular bond interactions in tris(2-pyridylmethyl)-azaphosphatrane (TPAP). Dalton Transactions, 2018, 47, 14101-14110.	1.6	12
54	SDSâ€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.	2.6	12

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55	Manganese amido-imine bisphenol Hangman complexes. Tetrahedron Letters, 2008, 49, 4796-4798.	0.7	11
56	Synthesis and redox properties of heterobimetallic Re(bpyCrown-M)(CO)3Cl complexes, where MÂ=ÂNa+, K+, Ca2+, and Ba2+. Polyhedron, 2021, 208, 115385.	1.0	10
57	Electrochemical Characterization of Isolated Nitrogenase Cofactors from <i>Azotobacter vinelandii</i>. ChemBioChem, 2020, 21, 1773-1778.	1.3	9
58	Decoupling Kinetics and Thermodynamics of Interfacial Catalysis at a Chemically Modified Black Silicon Semiconductor Photoelectrode. ACS Energy Letters, 2020, 5, 1848-1855.	8.8	8
59	Inverse molecular design of alkoxides and phenoxides for aqueous direct air capture of CO ₂. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	8
60	For CO2 Reduction, Hydrogen-Bond Donors Do the Trick. ACS Central Science, 2018, 4, 315-317.	5.3	7
61	Cationic Charges Leading to an Inverse Freeâ€Energy Relationship for Nâ"N Bond Formation by Mn VI Nitrides. Angewandte Chemie, 2018, 130, 14233-14238.	1.6	7
62	NGenE 2021: Electrochemistry Is Everywhere. ACS Energy Letters, 2022, 7, 368-374.	8.8	6
63	Stabilization of U(III) to Oxidation and Hydrolysis by Encapsulation Using 2.2.2-Cryptand. Inorganic Chemistry, 2020, 59, 17077-17083.	1.9	5
64	Copper tetradentate N2Py2 complexes with pendant bases in the secondary coordination sphere: improved ligand synthesis and protonation studies. Journal of Coordination Chemistry, 2016, 69, 1990-2002.	0.8	4
65	Crystal structure of NiFe(CO)₅[tris(pyridylmethyl)azaphosphatrane]: a synthetic mimic of the NiFe hydrogenase active site incorporating a pendant pyridine base. Acta Crystallographica Section E: Crystallographic Communications, 2019, 75, 438-442.	0.2	4
66	Molecular Insights into Heterogeneous Processes in Energy Storage and Conversion. ACS Energy Letters, 2019, 4, 2201-2204.	8.8	3
67	Checking in with Women Materials Scientists During a Global Pandemic: May 2020. Chemistry of Materials, 2020, 32, 4859-4862.	3.2	3
68	Reversible and Selective CO 2 to HCO 2 â" Electrocatalysis near the Thermodynamic Potential. Angewandte Chemie, 2020, 132, 4473-4477.	1.6	1
69	Selective Electrocatalytic Reduction of CO2 to HCO2â". Trends in Chemistry, 2020, 2, 401-402.	4.4	0
70	Modular synthesis of symmetric proazaphosphatranes bearing heteroatom groups. Tetrahedron Letters, 2020, 61, 152056.	0.7	0
71	Heterogeneous Interfaces through the Lens of Inorganic Chemistry. Inorganic Chemistry, 2021, 60, 6853-6854.	1.9	0