Nilay Hazari

List of Publications by Year
in descending order

107 papers	7,600 citations	46918 47 h-index	53109 85 g-index
113 all docs	113 docs citations	113 times ranked	6800 citing authors

#	Article	IF	Citations
1	Polymer bulk heterojunction solar cells employing FÃ¶rster resonance energy transfer. Nature Photonics, 2013, 7, 479-485.	15.6	389
2	Secondary Coordination Sphere Interactions Facilitate the Insertion Step in an Iridium(III) CO₂ Reduction Catalyst. Journal of the American Chemical Society, 2011, 133, 9274-9277.	6.6	388
3	Lewis Acid-Assisted Formic Acid Dehydrogenation Using a Pincer-Supported Iron Catalyst. Journal of the American Chemical Society, 2014, 136, 10234-10237.	6.6	377
4	Well-defined nickel and palladium precatalysts for cross-coupling. Nature Reviews Chemistry, 2017, 1, .	13.8	331
5	Well-Defined Iron Catalysts for the Acceptorless Reversible Dehydrogenation-Hydrogenation of Alcohols and Ketones. ACS Catalysis, 2014, 4, 3994-4003.	5.5	330
6	Iridium-Catalyzed Hydrogenation of N-Heterocyclic Compounds under Mild Conditions by an Outer-Sphere Pathway. Journal of the American Chemical Society, 2011, 133, 7547-7562.	6.6	296
7	Iron catalyzed CO₂hydrogenation to formate enhanced by Lewis acid co-catalysts. Chemical Science, 2015, 6, 4291-4299.	3.7	285
8	Opportunities and Challenges for Catalysis in Carbon Dioxide Utilization. ACS Catalysis, 2019, 9, 7937-7956.	5.5	271
9	Cross-Coupling and Related Reactions: Connecting Past Success to the Development of New Reactions for the Future. Organometallics, 2019, 38, 3-35.	1.1	267
10	Homogeneous iron complexes for the conversion of dinitrogen into ammonia and hydrazine. Chemical Society Reviews, 2010, 39, 4044.	18.7	227
11	Reversible Hydrogenation of Carbon Dioxide to Formic Acid and Methanol: Lewis Acid Enhancement of Base Metal Catalysts. Accounts of Chemical Research, 2017, 50, 1049-1058.	7.6	207
12	Base-Free Methanol Dehydrogenation Using a Pincer-Supported Iron Compound and Lewis Acid Co-catalyst. ACS Catalysis, 2015, 5, 2404-2415.	5.5	184
13	Design of a Versatile and Improved Precatalyst Scaffold for Palladium-Catalyzed Cross-Coupling: (Î·³-1-^tBu-indenyl)₂(Î¼-Cl)₂Pd₂. ACS Catalysis, 2015, 5, 3680-3688.	5.5	133
14	Palladium(I)-Bridging Allyl Dimers for the Catalytic Functionalization of CO₂. Journal of the American Chemical Society, 2011, 133, 3280-3283.	6.6	131
15	Experimental and Computational Studies of the Reaction of Carbon Dioxide with Pincer-Supported Nickel and Palladium Hydrides. Organometallics, 2012, 31, 8225-8236.	1.1	130
16	Mechanistic Study of an Improved Ni Precatalyst for Suzukiâ€“Miyaura Reactions of Aryl Sulfamates: Understanding the Role of Ni(I) Species. Journal of the American Chemical Society, 2017, 139, 922-936.	6.6	130
17	An Iridium(IV) Species, [Cp*Ir(NHC)Cl]⁺, Related to a Water-Oxidation Catalyst. Organometallics, 2011, 30, 965-973.	1.1	127
18	Exploring the reactions of CO₂with PCP supported nickel complexes. Chemical Communications, 2011, 47, 1824-1826.	2.2	117

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19	Insight into the Efficiency of Cinnamyl-Supported Precatalysts for the Suzukiâ€“Miyaura Reaction: Observation of Pd(I) Dimers with Bridging Allyl Ligands During Catalysis. Journal of the American Chemical Society, 2014, 136, 7300-7316.	6.6	115
20	A mechanistic study of allene carboxylation with CO₂resulting in the development of a Pd(<scp>ii</scp>) pincer complex for the catalytic hydroboration of CO₂. Chemical Science, 2014, 5, 3859.	3.7	109
21	Selective Iron-Catalyzed <i>N</i>-Formylation of Amines using Dihydrogen and Carbon Dioxide. ACS Catalysis, 2018, 8, 1338-1345.	5.5	101
22	Synthesis and Structure of Six-Coordinate Iron Borohydride Complexes Supported by PNP Ligands. Inorganic Chemistry, 2014, 53, 2133-2143.	1.9	97
23	Understanding Precatalyst Activation in Cross-Coupling Reactions: Alcohol Facilitated Reduction from Pd(II) to Pd(0) in Precatalysts of the Type (Î·3-allyl)Pd(L)(Cl) and (Î·3-indenyl)Pd(L)(Cl). ACS Catalysis, 2015, 5, 5596-5606.	5.5	89
24	Comparison of dppfâ€Supported Nickel Precatalysts for the Suzukiâ€“Miyaura Reaction: The Observation and Activity of Nickel(I). Angewandte Chemie - International Edition, 2015, 54, 13352-13356.	7.2	88
25	Selective conversion of glycerol to lactic acid with iron pincer precatalysts. Chemical Communications, 2015, 51, 16201-16204.	2.2	86
26	Selective Iron-Catalyzed Deaminative Hydrogenation of Amides. Organometallics, 2017, 36, 409-416.	1.1	84
27	Rapidly Activating Pd-Precatalyst for Suzukiâ€“Miyaura and Buchwaldâ€“Hartwig Couplings of Aryl Esters. Journal of Organic Chemistry, 2018, 83, 469-477.	1.7	83
28	Palladium catalyzed carboxylation of allylstannanes and boranes using CO₂. Chemical Communications, 2011, 47, 1069-1071.	2.2	82
29	Development of an Improved System for the Carboxylation of Aryl Halides through Mechanistic Studies. ACS Catalysis, 2019, 9, 3228-3241.	5.5	77
30	Synthesis and Reactivity of Paramagnetic Nickel Polypyridyl Complexes Relevant to C(sp²)â€“C(sp³)Coupling Reactions. Angewandte Chemie - International Edition, 2019, 58, 6094-6098.	7.2	76
31	Synthesis of PCPâ€Supported Nickel Complexes and their Reactivity with Carbon Dioxide. Chemistry - A European Journal, 2012, 18, 6915-6927.	1.7	73
32	Carbon Dioxide Insertion into Group 9 and 10 Metalâ€“Element Ïƒ Bonds. Inorganic Chemistry, 2017, 56, 13655-13678.	1.9	71
33	Controlling Selectivity in the Hydroboration of Carbon Dioxide to the Formic Acid, Formaldehyde, and Methanol Oxidation Levels. ACS Catalysis, 2019, 9, 301-314.	5.5	71
34	Lewis Acid Induced Î²-Elimination from a Nickelalactone: Efforts toward Acrylate Production from CO2and Ethylene. Organometallics, 2013, 32, 2152-2159.	1.1	68
35	The Reaction of Carbon Dioxide with Palladiumâˆ’Allyl Bonds. Organometallics, 2010, 29, 6369-6376.	1.1	65
36	Nickel(I) Monomers and Dimers with Cyclopentadienyl and Indenyl Ligands. Chemistry - A European Journal, 2014, 20, 5327-5337.	1.7	65

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37	Mechanistic Studies of the Insertion of CO₂ into Palladium(I) Bridging Allyl Dimers. Organometallics, 2012, 31, 470-485.	1.1	62
38	Iron-Catalyzed Amide Formation from the Dehydrogenative Coupling of Alcohols and Secondary Amines. Organometallics, 2017, 36, 2020-2025.	1.1	60
39	Ni(I)â€“Alkyl Complexes Bearing Phenanthroline Ligands: Experimental Evidence for CO₂ Insertion at Ni(I) Centers. Journal of the American Chemical Society, 2020, 142, 10936-10941.	6.6	59
40	Enhanced CO₂ electroreduction efficiency through secondary coordination effects on a pincer iridium catalyst. Chemical Communications, 2015, 51, 5947-5950.	2.2	57
41	Nickel(I) Aryl Species: Synthesis, Properties, and Catalytic Activity. ACS Catalysis, 2018, 8, 2526-2533.	5.5	57
42	Catalytic Formic Acid Dehydrogenation and CO2 Hydrogenation Using Iron PNRP Pincer Complexes with Isonitrile Ligands. Organometallics, 2018, 37, 3846-3853.	1.1	57
43	Sequential Hydrogenation of CO₂ to Methanol Using a Pincer Iron Catalyst. Organometallics, 2019, 38, 3084-3091.	1.1	56
44	Effect of Sodium Cation on Metallacycle Î²â€Hydride Elimination in CO₂â€“Ethylene Coupling to Acrylates. Chemistry - A European Journal, 2014, 20, 3205-3211.	1.7	54
45	Acceleration of CO₂ insertion into metal hydrides: ligand, Lewis acid, and solvent effects on reaction kinetics. Chemical Science, 2018, 9, 6629-6638.	3.7	53
46	The Key Role of the Hemiaminal Intermediate in the Iron-Catalyzed Deaminative Hydrogenation of Amides. ACS Catalysis, 2018, 8, 8751-8762.	5.5	53
47	Thermodynamic and kinetic hydricity of transition metal hydrides. Chemical Society Reviews, 2020, 49, 7929-7948.	18.7	52
48	Quaternary Organic Solar Cells Enhanced by Cocrystalline Squaraines with Power Conversion Efficiencies >10%. Advanced Energy Materials, 2016, 6, 1600660.	10.2	46
49	Dinuclear Pd^Icomplexes with bridging allyl and related ligands. Chemical Society Reviews, 2016, 45, 2871-2899.	18.7	43
50	Iron-catalyzed urea synthesis: dehydrogenative coupling of methanol and amines. Chemical Science, 2018, 9, 4003-4008.	3.7	42
51	Understanding the Individual and Combined Effects of Solvent and Lewis Acid on CO₂ Insertion into a Metal Hydride. Journal of the American Chemical Society, 2019, 141, 10520-10529.	6.6	40
52	Selective Homogeneous and Heterogeneous Catalytic Conversion of Methanol/Dimethyl Ether to Triptane. Accounts of Chemical Research, 2012, 45, 653-662.	7.6	39
53	The Role of Proton Shuttles in the Reversible Activation of Hydrogen via Metalâ€“Ligand Cooperation. Journal of the American Chemical Society, 2019, 141, 17350-17360.	6.6	39
54	Effect of 2-Substituents on Allyl-Supported Precatalysts for the Suzukiâ€“Miyaura Reaction: Relating Catalytic Efficiency to the Stability of Palladium(I) Bridging Allyl Dimers. Organometallics, 2015, 34, 381-394.	1.1	38

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55	Nitrogen Fixation Revisited on Iron(0) Dinitrogen Phosphine Complexes. Inorganic Chemistry, 2015, 54, 4768-4776.	1.9	38
56	Synthesis, Properties, and Reactivity with Carbon Dioxide of (allyl)2Ni(L) Complexes. Organometallics, 2011, 30, 3142-3150.	1.1	37
57	An Unusual Example of Hypervalent Silicon: A Fiveâ€Coordinate Silyl Group Bridging Two Palladium or Nickel Centers through a Nonsymmetrical Fourâ€Center Twoâ€Electron Bond. Angewandte Chemie - International Edition, 2014, 53, 1103-1108.	7.2	37
58	A Computational Investigation of the Insertion of Carbon Dioxide into Fourâ€• and Fiveâ€Coordinate Iridium Hydrides. European Journal of Inorganic Chemistry, 2013, 2013, 4032-4041.	1.0	35
59	Synthesis and reactivity of a masked PSiP pincer supported nickel hydride. Polyhedron, 2014, 84, 37-43.	1.0	35
60	A Widely Applicable Dual Catalytic System for Cross-Electrophile Coupling Enabled by Mechanistic Studies. ACS Catalysis, 2020, 10, 12642-12656.	5.5	35
61	Dinitrogen-Facilitated Reversible Formation of a Siâ€"H Bond in a Pincer-Supported Ni Complex. Organometallics, 2016, 35, 3154-3162.	1.1	33
62	Synthesis, Properties, and Reactivity of Palladium and Nickel NHC Complexes Supported by Combinations of Allyl, Cyclopentadienyl, and Indenyl Ligands. Organometallics, 2013, 32, 4025-4037.	1.1	32
63	Flexible Binding of PNP Pincer Ligands to Monomeric Iron Complexes. Inorganic Chemistry, 2014, 53, 6066-6072.	1.9	32
64	Understanding the Solution and Solid-State Structures of Pd and Pt PSiP Pincer-Supported Hydrides. Inorganic Chemistry, 2015, 54, 11411-11422.	1.9	31
65	Pd(I)-Bridging Allyl Dimers: A New System for the Catalytic Functionalization of Carbon Dioxide. Synlett, 2011, 2011, 1793-1797.	1.0	30
66	Additiveâ€Free Formic Acid Dehydrogenation Using a Pincerâ€Supported Iron Catalyst. ChemCatChem, 2020, 12, 1934-1938.	1.8	28
67	Synthesis and Catalytic Activity of PNP-Supported Iron Complexes with Ancillary Isonitrile Ligands. Organometallics, 2017, 36, 3995-4004.	1.1	27
68	Pd-Catalyzed Suzukiâ€"Miyaura and Hiyamaâ€"Denmark Couplings of Aryl Sulfamates. Organic Letters, 2016, 18, 5784-5787.	2.4	26
69	Synthesis, Electronic Structure, and Reactivity of Palladium(I) Dimers with Bridging Allyl, Cyclopentadienyl, and Indenyl Ligands. Organometallics, 2013, 32, 4223-4238.	1.1	23
70	Tunable and Practical Homogeneous Organic Reductants for Cross-Electrophile Coupling. Journal of the American Chemical Society, 2021, 143, 21024-21036.	6.6	23
71	Bis(dialkylphosphino)ferrocene-Ligated Nickel(II) Precatalysts for Suzukiâ€"Miyaura Reactions of Aryl Carbonates. Organometallics, 2019, 38, 3377-3387.	1.1	21
72	Mild, Reversible Reaction of Iridium(III) Amido Complexes with Carbon Dioxide. Inorganic Chemistry, 2012, 51, 9683-9693.	1.9	20

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73	Synthesis and Properties of NHC-Supported Palladium(I) Dimers with Bridging Allyl, Cyclopentadienyl, and Indenyl Ligands. Organometallics, 2013, 32, 5114-5127.	1.1	20
74	Modifications to the Aryl Group of dppf-Ligated Ni Ïƒ-Aryl Precatalysts: Impact on Speciation and Catalytic Activity in Suzukiâ€"Miyaura Coupling Reactions. Organometallics, 2018, 37, 3943-3955.	1.1	20
75	Electron-Rich CpIr(biphenyl-2,2â€²-diyl) Complexes with Ï€-Accepting Carbon Donor Ligands. Organometallics, 2012, 31, 7158-7164.	1.1	17
76	Homogeneous Organic Electron Donors in Nickel-Catalyzed Reductive Transformations. Journal of Organic Chemistry, 2022, 87, 7589-7609.	1.7	17
77	Nearâ€Unity Molecular Doping Efficiency in Monolayer MoS₂. Advanced Electronic Materials, 2021, 7, 2000873.	2.6	16
78	DFT Investigation of Suzukiâ€"Miyaura Reactions with Aryl Sulfamates Using a Dialkylbiarylphosphine-Ligated Palladium Catalyst. Organometallics, 2017, 36, 3664-3675.	1.1	15
79	Differences in the Performance of Allyl Based Palladium Precatalysts for Suzukiâ€Miyaura Reactions. Advanced Synthesis and Catalysis, 2020, 362, 5062-5078.	2.1	15
80	Monolayer Molecular Functionalization Enabled by Acidâ€"Base Interaction for High-Performance Photochemical CO₂ Reduction. ACS Energy Letters, 2022, 7, 2265-2272.	8.8	15
81	Effect of Nucleophilicity on the Kinetics of CO₂ Insertion into Pincer-Supported Nickel Complexes. Organometallics, 2018, 37, 3649-3653.	1.1	13
82	Rational selection of co-catalysts for the deaminative hydrogenation of amides. Chemical Science, 2020, 11, 2225-2230.	3.7	13
83	Control of Catalyst Isomers Using an <i>N</i>-Phenyl-Substituted RN(CH₂CH₂PⁱPr₂)₂ Pincer Ligand in CO₂ Hydrogenation and Formic Acid Dehydrogenation. Inorganic Chemistry, 2022, 61, 643-656.	1.9	13
84	Making Carbon-Chlorine Bonds by Dipalladium Electrocatalysis. European Journal of Inorganic Chemistry, 2013, 2013, 1134-1137.	1.0	11
85	Understanding the Reactivity and Decomposition of a Highly Active Iron Pincer Catalyst for Hydrogenation and Dehydrogenation Reactions. ACS Catalysis, 2021, 11, 10631-10646.	5.5	11
86	Synthesis and Reactivity of Paramagnetic Nickel Polypyridyl Complexes Relevant to C(sp²)â€"C(sp³)Coupling Reactions. Angewandte Chemie, 2019, 131, 6155-6159.	1.6	10
87	Dynamic15N NMR studies of iron phosphine complexes containing coordinated dinitrogen. Magnetic Resonance in Chemistry, 2003, 41, 709-713.	1.1	9
88	Tris(hydroxypropyl)phosphine Oxide: A Chiral Three-Dimensional Material with Nonlinear Optical Properties. Crystal Growth and Design, 2010, 10, 1482-1485.	1.4	9
89	Palladium-Catalyzed Suzukiâ€"Miyaura Reactions of Aspartic Acid Derived Phenyl Esters. Organic Letters, 2019, 21, 5762-5766.	2.4	9
90	Ligand and solvent effects on CO₂ insertion into group 10 metal alkyl bonds. Chemical Science, 2022, 13, 2391-2404.	3.7	9

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91	Comparison of the catalytic activity for the Suzukiâ€“Miyaura reaction of (Î·⁵-Cp)Pd(IPr)Cl with (Î·³-cinnamyl)Pd(IPr)(Cl) and (Î·³-1-<i>t-</i>Bu-indenyl)Pd(IPr)(Cl). Beilstein Journal of Organic Chemistry, 2015, 11, 2476-2486.	1.3	8
92	Hydrogenation and Dehydrogenation Reactions Catalyzed by Iron Pincer Compounds. , 2018, , 111-131.		8
93	Compact Super Electron-Donor to Monolayer MoS₂. Nano Letters, 2022, 22, 4501-4508.	4.5	8
94	Dehydrogenative Synthesis of Carbamates from Formamides and Alcohols Using a Pincer-Supported Iron Catalyst. ACS Catalysis, 2021, 11, 10614-10624.	5.5	7
95	Iron, Cobalt, and Nickel Complexes Supported by a iPrPNPhP Pincer Ligand. Organometallics, 0, , .	1.1	7
96	Organometallic Chemistry for Enabling Carbon Dioxide Utilization. Organometallics, 2020, 39, 1457-1460.	1.1	6
97	Comparative Coordination Chemistry of PNP and SNS Pincer Ruthenium Complexes. Organometallics, 2021, 40, 4066-4076.	1.1	6
98	Photoelectron Spectroscopy of Palladium(I) Dimers with Bridging Allyl Ligands. Organometallics, 2012, 31, 8571-8576.	1.1	5
99	Synthesis of Triarylmethanes via Palladium-Catalyzed Suzukiâ€“Miyaura Reactions of Diarylmethyl Esters. Organometallics, 2021, 40, 2332-2344.	1.1	4
100	Synthesis of organometallic pincer-supported cobalt(II) complexes. Polyhedron, 2020, 177, 114308.	1.0	3
101	Solar Cells: Quaternary Organic Solar Cells Enhanced by Cocrystalline Squaraines with Power Conversion Efficiencies >10% (Adv. Energy Mater. 21/2016). Advanced Energy Materials, 2016, 6, .	10.2	1
102	Pioneers and Influencers in Organometallic Chemistry: Professor Robert Crabtreeâ€™s Storied Career via an Unusual Journey to the Ivy League. Organometallics, 2021, 40, 295-301.	1.1	1
103	Colorful Organic Solar Cells Employing FÃ¶rster Resonance Energy Transfer Dye Molecule. , 2018, , .		0
104	Reactivity and Structure of Complexes of Small Molecules: Carbon Dioxide. , 2021, , 959-975.		0
105	Chemical Reduction of NiII Cyclam and Characterization of Isolated NiI Cyclam with Cryogenic Vibrational Spectroscopy and Inert-Gas-Mediated High-Resolution Mass Spectrometry. Journal of Physical Chemistry A, 2021, 125, 6715-6721.	1.1	0
106	Current Frontiers in Pincer Chemistry. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 1530-1530.	0.6	0
107	Lewis Acid Participation in Organometallic Chemistry. , 2021, , .		0