Nilay Hazari

List of Publications by Year
in descending order

107 papers	7,600 citations	46984 47 h-index	53190 85 g-index
113 all docs	113 docs citations	113 times ranked	6800 citing authors

#	Article	IF	Citations
1	Ligand and solvent effects on CO₂ insertion into group 10 metal alkyl bonds. Chemical Science, 2022, 13, 2391-2404.	3.7	9
2	Control of Catalyst Isomers Using an N-Phenyl-Substituted RN(CH₂CH₂PⁱPr₂)₂ Pincer Ligand in CO₂ Hydrogenation and Formic Acid Dehydrogenation. Inorganic Chemistry, 2022, 61, 643-656.	1.9	13
3	Compact Super Electron-Donor to Monolayer MoS₂. Nano Letters, 2022, 22, 4501-4508.	4.5	8
4	Homogeneous Organic Electron Donors in Nickel-Catalyzed Reductive Transformations. Journal of Organic Chemistry, 2022, 87, 7589-7609.	1.7	17
5	Monolayer Molecular Functionalization Enabled by Acidâ€“Base Interaction for High-Performance Photochemical CO₂ Reduction. ACS Energy Letters, 2022, 7, 2265-2272.	8.8	15
6	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
7	Reactivity and Structure of Complexes of Small Molecules: Carbon Dioxide. , 2021, , 959-975.		0
8	Synthesis of Triarylmethanes via Palladium-Catalyzed Suzukiâ€“Miyaura Reactions of Diarylmethyl Esters. Organometallics, 2021, 40, 2332-2344.	1.1	4
9	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
10	Current Frontiers in Pincer Chemistry. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 1530-1530.	0.6	0
11	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
12	Dehydrogenative Synthesis of Carbamates from Formamides and Alcohols Using a Pincer-Supported Iron Catalyst. ACS Catalysis, 2021, 11, 10614-10624.	5.5	7
13	Lewis Acid Participation in Organometallic Chemistry. , 2021, , .		0
14	Nearâ€Unity Molecular Doping Efficiency in Monolayer MoS₂. Advanced Electronic Materials, 2021, 7, 2000873.	2.6	16
15	Tunable and Practical Homogeneous Organic Reductants for Cross-Electrophile Coupling. Journal of the American Chemical Society, 2021, 143, 21024-21036.	6.6	23
16	Comparative Coordination Chemistry of PNP and SNS Pincer Ruthenium Complexes. Organometallics, 2021, 40, 4066-4076.	1.1	6
17	Synthesis of organometallic pincer-supported cobalt(II) complexes. Polyhedron, 2020, 177, 114308.	1.0	3
18	A Widely Applicable Dual Catalytic System for Cross-Electrophile Coupling Enabled by Mechanistic Studies. ACS Catalysis, 2020, 10, 12642-12656.	5.5	35

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19	Thermodynamic and kinetic hydricity of transition metal hydrides. Chemical Society Reviews, 2020, 49, 7929-7948.	18.7	52
20	Differences in the Performance of Allyl Based Palladium Precatalysts for Suzukiâ€Miyaura Reactions. Advanced Synthesis and Catalysis, 2020, 362, 5062-5078.	2.1	15
21	Organometallic Chemistry for Enabling Carbon Dioxide Utilization. Organometallics, 2020, 39, 1457-1460.	1.1	6
22	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
23	Additiveâ€Free Formic Acid Dehydrogenation Using a Pincerâ€Supported Iron Catalyst. ChemCatChem, 2020, 12, 1934-1938.	1.8	28
24	Rational selection of co-catalysts for the deaminative hydrogenation of amides. Chemical Science, 2020, 11, 2225-2230.	3.7	13
25	Opportunities and Challenges for Catalysis in Carbon Dioxide Utilization. ACS Catalysis, 2019, 9, 7937-7956.	5.5	271
26	Palladium-Catalyzed Suzukiâ€“Miyaura Reactions of Aspartic Acid Derived Phenyl Esters. Organic Letters, 2019, 21, 5762-5766.	2.4	9
27	Sequential Hydrogenation of CO₂ to Methanol Using a Pincer Iron Catalyst. Organometallics, 2019, 38, 3084-3091.	1.1	56
28	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
29	Bis(dialkylphosphino)ferrocene-Ligated Nickel(II) Precatalysts for Suzukiâ€“Miyaura Reactions of Aryl Carbonates. Organometallics, 2019, 38, 3377-3387.	1.1	21
30	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
31	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
32	Development of an Improved System for the Carboxylation of Aryl Halides through Mechanistic Studies. ACS Catalysis, 2019, 9, 3228-3241.	5.5	77
33	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
34	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
35	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
36	Iron-catalyzed urea synthesis: dehydrogenative coupling of methanol and amines. Chemical Science, 2018, 9, 4003-4008.	3.7	42

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37	Nickel(I) Aryl Species: Synthesis, Properties, and Catalytic Activity. ACS Catalysis, 2018, 8, 2526-2533.	5.5	57
38	Selective Iron-Catalyzed N-Formylation of Amines using Dihydrogen and Carbon Dioxide. ACS Catalysis, 2018, 8, 1338-1345.	5.5	101
39	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
40	Colorful Organic Solar Cells Employing FÃ¶rster Resonance Energy Transfer Dye Molecule. , 2018, , .		0
41	Catalytic Formic Acid Dehydrogenation and CO2 Hydrogenation Using Iron PNRP Pincer Complexes with Isonitrile Ligands. Organometallics, 2018, 37, 3846-3853.	1.1	57
42	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
43	Effect of Nucleophilicity on the Kinetics of CO₂ Insertion into Pincer-Supported Nickel Complexes. Organometallics, 2018, 37, 3649-3653.	1.1	13
44	Hydrogenation and Dehydrogenation Reactions Catalyzed by Iron Pincer Compounds. , 2018, , 111-131.		8
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	Well-defined nickel and palladium precatalysts for cross-coupling. Nature Reviews Chemistry, 2017, 1, .	13.8	331
48	Iron-Catalyzed Amide Formation from the Dehydrogenative Coupling of Alcohols and Secondary Amines. Organometallics, 2017, 36, 2020-2025.	1.1	60
49	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
50	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
51	Selective Iron-Catalyzed Deaminative Hydrogenation of Amides. Organometallics, 2017, 36, 409-416.	1.1	84
52	Synthesis and Catalytic Activity of PNP-Supported Iron Complexes with Ancillary Isonitrile Ligands. Organometallics, 2017, 36, 3995-4004.	1.1	27
53	DFT Investigation of Suzukiâ€“Miyaura Reactions with Aryl Sulfamates Using a Dialkylbiarylphosphine-Ligated Palladium Catalyst. Organometallics, 2017, 36, 3664-3675.	1.1	15
54	Carbon Dioxide Insertion into Group 9 and 10 Metalâ€“Element Ïƒ Bonds. Inorganic Chemistry, 2017, 56, 13655-13678.	1.9	71

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55	Dinuclear Pd^Icomplexes with bridging allyl and related ligands. Chemical Society Reviews, 2016, 45, 2871-2899.	18.7	43
56	Quaternary Organic Solar Cells Enhanced by Cocrystalline Squaraines with Power Conversion Efficiencies >10%. Advanced Energy Materials, 2016, 6, 1600660.	10.2	46
57	Dinitrogen-Facilitated Reversible Formation of a Siâ€“H Bond in a Pincer-Supported Ni Complex. Organometallics, 2016, 35, 3154-3162.	1.1	33
58	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
59	Pd-Catalyzed Suzukiâ€“Miyaura and Hiyamaâ€“Denmark Couplings of Aryl Sulfamates. Organic Letters, 2016, 18, 5784-5787.	2.4	26
60	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
61	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-t-Bu-indenyl)Pd(IPr)(Cl). Beilstein Journal of Organic Chemistry, 2015, 11, 2476-2486.	1.3	8
62	Iron catalyzed CO₂hydrogenation to formate enhanced by Lewis acid co-catalysts. Chemical Science, 2015, 6, 4291-4299.	3.7	285
63	Understanding the Solution and Solid-State Structures of Pd and Pt PSiP Pincer-Supported Hydrides. Inorganic Chemistry, 2015, 54, 11411-11422.	1.9	31
64	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
65	Enhanced CO₂ electroreduction efficiency through secondary coordination effects on a pincer iridium catalyst. Chemical Communications, 2015, 51, 5947-5950.	2.2	57
66	Base-Free Methanol Dehydrogenation Using a Pincer-Supported Iron Compound and Lewis Acid Co-catalyst. ACS Catalysis, 2015, 5, 2404-2415.	5.5	184
67	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
68	Nitrogen Fixation Revisited on Iron(0) Dinitrogen Phosphine Complexes. Inorganic Chemistry, 2015, 54, 4768-4776.	1.9	38
69	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
70	Selective conversion of glycerol to lactic acid with iron pincer precatalysts. Chemical Communications, 2015, 51, 16201-16204.	2.2	86
71	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
72	Synthesis and Structure of Six-Coordinate Iron Borohydride Complexes Supported by PNP Ligands. Inorganic Chemistry, 2014, 53, 2133-2143.	1.9	97

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73	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
74	Nickel(I) Monomers and Dimers with Cyclopentadienyl and Indenyl Ligands. Chemistry - A European Journal, 2014, 20, 5327-5337.	1.7	65
75	Flexible Binding of PNP Pincer Ligands to Monomeric Iron Complexes. Inorganic Chemistry, 2014, 53, 6066-6072.	1.9	32
76	Well-Defined Iron Catalysts for the Acceptorless Reversible Dehydrogenation-Hydrogenation of Alcohols and Ketones. ACS Catalysis, 2014, 4, 3994-4003.	5.5	330
77	Synthesis and reactivity of a masked PSiP pincer supported nickel hydride. Polyhedron, 2014, 84, 37-43.	1.0	35
78	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
79	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
80	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
81	Making Carbon-Chlorine Bonds by Dipalladium Electrocatalysis. European Journal of Inorganic Chemistry, 2013, 2013, 1134-1137.	1.0	11
82	Lewis Acid Induced Î²-Elimination from a Nickelalactone: Efforts toward Acrylate Production from CO2and Ethylene. Organometallics, 2013, 32, 2152-2159.	1.1	68
83	Polymer bulk heterojunction solar cells employing FÃ¶rster resonance energy transfer. Nature Photonics, 2013, 7, 479-485.	15.6	389
84	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
85	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
86	Synthesis and Properties of NHC-Supported Palladium(I) Dimers with Bridging Allyl, Cyclopentadienyl, and Indenyl Ligands. Organometallics, 2013, 32, 5114-5127.	1.1	20
87	Synthesis, Electronic Structure, and Reactivity of Palladium(I) Dimers with Bridging Allyl, Cyclopentadienyl, and Indenyl Ligands. Organometallics, 2013, 32, 4223-4238.	1.1	23
88	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
89	Mechanistic Studies of the Insertion of CO₂ into Palladium(I) Bridging Allyl Dimers. Organometallics, 2012, 31, 470-485.	1.1	62
90	Mild, Reversible Reaction of Iridium(III) Amido Complexes with Carbon Dioxide. Inorganic Chemistry, 2012, 51, 9683-9693.	1.9	20

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91	Photoelectron Spectroscopy of Palladium(I) Dimers with Bridging Allyl Ligands. Organometallics, 2012, 31, 8571-8576.	1.1	5
92	Electron-Rich CpIr(biphenyl-2,2â€²-diyl) Complexes with Ï€-Accepting Carbon Donor Ligands. Organometallics, 2012, 31, 7158-7164.	1.1	17
93	Selective Homogeneous and Heterogeneous Catalytic Conversion of Methanol/Dimethyl Ether to Triptane. Accounts of Chemical Research, 2012, 45, 653-662.	7.6	39
94	Synthesis of PCPâ€Supported Nickel Complexes and their Reactivity with Carbon Dioxide. Chemistry - A European Journal, 2012, 18, 6915-6927.	1.7	73
95	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
96	Palladium catalyzed carboxylation of allylstannanes and boranes using CO₂. Chemical Communications, 2011, 47, 1069-1071.	2.2	82
97	Synthesis, Properties, and Reactivity with Carbon Dioxide of (allyl)2Ni(L) Complexes. Organometallics, 2011, 30, 3142-3150.	1.1	37
98	An Iridium(IV) Species, [Cp*Ir(NHC)Cl]⁺, Related to a Water-Oxidation Catalyst. Organometallics, 2011, 30, 965-973.	1.1	127
99	Palladium(I)-Bridging Allyl Dimers for the Catalytic Functionalization of CO₂. Journal of the American Chemical Society, 2011, 133, 3280-3283.	6.6	131
100	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
101	Pd(I)-Bridging Allyl Dimers: A New System for the Catalytic Functionalization of Carbon Dioxide. Synlett, 2011, 2011, 1793-1797.	1.0	30
102	Exploring the reactions of CO₂with PCP supported nickel complexes. Chemical Communications, 2011, 47, 1824-1826.	2.2	117
103	Homogeneous iron complexes for the conversion of dinitrogen into ammonia and hydrazine. Chemical Society Reviews, 2010, 39, 4044.	18.7	227
104	The Reaction of Carbon Dioxide with Palladiumâ^'Allyl Bonds. Organometallics, 2010, 29, 6369-6376.	1.1	65
105	Tris(hydroxypropyl)phosphine Oxide: A Chiral Three-Dimensional Material with Nonlinear Optical Properties. Crystal Growth and Design, 2010, 10, 1482-1485.	1.4	9
106	Dynamic15N NMR studies of iron phosphine complexes containing coordinated dinitrogen. Magnetic Resonance in Chemistry, 2003, 41, 709-713.	1.1	9
107	Iron, Cobalt, and Nickel Complexes Supported by a iPrPNPhP Pincer Ligand. Organometallics, 0, , .	1.1	7