

Zheng Huang

List of Publications by Year in descending order

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88
papers

6,647
citations

53794

45
h-index

62596

80
g-index

110
all docs

110
docs citations

110
times ranked

4726
citing authors

#	ARTICLE	IF	CITATIONS
1	Catalytic Alkane Metathesis by Tandem Alkane Dehydrogenation-Olefin Metathesis. <i>Science</i> , 2006, 312, 257-261.	12.6	515
2	Advances in Base-Metal-Catalyzed Alkene Hydrosilylation. <i>ACS Catalysis</i> , 2017, 7, 1227-1243.	11.2	404
3	Efficient and selective degradation of polyethylenes into liquid fuels and waxes under mild conditions. <i>Science Advances</i> , 2016, 2, e1501591.	10.3	268
4	Cobalt-Catalyzed Enantioselective Hydroboration of 1,1-Disubstituted Aryl Alkenes. <i>Journal of the American Chemical Society</i> , 2014, 136, 15501-15504.	13.7	267
5	Iron-Catalyzed, Atom-Economical, Chemo- and Regioselective Alkene Hydroboration with Pinacolborane. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 3676-3680.	13.8	217
6	A Cobalt-Catalyzed Alkene Hydroboration with Pinacolborane. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 2696-2700.	13.8	213
7	Phosphinite-Iminopyridine Iron Catalysts for Chemoselective Alkene Hydrosilylation. <i>Journal of the American Chemical Society</i> , 2013, 135, 19154-19166.	13.7	202
8	Base-Metal-Catalyzed Regiodivergent Alkene Hydrosilylations. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6671-6675.	13.8	177
9	Conversion of alkanes to linear alkylsilanes using an iridium-iron-catalysed tandem dehydrogenation-isomerization-hydrosilylation. <i>Nature Chemistry</i> , 2016, 8, 157-161.	13.6	175
10	Ligand exchanges and selective catalytic hydrogenation in molecular single crystals. <i>Nature</i> , 2010, 465, 598-601.	27.8	160
11	Selective Catalytic Transfer Dehydrogenation of Alkanes and Heterocycles by an Iridium Pincer Complex. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 1390-1394.	13.8	154
12	Cobalt-Catalyzed Alkyne Hydrosilylation and Sequential Vinylsilane Hydroboration with Markovnikov Selectivity. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 10839-10843.	13.8	141
13	Recent advances in tridentate iron and cobalt complexes for alkene and alkyne hydrofunctionalizations. <i>Coordination Chemistry Reviews</i> , 2019, 386, 138-153.	18.8	139
14	Asymmetric Synthesis of Silicon-Stereogenic Vinylhydrosilanes by Cobalt-Catalyzed Regio- and Enantioselective Alkyne Hydrosilylation with Dihydrosilanes. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 6319-6323.	13.8	136
15	Coordination Polymers Assembled from Angular Dipyridyl Ligands and Cu(I), Cd(II), Co(II) Salts: Crystal Structures and Properties. <i>Inorganic Chemistry</i> , 2004, 43, 931-944.	4.0	135
16	Transfer Hydrogenation of Alkenes Using Ethanol Catalyzed by a NCP Pincer Iridium Complex: Scope and Mechanism. <i>Journal of the American Chemical Society</i> , 2018, 140, 4417-4429.	13.7	131
17	Highly Active and Recyclable Heterogeneous Iridium Pincer Catalysts for Transfer Dehydrogenation of Alkanes. <i>Advanced Synthesis and Catalysis</i> , 2009, 351, 188-206.	4.3	120
18	Olefin Isomerization by Iridium Pincer Catalysts. Experimental Evidence for an η^3 -Allyl Pathway and an Unconventional Mechanism Predicted by DFT Calculations. <i>Journal of the American Chemical Society</i> , 2012, 134, 13276-13295.	13.7	117

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19	Synthesis of 1,1,1-Tris(boronates) from Vinylarenes by Co-Catalyzed Dehydrogenative Borylations of Hydroboration. <i>Journal of the American Chemical Society</i> , 2015, 137, 15600-15603.	13.7	112
20	From Metallacyclophanes to 1-D Coordination Polymers: A Role of Anions in Self-Assembly Processes of Copper(II) and 2,5-Bis(3-pyridyl)-1,3,4-oxadiazole. <i>Inorganic Chemistry</i> , 2003, 42, 552-559.	4.0	99
21	Cobalt-Catalyzed Alkyne Hydrosilylation and Sequential Vinylsilane Hydroboration with Markovnikov Selectivity. <i>Angewandte Chemie</i> , 2016, 128, 10997-11001.	2.0	96
22	Stereoselective Synthesis of Trisubstituted Alkenes via Cobalt-Catalyzed Double Dehydrogenative Borylations of 1-Alkenes. <i>ACS Catalysis</i> , 2017, 7, 6419-6425.	11.2	93
23	Cobalt-Catalyzed Regio- and Enantioselective Markovnikov 1,2-Hydrosilylation of Conjugated Dienes. <i>ACS Catalysis</i> , 2019, 9, 1612-1618.	11.2	89
24	Synthesis of 1,1-diboronate esters by cobalt-catalyzed sequential hydroboration of terminal alkynes. <i>Organic Chemistry Frontiers</i> , 2016, 3, 434-438.	4.5	84
25	Iridium-Catalyzed Selective α -Alkylation of Unactivated Amides with Primary Alcohols. <i>Organic Letters</i> , 2013, 15, 1144-1147.	4.6	82
26	Effect of Anions on the Framework Formation of Novel AgI Coordination Polymers with Angular Bridging Ligands. <i>Crystal Growth and Design</i> , 2004, 4, 71-78.	3.0	81
27	Challenges and opportunities for alkane functionalisation using molecular catalysts. <i>Chemical Science</i> , 2018, 9, 288-299.	7.4	78
28	Iron-catalyzed asymmetric hydrosilylation of ketones. <i>Chemical Communications</i> , 2015, 51, 5073-5076.	4.1	77
29	An Agostic Iridium Pincer Complex as a Highly Efficient and Selective Catalyst for Monoisomerization of 1-Alkenes to <i>cis</i> -2-Alkenes. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 1614-1618.	13.8	76
30	Evaluation of Molybdenum and Tungsten Metathesis Catalysts for Homogeneous Tandem Alkane Metathesis. <i>Organometallics</i> , 2009, 28, 355-360.	2.3	74
31	Efficient Heterogeneous Dual Catalyst Systems for Alkane Metathesis. <i>Advanced Synthesis and Catalysis</i> , 2010, 352, 125-135.	4.3	73
32	Copper(I) Enolate Complexes in α -Arylation Reactions: Synthesis, Reactivity, and Mechanism. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1028-1032.	13.8	71
33	Iridium complexes of new NCP pincer ligands: catalytic alkane dehydrogenation and alkene isomerization. <i>Chemical Communications</i> , 2014, 50, 11056.	4.1	66
34	Site-Selective Acceptorless Dehydrogenation of Aliphatics Enabled by Organophotoredox/Cobalt Dual Catalysis. <i>Journal of the American Chemical Society</i> , 2021, 143, 16470-16485.	13.7	65
35	Pincer cobalt complex-catalyzed <i>cis</i> -selective hydrosilylation of terminal alkynes. <i>Organic Chemistry Frontiers</i> , 2017, 4, 1517-1521.	4.5	63
36	Ruthenium-Catalyzed Site-Selective Intramolecular Silylation of Primary C-H Bonds for Synthesis of Sila-Heterocycles. <i>Journal of the American Chemical Society</i> , 2017, 139, 11601-11609.	13.7	62

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37	A General and Mild Catalytic Alkylation of Unactivated Esters Using Alcohols. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 4023-4027.	13.8	60
38	Asymmetric Synthesis of Silicon-Stereogenic Vinylhydrosilanes by Cobalt-Catalyzed Regio- and Enantioselective Alkyne Hydrosilylation with Dihydrosilanes. <i>Angewandte Chemie</i> , 2018, 130, 6427-6431.	2.0	60
39	Catalyst as colour indicator for endpoint detection to enable selective alkyne trans-hydrogenation with ethanol. <i>Nature Catalysis</i> , 2019, 2, 529-536.	34.4	55
40	Cobalt-Catalyzed Hydroboration and Borylation of Alkenes and Alkynes. <i>Synlett</i> , 2018, 29, 1421-1429.	1.8	54
41	Catalytic alkane dehydrogenations. <i>Science Bulletin</i> , 2015, 60, 1316-1331.	9.0	53
42	Synthesis of Pincer Hydrido Ruthenium Olefin Complexes for Catalytic Alkane Dehydrogenation. <i>Organometallics</i> , 2016, 35, 181-188.	2.3	53
43	N ² H Activation of Hydrazines by Iridium(I). Double N ² H Activation To Form Iridium Aminonitrene Complexes. <i>Journal of the American Chemical Society</i> , 2010, 132, 11458-11460.	13.7	52
44	A Pincer Ruthenium Complex for Regioselective C-H Silylation of Heteroarenes. <i>Organic Letters</i> , 2016, 18, 5624-5627.	4.6	46
45	Manganese-Catalyzed Asymmetric Hydrosilylation of Aryl Ketones. <i>ACS Omega</i> , 2017, 2, 4688-4692.	3.5	45
46	Syntheses, Structure, and Properties of the Metal Complexes with 3-(2-Pyridyl)pyrazole-Based Ligands: Tuning the Complex Structures by Ligand Modifications. <i>Crystal Growth and Design</i> , 2006, 6, 99-108.	3.0	44
47	Selective synthesis of secondary benzylic (Z)-allylboronates by Fe-catalyzed 1,4-hydroboration of 1-aryl-substituted 1,3-dienes. <i>Organic Chemistry Frontiers</i> , 2014, 1, 1101-1106.	4.5	44
48	Cationic Palladium(II) Complexes of Phosphine-Sulfonamide Ligands: Synthesis, Characterization, and Catalytic Ethylene Oligomerization. <i>Organometallics</i> , 2014, 33, 3738-3745.	2.3	42
49	An Amine-Assisted Ionic Monohydride Mechanism Enables Selective Alkyne <i>cis</i> -Semihydrogenation with Ethanol: From Elementary Steps to Catalysis. <i>Journal of the American Chemical Society</i> , 2021, 143, 4824-4836.	13.7	42
50	Identifying a cobalt catalyst for highly selective hydrosilylation of allenes. <i>Organic Chemistry Frontiers</i> , 2017, 4, 1829-1832.	4.5	41
51	Base-Metal-Catalyzed Regiodivergent Alkene Hydrosilylations. <i>Angewandte Chemie</i> , 2016, 128, 6783-6787.	2.0	39
52	Cobalt-Catalyzed Borylation of Aryl Halides and Pseudohalides. <i>Organometallics</i> , 2016, 35, 1559-1564.	2.3	39
53	Thermal, Catalytic Conversion of Alkanes to Linear Aldehydes and Linear Amines. <i>Journal of the American Chemical Society</i> , 2018, 140, 4157-4163.	13.7	37
54	A BEt ₃ -Base Catalyst for Amide Reduction with Silane. <i>Journal of Organic Chemistry</i> , 2019, 84, 6084-6093.	3.2	34

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55	Cobalt-Catalyzed Regio- and Stereoselective Hydroboration of Allenes. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 6278-6283.	13.8	34
56	Mixed Diboration of Alkynes Catalyzed by LiOH: Regio- and Stereoselective Synthesis of <i>cis</i> -1,2-Diborylalkenes. <i>Organic Letters</i> , 2018, 20, 7363-7366.	4.6	32
57	Iron-Catalyzed Alkene Hydroboration with Pinacolborane. <i>Synlett</i> , 2013, 24, 1745-1747.	1.8	28
58	<i>n</i> -Alkanes to <i>n</i> -alcohols: Formal primary C-H bond hydroxymethylation via quadruple relay catalysis. <i>Science Advances</i> , 2020, 6, .	10.3	28
59	Catalytic alkane transfer-dehydrogenation by PSCOP iridium pincer complexes. <i>Polyhedron</i> , 2016, 116, 12-19.	2.2	27
60	A General, Practical Triethylborane-Catalyzed Reduction of Carbonyl Functions to Alcohols. <i>Chemistry - A European Journal</i> , 2015, 21, 14737-14741.	3.3	26
61	Cobalt-Catalyzed Asymmetric Hydrogenation of Vinylsilanes with a Phosphine-Pyridine-Oxazoline Ligand: Synthesis of Optically Active Organosilanes and Silacycles. <i>Organometallics</i> , 2019, 38, 3906-3911.	2.3	26
62	Reactions of phosphinites with oxide surfaces: a new method for anchoring organic and organometallic complexes. <i>Dalton Transactions</i> , 2011, 40, 4268.	3.3	25
63	N-Bridged Pincer Iridium Complexes for Highly Efficient Alkane Dehydrogenation and the Relevant Linker Effects. <i>ACS Catalysis</i> , 2020, 10, 6475-6487.	11.2	25
64	A highly efficient catalytic α -alkylation of unactivated amides using primary alcohols. <i>Tetrahedron Letters</i> , 2016, 57, 2919-2921.	1.4	22
65	Pincer Iron Hydride Complexes for Alkene Isomerization: Catalytic Approach to Trisubstituted (<i>Z</i>)-Alkenyl Boronates. <i>ACS Catalysis</i> , 2021, 11, 10138-10147.	11.2	22
66	Ligand controlled cobalt catalyzed regiodivergent 1,2-hydroboration of 1,3-dienes. <i>Science China Chemistry</i> , 2019, 62, 336-340.	8.2	18
67	NCP-type Pincer Iridium Complexes Catalyzed Transfer-Dehydrogenation of Alkanes and Heterocycles. <i>Chinese Journal of Chemistry</i> , 2020, 38, 837-841.	4.9	18
68	Phosphine-Iminoquinoline Iron Complexes for Ethylene Polymerization and Copolymerization. <i>Organometallics</i> , 2017, 36, 3758-3764.	2.3	17
69	Iron-Catalyzed Regio- and Stereoselective Hydrosilylation of 1,3-Enynes To Access 1,3-Dienylsilanes. <i>Organic Letters</i> , 2021, 23, 2375-2379.	4.6	16
70	Iron Catalyzed Isomerization of α -Alkyl Styrenes to Access Trisubstituted Alkenes. <i>Chinese Journal of Chemistry</i> , 2021, 39, 585-589.	4.9	14
71	An Agostic Iridium Pincer Complex as a Highly Efficient and Selective Catalyst for Monoisomerization of 1-Alkenes to <i>trans</i> -2-Alkenes. <i>Angewandte Chemie</i> , 2017, 129, 1636-1640.	2.0	13
72	Recent Advances in α -Coordination-Insertion Copolymerization of Ethylene with Polar Functionalized Comonomers. <i>Chinese Journal of Chemistry</i> , 2020, 38, 1445-1448.	4.9	12

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73	Self-assembly of novel discrete binuclear molecular box structure from a novel bis-N,O-bidentate Schiff-base ligand and ZnII, Coll salts. <i>Inorganic Chemistry Communication</i> , 2005, 8, 194-198.	3.9	10
74	A New Phosphineâ€Amineâ€Oxazoline Ligand for Ruâ€Catalyzed Asymmetric Hydrogenation of <i>N</i> -Phosphinylimines. <i>Chinese Journal of Chemistry</i> , 2018, 36, 1151-1155.	4.9	10
75	Pincer Iridium and Ruthenium Complexes for Alkane Dehydrogenation. , 2018, , 383-399.		10
76	Ruthenium-Catalyzed Hydrodefluorination with Silane as the Directing and Reducing Group. <i>Organic Letters</i> , 2020, 22, 9298-9302.	4.6	10
77	Cobaltâ€Catalyzed Regioâ€and Stereoselective Hydroboration of Allenes. <i>Angewandte Chemie</i> , 2020, 132, 6337-6342.	2.0	9
78	Synthesis and characterization of a tetradentate PNCP iridium complex for catalytic alkane dehydrogenation. <i>Science China Chemistry</i> , 2015, 58, 1340-1344.	8.2	8
79	A highly efficient cobalt-catalyzed deuterogenolysis of diboron: Synthesis of deuterated pinacolborane and vinylboronates. <i>Tetrahedron</i> , 2019, 75, 4138-4142.	1.9	8
80	Chiral Iridium Complexes of Anionic NCP Pincer Ligand for Asymmetric Transfer Hydrogenation of 1,1-Diarylethenes with Ethanol. <i>Organic Letters</i> , 2021, 23, 8978-8983.	4.6	8
81	Double-Linear Insertion Mode of \pm -%-Dienes Enabled by Thio-imino-quinoline Iron Catalyst. <i>ACS Catalysis</i> , 2020, 10, 15092-15103.	11.2	7
82	Ru-Catalyzed Site-Selective Aliphatic Câ€H Bond Silylation of Amides and Carbamides. <i>Organometallics</i> , 2021, 40, 2365-2370.	2.3	7
83	Asymmetric Transfer Hydrogenation of Diaryl Ketones with Ethanol Catalyzed by Chiral <i>NCP</i> Pincer Iridium Complexes. <i>Chinese Journal of Chemistry</i> , 2022, 40, 1131-1136.	4.9	7
84	Dehydrogenation Based Asymmetric Epoxidation of Arylalkanes to Chiral Epoxides. <i>Chinese Journal of Chemistry</i> , 0, , .	4.9	7
85	Dehydrogenation of Primary Alkyl Azides to Nitriles Catalyzed by Pincer Iridium/Ruthenium Complexes. <i>ChemCatChem</i> , 2020, 12, 3661-3665.	3.7	6
86	Ruthenium-Catalyzed Dual Dehydrogenative Silylation of C(sp ³)â€H Bonds: Access to Diverse Silicon-Centered Spirocycles. <i>Organic Letters</i> , 2021, 23, 7603-7607.	4.6	6
87	Pincer Ruthenium Catalyzed Intramolecular Silylation of C(sp ²)â€H Bonds. <i>Synlett</i> , 2017, 28, 2468-2472.	1.8	4
88	Undirected, Asymmetric Alkyl Group Functionalizations through Alkane Dehydrogenation. <i>Organic Letters</i> , 0, , .	4.6	3