

# Peng Liu

## List of Publications by Year in descending order

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207  
papers

13,694  
citations

13827

67  
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27345

106  
g-index

226  
all docs

226  
docs citations

226  
times ranked

10000  
citing authors

#	ARTICLE	IF	CITATIONS
1	Conversion of amides to esters by the nickel-catalysed activation of amide C–N bonds. <i>Nature</i> , 2015, 524, 79-83.	13.7	479
2	Mechanism of Photoinduced Metal-Free Atom Transfer Radical Polymerization: Experimental and Computational Studies. <i>Journal of the American Chemical Society</i> , 2016, 138, 2411-2425.	6.6	384
3	Computational Explorations of Mechanisms and Ligand-Directed Selectivities of Copper-Catalyzed Ullmann-Type Reactions. <i>Journal of the American Chemical Society</i> , 2010, 132, 6205-6213.	6.6	324
4	Palladium-Catalyzed <i>meta</i> -Selective C–H Bond Activation with a Nitrile-Containing Template: Computational Study on Mechanism and Origins of Selectivity. <i>Journal of the American Chemical Society</i> , 2014, 136, 344-355.	6.6	317
5	Catalytic asymmetric hydroamination of unactivated internal olefins to aliphatic amines. <i>Science</i> , 2015, 349, 62-66.	6.0	316
6	Suzuki–Miyaura Cross-Coupling of Aryl Carbamates and Sulfamates: Experimental and Computational Studies. <i>Journal of the American Chemical Society</i> , 2011, 133, 6352-6363.	6.6	285
7	Catalytic Ketyl-Olefin Cyclizations Enabled by Proton-Coupled Electron Transfer. <i>Journal of the American Chemical Society</i> , 2013, 135, 10022-10025.	6.6	275
8	Photoredox-mediated Minisci C–H alkylation of N-heteroarenes using boronic acids and hypervalent iodine. <i>Chemical Science</i> , 2016, 7, 6407-6412.	3.7	272
9	Role of <i>N</i> -Acyl Amino Acid Ligands in Pd(II)-Catalyzed Remote C–H Activation of Tethered Arenes. <i>Journal of the American Chemical Society</i> , 2014, 136, 894-897.	6.6	263
10	Copper-catalyzed asymmetric addition of olefin-derived nucleophiles to ketones. <i>Science</i> , 2016, 353, 144-150.	6.0	227
11	Catalytic activation of carbon–carbon bonds in cyclopentanones. <i>Nature</i> , 2016, 539, 546-550.	13.7	217
12	Distortion/Interaction Analysis Reveals the Origins of Selectivities in Iridium-Catalyzed C–H Borylation of Substituted Arenes and 5-Membered Heterocycles. <i>Journal of the American Chemical Society</i> , 2014, 136, 4575-4583.	6.6	215
13	Ligand–Substrate Dispersion Facilitates the Copper-Catalyzed Hydroamination of Unactivated Olefins. <i>Journal of the American Chemical Society</i> , 2017, 139, 16548-16555.	6.6	189
14	A general strategy for synthesis of cyclophane-braced peptide macrocycles via palladium-catalysed intramolecular sp <sup>3</sup> C–H arylation. <i>Nature Chemistry</i> , 2018, 10, 540-548.	6.6	180
15	<i>Z</i> -Selectivity in Olefin Metathesis with Chelated Ru Catalysts: Computational Studies of Mechanism and Selectivity. <i>Journal of the American Chemical Society</i> , 2012, 134, 1464-1467.	6.6	176
16	Dynamics, transition states, and timing of bond formation in Diels–Alder reactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 12860-12865.	3.3	166
17	Catalytic Intermolecular Carboamination of Unactivated Alkenes via Directed Aminopalladation. <i>Journal of the American Chemical Society</i> , 2017, 139, 11261-11270.	6.6	165
18	Catalyst-Free and Redox-Neutral Innate Trifluoromethylation and Alkylation of Aromatics Enabled by Light. <i>Journal of the American Chemical Society</i> , 2017, 139, 14315-14321.	6.6	153

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19	CuH-Catalyzed Enantioselective Ketone Allylation with 1,3-Dienes: Scope, Mechanism, and Applications. <i>Journal of the American Chemical Society</i> , 2019, 141, 5062-5070.	6.6	151
20	Nickel-catalyzed amination of aryl carbamates and sequential site-selective cross-couplings. <i>Chemical Science</i> , 2011, 2, 1766.	3.7	148
21	An enzymatic platform for the asymmetric amination of primary, secondary and tertiary C(sp <sup>3</sup> )-H bonds. <i>Nature Chemistry</i> , 2019, 11, 987-993.	6.6	146
22	Origins of Differences in Reactivities of Alkenes, Alkynes, and Allenes in [Rh(CO) <sub>2</sub> Cl] <sub>2</sub> -Catalyzed (5 + 2) Cycloaddition Reactions with Vinylcyclopropanes. <i>Journal of the American Chemical Society</i> , 2008, 130, 2378-2379.	6.6	145
23	Mechanistic Basis for Regioselection and Regiodivergence in Nickel-Catalyzed Reductive Couplings. <i>Accounts of Chemical Research</i> , 2015, 48, 1736-1745.	7.6	144
24	Deacylative transformations of ketones via aromatization-promoted C-C bond activation. <i>Nature</i> , 2019, 567, 373-378.	13.7	135
25	Origin of Enantioselectivity in Benztetramisole-Catalyzed Dynamic Kinetic Resolution of Azlactones. <i>Organic Letters</i> , 2012, 14, 3288-3291.	2.4	134
26	C(alkenyl)-H Activation via Six-Membered Palladacycles: Catalytic 1,3-Diene Synthesis. <i>Journal of the American Chemical Society</i> , 2018, 140, 5805-5813.	6.6	134
27	Mechanism and Enantioselectivity in Palladium-Catalyzed Conjugate Addition of Arylboronic Acids to $\beta$ -Substituted Cyclic Enones: Insights from Computation and Experiment. <i>Journal of the American Chemical Society</i> , 2013, 135, 14996-15007.	6.6	131
28	Electronic and Steric Control of Regioselectivities in Rh(I)-Catalyzed (5 + 2) Cycloadditions: Experiment and Theory. <i>Journal of the American Chemical Society</i> , 2010, 132, 10127-10135.	6.6	128
29	Complementary site-selectivity in arene functionalization enabled by overcoming the ortho constraint in palladium/norbornene catalysis. <i>Nature Chemistry</i> , 2018, 10, 866-872.	6.6	122
30	Ligand Steric Contours To Understand the Effects of <i>N</i> -Heterocyclic Carbene Ligands on the Reversal of Regioselectivity in Ni-Catalyzed Reductive Couplings of Alkynes and Aldehydes. <i>Journal of the American Chemical Society</i> , 2011, 133, 6956-6959.	6.6	119
31	Understanding Reactivity and Stereoselectivity in Palladium-Catalyzed Diastereoselective sp <sup>3</sup> -C-H Bond Activation: Intermediate Characterization and Computational Studies. <i>Journal of the American Chemical Society</i> , 2012, 134, 14118-14126.	6.6	115
32	Mechanism and Origins of Ligand-Controlled Linear Versus Branched Selectivity of Iridium-Catalyzed Hydroarylation of Alkenes. <i>ACS Catalysis</i> , 2016, 6, 809-820.	5.5	114
33	Ligand Effects on Rates and Regioselectivities of Rh(I)-Catalyzed (5 + 2) Cycloadditions: A Computational Study of Cyclooctadiene and Dinaphthocyclooctatetraene as Ligands. <i>Journal of the American Chemical Society</i> , 2012, 134, 11012-11025.	6.6	110
34	Origins of Regioselectivity and Alkene-Directing Effects in Nickel-Catalyzed Reductive Couplings of Alkynes and Aldehydes. <i>Journal of the American Chemical Society</i> , 2010, 132, 2050-2057.	6.6	109
35	Experimental and Computational Exploration of <i>para</i> -Selective Silylation with a Hydrogen-Bonded Template. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14903-14907.	7.2	107
36	Origin of Enantioselectivity in CF <sub>3</sub> -PIP-Catalyzed Kinetic Resolution of Secondary Benzylic Alcohols. <i>Journal of the American Chemical Society</i> , 2008, 130, 13836-13837.	6.6	106

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37	Substituent Effects, Reactant Preorganization, and Ligand Exchange Control the Reactivity in Rh <sup>I</sup> -Catalyzed (5+2) Cycloadditions between Vinylcyclopropanes and Alkynes. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 3939-3941.	7.2	105
38	Mechanistically Guided Design of Ligands That Significantly Improve the Efficiency of CuH-Catalyzed Hydroamination Reactions. <i>Journal of the American Chemical Society</i> , 2018, 140, 13976-13984.	6.6	101
39	Enzymatic hydroxylation of an unactivated methylene C-H bond guided by molecular dynamics simulations. <i>Nature Chemistry</i> , 2015, 7, 653-660.	6.6	100
40	Benzazetidone synthesis via palladium-catalysed intramolecular C-H amination. <i>Nature Chemistry</i> , 2016, 8, 1131-1136.	6.6	100
41	A unified photoredox-catalysis strategy for C(sp <sup>3</sup> )-H hydroxylation and amidation using hypervalent iodine. <i>Chemical Science</i> , 2017, 8, 7180-7185.	3.7	97
42	Reactivity and Chemoselectivity of Allenes in Rh(I)-Catalyzed Intermolecular (5 + 2) Cycloadditions with Vinylcyclopropanes: Allene-Mediated Rhodacycle Formation Can Poison Rh(I)-Catalyzed Cycloadditions. <i>Journal of the American Chemical Society</i> , 2014, 136, 17273-17283.	6.6	96
43	Glycosyl Cross-Coupling of Anomeric Nucleophiles: Scope, Mechanism, and Applications in the Synthesis of Aryl C-Glycosides. <i>Journal of the American Chemical Society</i> , 2017, 139, 17908-17922.	6.6	96
44	Computational Study of Rh-Catalyzed Carboacylation of Olefins: Ligand-Promoted Rhodacycle Isomerization Enables Regioselective C-C Bond Functionalization of Benzocyclobutenones. <i>Journal of the American Chemical Society</i> , 2015, 137, 8274-8283.	6.6	95
45	Mechanistically Guided Predictive Models for Ligand and Initiator Effects in Copper-Catalyzed Atom Transfer Radical Polymerization (Cu-ATRP). <i>Journal of the American Chemical Society</i> , 2019, 141, 7486-7497.	6.6	95
46	Mechanism and Transition-State Structures for Nickel-Catalyzed Reductive Alkyne-Aldehyde Coupling Reactions. <i>Journal of the American Chemical Society</i> , 2009, 131, 6654-6655.	6.6	94
47	Decomposition Pathways of Z-Selective Ruthenium Metathesis Catalysts. <i>Journal of the American Chemical Society</i> , 2012, 134, 7861-7866.	6.6	94
48	Computational Study of Ni-Catalyzed C-H Functionalization: Factors That Control the Competition of Oxidative Addition and Radical Pathways. <i>Journal of the American Chemical Society</i> , 2017, 139, 9909-9920.	6.6	94
49	High-Yield Sorting of Small-Diameter Carbon Nanotubes for Solar Cells and Transistors. <i>ACS Nano</i> , 2014, 8, 2609-2617.	7.3	91
50	Modular ipso/ortho Difunctionalization of Aryl Bromides via Palladium/Norbornene Cooperative Catalysis. <i>Journal of the American Chemical Society</i> , 2018, 140, 8551-8562.	6.6	91
51	Theoretical study of Pd(0)-catalyzed carbohalogenation of alkenes: mechanism and origins of reactivities and selectivities in alkyl halide reductive elimination from Pd(II) species. <i>Chemical Science</i> , 2012, 3, 1987.	3.7	90
52	Origins of Initiation Rate Differences in Ruthenium Olefin Metathesis Catalysts Containing Chelating Benzylidenes. <i>Journal of the American Chemical Society</i> , 2015, 137, 5782-5792.	6.6	89
53	Scalable and Selective Dispersion of Semiconducting Arc-Discharged Carbon Nanotubes by Dithiafulvalene/Thiophene Copolymers for Thin Film Transistors. <i>ACS Nano</i> , 2013, 7, 2659-2668.	7.3	88
54	Catalytic C-H Trifluoromethoxylation of Arenes and Heteroarenes. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9645-9649.	7.2	88

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55	Redox-Active Reagents for Photocatalytic Generation of the OCF <sub>3</sub> Radical and (Hetero)Aryl C-H Trifluoromethoxylation. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13795-13799.	7.2	85
56	Mechanism and Origins of Selectivities in the Copper-Catalyzed Dearomatization-Induced <i>ortho</i> -C-H Cyanation of Vinylarenes. <i>ACS Catalysis</i> , 2015, 5, 2944-2951.	5.5	84
57	Tridentate Directing Groups Stabilize 6-Membered Palladacycles in Catalytic Alkene Hydrofunctionalization. <i>Journal of the American Chemical Society</i> , 2017, 139, 15576-15579.	6.6	83
58	Sterically Shielded, Stabilized Nitrile Imine for Rapid Bioorthogonal Protein Labeling in Live Cells. <i>Journal of the American Chemical Society</i> , 2018, 140, 4860-4868.	6.6	83
59	Asymmetric Synthesis of $\beta$ -Lactam via Palladium-Catalyzed Enantioselective Intramolecular C(sp <sup>3</sup> ) <sup>3</sup> -H Amidation. <i>ACS Catalysis</i> , 2020, 10, 114-120.	5.5	83
60	Ni-Catalyzed Arylboration of Unactivated Alkenes: Scope and Mechanistic Studies. <i>Journal of the American Chemical Society</i> , 2019, 141, 9391-9400.	6.6	78
61	Rh-Catalyzed (5+2) Cycloadditions of 3-Acyloxy-1,4-enynes and Alkynes: Computational Study of Mechanism, Reactivity, and Regioselectivity. <i>Journal of the American Chemical Society</i> , 2013, 135, 9271-9274.	6.6	76
62	Catalytic Site-Selective Acylation of Carbohydrates Directed by Cation- $\pi$ Interaction. <i>Journal of the American Chemical Society</i> , 2017, 139, 4346-4349.	6.6	75
63	Sequence-Controlled Polymers Through Entropy-Driven Ring-Opening Metathesis Polymerization: Theory, Molecular Weight Control, and Monomer Design. <i>Journal of the American Chemical Society</i> , 2019, 141, 5741-5752.	6.6	75
64	Rhodium-Catalyzed Enantioselective Radical Addition of CX <sub>4</sub> Reagents to Olefins. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 8780-8784.	7.2	73
65	Application of Trimethylgermyl-Substituted Bisphosphine Ligands with Enhanced Dispersion Interactions to Copper-Catalyzed Hydroboration of Disubstituted Alkenes. <i>Journal of the American Chemical Society</i> , 2020, 142, 18213-18222.	6.6	73
66	Stereodivergent atom-transfer radical cyclization by engineered cytochromes P450. <i>Science</i> , 2021, 374, 1612-1616.	6.0	73
67	Boron insertion into alkyl ether bonds via zinc/nickel tandem catalysis. <i>Science</i> , 2021, 372, 175-182.	6.0	72
68	<i>Z</i> -Selective Ethenolysis with a Ruthenium Metathesis Catalyst: Experiment and Theory. <i>Journal of the American Chemical Society</i> , 2013, 135, 5848-5858.	6.6	71
69	NHC Ligands Tailored for Simultaneous Regio- and Enantiocontrol in Nickel-Catalyzed Reductive Couplings. <i>Journal of the American Chemical Society</i> , 2017, 139, 9317-9324.	6.6	71
70	Tandem Iridium Catalysis as a General Strategy for Atroposelective Construction of Axially Chiral Styrenes. <i>Journal of the American Chemical Society</i> , 2021, 143, 10686-10694.	6.6	71
71	Solvent Effects on Polymer Sorting of Carbon Nanotubes with Applications in Printed Electronics. <i>Small</i> , 2015, 11, 126-133.	5.2	69
72	A Photoswitchable Olefin Metathesis Catalyst. <i>Organometallics</i> , 2017, 36, 490-497.	1.1	69

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73	Catalytic, Enantioselective N-Acylation of Lactams and Thiolactams Using Amidine-Based Catalysts. <i>Journal of the American Chemical Society</i> , 2012, 134, 17605-17612.	6.6	68
74	Mechanism and Origins of Ligand-Controlled Selectivities in [Ni(NHC)]-Catalyzed Intramolecular (5 + 1) [2+1] Cycloaddition of Alkynes. <i>Journal of the American Chemical Society</i> , 2013, 135, 1456-1462.	6.6	68
75	Kinetic Resolution via Rh-Catalyzed C=C Activation of Cyclobutanones at Room Temperature. <i>Journal of the American Chemical Society</i> , 2019, 141, 16260-16265.	6.6	67
76	Predictive Model for Oxidative C-H Bond Functionalization Reactivity with 2,3-Dichloro-5,6-dicyano-1,4-benzoquinone. <i>Journal of the American Chemical Society</i> , 2017, 139, 17935-17944.	6.6	64
77	Cascade CuH-catalysed conversion of alkynes into enantioenriched 1,1-disubstituted products. <i>Nature Catalysis</i> , 2020, 3, 23-29.	16.1	64
78	2-Sulfonylpyridines as Tunable, Cysteine-Reactive Electrophiles. <i>Journal of the American Chemical Society</i> , 2020, 142, 8972-8979.	6.6	64
79	Monovalent Nickel-Mediated Radical Formation: A Concerted Halogen-Atom Dissociation Pathway Determined by Electroanalytical Studies. <i>Journal of the American Chemical Society</i> , 2021, 143, 14196-14206.	6.6	64
80	Catalytic, Enantioselective $\alpha$ -Alkylation of Azlactones with Nonconjugated Alkenes by Directed Nucleopalladation. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3923-3927.	7.2	63
81	H-bonded reusable template assisted para-selective ketonisation using soft electrophilic vinyl ethers. <i>Nature Communications</i> , 2018, 9, 3582.	5.8	62
82	Carboxylate-Assisted C(sp <sup>3</sup> )-H Activation in Olefin Metathesis-Relevant Ruthenium Complexes. <i>Journal of the American Chemical Society</i> , 2014, 136, 6733-6743.	6.6	61
83	Traversing Steric Limitations by Cooperative Lewis Base/Palladium Catalysis: An Enantioselective Synthesis of $\beta$ -Branched Esters Using $\alpha$ -Substituted Allyl Electrophiles. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 7800-7803.	7.2	61
84	Energy Decomposition Analyses Reveal the Origins of Catalyst and Nucleophile Effects on Regioselectivity in Nucleopalladation of Alkenes. <i>Journal of the American Chemical Society</i> , 2019, 141, 11892-11904.	6.6	61
85	On the Mechanism of Ligand-Assisted, Copper-Catalyzed Benzylic Amination by Chloramine-T. <i>Organometallics</i> , 2010, 29, 3404-3412.	1.1	57
86	Asymmetric allylic substitution $\rightarrow$ isomerization to axially chiral enamides <i>via</i> hydrogen-bonding assisted central-to-axial chirality transfer. <i>Chemical Science</i> , 2020, 11, 10119-10126.	3.7	57
87	Mechanism of the Cycloaddition of Carbon Dioxide and Epoxides Catalyzed by Cobalt-Substituted 12-Tungstenphosphate. <i>Chemistry - A European Journal</i> , 2012, 18, 9870-9876.	1.7	56
88	Regioselective, Photocatalytic $\alpha$ -Functionalization of Amines. <i>Journal of the American Chemical Society</i> , 2020, 142, 11972-11977.	6.6	54
89	Branched-Selective Direct $\alpha$ -Alkylation of Cyclic Ketones with Simple Alkenes. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4366-4370.	7.2	53
90	A Transient $\beta$ -Directing Group Strategy Enables Enantioselective Reductive Heck Hydroarylation of Alkenes. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 8885-8890.	7.2	53

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91	Synthesis of Pyrroles through the CuH-Catalyzed Coupling of Enynes and Nitriles. <i>Journal of the American Chemical Society</i> , 2020, 142, 9908-9914.	6.6	52
92	Stereoselective Palladium-Catalyzed Base-Free Suzuki–Miyaura Cross-Coupling of Tetrasubstituted <i>gem</i> -Difluoroalkenes: An Experimental and Computational Study. <i>ACS Catalysis</i> , 2021, 11, 4799-4809.	5.5	52
93	Ligand–Controlled Regiodivergence in Nickel–Catalyzed Hydroarylation and Hydroalkenylation of Alkenyl Carboxylic Acids**. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 23306-23312.	7.2	51
94	Synthesis of Boriranes by Double Hydroboration Reactions of N-Heterocyclic Carbene Boranes and Dimethyl Acetylenedicarboxylate. <i>Journal of the American Chemical Society</i> , 2017, 139, 1726-1729.	6.6	49
95	Epimerization of Tertiary Carbon Centers via Reversible Radical Cleavage of Unactivated C(sp <sup>3</sup> )–H Bonds. <i>Journal of the American Chemical Society</i> , 2018, 140, 9678-9684.	6.6	49
96	Cyclometalated <i>Z</i> -Selective Ruthenium Metathesis Catalysts with Modified N-Chelating Groups. <i>Organometallics</i> , 2015, 34, 2858-2869.	1.1	48
97	$\hat{\Psi}$ -Selective Aroylation of Activated Alkenes by Photoredox Catalysis. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 7318-7323.	7.2	47
98	Entry to 1,2,3,4-Tetrasubstituted Arenes through Addressing the <i>meta</i> Constraint in the Palladium/Norbornene Catalysis. <i>Journal of the American Chemical Society</i> , 2020, 142, 3050-3059.	6.6	44
99	Catalytic radical difluoromethoxylation of arenes and heteroarenes. <i>Chemical Science</i> , 2019, 10, 3217-3222.	3.7	43
100	Diastereo- and Enantioselective CuH-Catalyzed Hydroamination of Strained Trisubstituted Alkenes. <i>ACS Catalysis</i> , 2020, 10, 282-291.	5.5	43
101	Computationally Guided Catalyst Design in the Type I Dynamic Kinetic Asymmetric Pauson–Khand Reaction of Allenyl Acetates. <i>Journal of the American Chemical Society</i> , 2017, 139, 15022-15032.	6.6	42
102	Ab Initio Molecular Dynamics Simulations of the S <sub>N</sub> 1/S <sub>N</sub> 2 Mechanistic Continuum in Glycosylation Reactions. <i>Journal of the American Chemical Society</i> , 2021, 143, 1577-1589.	6.6	41
103	Excited-State Palladium-Catalyzed Radical Migratory Mizoroki–Heck Reaction Enables C2-Alkenylation of Carbohydrates. <i>Journal of the American Chemical Society</i> , 2022, 144, 3353-3359.	6.6	41
104	Mechanism of Sulfite-Driven, MeReO <sub>3</sub> -Catalyzed Deoxydehydration of Glycols. <i>Organometallics</i> , 2013, 32, 1821-1831.	1.1	40
105	Dimer Involvement and Origin of Crossover in Nickel-Catalyzed Aldehyde–Alkyne Reductive Couplings. <i>Journal of the American Chemical Society</i> , 2014, 136, 17495-17504.	6.6	40
106	Anti-selective [3+2] (Hetero)annulation of non-conjugated alkenes via directed nucleopalladation. <i>Nature Communications</i> , 2020, 11, 6432.	5.8	40
107	Generation of Axially Chiral Fluoroallenes through a Copper-Catalyzed Enantioselective $\hat{\Psi}$ -Fluoride Elimination. <i>Journal of the American Chemical Society</i> , 2021, 143, 13759-13768.	6.6	40
108	Inversion of Enantioselectivity in Allene Gas versus Allyl Acetate Reductive Aldehyde Allylation Guided by Metal-Centered Stereogenicity: An Experimental and Computational Study. <i>ACS Catalysis</i> , 2019, 9, 9158-9163.	5.5	39



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109	Integrating Allyl Electrophiles into Nickel-Catalyzed Conjunctive Cross-Coupling. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 7029-7034.	7.2	39
110	Highly Enantioselective Synthesis of Indazoles with a C3-Quaternary Chiral Center Using CuH Catalysis. <i>Journal of the American Chemical Society</i> , 2020, 142, 10550-10556.	6.6	38
111	Nickel-Catalyzed Dearomative Arylboration of Indoles: Regioselective Synthesis of C2- and C3-Borylated Indolines. <i>Journal of the American Chemical Society</i> , 2021, 143, 16502-16511.	6.6	38
112	Probing Stereoselectivity in Ring-Opening Metathesis Polymerization Mediated by Cyclometalated Ruthenium-Based Catalysts: A Combined Experimental and Computational Study. <i>Journal of the American Chemical Society</i> , 2016, 138, 1394-1405.	6.6	37
113	Site-Selective and Stereoselective <i>O</i> -Alkylation of Glycosides by Rh(II)-Catalyzed Carbenoid Insertion. <i>Journal of the American Chemical Society</i> , 2019, 141, 19902-19910.	6.6	36
114	Nickel-Catalyzed Radical Migratory Coupling Enables C-2 Arylation of Carbohydrates. <i>Journal of the American Chemical Society</i> , 2021, 143, 8590-8596.	6.6	36
115	A Traceless Directing Group Enables Catalytic $S_N2$ Glycosylation toward 1,2- <i>cis</i> -Glycopyranosides. <i>Journal of the American Chemical Society</i> , 2021, 143, 11908-11913.	6.6	36
116	Development of Chiral Bis-hydrazone Ligands for the Enantioselective Cross-Coupling Reactions of Aryldimethylsilylanolates. <i>Journal of Organic Chemistry</i> , 2015, 80, 313-366.	1.7	35
117	Redox-Neutral TEMPO Catalysis: Direct Radical (Hetero)Aryl $C-H$ and Trifluoromethoxylation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 21475-21480.	7.2	35
118	Mechanistic studies on intramolecular $C-H$ trifluoromethoxylation of (hetero)arenes via OCF <sub>3</sub> -migration. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 5599-5605.	1.5	33
119	Catalytic $C-H$ Trifluoromethoxylation of Arenes and Heteroarenes. <i>Angewandte Chemie</i> , 2018, 130, 9793-9797.	1.6	33
120	Manifestation of Felkin-Anh Control in Enantioselective Acyl Transfer Catalysis: Kinetic Resolution of Carboxylic Acids. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9638-9642.	7.2	32
121	N-Type Conjugated Polymer-Enabled Selective Dispersion of Semiconducting Carbon Nanotubes for Flexible CMOS-Like Circuits. <i>Advanced Functional Materials</i> , 2015, 25, 1837-1844.	7.8	32
122	Confronting the Challenging Asymmetric Carbonyl 1,2-Addition Using Vinyl Heteroarene Pronucleophiles: Ligand-Controlled Regiodivergent Processes through a Dearomatized Allyl-Cu Species. <i>Journal of the American Chemical Society</i> , 2022, 144, 5985-5995.	6.6	32
123	Remote Substituent Effects in Ruthenium-Catalyzed [2+2] Cycloadditions: An Experimental and Theoretical Study. <i>Journal of Organic Chemistry</i> , 2006, 71, 3793-3803.	1.7	30
124	Ligand Conformational Flexibility Enables Enantioselective Tertiary $C-B$ Bond Formation in the Phosphonate-Directed Catalytic Asymmetric Alkene Hydroboration. <i>Journal of the American Chemical Society</i> , 2021, 143, 4801-4808.	6.6	30
125	Ruthenabenzene: A Robust Precatalyst. <i>Journal of the American Chemical Society</i> , 2021, 143, 7490-7500.	6.6	30
126	Redox-Active Reagents for Photocatalytic Generation of the OCF <sub>3</sub> Radical and (Hetero)Aryl $C-H$ Trifluoromethoxylation. <i>Angewandte Chemie</i> , 2018, 130, 13991-13995.	1.6	29



#	ARTICLE	IF	CITATIONS
127	Catalytic, Enantioselective $\alpha$ -Alkylation of Azlactones with Nonconjugated Alkenes by Directed Nucleopalladation. <i>Angewandte Chemie</i> , 2019, 131, 3963-3967.	1.6	29
128	Cafestol to Tricalysiolide B and Oxidized Analogues: Biosynthetic and Derivatization Studies Using Non-heme Iron Catalyst Fe(PDP). <i>Synlett</i> , 2012, 23, 2768-2772.	1.0	28
129	Competition Between Concerted and Stepwise Dynamics in the Triplet Diazo-Methane Rearrangement. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8664-8667.	7.2	28
130	Traversing Steric Limitations by Cooperative Lewis Base/Palladium Catalysis: An Enantioselective Synthesis of $\alpha$ -Branched Esters Using $\beta$ -Substituted Allyl Electrophiles. <i>Angewandte Chemie</i> , 2018, 130, 7926-7929.	1.6	28
131	Rhodium(I)-Catalyzed Benzannulation of Heteroaryl Propargylic Esters: Synthesis of Indoles and Related Heterocycles. <i>Chemistry - A European Journal</i> , 2016, 22, 10410-10414.	1.7	27
132	A Ring-Opening Metathesis Polymerization Catalyst That Exhibits Redox-Switchable Monomer Selectivities. <i>Chemistry - A European Journal</i> , 2017, 23, 5994-6000.	1.7	27
133	An Initiation Kinetics Prediction Model Enables Rational Design of Ruthenium Olefin Metathesis Catalysts Bearing Modified Chelating Benzylidenes. <i>ACS Catalysis</i> , 2018, 8, 4600-4611.	5.5	27
134	Ruthenium-Catalyzed Reductive Cleavage of Unstrained Aryl-Aryl Bonds: Reaction Development and Mechanistic Study. <i>Journal of the American Chemical Society</i> , 2019, 141, 18630-18640.	6.6	27
135	A Short Synthesis of Delavatine A Unveils New Insights into Site-Selective Cross-Coupling of 3,5-Dibromo-2-pyrone. <i>Journal of the American Chemical Society</i> , 2019, 141, 2652-2660.	6.6	26
136	Chiral Amines via Enantioselective $\alpha$ -Allyliridium-Carboxylate-Catalyzed Allylic Alkylation: Student Training via Industrial-Academic Collaboration. <i>Accounts of Chemical Research</i> , 2022, 55, 2138-2147.	7.6	26
137	Mechanism and Origins of Regio- and Enantioselectivities in Rh-Catalyzed Hydrogenative Couplings of 1,3-Diynes and Activated Carbonyl Partners: Intervention of a Cumulene Intermediate. <i>Chemistry - A European Journal</i> , 2011, 17, 4021-4029.	1.7	25
138	Theoretical studies of regioselectivity of Ni- and Rh-catalyzed C-C bond forming reactions with unsymmetrical alkynes. <i>Inorganica Chimica Acta</i> , 2011, 369, 2-14.	1.2	25
139	<i>Cis</i> -Selective Metathesis to Enhance the Living Character of Ring-Opening Polymerization: An Approach to Sequenced Copolymers. <i>ACS Macro Letters</i> , 2018, 7, 858-862.	2.3	25
140	Intermolecular Regio- and Stereoselective Hetero-[5+2] Cycloaddition of Oxidopyrylium Ylides and Cyclic Imines. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 887-891.	7.2	25
141	Pd-Catalyzed C(alkenyl)-H Activation Facilitated by a Transient Directing Group**. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	24
142	Cu-Catalyzed Hydroboration of Benzylidenecyclopropanes: Reaction Optimization, (Hetero)Aryl Scope, and Origins of Pathway Selectivity. <i>ACS Catalysis</i> , 2019, 9, 11130-11136.	5.5	23
143	Experimental and Computational Exploration of $\alpha$ -Selective Silylation with a Hydrogen-Bonded Template. <i>Angewandte Chemie</i> , 2017, 129, 15099-15103.	1.6	22
144	Origins of the Stereoretentive Mechanism of Olefin Metathesis with Ru-Dithiolate Catalysts. <i>Journal of Organic Chemistry</i> , 2017, 82, 10595-10600.	1.7	22

#	ARTICLE	IF	CITATIONS
145	Tuning the Reactivity of Cyclopropenes from Living Ring-Opening Metathesis Polymerization (ROMP) to Single-Addition and Alternating ROMP. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 17771-17776.	7.2	22
146	Compatibility Score for Rational Electrophile Selection in Pd/NBE Cooperative Catalysis. <i>Chem</i> , 2020, 6, 2810-2825.	5.8	22
147	Regioselectivity in the Cu(I)-Catalyzed [4 + 2]-Cycloaddition of 2-Nitrosopyridine with Unsymmetrical Dienes. <i>Journal of Organic Chemistry</i> , 2014, 79, 5617-5626.	1.7	21
148	Theoretical studies of the conformations and <sup>19</sup> F NMR spectra of linear and a branched perfluorooctanesulfonamide (PFOSAmide). <i>Chemosphere</i> , 2007, 69, 1213-1220.	4.2	20
149	Adamantyl Group Directed Site-Selective Acylation: Applications in Streamlined Assembly of Oligosaccharides. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9542-9546.	7.2	20
150	C2-ketonylation of carbohydrates via excited-state palladium-catalyzed 1,2-spin-center shift. <i>Chemical Science</i> , 2022, 13, 6276-6282.	3.7	20
151	Disentangling Ligand Effects on Metathesis Catalyst Activity: Experimental and Computational Studies of Ruthenium-Aminophosphine Complexes. <i>Journal of the American Chemical Society</i> , 2018, 140, 5634-5643.	6.6	19
152	Multifaceted Substrate-Ligand Interactions Promote the Copper-Catalyzed Hydroboration of Benzylidenecyclobutanes and Related Compounds. <i>ACS Catalysis</i> , 2020, 10, 13075-13083.	5.5	19
153	Controlling cyclization pathways in palladium-catalyzed intramolecular alkene hydro-functionalization via substrate directivity. <i>Chemical Science</i> , 2020, 11, 11307-11314.	3.7	19
154	Redox-Neutral TEMPO Catalysis: Direct Radical (Hetero)Aryl C-H and Trifluoromethoxylation. <i>Angewandte Chemie</i> , 2020, 132, 21659-21664.	1.6	19
155	Organophosphorus-catalyzed relay oxidation of H-Bpin: electrophilic C-H borylation of heteroarenes. <i>Chemical Science</i> , 2021, 12, 1031-1037.	3.7	19
156	Using Ring Strain to Control 4π-Electrocyclization Reactions: Torquoselectivity in Ring Closing of Medium-Ring Dienes and Ring Opening of Bicyclic Cyclobutenes. <i>Journal of Organic Chemistry</i> , 2017, 82, 4613-4624.	1.7	18
157	A redox-switchable ring-closing metathesis catalyst. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 1525-1532.	3.0	18
158	Computational Study of the Ni-Catalyzed C-H Oxidative Cycloaddition of Aromatic Amides with Alkynes. <i>ACS Omega</i> , 2019, 4, 5209-5220.	1.6	18
159	The Thermal Rearrangement of an NHC-Ligated 3-Benzoborepin to an NHC-Boranorcaradiene. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 903-909.	7.2	18
160	Enantioselective Iridium-Catalyzed Allylation of Nitroalkanes: Entry to <sup>1,2</sup> -Stereogenic <sup>1,4</sup> -Quaternary Primary Amines. <i>Journal of the American Chemical Society</i> , 2021, 143, 9343-9349.	6.6	18
161	Ruthenium-catalyzed [2+2] cycloadditions between substituted alkynes and norbornadiene: a theoretical study. <i>Tetrahedron</i> , 2007, 63, 7659-7666.	1.0	16
162	Confined organization of fullerene units along high polymer chains. <i>Journal of Materials Chemistry C</i> , 2013, 1, 5747.	2.7	16

#	ARTICLE	IF	CITATIONS
163	Computational Investigations of the Effects of <i>N</i> -Heterocyclic Carbene Ligands on the Mechanism, Reactivity, and Regioselectivity of Rh-Catalyzed Hydroborations. <i>ACS Catalysis</i> , 2020, 10, 3820-3827.	5.5	16
164	Low-valent tungsten redox catalysis enables controlled isomerization and carbonylative functionalization of alkenes. <i>Nature Chemistry</i> , 2022, 14, 632-639.	6.6	16
165	Concerted [4 + 2] and Stepwise (2 + 2) Cycloadditions of Tetrafluoroethylene with Butadiene: DFT and DLPNO-UCCSD(T) Explorations. <i>Journal of Organic Chemistry</i> , 2020, 85, 3858-3864.	1.7	15
166	Mechanism and Origins of Enantioselectivity in the Rh(I)-Catalyzed Pauson-Khand Reaction: Comparison of Bidentate and Monodentate Chiral Ligands. <i>ACS Catalysis</i> , 2021, 11, 323-336.	5.5	15
167	C-N Bond Forming Radical Rebound Is the Enantioselectivity-Determining Step in P411-Catalyzed Enantioselective C(sp <sup>3</sup> )-H Amination: A Combined Computational and Experimental Investigation. <i>Journal of the American Chemical Society</i> , 2022, 144, 11215-11225.	6.6	15
168	Kinetics and Inverse Temperature Dependence of a Tsuji-Trost Reaction in Aqueous Buffer. <i>ACS Catalysis</i> , 2019, 9, 11720-11733.	5.5	14
169	Branched-Selective Direct $\alpha$ -Alkylation of Cyclic Ketones with Simple Alkenes. <i>Angewandte Chemie</i> , 2019, 131, 4410-4414.	1.6	14
170	P-stereogenic N-vinylphosphoramides enabled by asymmetric allylic substitution-isomerization. <i>Cell Reports Physical Science</i> , 2021, 2, 100594.	2.8	14
171	Origins of Catalyst-Controlled Selectivity in Ag-Catalyzed Regiodivergent C-H Amination. <i>Journal of the American Chemical Society</i> , 2022, 144, 2735-2746.	6.6	14
172	Rhodium-Catalyzed Intramolecular [5+2] Cycloaddition of Inverted 3-acyloxy-1,4-enyne and Alkyne: Experimental and Theoretical Studies. <i>Chemistry - A European Journal</i> , 2016, 22, 7079-7083.	1.7	13
173	<i>O</i> -Mannosylation through <i>O</i> -Alkylation of Anomeric Cesium Alkoxides: Mechanistic Studies and Synthesis of the Hexasaccharide Core of Complex Fucosylated N-Linked Glycans. <i>European Journal of Organic Chemistry</i> , 2020, 2020, 2291-2301.	1.2	13
174	A Transient Directing Group Strategy Enables Enantioselective Reductive Heck Hydroarylation of Alkenes. <i>Angewandte Chemie</i> , 2020, 132, 8970-8975.	1.6	13
175	[2+2] Photocycloaddition of Enones to Single-Walled Carbon Nanotubes Creates Fluorescent Quantum Defects. <i>ACS Nano</i> , 2021, 15, 4833-4844.	7.3	13
176	Mechanistic Insights into the ReIO <sub>2</sub> (PPh <sub>3</sub> ) <sub>2</sub> -Promoted Reductive Coupling of Alcohols. <i>Organometallics</i> , 2018, 37, 2468-2480.	1.1	12
177	Energy Decomposition Analysis Reveals the Nature of Lone Pair- $\pi$ Interactions with Cationic $\pi$ Systems in Catalytic Acyl Transfer Reactions. <i>Organic Letters</i> , 2021, 23, 4411-4414.	2.4	12
178	Development and Mechanistic Studies of the Iridium-Catalyzed C-H Alkenylation of Enamides with Vinyl Acetates: A Versatile Approach for Ketone Functionalization. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 20926-20934.	7.2	12
179	Synthesis of (+)-ribose by catalytic, enantioselective hydroamination of benzene. , 2022, 1, 542-547.		12
180	Engineered P450 Atom-Transfer Radical Cyclases are Bifunctional Biocatalysts: Reaction Mechanism and Origin of Enantioselectivity. <i>Journal of the American Chemical Society</i> , 2022, 144, 13344-13355.	6.6	12

#	ARTICLE	IF	CITATIONS
181	Intramolecular C-H Activation Reactions of Ru(NHC) Complexes Combined with H <sub>2</sub> Transfer to Alkenes: A Theoretical Elucidation of Mechanisms and Effects of Ligands on Reactivities. <i>Organometallics</i> , 2017, 36, 3613-3623.	1.1	8
182	The Thermal Rearrangement of an NHC-Ligated $\beta$ -Benzoborepin to an NHC-Boranorcaradiene. <i>Angewandte Chemie</i> , 2020, 132, 913-919.	1.6	8
183	Reductive Lithiation in the Absence of Aromatic Electron Carriers. A Steric Effect Manifested on the Surface of Lithium Metal Leads to a Difference in Relative Reactivity Depending on Whether the Aromatic Electron Carrier Is Present or Absent. <i>Journal of Organic Chemistry</i> , 2015, 80, 8571-8582.	1.7	7
184	Fundamental Difference in Reductive Lithiations with Preformed Radical Anions versus Catalytic Aromatic Electron-Transfer Agents: <i>N,N</i> -Dimethylaniline as an Advantageous Catalyst. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 383-386.	7.2	7
185	1,3-Dipolar Cycloaddition Reactions of Low-Valent Rhodium and Iridium Complexes with Arylnitrile <i>N</i> -Oxides. <i>Journal of Organic Chemistry</i> , 2017, 82, 5096-5101.	1.7	7
186	$\beta$ -Selective Arylation of Activated Alkenes by Photoredox Catalysis. <i>Angewandte Chemie</i> , 2019, 131, 7396-7401.	1.6	7
187	Metal-Free C-C Coupling of an Allenyl Sulfone with Picolyl Amides to Access Vinyl Sulfones via Pyridine-Initiated In Situ Generation of Sulfinat Anion. <i>Journal of Organic Chemistry</i> , 2020, 85, 7959-7975.	1.7	7
188	The 3Dmol.js Learning Environment: A Classroom Response System for 3D Chemical Structures. <i>Journal of Chemical Education</i> , 2020, 97, 3872-3876.	1.1	6
189	Ligand-Controlled Regiodivergence in Nickel-Catalyzed Hydroarylation and Hydroalkenylation of Alkenyl Carboxylic Acids**. <i>Angewandte Chemie</i> , 2020, 132, 23506-23512.	1.6	6
190	Thiol Reactivity of <i>N</i> -Aryl $\beta$ -Methylene- $\beta$ -lactams: A Reactive Group for Targeted Covalent Inhibitor Design. <i>Journal of Organic Chemistry</i> , 2021, 86, 11926-11936.	1.7	6
191	Kinetic, ESI-MS, and Computational Studies of $\beta$ -Allyliridium <i>C,O</i> -Benzoate-Catalyzed Allylic Amination: Understanding the Effect of Cesium Ion. <i>ACS Catalysis</i> , 2022, 12, 3660-3668.	5.5	6
192	Mechanism-Based Approach to Reagent Selection for Oxidative Carbon-Hydrogen Bond Cleavage Reactions. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	5
193	Density Functional Theory Study on the Mechanism of Iridium-Catalyzed Benzylamine <i>ortho</i> C-H Alkenylation with Ethyl Acrylate. <i>ACS Omega</i> , 2020, 5, 15446-15453.	1.6	4
194	Integrating Allyl Electrophiles into Nickel-Catalyzed Conjunctive Cross-Coupling. <i>Angewandte Chemie</i> , 2020, 132, 7095-7100.	1.6	4
195	Noncovalent Interaction- and Steric Effect-Controlled Regiodivergent Selectivity in Dimeric Manganese-Catalyzed Hydroarylation of Internal Alkynes: A Computational Study. <i>Journal of Organic Chemistry</i> , 2022, 87, 4215-4225.	1.7	4
196	Redox-switchable olefin cross metathesis (CM) reactions and acyclic diene metathesis (ADMET) polymerizations. <i>Materials Chemistry Frontiers</i> , 2019, 3, 2083-2089.	3.2	3
197	Tuning the Reactivity of Cyclopropenes from Living Ring-Opening Metathesis Polymerization (ROMP) to Single-Addition and Alternating ROMP. <i>Angewandte Chemie</i> , 2019, 131, 17935-17940.	1.6	3
198	Using Computational Chemistry to Understand & Discover Chemical Reactions. <i>Daedalus</i> , 2014, 143, 49-66.	0.9	2

#	ARTICLE	IF	CITATIONS
199	S-Adamantyl Group Directed Site-Selective Acylation: Applications in Streamlined Assembly of Oligosaccharides. <i>Angewandte Chemie</i> , 2019, 131, 9642-9646.	1.6	2
200	Development and Mechanistic Studies of the Iridium-Catalyzed C-H Alkenylation of Enamides with Vinyl Acetates: A Versatile Approach for Ketone Functionalization. <i>Angewandte Chemie</i> , 2021, 133, 21094-21102.	1.6	2
201	Correction: Photoredox-mediated Minisci C-H alkylation of N-heteroarenes using boronic acids and hypervalent iodine. <i>Chemical Science</i> , 2016, 7, 6573-6573.	3.7	1
202	Intermolecular Regio- and Stereoselective Hetero-[5+2] Cycloaddition of Oxidopyrylium Ylides and Cyclic Imines. <i>Angewandte Chemie</i> , 2019, 131, 897-901.	1.6	1
203	One-electron reduction induced spin transition in Fe( <i>scp</i> ) spin crossover molecules and the effect of the ligand. <i>Journal of Materials Chemistry C</i> , 2021, 9, 4808-4814.	2.7	1
204	Rh(I)-Catalyzed Allenic Pauson-Khand Reaction to Access the Thapsigargin Core: Influence of Furan and Allenyl Chloroacetate Groups on Enantioselectivity. <i>Organic Letters</i> , 2022, 24, 995-999.	2.4	1
205	Pd(II)-Catalyzed C(alkenyl)-H Activation Facilitated by a Transient Directing Group. <i>Angewandte Chemie</i> , 2019, 131, 10000-10000.	1.6	1
206	Issues Particular to Organometallic Reactions. <i>Organometallics</i> , 2018, 37, 519-539.		0
207	Mechanism and stereospecificity of Z-enamide synthesis from salicylaldehydes with isoxazoles using DFT calculations. <i>Journal of Organometallic Chemistry</i> , 2019, 903, 120981.	0.8	0