

Peng Liu

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

201 papers	10,004 citations	59 h-index	93 g-index
226 ext. papers	11,934 ext. citations	12.8 avg, IF	6.77 L-index

#	Paper	IF	Citations
201	.. <i>Journal of the American Chemical Society</i> , 2022 ,	16.4	3
200	Excited-State Palladium-Catalyzed Radical Migratory Mizoroki-Heck Reaction Enables C2-Alkenylation of Carbohydrates.. <i>Journal of the American Chemical Society</i> , 2022 ,	16.4	2
199	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 ,	16.4	3
198	Kinetic, ESI-IMS, and Computational Studies of Allyliridium C,O-Benzoate-Catalyzed Allylic Amination: Understanding the Effect of Cesium Ion. <i>ACS Catalysis</i> , 2022 , 12, 3660-3668	13.1	0
197	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	16.4	10
196	[2+2] Photocycloaddition of Enones to Single-Walled Carbon Nanotubes Creates Fluorescent Quantum Defects. <i>ACS Nano</i> , 2021 , 15, 4833-4844	16.7	4
195	Stereoselective Palladium-Catalyzed Base-Free Suzuki-Miyaura Cross-Coupling of Tetrasubstituted gem-Difluoroalkenes: An Experimental and Computational Study. <i>ACS Catalysis</i> , 2021 , 11, 4799-4809	13.1	19
194	Boron insertion into alkyl ether bonds via zinc/nickel tandem catalysis. <i>Science</i> , 2021 , 372, 175-182	33.3	18
193	Energy Decomposition Analysis Reveals the Nature of Lone Pair-Interactions with Cationic Systems in Catalytic Acyl Transfer Reactions. <i>Organic Letters</i> , 2021 , 23, 4411-4414	6.2	6
192	Ruthenabenzene: A Robust Precatalyst. <i>Journal of the American Chemical Society</i> , 2021 , 143, 7490-7500	16.4	6
191	Nickel-Catalyzed Radical Migratory Coupling Enables C-2 Arylation of Carbohydrates. <i>Journal of the American Chemical Society</i> , 2021 , 143, 8590-8596	16.4	9
190	Enantioselective Iridium-Catalyzed Allylation of Nitroalkanes: Entry to Stereogenic Quaternary Primary Amines. <i>Journal of the American Chemical Society</i> , 2021 , 143, 9343-9349	16.4	5
189	A "Traceless" Directing Group Enables Catalytic S2 Glycosylation toward 1,2-Glycopyranosides. <i>Journal of the American Chemical Society</i> , 2021 , 143, 11908-11913	16.4	5
188	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	16.4	20
187	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	13.1	5
186	Ab Initio Molecular Dynamics Simulations of the S1/S2 Mechanistic Continuum in Glycosylation Reactions. <i>Journal of the American Chemical Society</i> , 2021 , 143, 1577-1589	16.4	11
185	One-electron reduction induced spin transition in Fe(II) spin crossover molecules and the effect of the ligand. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 4808-4814	7.1	1

184	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	3.6	1
183	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	16.4	4
182	Generation of Axially Chiral Fluoroallenes through a Copper-Catalyzed Enantioselective β -Fluoride Elimination. <i>Journal of the American Chemical Society</i> , 2021 , 143, 13759-13768	16.4	8
181	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	16.4	15
180	Thiol Reactivity of α -Aryl β -Methylene- γ -lactams: A Reactive Group for Targeted Covalent Inhibitor Design. <i>Journal of Organic Chemistry</i> , 2021 , 86, 11926-11936	4.2	0
179	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	16.4	10
178	P-stereogenic N-vinylphosphonamides enabled by asymmetric allylic substitution-isomerization. <i>Cell Reports Physical Science</i> , 2021 , 100594	6.1	2
177	Stereodivergent atom-transfer radical cyclization by engineered cytochromes P450.. <i>Science</i> , 2021 , 374, 1612-1616	33.3	13
176	Ligand-Controlled Regiodivergence in Nickel-Catalyzed Hydroarylation and Hydroalkenylation of Alkenyl Carboxylic Acids**. <i>Angewandte Chemie</i> , 2020 , 132, 23506-23512	3.6	2
175	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	4.2	3
174	Synthesis of Pyrroles through the CuH-Catalyzed Coupling of Enynes and Nitriles. <i>Journal of the American Chemical Society</i> , 2020 , 142, 9908-9914	16.4	29
173	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	16.4	20
172	Density Functional Theory Study on the Mechanism of Iridium-Catalyzed Benzylamine C-H Alkenylation with Ethyl Acrylate. <i>ACS Omega</i> , 2020 , 5, 15446-15453	3.9	3
171	Regioselective, Photocatalytic β -Functionalization of Amines. <i>Journal of the American Chemical Society</i> , 2020 , 142, 11972-11977	16.4	30
170	A Transient-Directing-Group Strategy Enables Enantioselective Reductive Heck Hydroarylation of Alkenes. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 8885-8890	16.4	30
169	α -Mannosylation via α -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	3.2	6
168	A Transient-Directing-Group Strategy Enables Enantioselective Reductive Heck Hydroarylation of Alkenes. <i>Angewandte Chemie</i> , 2020 , 132, 8970-8975	3.6	7
167	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	4.2	7

166	Computational Investigations of the Effects of N-Heterocyclic Carbene Ligands on the Mechanism, Reactivity, and Regioselectivity of Rh-Catalyzed Hydroborations. <i>ACS Catalysis</i> , 2020 , 10, 3820-3827	13.1	15
165	Entry to 1,2,3,4-Tetrasubstituted Arenes through Addressing the "Constraint" in the Palladium/Norbornene Catalysis. <i>Journal of the American Chemical Society</i> , 2020 , 142, 3050-3059	16.4	26
164	Integrating Allyl Electrophiles into Nickel-Catalyzed Conjunctive Cross-Coupling. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 7029-7034	16.4	24
163	Integrating Allyl Electrophiles into Nickel-Catalyzed Conjunctive Cross-Coupling. <i>Angewandte Chemie</i> , 2020 , 132, 7095-7100	3.6	4
162	The Thermal Rearrangement of an NHC-Ligated 3-Benzoborepin to an NHC-Boranorcaradiene. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 903-909	16.4	8
161	Asymmetric Synthesis of β -Lactam via Palladium-Catalyzed Enantioselective Intramolecular C(sp ³) β Amidation. <i>ACS Catalysis</i> , 2020 , 10, 114-120	13.1	40
160	The Thermal Rearrangement of an NHC-Ligated 3-Benzoborepin to an NHC-Boranorcaradiene. <i>Angewandte Chemie</i> , 2020 , 132, 913-919	3.6	5
159	Cascade CuH-Catalysed Conversion of Alkynes to Enantioenriched 1,1-Disubstituted Products. <i>Nature Catalysis</i> , 2020 , 3, 23-29	36.5	32
158	Diastereo- and Enantioselective CuH-Catalyzed Hydroamination of Strained Trisubstituted Alkenes. <i>ACS Catalysis</i> , 2020 , 10, 282-291	13.1	29
157	Compatibility Score for Rational Electrophile Selection in Pd/NBE Cooperative Catalysis. <i>Chem</i> , 2020 , 6, 2810-2825	16.2	8
156	Multifaceted Substrate-Ligand Interactions Promote the Copper-Catalyzed Hydroboration of Benzyldenecyclobutanes and Related Compounds. <i>ACS Catalysis</i> , 2020 , 10, 13075-13083	13.1	13
155	Controlling cyclization pathways in palladium(ii)-catalyzed intramolecular alkene hydro-functionalization substrate directivity.. <i>Chemical Science</i> , 2020 , 11, 11307-11314	9.4	8
154	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	16.4	29
153	Redox-Neutral TEMPO Catalysis: Direct Radical (Hetero)Aryl C-H Di- and Trifluoromethoxylation. <i>Angewandte Chemie</i> , 2020 , 132, 21659-21664	3.6	8
152	The 3Dmol.js Learning Environment: A Classroom Response System for 3D Chemical Structures. <i>Journal of Chemical Education</i> , 2020 , 97, 3872-3876	2.4	6
151	Ligand-Controlled Regiodivergence in Nickel-Catalyzed Hydroarylation and Hydroalkenylation of Alkenyl Carboxylic Acids*. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 23306-23312	16.4	26
150	Asymmetric allylic substitution-isomerization to axially chiral enamides hydrogen-bonding assisted central-to-axial chirality transfer. <i>Chemical Science</i> , 2020 , 11, 10119-10126	9.4	23
149	Redox-Neutral TEMPO Catalysis: Direct Radical (Hetero)Aryl C-H Di- and Trifluoromethoxylation. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 21475-21480	16.4	16

148	Anti-selective [3+2] (Hetero)annulation of non-conjugated alkenes via directed nucleopalladation. <i>Nature Communications</i> , 2020 , 11, 6432	17.4	15
147	2-Sulfonylpyridines as Tunable, Cysteine-Reactive Electrophiles. <i>Journal of the American Chemical Society</i> , 2020 , 142, 8972-8979	16.4	30
146	Organophosphorus-catalyzed relay oxidation of H-Bpin: electrophilic C-H borylation of heteroarenes. <i>Chemical Science</i> , 2020 , 12, 1031-1037	9.4	4
145	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	13.1	16
144	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	16.4	41
143	Branched-Selective Direct α -Alkylation of Cyclic Ketones with Simple Alkenes. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 4366-4370	16.4	33
142	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	16.4	27
141	Ni-Catalyzed Arylboration of Unactivated Alkenes: Scope and Mechanistic Studies. <i>Journal of the American Chemical Society</i> , 2019 , 141, 9391-9400	16.4	48
140	S-Adamantyl Group Directed Site-Selective Acylation: Applications in Streamlined Assembly of Oligosaccharides. <i>Angewandte Chemie</i> , 2019 , 131, 9642-9646	3.6	0
139	S-Adamantyl Group Directed Site-Selective Acylation: Applications in Streamlined Assembly of Oligosaccharides. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 9542-9546	16.4	11
138	α -Selective Arylation of Activated Alkenes by Photoredox Catalysis. <i>Angewandte Chemie</i> , 2019 , 131, 7396-7401	3.6	4
137	α -Selective Arylation of Activated Alkenes by Photoredox Catalysis. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 7318-7323	16.4	25
136	Computational Study of the Ni-Catalyzed C-H Oxidative Cycloaddition of Aromatic Amides with Alkynes. <i>ACS Omega</i> , 2019 , 4, 5209-5220	3.9	12
135	Deacylative transformations of ketones via aromatization-promoted C-C bond activation. <i>Nature</i> , 2019 , 567, 373-378	50.4	85
134	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	16.4	56
133	Catalytic, Enantioselective α -Alkylation of Azlactones with Nonconjugated Alkenes by Directed Nucleopalladation. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 3923-3927	16.4	43
132	Catalytic, Enantioselective α -Alkylation of Azlactones with Nonconjugated Alkenes by Directed Nucleopalladation. <i>Angewandte Chemie</i> , 2019 , 131, 3963-3967	3.6	16
131	Branched-Selective Direct α -Alkylation of Cyclic Ketones with Simple Alkenes. <i>Angewandte Chemie</i> , 2019 , 131, 4410-4414	3.6	7

130	Catalytic radical difluoromethoxylation of arenes and heteroarenes. <i>Chemical Science</i> , 2019 , 10, 3217-3224	24	
129	Redox-switchable olefin cross metathesis (CM) reactions and acyclic diene metathesis (ADMET) polymerizations. <i>Materials Chemistry Frontiers</i> , 2019 , 3, 2083-2089	7.8	1
128	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	16.4	14
127	An enzymatic platform for the asymmetric amination of primary, secondary and tertiary C(sp)-H bonds. <i>Nature Chemistry</i> , 2019 , 11, 987-993	17.6	84
126	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	3.6	2
125	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	16.4	16
124	Mechanism and stereospecificity of Z-enamide synthesis from salicylaldehydes with isoxazoles using DFT calculations. <i>Journal of Organometallic Chemistry</i> , 2019 , 903, 120981	2.3	
123	Kinetics and Inverse Temperature Dependence of a Tsuji-Yamamoto Reaction in Aqueous Buffer. <i>ACS Catalysis</i> , 2019 , 9, 11720-11733	13.1	9
122	Cu-Catalyzed Hydroboration of Benzyldenecyclopropanes: Reaction Optimization, (Hetero)Aryl Scope, and Origins of Pathway Selectivity. <i>ACS Catalysis</i> , 2019 , 9, 11130-11136	13.1	10
121	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	16.4	46
120	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	16.4	98
119	Site-Selective and Stereoselective α -Alkylation of Glycosides by Rh(II)-Catalyzed Carbenoid Insertion. <i>Journal of the American Chemical Society</i> , 2019 , 141, 19902-19910	16.4	20
118	Intermolecular Regio- and Stereoselective Hetero-[5+2] Cycloaddition of Oxidopyrylium Ylides and Cyclic Imines. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 887-891	16.4	14
117	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	16.4	11
116	Intermolecular Regio- and Stereoselective Hetero-[5+2] Cycloaddition of Oxidopyrylium Ylides and Cyclic Imines. <i>Angewandte Chemie</i> , 2019 , 131, 897-901	3.6	0
115	Catalytic CBr Trifluoromethoxylation of Arenes and Heteroarenes. <i>Angewandte Chemie</i> , 2018 , 130, 9793-9797	25	
114	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	16.4	13
113	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	16.4	85

112	An Initiation Kinetics Prediction Model Enables Rational Design of Ruthenium Olefin Metathesis Catalysts Bearing Modified Chelating Benzyldienes. <i>ACS Catalysis</i> , 2018 , 8, 4600-4611	13.1	20
111	Traversing Steric Limitations by Cooperative Lewis Base/Palladium Catalysis: An Enantioselective Synthesis of β -Branched Esters Using 2-Substituted Allyl Electrophiles. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 7800-7803	16.4	39
110	A general strategy for synthesis of cyclophane-braced peptide macrocycles via palladium-catalysed intramolecular sp C-H arylation. <i>Nature Chemistry</i> , 2018 , 10, 540-548	17.6	109
109	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	16.4	63
108	Catalytic C-H Trifluoromethoxylation of Arenes and Heteroarenes. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 9645-9649	16.4	66
107	Issues Particular to Organometallic Reactions 2018 , 519-539		
106	Epimerization of Tertiary Carbon Centers via Reversible Radical Cleavage of Unactivated C(sp)-H Bonds. <i>Journal of the American Chemical Society</i> , 2018 , 140, 9678-9684	16.4	23
105	Mechanistic Insights into the ReIO ₂ (PPh ₃) ₂ -Promoted Reductive Coupling of Alcohols. <i>Organometallics</i> , 2018 , 37, 2468-2480	3.8	11
104	Modular ipso/ ortho Difunctionalization of Aryl Bromides via Palladium/Norbornene Cooperative Catalysis. <i>Journal of the American Chemical Society</i> , 2018 , 140, 8551-8562	16.4	66
103	Redox-Active Reagents for Photocatalytic Generation of the OCF ₃ Radical and (Hetero)Aryl C-H Trifluoromethoxylation. <i>Angewandte Chemie</i> , 2018 , 130, 13991-13995	3.6	18
102	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	16.4	70
101	Redox-Active Reagents for Photocatalytic Generation of the OCF Radical and (Hetero)Aryl C-H Trifluoromethoxylation. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 13795-13799	16.4	56
100	H-bonded reusable template assisted para-selective ketonisation using soft electrophilic vinyl ethers. <i>Nature Communications</i> , 2018 , 9, 3582	17.4	42
99	Traversing Steric Limitations by Cooperative Lewis Base/Palladium Catalysis: An Enantioselective Synthesis of β -Branched Esters Using 2-Substituted Allyl Electrophiles. <i>Angewandte Chemie</i> , 2018 , 130, 7926-7929	3.6	20
98	Cis-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	6.6	17
97	Complementary site-selectivity in arene functionalization enabled by overcoming the ortho constraint in palladium/norbornene catalysis. <i>Nature Chemistry</i> , 2018 , 10, 866-872	17.6	83
96	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	16.4	37
95	Using Ring Strain to Control 4E 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	4.2	18

94	1,3-Dipolar Cycloaddition Reactions of Low-Valent Rhodium and Iridium Complexes with Arylnitrile N-Oxides. <i>Journal of Organic Chemistry</i> , 2017 , 82, 5096-5101	4.2	5
93	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	16.4	47
92	Rhodium-Catalyzed Enantioselective Radical Addition of CX Reagents to Olefins. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 8780-8784	16.4	54
91	A redox-switchable ring-closing metathesis catalyst. <i>Inorganic Chemistry Frontiers</i> , 2017 , 4, 1525-1532	6.8	15
90	Catalytic Site-Selective Acylation of Carbohydrates Directed by Cation- π Interaction. <i>Journal of the American Chemical Society</i> , 2017 , 139, 4346-4349	16.4	56
89	A Photoswitchable Olefin Metathesis Catalyst. <i>Organometallics</i> , 2017 , 36, 490-497	3.8	64
88	A Ring-Opening Metathesis Polymerization Catalyst That Exhibits Redox-Switchable Monomer Selectivities. <i>Chemistry - A European Journal</i> , 2017 , 23, 5994-6000	4.8	21
87	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	16.4	117
86	Tridentate Directing Groups Stabilize 6-Membered Palladacycles in Catalytic Alkene Hydrofunctionalization. <i>Journal of the American Chemical Society</i> , 2017 , 139, 15576-15579	16.4	60
85	Experimental and Computational Exploration of para-Selective Silylation with a Hydrogen-Bonded Template. <i>Angewandte Chemie</i> , 2017 , 129, 15099-15103	3.6	19
84	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	16.4	37
83	Ligand-Substrate Dispersion Facilitates the Copper-Catalyzed Hydroamination of Unactivated Olefins. <i>Journal of the American Chemical Society</i> , 2017 , 139, 16548-16555	16.4	116
82	Origins of the Stereoretentive Mechanism of Olefin Metathesis with Ru-Dithiolate Catalysts. <i>Journal of Organic Chemistry</i> , 2017 , 82, 10595-10600	4.2	17
81	Intramolecular C \equiv N Activation Reactions of Ru(NHC) Complexes Combined with H ₂ Transfer to Alkenes: A Theoretical Elucidation of Mechanisms and Effects of Ligands on Reactivities. <i>Organometallics</i> , 2017 , 36, 3613-3623	3.8	7
80	Catalytic Intermolecular Carboamination of Unactivated Alkenes via Directed Aminopalladation. <i>Journal of the American Chemical Society</i> , 2017 , 139, 11261-11270	16.4	116
79	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	16.4	68
78	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	16.4	51
77	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	16.4	80

76	A unified photoredox-catalysis strategy for C(sp)-H hydroxylation and amidation using hypervalent iodine. <i>Chemical Science</i> , 2017 , 8, 7180-7185	9.4	57
75	Experimental and Computational Exploration of para-Selective Silylation with a Hydrogen-Bonded Template. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 14903-14907	16.4	83
74	Catalytic activation of carbon-carbon bonds in cyclopentanones. <i>Nature</i> , 2016 , 539, 546-550	50.4	173
73	Copper-catalyzed asymmetric addition of olefin-derived nucleophiles to ketones. <i>Science</i> , 2016 , 353, 144-50	33.3	161
72	Rhodium(I)-Catalyzed Benzannulation of Heteroaryl Propargylic Esters: Synthesis of Indoles and Related Heterocycles. <i>Chemistry - A European Journal</i> , 2016 , 22, 10410-4	4.8	23
71	Mechanism of Photoinduced Metal-Free Atom Transfer Radical Polymerization: Experimental and Computational Studies. <i>Journal of the American Chemical Society</i> , 2016 , 138, 2411-25	16.4	313
70	Mechanistic studies on intramolecular C-H trifluoromethoxylation of (hetero)arenes via OCF ₃ -migration. <i>Organic and Biomolecular Chemistry</i> , 2016 , 14, 5599-605	3.9	25
69	Fundamental Difference in Reductive Lithiations with Preformed Radical Anions versus Catalytic Aromatic Electron-Transfer Agents: N,N-Dimethylaniline as an Advantageous Catalyst. <i>Angewandte Chemie</i> , 2016 , 128, 391-394	3.6	
68	Mechanism and Origins of Ligand-Controlled Linear Versus Branched Selectivity of Iridium-Catalyzed Hydroarylation of Alkenes. <i>ACS Catalysis</i> , 2016 , 6, 809-820	13.1	92
67	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, 1394-405	16.4	31
66	Photoredox-mediated Minisci C-H alkylation of π -heteroarenes using boronic acids and hypervalent iodine. <i>Chemical Science</i> , 2016 , 7, 6407-6412	9.4	204
65	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, 7079-83	4.8	11
64	Fundamental Difference in Reductive Lithiations with Preformed Radical Anions versus Catalytic Aromatic Electron-Transfer Agents: N,N-Dimethylaniline as an Advantageous Catalyst. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 383-6	16.4	7
63	Benzazetidene synthesis via palladium-catalysed intramolecular C \equiv N amination. <i>Nature Chemistry</i> , 2016 , 8, 1131-1136	17.6	80
62	Correction: Photoredox-mediated Minisci C-H alkylation of π -heteroarenes using boronic acids and hypervalent iodine. <i>Chemical Science</i> , 2016 , 7, 6573	9.4	
61	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, 8571-82	4.2	4
60	Conversion of amides to esters by the nickel-catalysed activation of amide C-N bonds. <i>Nature</i> , 2015 , 524, 79-83	50.4	377
59	ORGANIC CHEMISTRY. Catalytic asymmetric hydroamination of unactivated internal olefins to aliphatic amines. <i>Science</i> , 2015 , 349, 62-6	33.3	246

58	Enzymatic hydroxylation of an unactivated methylene C-H bond guided by molecular dynamics simulations. <i>Nature Chemistry</i> , 2015 , 7, 653-60	17.6	78
57	Origins of initiation rate differences in ruthenium olefin metathesis catalysts containing chelating benzylidenes. <i>Journal of the American Chemical Society</i> , 2015 , 137, 5782-92	16.4	68
56	Mechanistic Basis for Regioselection and Regiodivergence in Nickel-Catalyzed Reductive Couplings. <i>Accounts of Chemical Research</i> , 2015 , 48, 1736-45	24.3	108
55	Mechanism and Origins of Selectivities in the Copper-Catalyzed Dearomatization-Induced ortho C-Br Cyanation of Vinylarenes. <i>ACS Catalysis</i> , 2015 , 5, 2944-2951	13.1	75
54	Computational Studies of Ruthenium-Catalyzed Olefin Metathesis 2015 , 199-252		8
53	Solvent effects on polymer sorting of carbon nanotubes with applications in printed electronics. <i>Small</i> , 2015 , 11, 126-33	11	57
52	Development of Chiral Bis-hydrazone Ligands for the Enantioselective Cross-Coupling Reactions of Aryldimethylsilanolates. <i>Journal of Organic Chemistry</i> , 2015 , 80, 313-66	4.2	27
51	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, 8274-83	16.4	81
50	Cyclometalated Z-Selective Ruthenium Metathesis Catalysts with Modified N-Chelating Groups. <i>Organometallics</i> , 2015 , 34, 2858-2869	3.8	37
49	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	15.6	27
48	Palladium-catalyzed meta-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, 344-55	16.4	270
47	Carboxylate-assisted C(sp ²)-H activation in olefin metathesis-relevant ruthenium complexes. <i>Journal of the American Chemical Society</i> , 2014 , 136, 6733-43	16.4	55
46	High-yield sorting of small-diameter carbon nanotubes for solar cells and transistors. <i>ACS Nano</i> , 2014 , 8, 2609-17	16.7	82
45	Using Computational Chemistry to Understand & Discover Chemical Reactions. <i>Daedalus</i> , 2014 , 143, 49-66		1
44	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, 4575-83	16.4	179
43	Role of N-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, 894-7	16.4	233
42	Regioselectivity in the Cu(I)-catalyzed [4 + 2]-cycloaddition of 2-nitrosopyridine with unsymmetrical dienes. <i>Journal of Organic Chemistry</i> , 2014 , 79, 5617-26	4.2	19
41	Competition between concerted and stepwise dynamics in the triplet di- π -methane rearrangement. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 8664-7	16.4	23

40	Dimer involvement and origin of crossover in nickel-catalyzed aldehyde-alkyne reductive couplings. <i>Journal of the American Chemical Society</i> , 2014 , 136, 17495-504	16.4	31
39	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, 17273-83	16.4	88
38	Competition Between Concerted and Stepwise Dynamics in the Triplet Di- π -Methane Rearrangement. <i>Angewandte Chemie</i> , 2014 , 126, 8808-8811	3.6	1
37	Mechanism and enantioselectivity in palladium-catalyzed conjugate addition of arylboronic acids to β -substituted cyclic enones: insights from computation and experiment. <i>Journal of the American Chemical Society</i> , 2013 , 135, 14996-5007	16.4	110
36	Confined organization of fullerene units along high polymer chains. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 5747	7.1	15
35	Scalable and selective dispersion of semiconducting arc-discharged carbon nanotubes by dithiafulvalene/thiophene copolymers for thin film transistors. <i>ACS Nano</i> , 2013 , 7, 2659-68	16.7	79
34	Mechanism of Sulfite-Driven, MeReO ₃ -Catalyzed Deoxydehydration of Glycols. <i>Organometallics</i> , 2013 , 32, 1821-1831	3.8	39
33	Z-Selective ethenolysis with a ruthenium metathesis catalyst: experiment and theory. <i>Journal of the American Chemical Society</i> , 2013 , 135, 5848-58	16.4	70
32	Mechanism and origins of ligand-controlled selectivities in [Ni(NHC)]-catalyzed intramolecular (5 + 2) cycloadditions and homo-ene reactions: a theoretical study. <i>Journal of the American Chemical Society</i> , 2013 , 135, 1456-62	16.4	63
31	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, 9271-4	16.4	72
30	Catalytic ketyl-olefin cyclizations enabled by proton-coupled electron transfer. <i>Journal of the American Chemical Society</i> , 2013 , 135, 10022-5	16.4	216
29	Origin of enantioselectivity in benzotetramisole-catalyzed dynamic kinetic resolution of azlactones. <i>Organic Letters</i> , 2012 , 14, 3288-91	6.2	117
28	Z-Selectivity in olefin metathesis with chelated Ru catalysts: computational studies of mechanism and selectivity. <i>Journal of the American Chemical Society</i> , 2012 , 134, 1464-7	16.4	157
27	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, 12860-5	11.5	144
26	Manifestation of Felkin-Anh Control in Enantioselective Acyl Transfer Catalysis: Kinetic Resolution of Carboxylic Acids. <i>Angewandte Chemie</i> , 2012 , 124, 9776-9780	3.6	11
25	Manifestation of Felkin-Anh control in enantioselective acyl transfer catalysis: kinetic resolution of carboxylic acids. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 9638-42	16.4	28
24	Catalytic, enantioselective N-acylation of lactams and thiolactams using amidine-based catalysts. <i>Journal of the American Chemical Society</i> , 2012 , 134, 17605-12	16.4	57
23	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, 11012-25	16.4	106

22	Decomposition pathways of Z-selective ruthenium metathesis catalysts. <i>Journal of the American Chemical Society</i> , 2012 , 134, 7861-6	16.4	90
21	Understanding reactivity and stereoselectivity in palladium-catalyzed diastereoselective sp ³ C-H bond activation: intermediate characterization and computational studies. <i>Journal of the American Chemical Society</i> , 2012 , 134, 14118-26	16.4	106
20	Mechanism of the cycloaddition of carbon dioxide and epoxides catalyzed by cobalt-substituted 12-tungstenphosphate. <i>Chemistry - A European Journal</i> , 2012 , 18, 9870-6	4.8	55
19	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	9.4	82
18	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	2.2	23
17	Ligand steric contours to understand the effects of N-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, 6956-9	16.4	97
16	Nickel-catalyzed amination of aryl carbamates and sequential site-selective cross-couplings. <i>Chemical Science</i> , 2011 , 2, 1766-1771	9.4	139
15	Suzuki-Miyaura cross-coupling of aryl carbamates and sulfamates: experimental and computational studies. <i>Journal of the American Chemical Society</i> , 2011 , 133, 6352-63	16.4	260
14	Mechanism and origins of regio- and enantioselectivities in RhI-catalyzed hydrogenative couplings of 1,3-diynes and activated carbonyl partners: intervention of a cumulene intermediate. <i>Chemistry - A European Journal</i> , 2011 , 17, 4021-9	4.8	23
13	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	2.7	21
12	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, 2050-7	16.4	101
11	On the Mechanism of Ligand-Assisted, Copper-Catalyzed Benzylic Amination by Chloramine-T. <i>Organometallics</i> , 2010 , 29, 3404-3412	3.8	53
10	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, 10127-35	16.4	120
9	Computational explorations of mechanisms and ligand-directed selectivities of copper-catalyzed Ullmann-type reactions. <i>Journal of the American Chemical Society</i> , 2010 , 132, 6205-13	16.4	294
8	Mechanism and transition-state structures for nickel-catalyzed reductive alkyne-aldehyde coupling reactions. <i>Journal of the American Chemical Society</i> , 2009 , 131, 6654-5	16.4	86
7	Origin of enantioselectivity in CF ₃ -PIP-catalyzed kinetic resolution of secondary benzylic alcohols. <i>Journal of the American Chemical Society</i> , 2008 , 130, 13836-7	16.4	98
6	Origins of differences in reactivities of alkenes, alkynes, and allenes in [Rh(CO)2Cl] ₂ -catalyzed (5 + 2) cycloaddition reactions with vinylcyclopropanes. <i>Journal of the American Chemical Society</i> , 2008 , 130, 2378-9	16.4	142
5	Substituent effects, reactant preorganization, and ligand exchange control the reactivity in Rh(I)-catalyzed (5+2) cycloadditions between vinylcyclopropanes and alkynes. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 3939-41	16.4	101

4	Substituent Effects, Reactant Preorganization, and Ligand Exchange Control the Reactivity in RhI-Catalyzed (5+2) Cycloadditions between Vinylcyclopropanes and Alkynes. <i>Angewandte Chemie</i> , 2008 , 120, 4003-4005	3.6	31
3	Ruthenium-catalyzed [2+2] cycloadditions between substituted alkynes and norbornadiene: a theoretical study. <i>Tetrahedron</i> , 2007 , 63, 7659-7666	2.4	15
2	Theoretical studies of the conformations and ¹⁹ F NMR spectra of linear and a branched perfluorooctanesulfonamide (PFOSAmide). <i>Chemosphere</i> , 2007 , 69, 1213-20	8.4	18
1	Remote substituent effects in ruthenium-catalyzed [2+2] cycloadditions: an experimental and theoretical study. <i>Journal of Organic Chemistry</i> , 2006 , 71, 3793-803	4.2	29