Kai Chen

List of Publications by Year
in descending order

43	4,488	117571 34	233338 45
papers	citations	h-index	g-index
61	61	61	3686
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Directed evolution of cytochrome c for carbonâ€“silicon bond formation: Bringing silicon to life. Science, 2016, 354, 1048-1051.	6.0	465
2	Engineering new catalytic activities in enzymes. Nature Catalysis, 2020, 3, 203-213.	16.1	465
3	Stereoselective Synthesis of Chiral Î±â€Aminoâ€Î²â€Lactams through Palladium(II)â€Catalyzed Sequential Monoarylation/Amidation of C(sp³)ï£¿H Bonds. Angewandte Chemie - International Edition, 2013, 52, 13588-13592.	7.2	318
4	Pd(ii)-catalyzed alkoxylation of unactivated C(sp3)â€“H and C(sp2)â€“H bonds using a removable directing group: efficient synthesis of alkyl ethers. Chemical Science, 2013, 4, 4187.	3.7	280
5	Genetically programmed chiral organoborane synthesis. Nature, 2017, 552, 132-136.	13.7	237
6	Enzymatic assembly of carbonâ€“carbon bonds via iron-catalysed sp3 Câ€“H functionalization. Nature, 2019, 565, 67-72.	13.7	233
7	Pd(ii)-catalyzed alkylation of unactivated C(sp3)â€“H bonds: efficient synthesis of optically active unnatural Î±-amino acids. Chemical Science, 2013, 4, 3906.	3.7	202
8	Stereoselective Synthesis of Chiral Î²-Fluoro Î±-Amino Acids via Pd(II)-Catalyzed Fluorination of Unactivated Methylene C(sp³)â€“H Bonds: Scope and Mechanistic Studies. Journal of the American Chemical Society, 2015, 137, 8219-8226.	6.6	183
9	Enzymatic construction of highly strained carbocycles. Science, 2018, 360, 71-75.	6.0	179
10	Sulfonamideâ€Promoted Palladium(II)â€Catalyzed Alkylation of Unactivated Methylene C(sp³)ï£¿H Bonds with Alkyl Iodides. Angewandte Chemie - International Edition, 2014, 53, 11950-11954.	7.2	131
11	Divergent and Stereoselective Synthesis of Î²â€Silylâ€Î±â€Amino Acids through Palladiumâ€Catalyzed Intermolecular Silylation of Unactivated Primary and Secondary Câˆ'H Bonds. Angewandte Chemie - International Edition, 2016, 55, 13859-13862.	7.2	125
12	Diverse Engineered Heme Proteins Enable Stereodivergent Cyclopropanation of Unactivated Alkenes. ACS Central Science, 2018, 4, 372-377.	5.3	113
13	Alternate Heme Ligation Steers Activity and Selectivity in Engineered Cytochrome P450-Catalyzed Carbene-Transfer Reactions. Journal of the American Chemical Society, 2018, 140, 16402-16407.	6.6	106
14	Pd(II)-Catalyzed Direct Sulfonylation of Unactivated C(sp³)â€“H Bonds with Sodium Sulfinates. Organic Letters, 2015, 17, 3552-3555.	2.4	105
15	Directed Evolution of a Cytochrome P450 Carbene Transferase for Selective Functionalization of Cyclic Compounds. Journal of the American Chemical Society, 2019, 141, 8989-8995.	6.6	99
16	Stereoselective Enzymatic Synthesis of Heteroatom-Substituted Cyclopropanes. ACS Catalysis, 2018, 8, 2629-2634.	5.5	96
17	In Situ Generation and Stabilization of Accessible Cu/Cu₂O Heterojunctions inside Organic Frameworks for Highly Efficient Catalysis. Angewandte Chemie - International Edition, 2020, 59, 1925-1931.	7.2	81
18	A general and practical palladium-catalyzed monoarylation of Î²-methyl C(sp3)â€“H of alanine. Chemical Communications, 2014, 50, 13924-13927.	2.2	78

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19	Stereoselective alkoxycarbonylation of unactivated C(sp3)â€“H bonds with alkyl chloroformates via Pd(II)/Pd(IV) catalysis. Nature Communications, 2016, 7, 12901.	5.8	66
20	Engineering Cytochrome P450s for Enantioselective Cyclopropenation of Internal Alkynes. Journal of the American Chemical Society, 2020, 142, 6891-6895.	6.6	63
21	Palladiumâ€Catalyzed Arylation of Unactivated Î³â€Methylene C(sp³)ï£¿H and Î´â€Cï£¿H Bonds with an Oxazolineâ€Carboxylate Auxiliary. Chemistry - A European Journal, 2015, 21, 17503-17507.	1.7	59
22	Sequential Câ€“S and Sâ€“N Coupling Approach to Sulfonamides. Organic Letters, 2020, 22, 1841-1845.	2.4	57
23	Practical Synthesis of <i>anti</i>â€Î²â€Hydroxyâ€Î±â€Amino Acids by Pd^{II}â€Catalyzed Sequential C(sp³)ï£¿H Functionalization. Chemistry - A European Journal, 2015, 21, 3264-3270.	1.7	53
24	Sterically hindered N-heterocyclic carbene/palladium(<scp>ii</scp>) catalyzed Suzukiâ€“Miyaura coupling of nitrobenzenes. Chemical Communications, 2019, 55, 9287-9290.	2.2	48
25	Dual-function enzyme catalysis for enantioselective carbonâ€“nitrogen bond formation. Nature Chemistry, 2021, 13, 1166-1172.	6.6	48
26	Transformation of Metalâ€Organic Frameworks into Stable Organic Frameworks with Inherited Skeletons and Catalytic Properties. Angewandte Chemie - International Edition, 2019, 58, 8119-8123.	7.2	41
27	Palladium-catalyzed sequential monoarylation/amidation of C(sp³)â€“H bonds: stereoselective synthesis of Î±-amino-Î²-lactams and anti-Î±,Î²-diamino acid. Chemical Communications, 2017, 53, 6351-6354.	2.2	40
28	Well-Designed <i>N</i>-Heterocyclic Carbene Ligands for Palladium-Catalyzed Denitrative Câ€“N Coupling of Nitroarenes with Amines. ACS Catalysis, 2019, 9, 8110-8115.	5.5	40
29	Enzymatic Lactone-Carbene Câ€“H Insertion to Build Contiguous Chiral Centers. ACS Catalysis, 2020, 10, 5393-5398.	5.5	38
30	Recent Progress in the Synthesis of Functionalized Î²-Lactams through Transition-Metal-Catalyzed C(sp3)â€“H Amidation. Synlett, 2014, 25, 1941-1945.	1.0	37
31	Palladium-catalyzed interannular meta-Câ€“H arylation. Chemical Communications, 2017, 53, 2166-2169.	2.2	37
32	Divergent and Stereoselective Synthesis of Î²â€Silylâ€Î±â€Amino Acids through Palladiumâ€Catalyzed Intermolecular Silylation of Unactivated Primary and Secondary Câˆ'H Bonds. Angewandte Chemie, 2016, 128, 14063-14066.	1.6	36
33	Transformation of Metalâ€Organic Frameworks into Stable Organic Frameworks with Inherited Skeletons and Catalytic Properties. Angewandte Chemie, 2019, 131, 8203-8207.	1.6	31
34	Synthesis of chiral Î±-hydroxy acids via palladium-catalyzed C(sp³)â€“H alkylation of lactic acid. Chemical Communications, 2016, 52, 1915-1918.	2.2	23
35	Engineered Cytochrome c-Catalyzed Lactone-Carbene Bâ€“H Insertion. Synlett, 2019, 30, 378-382.	1.0	22
36	Synthesis of benzoxazine and 1,3-oxazine derivatives via ligand-free copper(I)-catalyzed one-pot cascade addition/cyclization reaction. Tetrahedron, 2012, 68, 166-172.	1.0	19

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37	In Situ Generation and Stabilization of Accessible Cu/Cu₂O Heterojunctions inside Organic Frameworks for Highly Efficient Catalysis. Angewandte Chemie, 2020, 132, 1941-1947.	1.6	19
38	Palladium-catalyzed C(sp³)â€“H arylation of lactic acid: efficient synthesis of chiral Î²-aryl-Î±-hydroxy acids. Organic Chemistry Frontiers, 2016, 3, 204-208.	2.3	17
39	Copper Mediated Threeâ€Component Reactions of Alkynes, Azides, and Propargylic Carbonates: Synthesis of 5â€Allenylâ€1,2,3â€Triazoles. Advanced Synthesis and Catalysis, 2018, 360, 2435-2439.	2.1	14
40	Manganeseâ€Catalyzed Sequential Annulation between Indoles and 1, 6â€Diynes. Advanced Synthesis and Catalysis, 2018, 360, 4497-4501.	2.1	14
41	Interwrapping Distinct Metal-Organic Frameworks in Dual-MOFs for the Creation of Unique Composite Catalysts. Research, 2021, 2021, 9835935.	2.8	12
42	Suspending Ion Electrocatalysts in Charged Metalâ€“Organic Frameworks to Improve the Conductivity and Selectivity in Electroorganic Synthesis. Chemistry - an Asian Journal, 2019, 14, 3627-3634.	1.7	9
43	Nickel(II)/<i>N</i>â€Heterocyclic Carbene Catalyzed Desulfinylative Arylation by Câˆ’S Cleavage of Aryl Sulfoxides with Phenylboronic Acids. Advanced Synthesis and Catalysis, 2020, 362, 4373-4377.	2.1	8