Yang Wang

List of Publications by Year
in descending order

		172443	276858
61	1,926	29	41
papers	citations	h-index	g-index

61	61	61	740
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Organocatalytic insertion into Câ€“B bonds by in situ generated carbene: mechanism, role of the catalyst, and origin of stereoselectivity. Catalysis Science and Technology, 2022, 12, 947-953.	4.1	18
2	Unraveling the mechanism and substituent effects on the N-heterocyclic carbene-catalyzed transformation reaction of enals and imines. Molecular Catalysis, 2022, 519, 112122.	2.0	8
3	Mechanism of a cobalt-catalyzed hydroarylation reaction and origin of stereoselectivity. Catalysis Science and Technology, 2022, 12, 4380-4387.	4.1	11
4	Theoretical investigation on cobalt-catalyzed hydroacylation reaction: Mechanism and origin of stereoselectivity. Molecular Catalysis, 2022, 527, 112410.	2.0	7
5	Insight into the organocatalytic arylation of azonaphthalenes with Î±-chloroaldehydes: the general mechanism and origin of selectivities. Chemical Communications, 2021, 57, 219-222.	4.1	29
6	Predicting the origin of selectivity in NHC-catalyzed ring opening of formylcyclopropane: a theoretical investigation. Catalysis Science and Technology, 2021, 11, 332-337.	4.1	28
7	Theoretical study of the NHC-catalyzed Câ€“S bond cleavage and reconstruction reaction: mechanism, stereoselectivity, and role of catalysts. Organic Chemistry Frontiers, 2021, 8, 5352-5360.	4.5	16
8	Insights into the chiral sulfide/selenide-catalyzed electrophilic carbothiolation of alkynes: mechanism and origin of axial chirality. Organic Chemistry Frontiers, 2021, 8, 1983-1990.	4.5	20
9	Multiple Functional Organocatalyst-Promoted Inert Câ€“C Activation: Mechanism and Origin of Selectivities. ACS Catalysis, 2021, 11, 3443-3454.	11.2	38
10	Mechanism and origin of diastereoselectivity of N-heterocyclic carbene-catalyzed cross-benzoin reaction: A DFT study. Chinese Chemical Letters, 2020, 31, 736-738.	9.0	34
11	A combined experimental and computational study of NHC-promoted desulfonylation of tosylated aldimines. Organic Chemistry Frontiers, 2020, 7, 578-583.	4.5	16
12	Origin of Regioâ€•and Stereoselectivity in the NHCâ€catalyzed Reaction of Alkyl Pyridinium with Aliphatic Enal. ChemCatChem, 2020, 12, 1068-1074.	3.7	27
13	Computational Study on N-Heterocyclic Carbene (NHC)-Catalyzed Intramolecular Hydroacylation-Stetter Reaction Cascade. Molecular Catalysis, 2020, 484, 110723.	2.0	5
14	Origin and stabilization of axial chirality in the construction of naphthyl-C2-indoles: a DFT study. Organic Chemistry Frontiers, 2020, 7, 3166-3173.	4.5	8
15	Origin of diastereoselectivity and catalytic efficiency on Isothiourea-mediated cyclization of carboxylic acid with alkenyl ketone. Computational and Theoretical Chemistry, 2020, 1190, 113004.	2.5	1
16	Unveiling the Chemo- and Stereoselectivities of NHC-Catalyzed Reactions of an Aliphatic Ester with Aminochalcone. Journal of Organic Chemistry, 2020, 85, 8437-8446.	3.2	26
17	Insights into N-heterocyclic carbene and Lewis acid cooperatively catalyzed oxidative [3 + 3] annulation reactions of Î±,Î²-unsaturated aldehyde with 1,3-dicarbonyl compounds. Organic Chemistry Frontiers, 2020, 7, 1113-1121.	4.5	25
18	Mechanistic investigation of N-heterocyclic carbene and Na2CO3 cooperatively catalyzed C(sp3)-F bond activation reaction of fluoroenal. Molecular Catalysis, 2020, 489, 110944.	2.0	11

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19	Prediction on the Origin of Selectivities in Baseâ€controlled Switchable NHCâ€catalyzed Transformations. Chemistry - an Asian Journal, 2019, 14, 293-300.	3.3	42
20	Mechanism and Substituent Effects of Benzene Arylation via a Phenyl Cation Strategy: A Density Functional Theory Study. ChemCatChem, 2019, 11, 5068-5076.	3.7	5
21	Mechanistic studies on the N-heterocyclic carbene-catalyzed reaction of isatin-derived enals with hydrazones. Organic and Biomolecular Chemistry, 2019, 17, 7442-7447.	2.8	25
22	Prediction on the origin of selectivities of NHC-catalyzed asymmetric dearomatization (CADA) reactions. Catalysis Science and Technology, 2019, 9, 465-476.	4.1	50
23	Prediction on the origin of chemoselectivity in Lewis base-mediated competition cyclizations between allenoates and chalcones: a computational study. Organic Chemistry Frontiers, 2019, 6, 2692-2700.	4.5	23
24	Unravelling the Mechanism and Selectivity of the NHCâ€catalyzed Threeâ€Membered Ringâ€Opening/Fluorination of Epoxy Enals: A DFT Study. ChemCatChem, 2019, 11, 2919-2925.	3.7	20
25	Fluorination of benzene with disubstituted N-fluoropyridinium salts in acetonitrile solution: a DFT study. Theoretical Chemistry Accounts, 2019, 138, 1.	1.4	3
26	Insights into NHC-catalyzed oxidative Î±-C(sp³)â€“H activation of aliphatic aldehydes and cascade [2 + 3] cycloaddition with azomethine imines. Catalysis Science and Technology, 2019, 9, 2514-2522.	4.1	48
27	NHC-Catalyzed Aldol-Like Reactions of Allenoates with Isatins: Regiospecific Syntheses of Î³-Functionalized Allenoates. Organic Letters, 2019, 21, 1306-1310.	4.6	42
28	Insights into the isothiourea-catalyzed asymmetric [4 + 2] annulation of phenylacetic acid with alkylidene pyrazolone. Organic and Biomolecular Chemistry, 2018, 16, 2301-2311.	2.8	31
29	Insights into the Nâ€Heterocyclic Carbene (NHC)â€Catalyzed Intramolecular Cyclization of Aldimines: General Mechanism and Role of Catalyst. Chemistry - an Asian Journal, 2018, 13, 1710-1718.	3.3	34
30	Recent Advances on Computational Investigations of Nâ€Heterocyclic Carbene Catalyzed Cycloaddition/Annulation Reactions: Mechanism and Origin of Selectivities. ChemCatChem, 2018, 10, 338-360.	3.7	106
31	Theoretical study on DABCO-catalyzed ring expansion of cyclopropyl ketone: Mechanism, chemoselectivity, and role of catalyst. Computational and Theoretical Chemistry, 2018, 1123, 20-25.	2.5	12
32	Rhodium(III)-Catalyzed Cascade [5 + 1] Annulation/5-exo-Cyclization Initiated by Câ€“H Activation: 1,6-Diynes as One-Carbon Reaction Partners. Organic Letters, 2018, 20, 3245-3249.	4.6	39
33	Insights into the NHC-catalyzed cascade Michael/aldol/lactamization reaction: mechanism and origin of stereoselectivity. Organic Chemistry Frontiers, 2018, 5, 2065-2072.	4.5	35
34	Insights into the N-Heterocyclic Carbene (NHC)-Catalyzed Oxidative Î³-C(sp³)â€“H Deprotonation of Alkylenals and Cascade [4 + 2] Cycloaddition with Alkenylisoxazoles. Journal of Organic Chemistry, 2018, 83, 8543-8555.	3.2	61
35	Competing mechanisms and origins of chemo- and stereo-selectivities of NHC-catalyzed reactions of enals with 2-aminoacrylates. Catalysis Science and Technology, 2018, 8, 4229-4240.	4.1	40
36	Highâ€Valent Cobaltâ€Catalyzed Cî—¸H Activation/Annulation of 2â€Benzamidopyridine 1â€Oxide with Terminal Alkyne: A Combined Theoretical and Experimental Study. Advanced Synthesis and Catalysis, 2018, 360, 2668-2677.	4.3	61

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37	Insights into N-heterocyclic carbene-catalyzed [3 + 4] annulation reactions of 2-bromoenals with N-Ts hydrazones. Organic Chemistry Frontiers, 2018, 5, 2739-2748.	4.5	49
38	Theoretical investigation toward organophosphineâ€catalyzed [3â€‰+â€‰3] annulation of Moritaâ€“Baylisâ€“Hillman carbonates with azomethine imines: Mechanism, origin of stereoselectivity, and role of catalyst. International Journal of Quantum Chemistry, 2017, 117, e25367.	2.0	18
39	A DFT Study on Mechanisms and Origin of Selectivity of Phosphine-Catalyzed Vicinal Acylcyanation of Alkynoates. ChemistrySelect, 2017, 2, 5266-5273.	1.5	19
40	Insights into chemoselective fluorination reaction of alkynals via N-heterocyclic carbene and BrÃ¸nsted base cooperative catalysis. Theoretical Chemistry Accounts, 2017, 136, 1.	1.4	11
41	Computational Study on Î³-Câ€“H Functionalization of Î±,Î²-Unsaturated Ester Catalyzed by N-Heterocyclic Carbene: Mechanisms, Origin of Stereoselectivity, and Role of Catalyst. Journal of Organic Chemistry, 2017, 82, 13043-13050.	3.2	55
42	Computational study on NHC-catalyzed enantioselective and chemoselective fluorination of aliphatic aldehydes. Organic Chemistry Frontiers, 2017, 4, 1987-1998.	4.5	47
43	A computational study on the N-heterocyclic carbene-catalyzed C_{sp2}â€“C_{sp3} bond activation/[4+2] cycloaddition cascade reaction of cyclobutenones with imines: a new application of the conservation principle of molecular orbital symmetry. Physical Chemistry Chemical Physics, 2016, 18, 19933-19943.	2.8	36
44	Insights into Nâ€Heterocyclic Carbeneâ€Catalyzed [4+2] Annulation Reaction of Enals with Nitroalkenes: Mechanisms, Origin of Chemoâ€and Stereoselectivity, and Role of Catalyst. Chemistry - an Asian Journal, 2016, 11, 3046-3054.	3.3	32
45	Theoretical investigations towards the [4+2] cycloaddition of ketenes with 1-azadienes catalyzed by N -heterocyclic carbenes: mechanism and stereoselectivity. Tetrahedron, 2016, 72, 5295-5300.	1.9	16
46	Insights into Stereoselective Aminomethylation Reaction of Î±,Î²-Unsaturated Aldehyde with N,O-Acetal via N-Heterocyclic Carbene and BrÃ¸nsted Acid/Base Cooperative Organocatalysis. Journal of Organic Chemistry, 2016, 81, 5370-5380.	3.2	59
47	A DFT study on NHC-catalyzed intramolecular aldehydeâ€“ketone crossed-benzoin reaction: mechanism, regioselectivity, stereoselectivity, and role of NHC. Organic and Biomolecular Chemistry, 2016, 14, 6577-6590.	2.8	38
48	DFT Study on the Mechanism and Stereoselectivity of NHC-Catalyzed Synthesis of Substituted Trifluoromethyl Dihydropyranones with Contiguous Stereocenters. Journal of Organic Chemistry, 2016, 81, 868-877.	3.2	28
49	DFT perspective toward [3 + 2] annulation reaction of enals with Î±-ketoamides through NHC and BrÃ¸nsted acid cooperative catalysis: mechanism, stereoselectivity, and role of NHC. Organic Chemistry Frontiers, 2016, 3, 190-203.	4.5	74
50	N-Heterocyclic Carbene (NHC)-Catalyzed sp³ Î²-Câ€“H Activation of Saturated Carbonyl Compounds: Mechanism, Role of NHC, and Origin of Stereoselectivity. ACS Catalysis, 2016, 6, 279-289.	11.2	99
51	A DFT study on PBu₃-catalyzed intramolecular cyclizations of N-allylic substituted Î±-amino nitriles for the formation of functionalized pyrrolidines: mechanisms, selectivities, and the role of catalysts. Organic and Biomolecular Chemistry, 2016, 14, 3130-3141.	2.8	32
52	Mechanisms and stereoselectivities of the Rh(<scp>i</scp>)-catalyzed carbenoid carbon insertion reaction of benzocyclobutenol with diazoester. Organic and Biomolecular Chemistry, 2015, 13, 6587-6597.	2.8	36
53	Theoretical Investigations toward the Asymmetric Insertion Reaction of Diazoester with Aldehyde Catalyzed by N-Protonated Chiral Oxazaborolidine: Mechanisms and Stereoselectivity. Journal of Physical Chemistry A, 2015, 119, 8422-8431.	2.5	25
54	A quantum mechanical study of the mechanism and stereoselectivity of the N-heterocyclic carbene catalyzed [4 + 2] annulation reaction of enals with azodicarboxylates. Organic Chemistry Frontiers, 2015, 2, 874-884.	4.5	48

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55	A DFT study on the competing mechanisms of PPh3-catalyzed [3+3] and [3+2] annulations between 5-acetoxypenta-2,3-dienoate and 1C,3O-bisnucleophiles. Journal of Molecular Catalysis A, 2015, 407, 137-146.	4.8	18
56	Mechanistic and stereoselectivity study for the reaction of trifluoropyruvates with arylpropenes catalyzed by a cationic Lewis acid rhodium complex. RSC Advances, 2015, 5, 100147-100158.	3.6	15
57	DFT study on the reaction mechanisms and stereoselectivities of NHC-catalyzed [2 + 2] cycloaddition between arylalkylketenes and electron-deficient benzaldehydes. Organic and Biomolecular Chemistry, 2014, 12, 6374.	2.8	36
58	Mechanistic insights into the stereoselective C2-functionalization of 1-substituted imidazoles with cyanophenylacetylene and aldehydes. Computational and Theoretical Chemistry, 2014, 1049, 35-41.	2.5	5
59	DFT Study on the Mechanisms and Stereoselectivities of the [4 + 2] Cycloadditions of Enals and Chalcones Catalyzed by N-Heterocyclic Carbene. Journal of Organic Chemistry, 2014, 79, 3069-3078.	3.2	52
60	A theoretical study on the mechanisms of the reactions between 1,3-dialkynes and ammonia derivatives for the formation of five-membered N-heterocycles. Organic and Biomolecular Chemistry, 2014, 12, 7503-7514.	2.8	27
61	DFT Study on the Mechanisms and Diastereoselectivities of Lewis Acid-Promoted Keteneâ€“Alkene [2 + 2] Cycloadditions: What is the Role of Lewis Acid in the Ketene and C = X (X = O, CH₂, and NH) [2 + 2] Cycloaddition Reactions?. Journal of Physical Chemistry A, 2014, 118, 4288-4300.	2.5	46