Xiao-Song Xue

List of Publications by Year in Descending Order

102 papers	2,984 citations	31 h-index	51 g-index
122 ext. papers	3,778 ext. citations	9.7 avg, IF	5.84 L-index

#	Paper	IF	Citations
102	Highly selective synthesis of all-carbon tetrasubstituted alkenes by deoxygenative alkenylation of carboxylic acids.. *Nature Communications*, **2022**, 13, 10	17.4	3
101	Azetidine synthesis enabled by photo-induced copper catalysis via [3+1] radical cascade cyclization.. *Innovation(China)*, **2022**, 3, 100244	17.8	0
100	2,6-Azulene-based Homopolymers: Design, Synthesis, and Application in Proton Exchange Membrane Fuel Cells.. *ACS Macro Letters*, **2022**, 11, 680-686	6.6	3
99	Mechanistic Study on the Bidentate Nitrogen-Ligated Iodine(V) Reagent Promoted Oxidative Dearomatization of Phenols. *Acta Chimica Sinica*, **2021**, 79, 1394	3.3	
98	The Acidities of Nucleophilic Monofluoromethylation Reagents: An Anomalous -Fluorine Effect. *Angewandte Chemie - International Edition*, **2021**, 60, 9401-9406	16.4	6
97	Ligand-Dependent Regiodivergent Enantioselective Allylic Alkylations of -Trifluoromethylated Ketones. *Organic Letters*, **2021**, 23, 2443-2448	6.2	6
96	Computational Exploration of the Mechanism of Critical Steps in the Biomimetic Synthesis of Preuisolactone A, and Discovery of New Ambimodal (5 + 2)/(4 + 2) Cycloadditions. *Journal of the American Chemical Society*, **2021**, 143, 6601-6608	16.4	8
95	Highly Selective Arylation and Carbonylative Arylation of 3-Bromo-3,3-difluoropropene via Nickel Catalysis. *Angewandte Chemie - International Edition*, **2021**, 60, 12386-12391	16.4	17
94	Cooperative Stapling of Native Peptides at Lysine and Tyrosine or Arginine with Formaldehyde. *Angewandte Chemie - International Edition*, **2021**, 60, 6646-6652	16.4	7
93	Efficient synthesis of isoindolones by intramolecular cyclisation of pyridinylbenzoic acids. *Organic and Biomolecular Chemistry*, **2021**, 19, 8025-8029	3.9	0
92	Solvent-controlled photocatalytic divergent cyclization of alkynyl aldehydes: access to cyclopentenones and dihydropyranols. *Chemical Science*, **2021**, 12, 11420-11426	9.4	5
91	The Acidities of Nucleophilic Monofluoromethylation Reagents: An Anomalous -Fluorine Effect. *Angewandte Chemie*, **2021**, 133, 9487-9492	3.6	2
90	Cleaving arene rings for acyclic alkenylnitrile synthesis. *Nature*, **2021**, 597, 64-69	50.4	10
89	A ring expansion strategy towards diverse azaheterocycles. *Nature Chemistry*, **2021**, 13, 1006-1016	17.6	7
88	Ambimodal Transition States in Diels–Alder Cycloadditions of Tropolone and Tropolonate with N-Methylmaleimide**. *Angewandte Chemie*, **2021**, 133, 25195	3.6	0
87	Ambimodal Transition States in Diels-Alder Cycloadditions of Tropolone and Tropolonate with N-Methylmaleimide*. *Angewandte Chemie - International Edition*, **2021**, 60, 24991-24996	16.4	0
86	High Site Selectivity in Electrophilic Aromatic Substitutions: Mechanism of C-H Thianthrenation. *Journal of the American Chemical Society*, **2021**, 143, 16041-16054	16.4	10

85	[8+2] vs [4+2] Cycloadditions of Cyclohexadienamines to Tropone and Heptafulvenes-Mechanisms and Selectivities. *Journal of the American Chemical Society*, **2021**, 143, 934-944	16.4	6
84	Mechanism and Selectivity of N-Heterocyclic Carbene-Catalyzed Desymmetrizing [4+1] and [4+2] Annulations. *Chinese Journal of Organic Chemistry*, **2021**, 41, 2530	3	3
83	DFT Modeling of Catalytic Fluorination Reactions: Mechanisms, Reactivities, and Selectivities **2021**, 307-362		
82	Violations. How Nature Circumvents the Woodward-Hoffmann Rules and Promotes the Forbidden Conrotatory 4 + 2 Electron Electrocyclization of Prinzbach's Vinylogous Sesquifulvalene.. *Journal of the American Chemical Society*, **2021**, 143, 21694-21704	16.4	5
81	Polarity Umpolung Strategy for the Radical Alkylation of Alkenes. *Angewandte Chemie*, **2020**, 132, 8272-8279	3.6	15
80	Radical-mediated C-C cleavage of unstrained cycloketones and DFT study for unusual regioselectivity. *Nature Communications*, **2020**, 11, 672	17.4	13
79	Recent Computational Studies on Mechanisms of Hypervalent Iodine(III)-Promoted Dearomatization of Phenols. *Current Organic Chemistry*, **2020**, 24, 2106-2117	1.7	4
78	Quantification of the Activation Capabilities of Lewis/Br□sted Acid for Electrophilic Trifluoromethylthiolating Reagents□*Chinese Journal of Chemistry*, **2020**, 38, 130-134	4.9	5
77	Establishing Cation and Radical Donor Ability Scales of Electrophilic F, CF, and SCF Transfer Reagents. *Accounts of Chemical Research*, **2020**, 53, 182-197	24.3	34
76	Comprehensive Basicity Scales for N-Heterocyclic Carbenes in DMSO: Implications on the Stabilities of N-Heterocyclic Carbene and CO Adducts. *Chemistry - an Asian Journal*, **2020**, 15, 169-181	4.5	15
75	Biomimetic Total Synthesis of (□)-Carbocyclinone-534 Reveals Its Biosynthetic Pathway. *Organic Letters*, **2020**, 22, 9421-9426	6.2	2
74	Internal Alkyne-Directed Fluorination of Unactivated C(sp)-H Bonds. *Organic Letters*, **2020**, 22, 9398-9403	6.2	9
73	Potassium Acetate-Catalyzed Double Decarboxylative Transannulation To Access Highly Functionalized Pyrroles. *Organic Letters*, **2020**, 22, 9585-9590	6.2	7
72	Catalytic Direct Construction of Cyano-tetrazoles. *Organic Letters*, **2020**, 22, 7762-7767	6.2	7
71	The Br□sted Basicities of N-Heterocyclic Olefins in DMSO: An Effective Way to Evaluate the Stability of NHO-CO Adducts. *Journal of Organic Chemistry*, **2020**, 85, 13204-13210	4.2	6
70	Polarity Umpolung Strategy for the Radical Alkylation of Alkenes. *Angewandte Chemie - International Edition*, **2020**, 59, 8195-8202	16.4	43
69	Catalytic Enantioselective Cyclopropenation of Internal Alkynes: Access to Difluoromethylated Three-Membered Carbocycles. *Angewandte Chemie - International Edition*, **2019**, 58, 18191-18196	16.4	25
68	Chemodivergent and Stereoselective Construction of -Difluoroallylic Amines from Masked Difluorodiazo Reagents. *Organic Letters*, **2019**, 21, 8244-8249	6.2	15

67	Mechanism and Origins of Enantioselectivities in Spirobiindane-Based Hypervalent Iodine(III)-Induced Asymmetric Dearomatizing Spirolactonizations. *Journal of the American Chemical Society*, **2019**, 141, 16046-16056	16.4	31
66	Chiral Spiro Phosphoric Acid-Catalyzed Friedel□Crafts Conjugate Addition/Enantioselective Protonation Reactions. *ACS Catalysis*, **2019**, 9, 6522-6529	13.1	29
65	Visible-Light-Driven Neutral Nitrogen Radical Mediated Intermolecular Styrene Difunctionalization. *Organic Letters*, **2019**, 21, 3861-3865	6.2	13
64	Mechanisms and Dynamics of Reactions Involving Entropic Intermediates. *Trends in Chemistry*, **2019**, 1, 22-34	14.8	18
63	Computational I(III)□ BDEs for Benziodoxol(on)e-based Hypervalent Iodine Reagents: Implications for Their Functional Group Transfer Abilities. *Chinese Journal of Chemistry*, **2019**, 37, 359-363	4.9	12
62	Transition-Metal-Free -Trifluoromethylthiolation of Lithium Aryl Boronates. *Organic Letters*, **2019**, 21, 6347-6351	6.2	10
61	Factors Controlling Reactivity in the Hydrogen Atom Transfer and Radical Addition Steps of a Radical Relay Cascade. *Organic Letters*, **2019**, 21, 5894-5897	6.2	5
60	Nickel-catalyzed intermolecular oxidative Heck arylation driven by transfer hydrogenation. *Nature Communications*, **2019**, 10, 5025	17.4	42
59	Open-Shell Fluorination of Alkyl Bromides: Unexpected Selectivity in a Silyl Radical-Mediated Chain Process. *Journal of the American Chemical Society*, **2019**, 141, 20031-20036	16.4	32
58	Expanding the Frontiers of Higher-Order Cycloadditions. *Accounts of Chemical Research*, **2019**, 52, 3488-3501	24.3	39
57	Controllable catalytic difluorocarbene transfer enables access to diversified fluoroalkylated arenes. *Nature Chemistry*, **2019**, 11, 948-956	17.6	66
56	Metal-free directed sp-C-H borylation. *Nature*, **2019**, 575, 336-340	50.4	93
55	Near-Infrared Afterglow Luminescent Aggregation-Induced Emission Dots with Ultrahigh Tumor-to-Liver Signal Ratio for Promoted Image-Guided Cancer Surgery. *Nano Letters*, **2019**, 19, 318-330	11.5	295
54	Ambimodal Trispericyclic Transition State and Dynamic Control of Periselectivity. *Journal of the American Chemical Society*, **2019**, 141, 1217-1221	16.4	28
53	Origin of Stereocontrol in Photoredox Organocatalysis of Asymmetric □-Functionalizations of Aldehydes. *Journal of Organic Chemistry*, **2018**, 83, 3333-3338	4.2	6
52	Radical C-H Arylation of Oxazoles with Aryl Iodides: dppf as an Electron-Transfer Mediator for CsCO. *Organic Letters*, **2018**, 20, 1684-1687	6.2	14
51	Ordering the relative power of electrophilic fluorinating, trifluoromethylating, and trifluoromethylthiolating reagents: A summary of recent efforts. *Tetrahedron Letters*, **2018**, 59, 1278-1285	2	28
50	Exploration of the Synthetic Potential of Electrophilic Trifluoromethylthiolating and Difluoromethylthiolating Reagents. *Angewandte Chemie*, **2018**, 130, 12872-12877	3.6	8

49	Exploration of the Synthetic Potential of Electrophilic Trifluoromethylthiolating and Difluoromethylthiolating Reagents. *Angewandte Chemie - International Edition*, **2018**, 57, 12690-12695	16.4	29
48	Rhodium-Catalyzed 2-Arylphenol-Derived Six-Membered Silacyclization: Straightforward Access toward Dibenzooxasilines and Silicon-Containing Planar Chiral Metallocenes. *ACS Catalysis*, **2018**, 8, 7997-8005	13.1	37
47	A Systematic Theoretical Study on the Acidities for Cations of Ionic Liquids in Dimethyl Sulfoxide. *Journal of Physical Chemistry A*, **2018**, 122, 5750-5755	2.8	14
46	Recent Advances and Advisable Applications of Bond Energetics in Organic Chemistry. *Journal of the American Chemical Society*, **2018**, 140, 8611-8623	16.4	32
45	Computational Study of the Trifluoromethyl Radical Donor Abilities of CF3 Sources. *Acta Chimica Sinica*, **2018**, 76, 988	3.3	5
44	Origins of Selectivities in the Stork Diels-Alder Cycloaddition for the Synthesis of (□)-4-Methylenegermine. *Organic Letters*, **2018**, 20, 6108-6111	6.2	3
43	Mechanism and Origins of Chemo- and Stereoselectivities of Aryl Iodide-Catalyzed Asymmetric Difluorinations of □Substituted Styrenes. *Journal of the American Chemical Society*, **2018**, 140, 15206-15218	16.4	61
42	Mild Ring-Opening 1,3-Hydroborations of Non-Activated Cyclopropanes. *Angewandte Chemie - International Edition*, **2018**, 57, 16861-16865	16.4	34
41	Carbon-Selective Difluoromethylation of Soft Carbon Nucleophiles with Difluoromethylated Sulfonium Ylide. *Chinese Journal of Chemistry*, **2018**, 36, 1069-1074	4.9	28
40	Acidity Scale of N-Heterocyclic Carbene Precursors: Can We Predict the Stability of NHC-CO Adducts?. *Organic Letters*, **2018**, 20, 6041-6045	6.2	24
39	Theoretical study of Lewis acid activation models for hypervalent fluoroiodane reagent: The generality of □-coordination□activation model. *Tetrahedron Letters*, **2017**, 58, 1287-1291	2	25
38	The Essential Role of Bond Energetics in C-H Activation/Functionalization. *Chemical Reviews*, **2017**, 117, 8622-8648	68.1	247
37	Sulfimine-Promoted Fast O Transfer: One□tep Synthesis of Sulfoximine from Sulfide. *ChemistrySelect*, **2017**, 2, 1620-1624	1.8	44
36	Hypervalent-Iodine-Mediated Formation of Epoxides from Carbon(sp)-Carbon(sp) Single Bonds. *Journal of Organic Chemistry*, **2017**, 82, 11691-11702	4.2	10
35	A Systematic Evaluation of the N-F Bond Strength of Electrophilic N-F Reagents: Hints for Atomic Fluorine Donating Ability. *Journal of Organic Chemistry*, **2017**, 82, 4129-4135	4.2	30
34	Design and Applications of N-tert-Butyl Sulfinyl Squaramide Catalysts. *Organic Letters*, **2017**, 19, 1926-1929	6.2	12
33	A Systematic Assessment of Trifluoromethyl Radical Donor Abilities of Electrophilic Trifluoromethylating Reagents. *Asian Journal of Organic Chemistry*, **2017**, 6, 235-240	3	19
32	Mechanism and Origins of Stereoinduction in Natural Cinchona Alkaloid Catalyzed Asymmetric Electrophilic Trifluoromethylthiolation of □Keto Esters with N-Trifluoromethylthiophthalimide as Electrophilic SCF3 Source. *ACS Catalysis*, **2017**, 7, 7977-7986	13.1	29

31	Origin of Stereoselectivity of the Photoinduced Asymmetric Phase-Transfer-Catalyzed Perfluoroalkylation of β-Ketoesters. *Journal of Organic Chemistry*, **2017**, 82, 9321-9327	4.2	26
30	Establishing the Trifluoromethylthio Radical Donating Abilities of Electrophilic SCF-Transfer Reagents. *Journal of Organic Chemistry*, **2017**, 82, 8697-8702	4.2	23
29	N-tert-Butyl Sulfinyl Squaramide Receptors for Anion Recognition through Assisted tert-Butyl C-H Hydrogen Bonding. *Journal of Organic Chemistry*, **2017**, 82, 8662-8667	4.2	15
28	N-Trifluoromethylthio-dibenzenesulfonimide: A Shelf-Stable, Broadly Applicable Electrophilic Trifluoromethylthiolating Reagent. *Journal of Organic Chemistry*, **2016**, 81, 7486-7509	4.2	134
27	Mechanism of Silver-Mediated Geminal Difluorination of Styrenes with a Fluoroiodane Reagent: Insights into Lewis-Acid-Activation Model. *Organic Letters*, **2016**, 18, 6128-6131	6.2	49
26	Phosphoric Acid Catalyzed Asymmetric 1,6-Conjugate Addition of Thioacetic Acid to para-Quinone Methides. *Angewandte Chemie*, **2016**, 128, 1482-1486	3.6	38
25	Phosphoric Acid Catalyzed Asymmetric 1,6-Conjugate Addition of Thioacetic Acid to para-Quinone Methides. *Angewandte Chemie - International Edition*, **2016**, 55, 1460-4	16.4	166
24	An Energetic Guide for Estimating Trifluoromethyl Cation Donor Abilities of Electrophilic Trifluoromethylating Reagents: Computations of X-CF3 Bond Heterolytic Dissociation Enthalpies. *Journal of Organic Chemistry*, **2016**, 81, 3119-26	4.2	38
23	Quantitative Scale for the Trifluoromethylthio Cation-Donating Ability of Electrophilic Trifluoromethylthiolating Reagents. *Organic Letters*, **2016**, 18, 264-7	6.2	67
22	Comprehensive Energetic Scale for Quantitatively Estimating the Fluorinating Potential of N-F Reagents in Electrophilic Fluorinations. *Journal of Organic Chemistry*, **2016**, 81, 4280-9	4.2	35
21	Mechanism and Origin of the Unexpected Chemoselectivity in Fluorocyclization of o-Styryl Benzamides with a Hypervalent Fluoroiodane Reagent. *Journal of Organic Chemistry*, **2016**, 81, 9006-9011	4.2	39
20	Toward Prediction of the Chemistry in Ionic Liquids: An Accurate Computation of Absolute pK(a) Values of Benzoic Acids and Benzenethiols. *Journal of Organic Chemistry*, **2015**, 80, 8997-9006	4.2	18
19	A Highly Efficient Chirality Switchable Synthesis of Dihydropyran-Fused Benzofurans by Fine-Tuning the Phenolic Proton of β-Isocupreidine (β-ICD) Catalyst with Methyl. *Chemistry - A European Journal*, **2015**, 21, 10443-9	4.8	21
18	Computational study on the acidic constants of chiral Brønsted acids in dimethyl sulfoxide. *Journal of Organic Chemistry*, **2014**, 79, 4340-51	4.2	60
17	Computation of standard equilibrium acidity of CH acids in ionic media: shedding light on predicting changes of chemical behavior by switching solvent system from molecular to ionic. *Organic Chemistry Frontiers*, **2014**, 1, 176	5.2	5
16	Computational study on the pKa shifts in proline induced by hydrogen-bond-donating cocatalysts. *Journal of Organic Chemistry*, **2014**, 79, 1166-73	4.2	26
15	Synthesis of optically enriched spirocyclic benzofuran-2-ones by bifunctional thiourea-base catalyzed double-Michael addition of benzofuran-2-ones to dienones. *Chemistry - an Asian Journal*, **2013**, 8, 997-1003	4.5	42
14	Mechanism and selectivity of bioinspired cinchona alkaloid derivatives catalyzed asymmetric olefin isomerization: a computational study. *Journal of the American Chemical Society*, **2013**, 135, 7462-73	16.4	56

13	Theoretical study on the acidities of chiral phosphoric acids in dimethyl sulfoxide: hints for organocatalysis. *Journal of Organic Chemistry*, **2013**, 78, 7076-85	4.2	80
12	Asymmetric Michael addition reactions of 3-substituted benzofuran-2(3H)-ones to nitroolefins catalyzed by a bifunctional tertiary-amine thiourea. *Organic and Biomolecular Chemistry*, **2012**, 10, 413-20	3.9	53
11	Enantioselective organocatalyzed sulfenylation of 3-substituted oxindoles. *Organic Letters*, **2012**, 14, 4374-7	6.2	65
10	The effects of insertion of nitrogen atoms on the aromatic nitrogen-containing compounds: a potential approach for designing stable radical molecular materials. *Journal of Physical Organic Chemistry*, **2012**, 25, 92-100	2.1	6
9	Asymmetric Michael Addition Reactions between 3-Substituted Benzofuran-2(3H)-ones and 1,1-Bis(phenylsulfonyl)ethylene Catalyzed by Bifunctional Catalysts Containing Tertiary Amine and Thiourea Groups. *European Journal of Organic Chemistry*, **2012**, 2012, 1774-1782	3.2	36
8	A computational reinvestigation of the formation of N-alkylpyrroles via intermolecular redox amination. *Organic Letters*, **2011**, 13, 6054-7	6.2	46
7	Organic radicals based on phenalenyl and verdazyl units. *Tetrahedron Letters*, **2011**, 52, 3670-3673	2	9
6	Theoretical study of the peripheral disulfide bridge substituent effects on the antioxidant properties of naphthyridine diol derivatives. *Journal of Physical Chemistry A*, **2010**, 114, 1008-16	2.8	2
5	Selective Tuning of the HOMO□LUMO Gap of Carbazole-Based Donor□Acceptor□Donor Compounds toward Different Emission Colors. *European Journal of Organic Chemistry*, **2010**, 2010, 1681-1687	3.2	64
4	The rearrangement of 2-(1,6-methano[10]annulenyl)-3,3-dimethylmethylenecyclopropane: A computational study. *Computational and Theoretical Chemistry*, **2010**, 950, 1-4		1
3	2,5,8-Tri-tert-butyl-1,3,4,6,7,9-hexaazaphenalene: Synthesis, Crystal Structure and Calculation of Homolytic N□H Bond Dissociation Enthalpies. *Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences*, **2008**, 63, 1425-1430	1	2
2	Computations on Pericyclic Reactions Reveal the Richness of Ambimodal Transition States and Pericyclases. *Israel Journal of Chemistry*,	3.4	0
1	Chiral Lewis Base Catalyzed Enantioselective Selenocyclization of 1,1-Disubstituted Alkenes: Asymmetric Synthesis of Selenium-Containing 4H-3,1-Benzoxazines. *Organic Letters*,	6.2	2