

Liu Leo Liu

List of Publications by Year in descending order

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94
papers

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101543

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114
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114
times ranked

2592
citing authors

#	ARTICLE	IF	CITATIONS
1	A Singlet Phosphenidene Stable at Room Temperature. <i>CheM</i> , 2016, 1, 147-153.	11.7	255
2	An efficient synthetic route to stable bis(carbene)borylenes [(L1)(L2)BH]. <i>Chemical Communications</i> , 2014, 50, 7837-7839.	4.1	132
3	Deprotonation of a Borohydride: Synthesis of a Carbene-Stabilized Boryl Anion. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 7590-7592.	13.8	129
4	A Radical Mechanism for Frustrated Lewis Pair Reactivity. <i>CheM</i> , 2017, 3, 259-267.	11.7	129
5	Cyclic (Amino)aryl carbenes (CAArCs) as Strong σ -Donating and π -Accepting Ligands for Transition Metals. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14915-14919.	13.8	126
6	Catalytic hydroboration of aldehydes, ketones, alkynes and alkenes initiated by NaOH. <i>Green Chemistry</i> , 2017, 19, 4169-4175.	9.0	126
7	One-, Two-, and Three-Electron Reduction of a Cyclic Alkyl(amino)carbene-SbCl ₃ Adduct. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8176-8179.	13.8	124
8	Isolation of Au-, Co- ¹ PCO and Cu- ² PCO complexes, conversion of an Ir- ¹ PCO complex into a dimetalladiphosphene, and an interaction-free PCO anion. <i>Chemical Science</i> , 2016, 7, 2335-2341.	7.4	121
9	Radicals derived from Lewis acid/base pairs. <i>Chemical Society Reviews</i> , 2019, 48, 3454-3463.	38.1	96
10	Main group metal-ligand cooperation of N-heterocyclic germylene: an efficient catalyst for hydroboration of carbonyl compounds. <i>Chemical Communications</i> , 2016, 52, 13799-13802.	4.1	91
11	Nickel-Catalyzed Decarboxylative C-P Cross-Coupling of Alkenyl Acids with P(O)H Compounds. <i>Journal of Organic Chemistry</i> , 2014, 79, 8118-8127.	3.2	84
12	Singlet carbenes as mimics for transition metals: synthesis of an air stable organic mixed valence compound [M ₂ (C ₂) ⁺ É™; M = cyclic(alkyl)(amino)carbene]. <i>Organic Chemistry Frontiers</i> , 2014, 1, 351-354.	4.5	82
13	Experimental and Theoretical Study on Palladium-Catalyzed C-P Bond Formation via Direct Coupling of Triarylbiaryls with P(O)H Compounds. <i>Journal of Organic Chemistry</i> , 2014, 79, 608-617.	3.2	76
14	Isolation of a Heavier Cyclobutadiene Analogue: 2,4-Digerma-1,3-diphosphacyclobutadiene. <i>Organometallics</i> , 2016, 35, 1593-1596.	2.3	76
15	Isolation of a Lewis base stabilized parent phosphenium (PH ₂ ⁺) and related species. <i>Chemical Communications</i> , 2015, 51, 12732-12735.	4.1	75
16	N-Heterocyclic Carbenes as Promoters for the Rearrangement of Phosphaketenes to Phosphaheteroallenes: A Case Study for OCP to OPC Constitutional Isomerism. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6018-6022.	13.8	70
17	Nickel(II)-Magnesium-Catalyzed Cross-Coupling of 1,1-Dibromoalkenes with Diphenylphosphine Oxide: One-Pot Synthesis of Alkenylphosphine Oxides or Bisphosphine Oxides. <i>Advanced Synthesis and Catalysis</i> , 2013, 355, 659-666.	4.3	68
18	Mechanistic Insight into the Copper-Catalyzed Phosphorylation of Terminal Alkynes: A Combined Theoretical and Experimental Study. <i>Journal of Organic Chemistry</i> , 2014, 79, 6816-6822.	3.2	66

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19	Synthesis of a Carbodicyclopropenylidene: A Carbodicarbene based Solely on Carbon. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 5536-5540.	13.8	63
20	Single Electron Delivery to Lewis Pairs: An Avenue to Anions by Small Molecule Activation. <i>Journal of the American Chemical Society</i> , 2017, 139, 10062-10071.	13.7	60
21	Nitrogen-Based Lewis Acids: Synthesis and Reactivity of a Cyclic (Alkyl)(Amino)Nitrenium Cation. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3322-3326.	13.8	57
22	A Transient Vinylphosphinidene via a Phosphirene-Phosphinidene Rearrangement. <i>Journal of the American Chemical Society</i> , 2018, 140, 147-150.	13.7	57
23	Chemoselective Cross-Coupling between Two Different and Unactivated C(aryl)-O Bonds Enabled by Chromium Catalysis. <i>Journal of the American Chemical Society</i> , 2020, 142, 7715-7720.	13.7	57
24	Cyclic (Alkyl)(amino)carbene Ligand-Promoted Nitro Deoxygenative Hydroboration with Chromium Catalysis: Scope, Mechanism, and Applications. <i>Journal of the American Chemical Society</i> , 2021, 143, 1618-1629.	13.7	56
25	Mechanism of Nickel-Catalyzed Selective C-N Bond Activation in Suzuki-Miyaura Cross-Coupling of Amides: A Theoretical Investigation. <i>Journal of Organic Chemistry</i> , 2016, 81, 11686-11696.	3.2	55
26	(Phosphanyl)phosphaketenes as building blocks for novel phosphorus heterocycles. <i>Chemical Science</i> , 2017, 8, 3720-3725.	7.4	50
27	Cs ₂ CO ₃ -Promoted One-Pot Synthesis of Alkynylphosphonates, -phosphinates, and -phosphine Oxides. <i>Journal of Organic Chemistry</i> , 2014, 79, 3678-3683.	3.2	46
28	N-Heterocyclic Carbenes as Promoters for the Rearrangement of Phosphaketenes to Phosphaheteroallenes: A Case Study for OCP to OPC Constitutional Isomerism. <i>Angewandte Chemie</i> , 2016, 128, 6122-6126.	2.0	46
29	Mechanism, Reactivity, and Selectivity in Rh(III)-Catalyzed Phosphoryl-Directed Oxidative C-H Activation/Cyclization: A DFT Study. <i>Journal of Organic Chemistry</i> , 2014, 79, 5074-5081.	3.2	45
30	Facile Cleavage of the P=P Double Bond in Vinyl-Substituted Diphosphenes. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 273-277.	13.8	45
31	Homolytic cleavage of peroxide bonds via a single electron transfer of a frustrated Lewis pair. <i>Chemical Communications</i> , 2018, 54, 7431-7434.	4.1	43
32	N-Heterocyclic carbene stabilized parent sulfenyl, selenenyl, and tellurenyl cations (XH ⁺), <i>Tj ETQq0 0 0 rgBT /Overlock 10 T</i>	3.9	39
33	A Phosphorus Lewis Super Acid: Î-5-Pentamethylcyclopentadienyl Phosphorus Dication. <i>Chem</i> , 2018, 4, 2699-2708.	11.7	39
34	The Arene-Stabilized Î-5-Pentamethylcyclopentadienyl Arsenic Dication [(Î-5-Cp*)As(toluene)] ²⁺ . <i>Angewandte Chemie - International Edition</i> , 2019, 58, 5407-5412.	13.8	38
35	Facile Synthesis of the Dicyanophosphide Anion via Electrochemical Activation of White Phosphorus: An Avenue to Organophosphorus Compounds. <i>Journal of the American Chemical Society</i> , 2022, 144, 1517-1522.	13.7	38
36	Cross-Coupling Reactions between Stable Carbenes. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6550-6553.	13.8	36

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37	Phosphorus Coordination Chemistry in Catalysis: Air Stable P(III)-Dications as Lewis Acid Catalysts for the Allylation of C–F Bonds. <i>Organometallics</i> , 2018, 37, 4540-4544.	2.3	36
38	Double Role of the Hydroxy Group of Phosphoryl in Palladium(II)-Catalyzed ortho-Olefination: A Combined Experimental and Theoretical Investigation. <i>Journal of Organic Chemistry</i> , 2014, 79, 80-87.	3.2	35
39	An umpolung of Lewis acidity/basicity at nitrogen by deprotonation of a cyclic (amino)(aryl)nitrenium cation. <i>Chemical Communications</i> , 2018, 54, 4390-4393.	4.1	35
40	Mechanistic Insight into the Nickel-Catalyzed Cross-Coupling of Aryl Phosphates with Arylboronic Acids: Potassium Phosphate is Not a Spectator Base but is Involved in the Transmetalation Step in the Suzuki–Miyaura Reaction. <i>Chemistry - an Asian Journal</i> , 2013, 8, 2592-2595.	3.3	34
41	The phosphoethynolate anion reacts with unsaturated bonds: DFT investigations into [2+2], [3+2] and [4+2] cycloadditions. <i>Chemical Communications</i> , 2014, 50, 11347-11349.	4.1	34
42	Carbodicarbenes, Carbon(0) Derivatives, Can Dimerize. <i>Chemistry - an Asian Journal</i> , 2013, 8, 2940-2942.	3.3	31
43	Phosphorus oxychloride as an efficient coupling reagent for the synthesis of esters, amides and peptides under mild conditions. <i>RSC Advances</i> , 2013, 3, 16247-16250.	3.6	30
44	Phosphaaluminirenes: Synthons for Main Group Heterocycles. <i>Journal of the American Chemical Society</i> , 2019, 141, 16971-16982.	13.7	30
45	FLP reactivity of [Ph ₃ C] ⁺ and (i-o-tolyl) ₃ P and the capture of a Staudinger reaction intermediate. <i>Dalton Transactions</i> , 2017, 46, 9334-9338.	3.3	28
46	A Free Aluminylene with Diverse σ -Donating and Doubly π -Accepting Ligand Features for Transition Metals**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 27062-27069.	13.8	27
47	N-phosphoryl amino acid models for P-N bonds in prebiotic chemical evolution. <i>Science China Chemistry</i> , 2015, 58, 374-382.	8.2	26
48	Releasing Antiaromaticity in Metal-Bridgehead Naphthalene. <i>Journal of the American Chemical Society</i> , 2021, 143, 15587-15592.	13.7	26
49	Nitrogen-Based Lewis Acids: Synthesis and Reactivity of a Cyclic (Alkyl)(Amino)Nitrenium Cation. <i>Angewandte Chemie</i> , 2018, 130, 3380-3384.	2.0	25
50	Experimental and theoretical studies on nickel–zinc-catalyzed cross-coupling of gem-dibromoalkenes with P(O)–H compounds. <i>RSC Advances</i> , 2014, 4, 2322-2326.	3.6	24
51	Stability, Reactivity, Selectivity, Catalysis, and Predictions of 1,3,2,5-Diazadiborinine: Computational Insight into a Boron–Boron Frustrated Lewis Pair. <i>Journal of Organic Chemistry</i> , 2015, 80, 8790-8795.	3.2	24
52	Reversible Intramolecular Cycloaddition of Phosphaalkene to an Arene Ring. <i>Journal of the American Chemical Society</i> , 2019, 141, 8083-8087.	13.7	24
53	Site-Fixed Hydroboration of Terminal and Internal Alkenes using BX ₃ / <i>i</i> -Pr ₂ NEt**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 26238-26245.	13.8	23
54	Solvent-free solid acid-catalyzed nucleophilic substitution of propargylic alcohols: a green approach for the synthesis of 1,4-diynes. <i>Green Chemistry</i> , 2010, 12, 1576.	9.0	22

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55	Synthesis of a Carbodicyclopropenylidene: A Carbodicarbene based Solely on Carbon. <i>Angewandte Chemie</i> , 2016, 128, 5626-5630.	2.0	22
56	Nâ€Heterocyclic Carbene Stabilized Dicarbondiphosphides: Strong Neutral Fourâ€Membered Heterocyclic 6â€Electron Donors. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 4288-4293.	13.8	21
57	A Room-Temperature-Stable Phosphanorcaradiene. <i>Journal of the American Chemical Society</i> , 2018, 140, 7466-7470.	13.7	20
58	Reactivity of Germylene toward Phosphorus-Containing Compounds: Nucleophilic Addition and Tautomerism. <i>Inorganic Chemistry</i> , 2015, 54, 4423-4430.	4.0	19
59	Mechanism, catalysis and predictions of 1,3,2-diazaphospholenes: theoretical insight into highly polarized Pâ€X bonds. <i>Organic Chemistry Frontiers</i> , 2016, 3, 423-433.	4.5	19
60	Modulating the Frontier Orbitals of an Aluminylene for Facile Dearomatization of Inert Arenes**. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	18
61	BNN-1,3-dipoles: isolation and intramolecular cycloaddition with unactivated arenes. <i>Chemical Science</i> , 2020, 11, 7053-7059.	7.4	17
62	An arene-stabilized Î⁵-pentamethylcyclopentadienyl antimony dication acts as a source of Sb⁺ or Sb³⁺ cations. <i>Chemical Communications</i> , 2020, 56, 12953-12956.	4.1	16
63	Boraminolithium: An Iminoborane-Transfer Reagent. <i>Journal of the American Chemical Society</i> , 2021, 143, 13483-13488.	13.7	16
64	Baseâ€Stabilized [PO]⁺/[PO₂⁺ Cations. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18276-18280.	13.8	15
65	The Areneâ€Stabilized Î 5 â€Pentamethylcyclopentadienyl Arsenic Dication [(Î 5 â€Cp*)As(toluene)] 2+. <i>Angewandte Chemie</i> , 2019, 131, 5461-5466.	2.0	15
66	A theoretical study on the mechanism of ruthenium(<sc>ii</sc>)-catalyzed phosphoryl-directed <i>ortho</i>-selective Câ€H bond activations: the phosphoryl hydroxy group triggered Ru(<sc>ii</sc>)/Ru(0) catalytic cycle. <i>Organic Chemistry Frontiers</i> , 2017, 4, 1482-1492.	4.5	14
67	Reductive Coupling and Loss of N₂ from Magnesium Diazomethane Derivatives. <i>Chemistry - A European Journal</i> , 2018, 24, 8589-8595.	3.3	14
68	Palladium-Catalyzed Domino Addition and Cyclization of Arylboronic Acids with 3-Hydroxyprop-1-yn-1-yl Phosphonates Leading to 1,2-Oxaphospholenes. <i>Journal of Organic Chemistry</i> , 2015, 80, 6908-6914.	3.2	13
69	Zincâ€Containing Radical Anions via Single Electron Transfer to Donorâ€Acceptor Adducts. <i>Chemistry - A European Journal</i> , 2018, 24, 3980-3983.	3.3	13
70	A Roomâ€Temperature Stable Distonic Radical Cation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 23830-23835.	13.8	13
71	Conjugated polymers based on metalla-aromatic building blocks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	12
72	An imineâ€gallium Lewis pair stabilized oxophosphinidene <i>via</i> an unexpected phosphirene rearrangement. <i>Chemical Communications</i> , 2018, 54, 1041-1044.	4.1	11

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73	Facile Cleavage of the P=P Double Bond in Vinyl-Substituted Diphosphenes. <i>Angewandte Chemie</i> , 2019, 131, 279-283.	2.0	11
74	Oligomerization of phosphalkynes mediated by bulky N-heterocyclic carbenes: avenues to novel phosphorus frameworks. <i>Dalton Transactions</i> , 2019, 48, 14242-14245.	3.3	9
75	Distinguishing isomeric aldohexose-ketohexose disaccharides by electrospray ionization mass spectrometry in positive mode. <i>Rapid Communications in Mass Spectrometry</i> , 2015, 29, 2167-2174.	1.5	8
76	N-Heterocyclic Carbene Stabilized Dicarbondiphosphides: Strong Neutral Four-Membered Heterocyclic Electron Donors. <i>Angewandte Chemie</i> , 2020, 132, 4318-4323.	2.0	8
77	Facile addition of C-H bonds to a dicarbonylphosphide. <i>Dalton Transactions</i> , 2020, 49, 6384-6390.	3.3	8
78	A Free Aluminylene with Diverse σ -Donating and Doubly π -Accepting Ligand Features for Transition Metals. <i>Angewandte Chemie</i> , 0, , .	2.0	8
79	Unraveling the reactivity of a cationic iminoborane: avenues to unusual boron cations. <i>Chemical Science</i> , 2022, 13, 2303-2309.	7.4	8
80	A σ -Pot Strategy for the Synthesis of σ -Substituted Rhoda- and Irida-Carbonyl Complexes. <i>Chinese Journal of Chemistry</i> , 2022, 40, 1777-1784.	4.9	8
81	Free Metallophosphines: Extremely Electron-Rich Phosphorus Superbases That Are Electronically and Sterically Tunable**. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	8
82	Synthesis of digermylene-stabilized linear tetraboronate and boroxine. <i>Chemical Communications</i> , 2016, 52, 1582-1585.	4.1	7
83	N-Heterocyclic Carbene Derived 3-Azabutadiene as a Base in Classic and Frustrated Lewis Pair Chemistry. <i>Chemistry - A European Journal</i> , 2019, 25, 7110-7113.	3.3	7
84	Oxyphosphoranes as precursors to bridging phosphate-catecholate ligands. <i>Chemical Communications</i> , 2021, 57, 1194-1197.	4.1	7
85	Base-Stabilized $[\text{PO}]^+ / [\text{PO}]_2^+$ Cations. <i>Angewandte Chemie</i> , 2019, 131, 18444-18448.	2.0	6
86	Crystalline Neutral Diboron Analogues of Cyclopropanes. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	5
87	Reversible Stereoisomerization of 1,3-Diphosphetane Frameworks Revealed by a Single-Electron Redox Approach. <i>Inorganic Chemistry</i> , 2021, 60, 5771-5778.	4.0	4
88	Site-Fixed Hydroboration of Terminal and Internal Alkenes using $\text{BX}_3 / \text{Pr}_2\text{NET}$. <i>Angewandte Chemie</i> , 2021, 133, 26442-26449.	2.0	4
89	A Room-Temperature Stable Distonic Radical Cation. <i>Angewandte Chemie</i> , 2020, 132, 24038-24043.	2.0	3
90	Free Metallophosphines: Extremely Electron-Rich Phosphorus Superbases That Are Electronically and Sterically Tunable**. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	2

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91	Frontispiece: Nitrogen-Based Lewis Acids: Synthesis and Reactivity of a Cyclic (Alkyl)(Amino)Nitrenium Cation. <i>Angewandte Chemie - International Edition</i> , 2018, 57, .	13.8	1
92	Modulating the Frontier Orbitals of an Aluminylene for Facile Dearomatization of Inert Arenes**. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	1
93	The Dynamic Nature of Phosphorus. <i>Chem</i> , 2017, 3, 195-197.	11.7	0
94	Frontispiz: Nitrogen-Based Lewis Acids: Synthesis and Reactivity of a Cyclic (Alkyl)(Amino)Nitrenium Cation. <i>Angewandte Chemie</i> , 2018, 130, .	2.0	0