

# Shih-Yuan Liu

## List of Publications by Year in descending order

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98  
papers

6,745  
citations

46984

47  
h-index

62565

80  
g-index

117  
all docs

117  
docs citations

117  
times ranked

3145  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent Advances in Azaborine Chemistry. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 6074-6092.	7.2	654
2	The State of the Art in Azaborine Chemistry: New Synthetic Methods and Applications. <i>Journal of the American Chemical Society</i> , 2018, 140, 1184-1194.	6.6	304
3	A Hybrid Organic/Inorganic Benzene. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 973-977.	7.2	258
4	A Single-Component Liquid-Phase Hydrogen Storage Material. <i>Journal of the American Chemical Society</i> , 2011, 133, 19326-19329.	6.6	203
5	Crystal Clear Structural Evidence for Electron Delocalization in 1,2-Dihydro-1,2-azaborines. <i>Journal of the American Chemical Society</i> , 2008, 130, 7250-7252.	6.6	191
6	Late-stage functionalization of BN-heterocycles. <i>Chemical Society Reviews</i> , 2019, 48, 3436-3453.	18.7	156
7	Graphene-like Boron-Carbon-Nitrogen Monolayers. <i>ACS Nano</i> , 2017, 11, 2486-2493.	7.3	154
8	Hydrogen Storage by Boron-Nitrogen Heterocycles: A Simple Route for Spent Fuel Regeneration. <i>Journal of the American Chemical Society</i> , 2010, 132, 3289-3291.	6.6	152
9	Regioregular Synthesis of Azaborine Oligomers and a Polymer with a <i>syn</i> -Conformation Stabilized by $\pi$ - $\pi$ Interactions. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 11191-11195.	7.2	137
10	Two BN Isosteres of Anthracene: Synthesis and Characterization. <i>Journal of the American Chemical Society</i> , 2014, 136, 15414-15421.	6.6	135
11	A surprisingly mild and versatile method for palladium-catalyzed Suzuki cross-couplings of aryl chlorides in the presence of a triarylphosphine. Electronic supplementary information (ESI) available: experimental procedures and compound characterization data. See <a href="http://www.rsc.org/suppdata/cc/b1/b107888g/">http://www.rsc.org/suppdata/cc/b1/b107888g/</a> . <i>Chemical Communications</i> , 2001, 2408-2409.	2.2	134
12	BN/CC Isosteric Compounds as Enzyme Inhibitors: <i>N</i> - and <i>B</i> -Ethyl-1,2-Azaborine Inhibit Ethylbenzene Hydroxylation as Nonconvertible Substrate Analogues. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 2599-2601.	7.2	125
13	Site-Selective and Stereoselective <i>trans</i> -Hydroboration of 1,3-Enynes Catalyzed by 1,4-Azaborine-Based Phosphine-Pd Complex. <i>Journal of the American Chemical Society</i> , 2016, 138, 14566-14569.	6.6	118
14	Boron Mimetics: 1,2-Dihydro-1,2-Azaborines Bind inside a Nonpolar Cavity of T4 Lysozyme. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 6817-6819.	7.2	114
15	The Least Stable Isomer of BN Naphthalene: Toward Predictive Trends for the Optoelectronic Properties of BN Acenes. <i>Journal of the American Chemical Society</i> , 2017, 139, 6082-6085.	6.6	100
16	A 1,3-Dihydro-1,3-azaborine Debuts. <i>Journal of the American Chemical Society</i> , 2011, 133, 20152-20155.	6.6	99
17	1,2-BN Cyclohexane: Synthesis, Structure, Dynamics, and Reactivity. <i>Journal of the American Chemical Society</i> , 2011, 133, 13006-13009.	6.6	95
18	UV-Photoelectron Spectroscopy of 1,2- and 1,3-Azaborines: A Combined Experimental and Computational Electronic Structure Analysis. <i>Journal of the American Chemical Society</i> , 2012, 134, 10279-10285.	6.6	94

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19	Diversity through Isosterism: The Case of Boron-Substituted 1,2-Dihydro-1,2-azaborines. <i>Organic Letters</i> , 2007, 9, 4905-4908.	2.4	93
20	Homogeneous metal catalysis for conversion between aromatic and saturated compounds. <i>Coordination Chemistry Reviews</i> , 2016, 314, 134-181.	9.5	93
21	Boron in Disguise: The Parent Fused BN Indole. <i>Journal of the American Chemical Society</i> , 2011, 133, 11508-11511.	6.6	90
22	Protecting Group-Free Synthesis of 1,2-Azaborines: A Simple Approach to the Construction of BN-Benzenoids. <i>Journal of the American Chemical Society</i> , 2013, 135, 12908-12913.	6.6	90
23	Synthesis by free radical polymerization and properties of BN-polystyrene and BN-poly(vinylbiphenyl). <i>Chemical Communications</i> , 2016, 52, 13616-13619.	2.2	87
24	Resonance Stabilization Energy of 1,2-Azaborines: A Quantitative Experimental Study by Reaction Calorimetry. <i>Journal of the American Chemical Society</i> , 2010, 132, 18048-18050.	6.6	85
25	Medicinal Chemistry Profiling of Monocyclic 1,2-Azaborines. <i>ChemMedChem</i> , 2017, 12, 358-361.	1.6	84
26	Negishi Cross-Coupling Is Compatible with a Reactive B-Cl Bond: Development of a Versatile Late-Stage Functionalization of 1,2-Azaborines and Its Application to the Synthesis of New BN Isosteres of Naphthalene and Indenyl. <i>Journal of the American Chemical Society</i> , 2015, 137, 8932-8935.	6.6	82
27	Late-Stage Functionalization of 1,2-Dihydro-1,2-azaborines via Regioselective Iridium-Catalyzed C-H Borylation: The Development of a New N,N-Bidentate Ligand Scaffold. <i>Journal of the American Chemical Society</i> , 2015, 137, 5536-5541.	6.6	80
28	Monobenzofused 1,4-Azaborines: Synthesis, Characterization, and Discovery of a Unique Coordination Mode. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6795-6799.	7.2	72
29	Nucleophilic Aromatic Substitution Reactions of 1,2-Dihydro-1,2-Azaborine. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 8157-8160.	7.2	71
30	1,2-Azaborine Cations. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 7444-7447.	7.2	68
31	BN-substituted diphenylacetylene: a basic model for conjugated $\pi$ -systems containing the BN bond pair. <i>Chemical Science</i> , 2012, 3, 825-829.	3.7	66
32	Electrophilic Aromatic Substitution of a BN Indole. <i>Journal of the American Chemical Society</i> , 2010, 132, 16340-16342.	6.6	65
33	Boron-Substituted 1,3-Dihydro-1,3-Azaborines: Synthesis, Structure, and Evaluation of Aromaticity. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 7527-7531.	7.2	65
34	BN isosteres of indole. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 2060.	1.5	64
35	UV-Photoelectron Spectroscopy of BN Indoles: Experimental and Computational Electronic Structure Analysis. <i>Journal of the American Chemical Society</i> , 2014, 136, 11813-11820.	6.6	63
36	Bis-BN Cyclohexane: A Remarkably Kinetically Stable Chemical Hydrogen Storage Material. <i>Journal of the American Chemical Society</i> , 2015, 137, 134-137.	6.6	62

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37	Hydrogen Bonding of 1,2-Azaborines in the Binding Cavity of T4 Lysozyme Mutants: Structures and Thermodynamics. <i>Journal of the American Chemical Society</i> , 2016, 138, 12021-12024.	6.6	61
38	Synthesis of Substituted Naphthalenes via a Catalytic Ring-Expansion Rearrangement. <i>Organic Letters</i> , 2008, 10, 4855-4857.	2.4	60
39	Rhodium-Catalyzed Boron Arylation of 1,2-Azaborines. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 9316-9319.	7.2	55
40	BN Tetracene: Extending the Reach of BN/CC Isosterism in Acenes. <i>Organometallics</i> , 2017, 36, 2494-2497.	1.1	54
41	How stable are 1,2-dihydro-1,2-azaborines toward water and oxygen?. <i>Molecular BioSystems</i> , 2009, 5, 1303.	2.9	52
42	Hangman Salophens. <i>Journal of the American Chemical Society</i> , 2005, 127, 5278-5279.	6.6	51
43	1,2-Azaborolyls, Isoelectronic Analogues of the Ubiquitous Cyclopentadienyl Ligand: Synthesis of B-Heteroatom-Substituted 1,2-Azaborolyl Complexes and an Assessment of Their Electronic Features. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 174-176.	7.2	50
44	A Modular Synthetic Approach to Monocyclic 1,4-Azaborines. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8333-8337.	7.2	50
45	Diels-Alder Reactions of 1,2-Azaborines. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 7823-7827.	7.2	49
46	1,2-Azaborine: The Boron-Nitrogen Derivative of <i>ortho</i> -Benzyne. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 7819-7822.	7.2	48
47	Rhodium-Catalyzed B-H Activation of 1,2-Azaborines: Synthesis and Characterization of BN Isosteres of Stilbenes. <i>Organic Letters</i> , 2014, 16, 3340-3343.	2.4	46
48	A BN-Doped Cycloparaphenylene Debuts. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 1556-1560.	7.2	43
49	Structural Characterization and Computer-Aided Optimization of a Small-Molecule Inhibitor of the Arp2/3 Complex, a Key Regulator of the Actin Cytoskeleton. <i>ChemMedChem</i> , 2012, 7, 1286-1294.	1.6	42
50	Photoisomerization of 1,2-Dihydro-1,2-Azaborine: A Matrix Isolation Study. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 10880-10883.	7.2	41
51	Synthesis, Resolution, and Aldol Reactions of a Planar-Chiral Lewis Acid Complex. <i>Journal of the American Chemical Society</i> , 2005, 127, 15352-15353.	6.6	40
52	Microwave Spectrum, Structural Parameters, and Quadrupole Coupling for 1,2-Dihydro-1,2-azaborine. <i>Journal of the American Chemical Society</i> , 2010, 132, 5501-5506.	6.6	40
53	Mechanistic Studies of Hangman Salophen-Mediated Activation of O-O Bonds. <i>Inorganic Chemistry</i> , 2006, 45, 7572-7574.	1.9	39
54	BN benzonitrile: an electron-deficient 1,2-dihydro-1,2-azaborine featuring linkage isomerism. <i>Chemical Communications</i> , 2010, 46, 779-781.	2.2	39

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55	Pd <sup>II</sup> -Senphos Catalyzed <i>trans</i> -Selective Cyanoboration of 1,3-Enynes. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 15928-15932.	7.2	39
56	A BN anthracene mimics the electronic structure of more highly conjugated systems. <i>Dalton Transactions</i> , 2019, 48, 2807-2812.	1.6	37
57	The First General Method for the Synthesis of Transition-Metal $\pi$ Complexes of an Electronically Diverse Family of 1,2-Azaborolys. <i>Organometallics</i> , 2002, 21, 4323-4325.	1.1	36
58	Dehydrogenation Reactions of Cyclic C <sub>2</sub> B <sub>2</sub> N <sub>2</sub> H <sub>12</sub> and C <sub>4</sub> B <sub>2</sub> N <sub>2</sub> H <sub>12</sub> Isomers. <i>Journal of Physical Chemistry A</i> , 2010, 114, 2644-2654.	1.1	34
59	The Dewar Isomer of 1,2-Dihydro-1,2-azaborinines: Isolation, Fragmentation, and Energy Storage. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 5296-5300.	7.2	34
60	Accessing 1,2-Substituted Cyclobutanes through 1,2-Azaborine Photoisomerization. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18918-18922.	7.2	30
61	1,2-Azaborine Cations. <i>Angewandte Chemie</i> , 2010, 122, 7606-7609.	1.6	29
62	1,2-Azaborine: The Boron-Nitrogen Derivative of <i>ortho</i> -Benzyne. <i>Angewandte Chemie</i> , 2015, 127, 7930-7933.	1.6	27
63	3-Methyl-1,2-BN-cyclopentane: a promising H <sub>2</sub> storage material?. <i>Dalton Transactions</i> , 2013, 42, 611-614.	1.6	26
64	Microwave measurements and ab initio calculations of structural and electronic properties of N-Et-1,2-azaborine. <i>Journal of Chemical Physics</i> , 2009, 131, 224312.	1.2	24
65	Charge-Transfer-Induced Magic Cluster Formation of Azaborine Heterocycles on Noble Metal Surfaces. <i>Journal of Physical Chemistry C</i> , 2016, 120, 6020-6030.	1.5	23
66	Synthesis and Characterization of 1,2-Azaborine-Containing Phosphine Ligands: A Comparative Electronic Structure Analysis. <i>European Journal of Inorganic Chemistry</i> , 2017, 2017, 2207-2210.	1.0	23
67	Synthesis and characterization of an unnatural boron and nitrogen-containing tryptophan analogue and its incorporation into proteins. <i>Chemical Science</i> , 2019, 10, 4994-4998.	3.7	23
68	The Synthesis, Characterization and Dehydrogenation of $\sigma$ -Complexes of BN-Cyclohexanes. <i>Chemistry - A European Journal</i> , 2016, 22, 310-322.	1.7	22
69	A Boron Protecting Group Strategy for 1,2-Azaborines. <i>Journal of the American Chemical Society</i> , 2017, 139, 15259-15264.	6.6	21
70	1,2-Azaborine <sup>TM</sup> 's Distinct Electronic Structure Unlocks Two New Regioisomeric Building Blocks via Resolution Chemistry. <i>Journal of the American Chemical Society</i> , 2019, 141, 9072-9078.	6.6	21
71	$\pi$ -Boron Enolates Enable Palladium Catalyzed Carboboration of Internal 1,3-Enynes. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 21231-21236.	7.2	21
72	Cationic 1,2-Azaborine Adducts of Trimethylphosphine, Triphenylphosphine Oxide, and Pyridine-N-Oxide. <i>Organometallics</i> , 2011, 30, 52-54.	1.1	19

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73	A BN-doped Cycloparaphenylene Debuts. <i>Angewandte Chemie</i> , 2021, 133, 1580-1584.	1.6	18
74	Diels-Alder Reactions of 1,2-Azaborines. <i>Angewandte Chemie</i> , 2015, 127, 7934-7938.	1.6	17
75	Changing up BN-Polystyrene: Effect of Substitution Pattern on the Free-Radical Polymerization and Polymer Properties. <i>Macromolecules</i> , 2019, 52, 4500-4509.	2.2	17
76	Pd-Senphos Catalyzed <i>trans</i> -Selective Cyanoboration of 1,3-Enynes. <i>Angewandte Chemie</i> , 2020, 132, 16062-16066.	1.6	17
77	Superelectrophilicity of 1,2-Azaborine: Formation of Xenon and Carbon Monoxide Adducts. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4061-4064.	7.2	16
78	Exploring the strength of a hydrogen bond as a function of steric environment using 1,2-azaborine ligands and engineered T4 lysozyme receptors. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 7002-7006.	1.5	15
79	B-Methyl Amine Borane Derivatives: Synthesis, Characterization, and Hydrogen Release. <i>Australian Journal of Chemistry</i> , 2014, 67, 521.	0.5	14
80	Contemporary Research in Boron Chemistry. <i>Chemical Society Reviews</i> , 2019, 48, 3434-3435.	18.7	13
81	Effect of BN/CC Isosterism on the Thermodynamics of Surface and Bulk Binding: 1,2-Dihydro-1,2-azaborine vs Benzene. <i>Journal of Physical Chemistry C</i> , 2015, 119, 14624-14631.	1.5	11
82	The Dewar Isomer of 1,2-Dihydro-1,2-azaborinines: Isolation, Fragmentation, and Energy Storage. <i>Angewandte Chemie</i> , 2018, 130, 5394-5398.	1.6	11
83	Cation-binding ability of BN indole. <i>Chemical Communications</i> , 2020, 56, 3749-3752.	2.2	11
84	Pushing the limits of steric demand around a biaryl axis: synthesis of tetra-ortho-substituted biaryl naphthalenes. <i>Chemical Communications</i> , 2011, 47, 286-288.	2.2	9
85	The Versatile Reaction Chemistry of an Alpha-Boryl Diazo Compound. <i>Journal of the American Chemical Society</i> , 2021, 143, 14059-14064.	6.6	9
86	Electric Dipole Transition Moments and Solvent-Dependent Interactions of Fluorescent Boron-Nitrogen Substituted Indole Derivatives. <i>Journal of Physical Chemistry B</i> , 2015, 119, 7985-7993.	1.2	8
87	Accessing 1,2-Substituted Cyclobutanes through 1,2-Azaborine Photoisomerization. <i>Angewandte Chemie</i> , 2019, 131, 19094-19098.	1.6	8
88	Thermodynamically Controlled, Dynamic Binding of Diols to a 1,2-BN Cyclohexane Derivative. <i>Organometallics</i> , 2013, 32, 6650-6653.	1.1	7
89	Blending materials composed of boron, nitrogen and carbon to transform approaches to liquid hydrogen stores. <i>Dalton Transactions</i> , 2016, 45, 6196-6203.	1.6	7
90	Kinetics of $\text{CH}_2\text{CH}_2$ Hydrogen Release from a BN-cyclohexene Derivative. <i>Organometallics</i> , 2016, 35, 2425-2428.	1.1	5

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91	Identification and characterization of 1,2-BN cyclohexene using microwave spectroscopy. <i>Chemical Physics Letters</i> , 2015, 639, 88-92.	1.2	4
92	Superelektrophilie des 1,2-Azaborins: Bildung von Addukten mit Xenon und Kohlenmonoxid. <i>Angewandte Chemie</i> , 2019, 131, 4103-4106.	1.6	4
93	Expanding the functional group tolerance of cross-coupling in 1,2-dihydro-1,2-azaborines: Installation of alkyl, alkenyl, aryl, and heteroaryl substituents while maintaining a B-H bond. <i>Tetrahedron</i> , 2019, 75, 580-583.	1.0	4
94	A comparison of hydrogen release kinetics from 5- and 6-membered 1,2-BN-cycloalkanes. <i>RSC Advances</i> , 2021, 11, 34132-34136.	1.7	1
95	Inside Cover: Structural Characterization and Computer-Aided Optimization of a Small-Molecule Inhibitor of the Arp2/3 Complex, a Key Regulator of the Actin Cytoskeleton ( <i>ChemMedChem</i> 7/2012). <i>ChemMedChem</i> , 2012, 7, 1130-1130.	1.6	0
96	Electronic Transition Moments of 1,3,2-Benzodiazaboroline (External Bn Indole) and Fused Bn Indole Containing the 1,2-Dihydro-1,2-Azaborine Core. <i>Biophysical Journal</i> , 2014, 106, 206a.	0.2	0
97	Synthesis of 1,2-Azaborines and the Preparation of Their Protein Complexes with T4 Lysozyme Mutants. <i>Journal of Visualized Experiments</i> , 2017, , .	0.2	0
98	C-Boron Enolates Enable Palladium Catalyzed Carboboration of Internal 1,3-Enynes. <i>Angewandte Chemie</i> , 2021, 133, 21401-21406.	1.6	0