

# Liang Deng

## List of Publications by Year in descending order

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102  
papers

4,918  
citations

94381

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98753

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117  
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times ranked

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#	ARTICLE	IF	CITATIONS
1	Cobalt Complex-Catalyzed Hydrosilylation of Alkenes and Alkynes. <i>ACS Catalysis</i> , 2016, 6, 290-300.	5.5	361
2	Two-Coordinate Co(II) Imido Complexes as Outstanding Single-Molecule Magnets. <i>Journal of the American Chemical Society</i> , 2017, 139, 373-380.	6.6	343
3	Fast and Simple Preparation of Iron-Based Thin Films as Highly Efficient Water-Oxidation Catalysts in Neutral Aqueous Solution. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 4870-4875.	7.2	256
4	Regio- and Stereoselective Hydrosilylation of Alkynes Catalyzed by Three-Coordinate Cobalt(I) Alkyl and Silyl Complexes. <i>Journal of the American Chemical Society</i> , 2014, 136, 17414-17417.	6.6	182
5	Advances in the chemistry of carboranes and metallacarboranes with more than 12 vertices. <i>Coordination Chemistry Reviews</i> , 2007, 251, 2452-2476.	9.5	143
6	High-Oxidation-State 3d Metal (Ti-Cu) Complexes with N-Heterocyclic Carbene Ligation. <i>Chemical Reviews</i> , 2018, 118, 9930-9987.	23.0	136
7	Mode of Activation of Cobalt(II) Amides for Catalytic Hydrosilylation of Alkenes with Tertiary Silanes. <i>Journal of the American Chemical Society</i> , 2017, 139, 1798-1801.	6.6	121
8	Three-Coordinate Cobalt(IV) and Cobalt(V) Imido Complexes with N-Heterocyclic Carbene Ligation: Synthesis, Structure, and Their Distinct Reactivity in C-H Bond Amination. <i>Journal of the American Chemical Society</i> , 2014, 136, 15525-15528.	6.6	115
9	Observation of the single-ion magnet behavior of d <sup>8</sup> ions on two-coordinate Co-NHC complexes. <i>Chemical Science</i> , 2015, 6, 7156-7162.	3.7	115
10	Anchoring of Silyl Donors on a N-Heterocyclic Carbene through the Cobalt-Mediated Silylation of Benzylic C-H Bonds. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 10845-10849.	7.2	112
11	Stabilization of Fully Reduced Iron-Sulfur Clusters by Carbene Ligation: The [Fe <sub>n</sub> S <sub>n</sub> ] <sup>0</sup> Oxidation Levels (n = 4, 8). <i>Journal of the American Chemical Society</i> , 2008, 130, 9878-9886.	6.6	110
12	Synthesis, Structure, and Reactivity of Organo-Iron(II) Complexes with N-Heterocyclic Carbene Ligation. <i>Organometallics</i> , 2011, 30, 2018-2025.	1.1	99
13	Bis(dinitrogen)cobalt(1) Complexes with NHC Ligation: Synthesis, Characterization, and Their Dinitrogen Functionalization Reactions Affording Side-on Bound Diazene Complexes. <i>Journal of the American Chemical Society</i> , 2018, 140, 2239-2250.	6.6	95
14	Recent Advances in Iron-Catalyzed C-H Bond Amination via Iron Imido Intermediate. <i>Chinese Journal of Chemistry</i> , 2018, 36, 1222-1240.	2.6	90
15	Three-Coordinate Iron(IV) Bisimido Complexes with Aminocarbene Ligation: Synthesis, Structure, and Reactivity. <i>Journal of the American Chemical Society</i> , 2015, 137, 14196-14207.	6.6	88
16	Intramolecular C(sp <sup>3</sup> )-H Bond Activation Reactions of Low-Valent Cobalt Complexes with Coordination Unsaturation. <i>Organometallics</i> , 2012, 31, 7040-7043.	1.1	86
17	Synthesis, Reactivity, and Structural Characterization of a 14-Vertex Carborane. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 2128-2131.	7.2	85
18	C-H bond amination by iron-imido/nitrene species. <i>Science Bulletin</i> , 2012, 57, 2352-2360.	1.7	85

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19	A Two-coordinate Cobalt(II) Imido Complex with NHC Ligation: Synthesis, Structure, and Reactivity. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 12640-12644.	7.2	84
20	Synthesis, Structure, and Reactivity of 13-Vertex Carboranes and 14-Vertex Metallocarboranes. <i>Journal of the American Chemical Society</i> , 2006, 128, 5219-5230.	6.6	82
21	(Aminocarbene)(Divinyltetramethyldisiloxane)Iron(0) Compounds: A Class of Low-coordinate Iron(0) Reagents. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8432-8436.	7.2	78
22	Nickel-Mediated Regioselective [2 + 2 + 2] Cycloaddition of Carboryne with Alkynes. <i>Journal of the American Chemical Society</i> , 2006, 128, 7728-7729.	6.6	76
23	Dinuclear Iron Complex-Catalyzed Cross-Coupling of Primary Alkyl Fluorides with Aryl Grignard Reagents. <i>Organometallics</i> , 2012, 31, 6518-6521.	1.1	75
24	Synthesis, Structure, and Reactivity of a Zirconocene Carboryne Precursor. <i>Journal of the American Chemical Society</i> , 2005, 127, 13774-13775.	6.6	72
25	Synthesis and Structure of 14- and 15-Vertex Ruthenacarboranes. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 4309-4313.	7.2	72
26	A Journey from 12-Vertex to 14-Vertex Carboranes and to 15-Vertex Metallocarboranes. <i>Organometallics</i> , 2007, 26, 1832-1845.	1.1	69
27	An Iron(II) Ylide Complex as a Masked Open-Shell Iron Alkylidene Species in Its Alkylidene-Transfer Reactions with Alkenes. <i>Journal of the American Chemical Society</i> , 2017, 139, 3876-3888.	6.6	59
28	Distinct Catalytic Performance of Cobalt(I)-N-Heterocyclic Carbene Complexes in Promoting the Reaction of Alkene with Diphenylsilane: Selective 2,1-Hydrosilylation, 1,2-Hydrosilylation, and Hydrogenation of Alkene. <i>ACS Catalysis</i> , 2018, 8, 9637-9646.	5.5	58
29	Role of C-C Linkage in the Formation and Stabilization of Supercarboranes. Synthesis and Structure of Carbon-Atoms-Apart 13-Vertex Carborane and 14-Vertex Metallocarborane. <i>Journal of the American Chemical Society</i> , 2007, 129, 18-19.	6.6	55
30	Square-Planar Cobalt Complexes with Monodentate N-Heterocyclic Carbene Ligation: Synthesis, Structure, and Catalytic Application. <i>Organometallics</i> , 2011, 30, 4687-4694.	1.1	52
31	Carbon-Carbon Bond Formation Reactivity of a Four-Coordinate NHC-Supported Iron(II) Phenyl Compound. <i>Organometallics</i> , 2015, 34, 599-605.	1.1	51
32	Mössbauer, Electron Paramagnetic Resonance, and Theoretical Studies of a Carbene-Based All-Ferrous Fe <sub>4</sub> S <sub>4</sub> Cluster: Electronic Origin and Structural Identification of the Unique Spectroscopic Site. <i>Inorganic Chemistry</i> , 2009, 48, 2735-2747.	1.9	47
33	Iron(II) Complexes Featuring Bidentate N-Heterocyclic Carbene-Silyl Ligands: Synthesis and Characterization. <i>Organometallics</i> , 2013, 32, 7268-7271.	1.1	45
34	Synthesis, Structure, and Reactivity of Low-Spin Cobalt(II) Imido Complexes [(Me <sub>3</sub> P) <sub>3</sub> Co(NAr)]. <i>Inorganic Chemistry</i> , 2017, 56, 8278-8286.	1.9	44
35	Selective Double Carbomagnesiation of Internal Alkynes Catalyzed by Iron-N-Heterocyclic Carbene Complexes: A Convenient Method to Highly Substituted 1,3-Dienyl Magnesium Reagents. <i>Journal of the American Chemical Society</i> , 2016, 138, 112-115.	6.6	40
36	Four-Coordinate Iron(II) Diaryl Compounds with Monodentate N-Heterocyclic Carbene Ligation: Synthesis, Characterization, and Their Tetrahedral-Square Planar Isomerization in Solution. <i>Inorganic Chemistry</i> , 2015, 54, 4752-4760.	1.9	39

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37	A Two-Coordinate Iron(II) Imido Complex with NHC Ligation: Synthesis, Characterization, and Its Diversified Reactivity of Nitrene Transfer and C–H Bond Activation. <i>Inorganic Chemistry</i> , 2019, 58, 7634-7644.	1.9	39
38	Zirconocene-Mediated Intermolecular Coupling of Si-tethered Diynes with Alkynes, Ketones, Aldehydes, and Isocyanates by means of Novel Skeletal Rearrangement of Zirconacyclobutene-Silacyclobutene and Zirconacyclohexadiene-Silacyclobutene Fused-Ring Intermediates. <i>Chemistry - A European Journal</i> , 2005, 11, 1895-1902.	1.7	38
39	Markovnikov Hydrosilylation of Alkynes with Tertiary Silanes Catalyzed by Dinuclear Cobalt Carbonyl Complexes with NHC Ligation. <i>Journal of the American Chemical Society</i> , 2021, 143, 12847-12856.	6.6	38
40	Linear and T-Shaped Iron(I) Complexes Supported by N-Heterocyclic Carbene Ligands: Synthesis and Structure Characterization. <i>Inorganic Chemistry</i> , 2015, 54, 8808-8816.	1.9	36
41	An NHC–Silyl–NHC Pincer Ligand for the Oxidative Addition of C–H, N–H, and O–H Bonds to Cobalt(I) Complexes. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 2720-2724.	7.2	36
42	Reduction of 1,2-(CH <sub>2</sub> ) <sub>n</sub> -1,2-C <sub>2</sub> B <sub>10</sub> H <sub>10</sub> by Group 1 Metals. Effects of Bridge Length/Rigidity on the Formation of Carborane Anions. <i>Organometallics</i> , 2005, 24, 6244-6249.	1.1	35
43	Monomeric Bis(anilido)iron(II) Complexes with <i>N</i> -Heterocyclic Carbene Ligation: Synthesis, Characterization, and Redox Reactivity toward Aryl Halides. <i>Inorganic Chemistry</i> , 2013, 52, 59-65.	1.9	34
44	Silane-Functionalized <i>N</i> -Heterocyclic Carbene–Cobalt Complexes Containing a Five-Coordinate Silicon with a Covalent Co–Si Bond. <i>Organometallics</i> , 2015, 34, 1546-1551.	1.1	34
45	Cleavage of Ni(μ <sub>2</sub> -S)-Ni Bridges in Dinuclear Nickel(II) Dithiolate Pincer Complexes and Related Reactions. <i>Inorganic Chemistry</i> , 2009, 48, 6159-6166.	1.9	31
46	Stabilization of 3:1 Site-Differentiated Cubane-Type Clusters in the [Fe <sub>4</sub> S <sub>4</sub> ] <sup>1+</sup> Core Oxidation State by Tertiary Phosphine Ligation: Synthesis, Core Structural Diversity, and S = 1/2 Ground States. <i>Inorganic Chemistry</i> , 2010, 49, 11118-11126.	1.9	31
47	Two- and three-coordinate formal iron( <i>scp</i> ) compounds featuring monodentate aminocarbene ligands. <i>Organic Chemistry Frontiers</i> , 2014, 1, 1040-1044.	2.3	31
48	High-Spin Iron(II) Alkynyl Complexes with N-Heterocyclic Carbene Ligation: Synthesis, Characterization, and Reactivity Study. <i>Organometallics</i> , 2015, 34, 2775-2782.	1.1	30
49	Three-Coordinate Iron(II) Dialkenyl Compound with NHC Ligation: Synthesis, Structure, and Reactivity. <i>Organometallics</i> , 2015, 34, 4401-4407.	1.1	30
50	High-Spin Iron(I) and Iron(0) Dinitrogen Complexes Supported by N-Heterocyclic Carbene Ligands. <i>Chemistry - A European Journal</i> , 2016, 22, 14162-14165.	1.7	30
51	The Stabilization of Three-Coordinate Formal Mn(0) Complex with NHC and Alkene Ligation. <i>Chem</i> , 2018, 4, 2844-2860.	5.8	30
52	Cubane-Type Co <sub>4</sub> S <sub>4</sub> Clusters: Synthesis, Redox Series, and Magnetic Ground States. <i>Journal of the American Chemical Society</i> , 2009, 131, 11213-11221.	6.6	29
53	Dinuclear Iron–Imido Complexes with N-Heterocyclic Carbene Ligation: Synthesis, Structure, and Redox Reactivity. <i>Organometallics</i> , 2012, 31, 4537-4543.	1.1	27
54	Low-Coordinate NHC-Cobalt(0)-Olefin Complexes: Synthesis, Structure, and Their Reactions with Hydrosilanes. <i>Inorganic Chemistry</i> , 2017, 56, 10775-10784.	1.9	26

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55	Alkyne and ketone induced novel cleavage of a C—C bond and a C—Si bond in zirconacyclobutene—silacyclobutene fused ring compounds. <i>Tetrahedron Letters</i> , 2003, 44, 677-679.	0.7	25
56	Synthesis and Structural Characterization of Zirconium—Carboryne Complexes. <i>Organometallics</i> , 2009, 28, 5749-5756.	1.1	25
57	Three-Coordinate Formal Cobalt(0), Iron(0), and Manganese(0) Complexes with Persistent Carbene and Alkene Ligation. <i>Accounts of Chemical Research</i> , 2020, 53, 244-254.	7.6	25
58	Open-shell iron hydrocarbyls. <i>Coordination Chemistry Reviews</i> , 2017, 350, 285-299.	9.5	22
59	Three-Coordinate Iron(0) Complexes with <i>N</i> -Heterocyclic Carbene and Vinyltrimethylsilane Ligation: Synthesis, Characterization, and Ligand Substitution Reactions. <i>Inorganic Chemistry</i> , 2019, 58, 13129-13141.	1.9	20
60	Synthesis and Structural Characterization of Group 10 Metal—Carboryne Complexes. <i>Organometallics</i> , 2010, 29, 4541-4547.	1.1	19
61	Iron(II) Dihydrocarbyls Supported by a Biphenyl-Linked Bis(benzimidazol-2-ylidene) Ligand: Syntheses and Characterization. <i>Organometallics</i> , 2014, 33, 5660-5669.	1.1	19
62	Isolable Borane-Based Diradical and Triradical Fused by a Diamagnetic Transition Metal Ion. <i>Journal of the American Chemical Society</i> , 2017, 139, 17723-17726.	6.6	19
63	Synthesis, Structure, Reactivity, and Thermal Isomerization of Boron-Substituted 13-Vertex Cobaltacarboranes (1-5-Cp)Co(1-6-R2C2B10Me8H2) (R = H, Et). <i>Inorganic Chemistry</i> , 2007, 46, 2716-2724.	1.9	18
64	Magnetic circular dichroism and density functional theory studies of electronic structure and bonding in cobalt(ii)—N-heterocyclic carbene complexes. <i>Dalton Transactions</i> , 2017, 46, 13290-13299.	1.6	18
65	Reactions of Low-Coordinate Cobalt(0)—N-Heterocyclic Carbene Complexes with Primary Aryl Phosphines. <i>Inorganic Chemistry</i> , 2018, 57, 15600-15609.	1.9	18
66	Iron-mediated C—H bond amination by organic azides on a tripodal bis(anilido)iminophosphorane platform. <i>Dalton Transactions</i> , 2013, 42, 5607.	1.6	17
67	Substrate Redox Non-innocence Inducing Stepwise Oxidative Addition Reaction: Nitrosoarene C—N Bond Cleavage on Low-Coordinate Cobalt(0) Species. <i>Journal of the American Chemical Society</i> , 2019, 141, 7731-7735.	6.6	17
68	Reactivity of a Two-Coordinate Cobalt(0) Cyclic (Alkyl)(amino)carbene Complex. <i>Organometallics</i> , 2020, 39, 729-739.	1.1	17
69	Cobalt(—I)- and Rhodium(—I)-Mediated Dearylation of N-Aryl N-Heterocyclic Carbene Ligands. <i>Organometallics</i> , 2020, 39, 2871-2877.	1.1	16
70	Three- and Four-Coordinate Homoleptic Iron(I)—NHC Complexes: Synthesis and Characterization. <i>Organometallics</i> , 2016, 35, 1361-1367.	1.1	15
71	Synthesis, structure, and C—H bond activation reaction of an iron(IV) terminal imido complex bearing trifluoromethyl groups. <i>Cell Reports Physical Science</i> , 2021, 2, 100454.	2.8	15
72	Zirconocene-mediated ligand-switched selective cleavage of active and inert carbon—carbon bonds in allylcyclopropanes. <i>Chemical Communications</i> , 2009, , 4414.	2.2	14

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73	Synthesis, Structure, and Reactivity Study of Iron(II) Complexes with Bulky Bis(anilido)thioether Ligation. <i>Organometallics</i> , 2012, 31, 428-434.	1.1	14
74	Post-Functionalization: A Useful Method for the Synthesis of Donor-Functionalized N-Heterocyclic Carbene-Transition-Metal Catalysts. <i>Synlett</i> , 2014, 25, 1045-1049.	1.0	13
75	The Modular Nature of All-Ferrous Edge-Bridged Double Cubanes. <i>Inorganic Chemistry</i> , 2010, 49, 1647-1650.	1.9	12
76	Hafnium(II) Complexes with Cyclic (Alkyl)(amino)carbene Ligation. <i>Organometallics</i> , 2018, 37, 4186-4188.	1.1	12
77	Reactivity of a Bis(amidinato)iron(II) Complex [Fe(MesC(NPr) <sub>2</sub> ) <sub>2</sub> ] toward Some Oxidizing Reagents. <i>Inorganic Chemistry</i> , 2013, 52, 5906-5913.	1.9	11
78	Cyclometallation reactions of a three-coordinate cobalt complex bearing a nonsymmetric N-heterocyclic carbene ligand. <i>Dalton Transactions</i> , 2019, 48, 9676-9683.	1.6	11
79	An Isolable Mononuclear Palladium(I) Amido Complex. <i>Journal of the American Chemical Society</i> , 2021, 143, 10751-10759.	6.6	11
80	Formal Co(0), Fe(0), and Mn(0) complexes with NHC and styrene ligation. <i>Chinese Chemical Letters</i> , 2020, 31, 1342-1344.	4.8	10
81	Dinickelaferrocene: A Ferrocene Analogue with Two Aromatic Nickeloles Realized by Electron Back-Donation from Iron. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14394-14398.	7.2	10
82	Catalytic Method for the Synthesis of Deuterium-Labeled N-Heterocyclic Carbenes Enabled by a Coordinatively Unsaturated Ruthenium N-Heterocyclic Carbene Catalyst. <i>Journal of the American Chemical Society</i> , 2021, 143, 19956-19965.	6.6	8
83	Low-coordinate cobalt(0) N-heterocyclic carbene complexes as catalysts for hydrosilylation of alkynes. <i>Applied Organometallic Chemistry</i> , 2022, 36, .	1.7	8
84	A square planar iron(II) biphenyl-2,2'-diyl complex with NHC ligation: Synthesis, characterization, and its reactivity toward unsaturated organic substrates. <i>Inorganica Chimica Acta</i> , 2017, 460, 49-54.	1.2	7
85	Reaction of Li <sub>2</sub> C <sub>2</sub> B <sub>10</sub> Me <sub>8</sub> H <sub>2</sub> with NiCl <sub>2</sub> . Ligand effects on stability of Ni-octamethylcarbyne complexes. <i>Journal of Organometallic Chemistry</i> , 2013, 747, 225-228.	0.8	6
86	Multiple magnetic relaxation pathways in T-shaped N-heterocyclic carbene-supported Fe(I) single-ion magnets. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 1050-1057.	3.0	6
87	Reactions of a Bis(vinyltrimethylsilane)nickel(0) N-Heterocyclic carbene complex with organic azides. <i>Journal of Organometallic Chemistry</i> , 2020, 913, 121195.	0.8	6
88	An NHC-Silyl-NHC Pincer Ligand for the Oxidative Addition of C-H, N-H, and O-H Bonds to Cobalt(I) Complexes. <i>Angewandte Chemie</i> , 2017, 129, 2764-2768.	1.6	3
89	Non-sedated functional imaging based on deep synchronization of PROPELLER MRI and NIRS. <i>Computer Methods and Programs in Biomedicine</i> , 2019, 175, 1-7.	2.6	3
90	Three-coordinate Bis(N-heterocyclic carbene)iron(0) complexes with alkene and alkyne ligation: Synthesis and characterization. <i>Polyhedron</i> , 2021, 197, 115054.	1.0	3

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91	Square Planar Nickel(II) Complexes with Halogenated <i>o</i> -Diiminobenzosemiquinonato Ligand: Synthesis, Characterization, and Redox Property. Chinese Journal of Chemistry, 2013, 31, 1473-1482.	2.6	2
92	Converting carbon dioxide into alkanes via alkane reverse combustion reaction. Science Bulletin, 2016, 61, 1160-1162.	4.3	2
93	Organometallics in Asia. Organometallics, 2016, 35, 1341-1342.	1.1	2
94	Richard Hadley Holm: A Remembrance and A Tribute. Comments on Inorganic Chemistry, 2022, 42, 61-108.	3.0	2
95	Isolable Anion Radicals of Nitrosoarenes. Chinese Journal of Chemistry, 2020, 38, 158-162.	2.6	1
96	Dinickelaferrocene: A Ferrocene Analogue with Two Aromatic Nickeloles Realized by Electron Back-Donation from Iron. Angewandte Chemie, 2020, 132, 14500-14504.	1.6	1
97	The Power of Organotransition Metal Catalysis in Synthesizing Organic Molecules. Organometallics, 2021, 40, 2179-2181.	1.1	1
98	A Mononuclear Iron Thiolate Complex with N-Heterocyclic Carbene Ligand. Acta Chimica Sinica, 2022, 80, 272.	0.5	1
99	Noninnocent Behavior of a (3-Imino)indol-2-yl Ligand in Metal Complexes. Organometallics, 2022, 41, 480-485.	1.1	1
100	Alkyne and Ketone Induced Novel Cleavage of a C-C Bond and a C-Si Bond in Zirconacyclobutene-Silacyclobutene Fused Ring Compounds. ChemInform, 2003, 34, no.	0.1	0
101	Pioneers and Influencers in Organometallic Chemistry: Professor Yao-Zeng Huang and His Three "Treasure Chests". Organometallics, 2020, 39, 2327-2330.	1.1	0
102	Organometallic Chemistry of NHCs and Analogues. , 2021, , .		0