

Xuenian Chen

List of Publications by Year in descending order

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105
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2,433
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218677

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106
all docs

106
docs citations

106
times ranked

1856
citing authors

#	ARTICLE	IF	CITATIONS
1	Probing the structures and bonding of size-selected boron and doped-boron clusters. <i>Chemical Society Reviews</i> , 2019, 48, 3550-3591.	38.1	169
2	The Roles of Dihydrogen Bonds in Amine Borane Chemistry. <i>Accounts of Chemical Research</i> , 2013, 46, 2666-2675.	15.6	122
3	Facile Synthesis of Aminodiborane and Inorganic Butane Analogue $\text{NH}_3\text{BH}_2\text{NH}_2\text{BH}_3$. <i>Journal of the American Chemical Society</i> , 2010, 132, 10658-10659.	13.7	91
4	Ammonia borane, past as prolog. <i>Journal of Organometallic Chemistry</i> , 2014, 751, 60-66.	1.8	86
5	Experimental and Computational Study of the Formation Mechanism of the Diammoniate of Diborane: The Role of Dihydrogen Bonds. <i>Journal of the American Chemical Society</i> , 2011, 133, 14172-14175.	13.7	79
6	A New Perspective on Borane Chemistry: The Nucleophilicity of the B^{\sim}H Bonding Pair Electrons. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3268-3278.	13.8	73
7	Toward Solution Syntheses of the Tetrahedral Au_{20} Pyramid and Atomically Precise Gold Nanoclusters with Uncoordinated Sites. <i>Accounts of Chemical Research</i> , 2018, 51, 2159-2168.	15.6	68
8	Elucidation of the Formation Mechanisms of the Octahydrotriborate Anion ($\text{B}_3\text{H}_8^{\ominus}$) through the Nucleophilicity of the B^{\sim}H Bond. <i>Journal of the American Chemical Society</i> , 2018, 140, 6718-6726.	13.7	68
9	Ammonium Octahydrotriborate ($\text{NH}_4\text{B}_3\text{H}_8$): New Synthesis, Structure, and Hydrolytic Hydrogen Release. <i>Inorganic Chemistry</i> , 2011, 50, 3738-3742.	4.0	67
10	Highly efficient reduction of carbon dioxide with a borane catalyzed by bis(phosphinite) pincer ligated palladium thiolate complexes. <i>Chemical Communications</i> , 2016, 52, 14262-14265.	4.1	54
11	Hydroboration of CO_2 catalyzed by bis(phosphinite) pincer ligated nickel thiolate complexes. <i>Dalton Transactions</i> , 2017, 46, 4504-4509.	3.3	53
12	High Proton Conductivity in Covalently Linked Polyoxometalate-Organoboronic Acid Polymers. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16953-16957.	13.8	50
13	Non-noble metal single-atom catalyst of Co_1/MXene (Mo_2CS_2) for CO oxidation. <i>Science China Materials</i> , 2021, 64, 651-663.	6.3	44
14	Formation Mechanisms, Structure, Solution Behavior, and Reactivity of Aminodiborane. <i>Journal of the American Chemical Society</i> , 2015, 137, 12406-12414.	13.7	42
15	A Giant $\text{Mo}/\text{Ta}/\text{W}$ Ternary Mixed-Addenda Polyoxometalate with Efficient Photocatalytic Activity for Primary Amine Coupling. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 43287-43293.	8.0	42
16	A Simple and Efficient Way to Synthesize Unsolvated Sodium Octahydrotriborate. <i>Inorganic Chemistry</i> , 2010, 49, 8185-8187.	4.0	41
17	Large-scale and Facile Preparation of Pure Ammonia Borane through Displacement Reactions. <i>Chemistry - A European Journal</i> , 2012, 18, 11994-11999.	3.3	40
18	Palladium-Catalyzed Regioselective B(9)-Amination of o -Carboranes and m -Carboranes in HFIP with Broad Nitrogen Sources. <i>Journal of the American Chemical Society</i> , 2022, 144, 8371-8378.	13.7	40

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19	Facile Synthesis of Unsolvated Alkali Metal Octahydrotriborate Salts $M\text{B}_3\text{H}_8$ ($M=\text{K, Rb, and Cs}$), Mechanisms of Formation, and the Crystal Structure of KB_3H_8 . <i>Angewandte Chemie - International Edition</i> , 2019, 58, 2720-2724.	13.8	39
20	New Syntheses and Structural Characterization of $\text{NH}_3\text{BH}_2\text{Cl}$ and $(\text{BH}_2\text{NH}_2)_3$ and Thermal Decomposition Behavior of $\text{NH}_3\text{BH}_2\text{Cl}$. <i>Inorganic Chemistry</i> , 2012, 51, 13430-13436.	4.0	38
21	Organoboron-Functionalization Enables the Hierarchical Assembly of Giant Polyoxometalate Nanocapsules. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 8537-8540.	13.8	37
22	Potassium octahydrotriborate: diverse polymorphism in a potential hydrogen storage material and potassium ion conductor. <i>Dalton Transactions</i> , 2019, 48, 8872-8881.	3.3	34
23	High-capacity hydrogen release through hydrolysis of NaB_3H_8 . <i>International Journal of Hydrogen Energy</i> , 2011, 36, 7038-7042.	7.1	33
24	Synthesis of dibenzothiazines from sulfides by one-pot N - O -transfer and intramolecular $\text{C}-\text{H}$ amination. <i>Green Chemistry</i> , 2018, 20, 2953-2958.	9.0	31
25	Efficient synthesis of primary and secondary amides via reacting esters with alkali metal amidoboranes. <i>Nature Communications</i> , 2021, 12, 5964.	12.8	30
26	Controllable Synthesis and Catalytic Performance of Nanocrystals of Rare-Earth-Polyoxometalates. <i>Inorganic Chemistry</i> , 2018, 57, 6624-6631.	4.0	29
27	Synthesis, structure and property of boron-based metal-organic materials. <i>Coordination Chemistry Reviews</i> , 2021, 435, 213783.	18.8	29
28	Lanthanide derivatives of Ta/W mixed-addendum POMs as proton-conducting materials. <i>Dalton Transactions</i> , 2017, 46, 4157-4160.	3.3	27
29	Visible light-mediated synthesis of amides from carboxylic acids and amine-boranes. <i>Green Chemistry</i> , 2021, 23, 3595-3599.	9.0	27
30	Anti and gauche conformers of an inorganic butane analogue, $\text{NH}_3\text{BH}_2\text{NH}_2\text{BH}_3$. <i>Chemical Communications</i> , 2012, 48, 7943.	4.1	26
31	The continuing story of the diammoniate of diborane. <i>Journal of Organometallic Chemistry</i> , 2015, 798, 24-29.	1.8	26
32	Iodine-Substituted Lithium/Sodium closo -Decaborates: Syntheses, Characterization, and Solid-State Ionic Conductivity. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 17554-17564.	8.0	26
33	Two transition-metal-modified Nb/W mixed-addendum polyoxometalates for visible-light-mediated aerobic benzylic $\text{C}-\text{H}$ oxidations. <i>Chinese Chemical Letters</i> , 2022, 33, 4395-4399.	9.0	25
34	Metathesis reactivity of bis(phosphinite) pincer ligated nickel chloride, isothiocyanate and azide complexes. <i>Journal of Organometallic Chemistry</i> , 2016, 804, 132-141.	1.8	23
35	Copper oxide hollow spheres: Synthesis and catalytic application in hydrolytic dehydrogenation of ammonia borane. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 20875-20881.	7.1	23
36	A Convenient Synthesis and a NMR Study of the Diammoniate of Diborane. <i>Chemistry - A European Journal</i> , 2012, 18, 3490-3492.	3.3	22

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37	Application of POCOP Pincer Nickel Complexes to the Catalytic Hydroboration of Carbon Dioxide. <i>Catalysts</i> , 2018, 8, 508.	3.5	22
38	Hydrosilylation of Aldehydes and Ketones Catalysed by Bis(phosphinite) Pincer Platinum Hydride Complexes. <i>Advanced Synthesis and Catalysis</i> , 2020, 362, 2709-2715.	4.3	22
39	Hydroboration Reaction and Mechanism of Carboxylic Acids using $\text{NaNH}_2(\text{BH}_3)_2$, a Hydroboration Reagent with Reducing Capability between NaBH_4 and LiAlH_4 . <i>Journal of Organic Chemistry</i> , 2021, 86, 5305-5316.	3.2	22
40	Brønsted and Lewis Base Behavior of Sodium Amidotrihydridoborate (NaNH_2BH_3). <i>European Journal of Inorganic Chemistry</i> , 2017, 2017, 4541-4545.	2.0	20
41	Unravelling a general mechanism of converting ionic B/N complexes into neutral B/N analogues of alkanes: $\text{H}^+\text{H}^{\ominus}$ dihydrogen bonding assisted dehydrogenation. <i>Chemical Communications</i> , 2019, 55, 12239-12242.	4.1	20
42	Palladium(ii) complexes supported by PBP and POCOP pincer ligands: a comparison of their structure, properties and catalytic activity. <i>Dalton Transactions</i> , 2019, 48, 17633-17643.	3.3	20
43	Practical Synthesis of B(9)-Halogenated Carboranes with <i>N</i> -Haloamides in Hexafluoroisopropanol. <i>Inorganic Chemistry</i> , 2022, 61, 5326-5334.	4.0	20
44	Catalyst design based on agostic interactions: synthesis, characterization, and catalytic activity of bis(pyrazolyl)borate copper complexes. <i>Dalton Transactions</i> , 2016, 45, 10194-10199.	3.3	19
45	A reaction of $[\text{2,6-(tBu}_2\text{PO)}_2\text{C}_6\text{H}_3]\text{NiSCH}_2\text{Ph}$ with $\text{BH}_3\cdot\text{THF}$: borane mediated C-S bond cleavage. <i>Dalton Transactions</i> , 2018, 47, 6018-6024.	3.3	19
46	The Reactivity of Mercapto Groups against Boron Hydrides in Pincer Ligated Nickel Mercapto Complexes. <i>Chemistry - an Asian Journal</i> , 2018, 13, 3231-3238.	3.3	18
47	Controllable syntheses of B/N anionic aminoborane chain complexes by the reaction of NH_3BH_3 with NaH and the mechanistic study. <i>Dalton Transactions</i> , 2019, 48, 14984-14988.	3.3	17
48	Syntheses of Bromo- <i>N</i> -heterocycles through Dibromohydantoin-Promoted Tandem C-H Amination/Bromination. <i>Journal of Organic Chemistry</i> , 2020, 85, 2918-2926.	3.2	17
49	Synthesis of Phenanthridines through Iodine-Supported Intramolecular C-H Amination and Oxidation under Visible Light. <i>Journal of Organic Chemistry</i> , 2020, 85, 12187-12198.	3.2	17
50	Adsorptive Mechanism of Chromium Adsorption on Siltstone-Nanomagnetite-Biochar Composite. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2021, 31, 1608-1620.	3.7	17
51	Synthesis, structural analysis, and thermal decomposition studies of $[(\text{NH}_3)_2\text{BH}_2]\text{B}_3\text{H}_8$. <i>RSC Advances</i> , 2013, 3, 7460.	3.6	16
52	Boranchemie aus einer neuen Perspektive: Nukleophilie der B-H-Bindungselektronen. <i>Angewandte Chemie</i> , 2019, 131, 3302-3313.	2.0	16
53	Reactions of POCOP pincer palladium benzylthiolate complexes with $\text{BH}_3\cdot\text{THF}$: Isolation and characterization of unstable POCOP-Pd(η -1-HBH ₃) complexes. <i>Journal of Organometallic Chemistry</i> , 2019, 882, 50-57.	1.8	15
54	The interconversion between $\text{THF}\cdot\text{B}_3\text{H}_7$ and B_3H_8 : an efficient synthetic method for MB_3H_8 (M = Li and Na). <i>Dalton Transactions</i> , 2019, 48, 5140-5143.	3.3	15

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55	One-Pot Synthesis of Iodo-Dibenzothiazines from 2-Biaryl Sulfides. <i>Journal of Organic Chemistry</i> , 2019, 84, 450-457.	3.2	15
56	Application of bis(phosphinite) pincer nickel complexes to the catalytic hydrosilylation of aldehydes. <i>Inorganica Chimica Acta</i> , 2021, 515, 120088.	2.4	15
57	Synthesis of Ammonia Borane Nanoparticles and the Diammoniate of Diborane by Direct Combination of Diborane and Ammonia. <i>Chemistry - A European Journal</i> , 2016, 22, 6228-6233.	3.3	14
58	The stability of group 10 metal POCOP pincer complexes: decomposition/reconstruction pathways of the pincer backbone. <i>Dalton Transactions</i> , 2019, 48, 13760-13768.	3.3	14
59	Structure determination of an amorphous compound AlB ₄ H ₁₁ . <i>Chemical Science</i> , 2012, 3, 3183.	7.4	13
60	Desolvation and Dehydrogenation of Solvated Magnesium Salts of Dodecahydrododecaborate: Relationship between Structure and Thermal Decomposition. <i>Chemistry - A European Journal</i> , 2014, 20, 7325-7333.	3.3	13
61	Aggregation-Induced Fluorescence of Carbazole and o-Carborane Based Organic Fluorophore. <i>Frontiers in Chemistry</i> , 2019, 7, 768.	3.6	13
62	Facile Synthesis of Unsolvated Alkali Metal Octahydrotriborate Salts MB ₃ H ₈ (M=K, Rb, and Cs), Mechanisms of Formation, and the Crystal Structure of KB ₃ H ₈ . <i>Angewandte Chemie</i> , 2019, 131, 2746-2750.	2.0	13
63	Synthesis, Crystal Structures and Photoluminescent Properties of One-Dimensional Europium(III)- and Terbium(III)-Glutarate Coordination Polymers, and Their Applications for the Sensing of Fe ³⁺ and Nitroaromatics. <i>Frontiers in Chemistry</i> , 2019, 7, 728.	3.6	13
64	A safe and efficient synthetic method for alkali metal octahydrotriborates, unravelling a general mechanism for constructing the delta B ₃ unit of polyhedral boranes. <i>Dalton Transactions</i> , 2021, 50, 13676-13679.	3.3	13
65	Platinum thiolate complexes supported by PBP and POCOP pincer ligands as efficient catalysts for the hydrosilylation of carbonyl compounds. <i>Dalton Transactions</i> , 2022, 51, 2304-2312.	3.3	13
66	Boronic acid derivatized lanthanide- and polyoxometalates with novel B-OH-Ln and B-O-Nb bridges. <i>Chemical Communications</i> , 2019, 55, 2525-2528.	4.1	12
67	KB ₃ H ₈ ·NH ₃ ·B ₃ H ₇ Complex as a Potential Solid-State Electrolyte with Excellent Stability against K Metal. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 17378-17387.	8.0	12
68	Chemical Syntheses of Two-Dimensional Boron Materials. <i>CheM</i> , 2020, 6, 324-326.	11.7	11
69	The Stability of Diphosphino-Boryl PBP Pincer Backbone: PBP to POP Ligand Hydrolysis. <i>Chemistry - an Asian Journal</i> , 2021, 16, 2489-2494.	3.3	11
70	Synthesis, Thermal, Structural Analyses, and Photoluminescent Properties of a New Family of Malonate-Containing Lanthanide(III) Coordination Polymers. <i>Frontiers in Chemistry</i> , 2019, 7, 260.	3.6	10
71	Which Type of Pincer Complex Is Thermodynamically More Stable? Understanding the Structures and Relative Bond Strengths of Group 10 Metal Complexes Supported by Benzene-Based PYCYP Pincer Ligands. <i>Inorganic Chemistry</i> , 2021, 60, 18924-18937.	4.0	10
72	Facile Synthetic Method of Na[BH ₃ (NH ₂) ₂] ₂ Based on the Reactions of Sodium Amidoborane (NaNH ₂ BH ₃) with NiBr ₂ or CoCl ₂ . <i>Inorganic Chemistry</i> , 2021, 60, 7101-7107.	4.0	9

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73	One-step hydrothermal synthesis of the Ag/AgI heterojunction with highly enhanced visible-light photocatalytic performances. <i>Micro and Nano Letters</i> , 2014, 9, 376-381.	1.3	8
74	Syntheses and Structures of Group 10 Metal POCOP Pincer Complexes Bearing A Mercapto-carborane Auxiliary Ligand. <i>ChemistrySelect</i> , 2019, 4, 1292-1297.	1.5	6
75	Tuning Oxidation Degrees of Low-Crystallinity Porous Ni-Co-B/O/C Nanocomposites for High-Performance Hybrid Supercapacitors. <i>Energy & Fuels</i> , 2020, 34, 16893-16902.	5.1	6
76	Organobor-Funktionalisierung ermöglicht die hierarchische Aggregation gigantischer Polyoxometallat-Nanokapseln. <i>Angewandte Chemie</i> , 2020, 132, 8615-8618.	2.0	6
77	Synthesis, crystal structures and, magnetic and photoluminescence properties of lanthanide-based metal-organic frameworks constructed with 2,5-dihydroxybenzene-1,4-dicarboxylic acid. <i>RSC Advances</i> , 2020, 10, 12841-12850.	3.6	6
78	Theoretical study on hydrogen storage of pristine bilayer hexagonal boron nitride. <i>Theoretical Chemistry Accounts</i> , 2021, 140, 1.	1.4	6
79	Improved Methods for the Synthesis of KB ₃ H ₈ , NH ₃ B ₃ H ₇ , and N-Alkyl Analogues of NH ₃ B ₃ H ₇ . <i>Inorganic Chemistry</i> , 2021, 60, 18466-18472.	4.0	6
80	Reactions of Amine-Boranes with Oxalic Acid: Substitution on the N or B Atom Leads to Different Spiroborate Compounds. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 2659-2665.	2.0	5
81	High Proton-Conductivity in Covalently Linked Polyoxometalate-Organoboronic Acid Polymers. <i>Angewandte Chemie</i> , 2021, 133, 17090-17094.	2.0	5
82	Synthesis and Dehydrogenation of Organic Salts of a Five-Membered B/N Anionic Chain, a Novel Ionic Liquid. <i>Chemistry - an Asian Journal</i> , 2021, 16, 2475-2480.	3.3	5
83	KB ₃ H ₈ : an environment-friendly reagent for the selective reduction of aldehydes and ketones to alcohols. <i>Chemical Communications</i> , 2021, 57, 12776-12779.	4.1	5
84	An Effective Osmium Precatalyst for Practical Synthesis of Diarylketones: Preparation, Reactivity, and Catalytic Application of [OsH ₂ (CO) ₂ mer ³ -P ₃ BP ₂ Ph ₂]. <i>Organometallics</i> , 2021, 40, 3825-3832.	2.3	5
85	A sandwich-type POM containing mixed cations: synthesis, thermal performance and proton-conducting properties. <i>Journal of Coordination Chemistry</i> , 2016, 69, 425-432.	2.2	4
86	Facile Synthesis of β -Bromostyrenes by Direct Bromination of Styrenes with N-Bromosuccinimide and Sodium Persulfate. <i>Synlett</i> , 2020, 31, 1523-1526.	1.8	4
87	Halogenated sodium/lithium monocarba-decaborates: syntheses, characterization, and solid-state ionic conductivity. <i>Materials Chemistry Frontiers</i> , 2021, 5, 8037-8046.	5.9	4
88	Sodium Aminodiboranate, a New Reagent for Chemoselective Reduction of Aldehydes and Ketones to Alcohols. <i>Synlett</i> , 0, 32, .	1.8	4
89	Multinuclear transition metal-containing polyoxometalates constructed from Nb/W mixed-addendum precursors: synthesis, structures and catalytic performance. <i>Dalton Transactions</i> , 2021, 50, 8690-8695.	3.3	4
90	Improved and Scalable Synthesis of [Et ₄ N][1-CHB ₉ H ₉]. <i>Organometallics</i> , 2021, 40, 3480-3485.	2.3	4

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91	B ¹⁵ N Cleavage in (9 ⁹ BBN)bis(pyrazolyl)borate Ni ^{II} Complexes. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 3724-3730.	2.0	3
92	A Structure Comparison of Ni(II) Complexes Supported by PNCNP and POCOP Pincer Ligands. <i>ChemistrySelect</i> , 2020, 5, 5205-5209.	1.5	3
93	Synthesis, Crystal Structure, and Nonlinear Optical Properties of Zn(II) Complex with 4,4',4''-Tri-tert-Butyl-2,2':6',2''-Terpyridine: A Dual Exploration. <i>Russian Journal of Inorganic Chemistry</i> , 2020, 65, 368-377.	1.3	3
94	Understanding the Electronic Structure and Stability of $B_2X_2O_2$ ($X = N, O$). <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 1045-1054.	1.0	0
95	Few-Layered Metal-Organic Framework Nanosheets as Catalysts for the Synthesis of 2,3-Dihydroquinazolinone and Propargylamines. <i>ACS Applied Nano Materials</i> , 2021, 4, 12108-12118.	5.0	3
96	Catalyst-free reductions of nitriles to amino-boranes using sodium amidoborane and lithium borohydride. <i>Organic Chemistry Frontiers</i> , 2022, 9, 1536-1540.	4.5	3
97	Coordination mode and stability of the tetrahydroborate ligand in group 10 metal pincer complexes. <i>Dalton Transactions</i> , 0, , .	3.3	3
98	Synthesis and characterization of bis(pyrazolyl)borate Ni complexes: ligand rearrangement and transformation. <i>Dalton Transactions</i> , 2019, 48, 13242-13247.	3.3	2
99	Syntheses and crystal structures of lutetium(III) and dysprosium(III) coordination polymers with 2,5-dihydroxybenzene-1,4-dicarboxylate anion: Magnetic and photoluminescent properties of the dysprosium complex. <i>Polyhedron</i> , 2020, 189, 114732.	2.2	2
100	Efficient Solvent-Free Hydrosilylation of Aldehydes and Ketones Catalyzed by Fe ₂ (CO) ₉ /C ₆ H ₄ -o-(NCH ₂ PPh ₂) ₂ BH. <i>Catalysis Letters</i> , 2021, 151, 3509.	2.6	2
101	Catalytic effect of water on the HO ₃ +NO formations from the HNO ₃ reaction in tropospheric conditions. <i>Molecular Simulation</i> , 2020, 46, 497-505.	2.0	1
102	A general method for the synthesis of covalent and ionic amine borane complexes containing trinitromethyl fragments. <i>RSC Advances</i> , 2021, 11, 9740-9745.	3.6	1
103	Synthesis of K[B ₃ H ₇ NH ₂ BH ₂ NH ₂ B ₃ H ₇] for a K-ion solid-state electrolyte. <i>Chemical Communications</i> , 2022, 58, 4200-4203.		1
104	Mechanisms of the Reactions of ¹⁵ N-Substituted Amine Boranes with THF·B ₃ H ₃ . <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 4994-4999.	2.0	0
105	Catalysts Based on the C ^{δ+} H ^{δ-} ...M Weak Interaction: Synthesis, Characterization and Catalytic Application of Bis(pyrazolyl)borate Cu(I) Complexes in Carbene Insertion into Heteroatom Hydrogen Bonds. <i>ChemistrySelect</i> , 2022, 7, .	1.5	0