

# Zhiguo Zhang

## List of Publications by Year in descending order

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106  
papers

5,413  
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101543

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#	ARTICLE	IF	CITATIONS
1	è¶...â¼¼â”çç³â¶™,,â%â,âžçž°â©ç,,¶æ”â,â,™çf·â’Æä¹™çf·çš,,é«~é%âæ·©æ€\$æâ–. Science China Materials, 2023, 66, 319-326.		
2	Porous Hydrogen-Bonded Frameworks Assembled from Metal-Nucleobase Entities for Xe/Kr Separation. CCS Chemistry, 2022, 4, 381-388.	7.8	22
3	Hydrogen-Bonded Metal-Organic Frameworks for Efficient Separation of Xenon and Krypton. Angewandte Chemie - International Edition, 2022, 61, .	13.8	36
4	Shell-Like Xenon Nano-Traps within Angular Anion-Pillared Layered Porous Materials for Boosting Xe/Kr Separation. Angewandte Chemie, 2022, 134, .	2.0	3
5	Shell-Like Xenon Nano-Traps within Angular Anion-Pillared Layered Porous Materials for Boosting Xe/Kr Separation. Angewandte Chemie - International Edition, 2022, 61, .	13.8	34
6	Titelbild: Hydrogen-Bonded Metal-Organic Frameworks for Efficient Separation of Xenon and Krypton (Angew. Chem. 11/2022). Angewandte Chemie, 2022, 134, .	2.0	2
7	Shape-size sieving of <i>trans</i> - and <i>cis</i> -piperylene isomers with gallate-based metal-organic frameworks. AIChE Journal, 2022, 68, .	3.6	1
8	Carbon dioxide capture in gallate-based metal-organic frameworks. Separation and Purification Technology, 2022, 292, 121031.	7.9	23
9	Highly efficient and anti-poisoning single-atom cobalt catalyst for selective hydrogenation of nitroarenes. Nano Research, 2022, 15, 10006-10013.	10.4	7
10	Separation of perfluorinated electron specialty gases on microporous carbon adsorbents with record selectivity. Separation and Purification Technology, 2022, 292, 121059.	7.9	25
11	Hydrogen-bonded metal-nucleobase frameworks for highly selective capture of ethane/propane from methane and methane/nitrogen separation. Nano Research, 2022, 15, 7695-7702.	10.4	15
12	Double-Accessible Open Metal Sites in Metal-Organic Frameworks with Suitable Pore Size for Efficient Xe/Kr Separation. Industrial & Engineering Chemistry Research, 2022, 61, 7361-7369.	3.7	12
13	Cooperative control of intralayer and interlayer space in MOFs enables selective capture of intermediate-sized molecules. Cell Reports Physical Science, 2022, 3, 100903.	5.6	2
14	Molecular Sieving of Propylene from Propane in Metal-Organic Framework-Derived Ultramicroporous Carbon Adsorbents. ACS Applied Materials & Interfaces, 2022, 14, 30443-30453.	8.0	18
15	Tunable Confined Aliphatic Pore Environment in Robust Metal-Organic Frameworks for Efficient Separation of Gases with a Similar Structure. Journal of the American Chemical Society, 2022, 144, 14322-14329.	13.7	56
16	Discrimination of xylene isomers in a stacked coordination polymer. Science, 2022, 377, 335-339.	12.6	94
17	Shaping of gallate-based metal-organic frameworks for adsorption separation of ethylene from acetylene and ethane. Journal of Colloid and Interface Science, 2021, 581, 177-184.	9.4	18
18	CoNi Alloy Nanoparticles Embedded in Metal-Organic Framework-Derived Carbon for the Highly Efficient Separation of Xenon and Krypton via a Charge-Transfer Effect. Angewandte Chemie, 2021, 133, 2461-2468.	2.0	11

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19	CoNi Alloy Nanoparticles Embedded in Metal-Organic Framework-Derived Carbon for the Highly Efficient Separation of Xenon and Krypton via a Charge-Transfer Effect. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 2431-2438.	13.8	53
20	Progress in the Enantioseparation of $\beta$ -Blockers by Chromatographic Methods. <i>Molecules</i> , 2021, 26, 468.	3.8	9
21	A robust ethane-trapping metal-organic framework for efficient purification of ethylene. <i>Science China Chemistry</i> , 2021, 64, 666-672.	8.2	16
22	Cooperative Interplay of Brønsted Acid and Lewis Acid Sites in MIL-101(Cr) for Cross-Dehydrogenative Coupling of C-H Bonds. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 10845-10854.	8.0	14
23	Heterogeneous synthesis of tetrahydroquinoline derivatives via cascade Povarov reaction catalyzed by sulfonic acid functionalized metal-organic frameworks. <i>Nano Select</i> , 2021, 2, 1968.	3.7	1
24	Deep Desulfurization with Record $\text{SO}_2$ Adsorption on the Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2021, 143, 9040-9047.	13.7	108
25	A pore-engineered metal-organic framework with mixed ligands enabling highly efficient separation of hexane isomers for gasoline upgrading. <i>Separation and Purification Technology</i> , 2021, 268, 118646.	7.9	23
26	Turn-On Photocatalysis: Creating Lone-Pair Donor-Acceptor Bonds in Organic Photosensitizer to Enhance Intersystem Crossing. <i>Advanced Science</i> , 2021, 8, e2100631.	11.2	24
27	Tandem synthesis of tetrahydroquinolines and identification of the reaction network by <i>in operando</i> NMR. <i>Catalysis Science and Technology</i> , 2021, 11, 4332-4341.	4.1	1
28	Crystal Structure Transformation in Hydrogen-Bonded Organic Frameworks via Ion Exchange. <i>Chemistry - an Asian Journal</i> , 2021, 16, 3978-3984.	3.3	10
29	Microporous Carbon Adsorbents Prepared by Activating Reagent-Free Pyrolysis for Upgrading Low-Quality Natural Gas. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 977-985.	6.7	23
30	The Future of Biomass Utilization Technologies Special Issue Editorial. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 16895-16898.	3.7	7
31	Simultaneous interlayer and intralayer space control in two-dimensional metal-organic frameworks for acetylene/ethylene separation. <i>Nature Communications</i> , 2020, 11, 6259.	12.8	85
32	Deciphering a Reaction Network for the Switchable Production of Tetrahydroquinoline or Quinoline with MOF-Supported Pd Tandem Catalysts. <i>ACS Catalysis</i> , 2020, 10, 5707-5714.	11.2	29
33	Calcium-Based Metal-Organic Framework for Simultaneous Capture of Trace Propyne and Propadiene from Propylene. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 17147-17154.	8.0	34
34	Supramolecular Metal-Organic Framework for $\text{CO}_2/\text{CH}_4$ and $\text{CO}_2/\text{N}_2$ Separation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 7866-7874.	3.7	42
35	Gallate-Based Metal-Organic Frameworks for Highly Efficient Removal of Trace Propyne from Propylene. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 13716-13723.	3.7	13
36	Adsorptive Separation of Geometric Isomers of 2-Butene on Gallate-Based Metal-Organic Frameworks. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 9609-9616.	8.0	38

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37	Facile Fabrication of Hierarchical MOF@Metal Nanoparticle Tandem Catalysts for the Synthesis of Bioactive Molecules. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 23002-23009.	8.0	27
38	Engineering the Pore Size of Pillared-Layer Coordination Polymers Enables Highly Efficient Adsorption Separation of Acetylene from Ethylene. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 28197-28204.	8.0	71
39	M-Gallate (M = Ni, Co) Metal-Organic Framework-Derived Ni/C and Bimetallic Ni-Co/C Catalysts for Lignin Conversion into Monophenols. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 12955-12963.	6.7	69
40	Adsorptive Separation of Acetylene from Ethylene in Isostructural Gallate-Based Metal-Organic Frameworks. <i>Chemistry - A European Journal</i> , 2019, 25, 15516-15524.	3.3	27
41	EGFR TKIs impair lysosome-dependent degradation of SQSTM1 to compromise the effectiveness in lung cancer. <i>Signal Transduction and Targeted Therapy</i> , 2019, 4, 25.	17.1	23
42	Visible-light-mediated direct access to $\alpha$ -ketoamides by dealkylative amidation of tertiary amines with benzoylformic acids. <i>Tetrahedron Letters</i> , 2019, 60, 151191.	1.4	8
43	Allylic oxidation of olefins with a manganese-based metal-organic framework. <i>Green Chemistry</i> , 2019, 21, 3629-3636.	9.0	22
44	A Robust Squarate-Based Metal-Organic Framework Demonstrates Record-High Affinity and Selectivity for Xenon over Krypton. <i>Journal of the American Chemical Society</i> , 2019, 141, 9358-9364.	13.7	162
45	New catalytic effect of thiourea on the oxidative cyanation of N-aryltetrahydroisoquinolines. <i>Tetrahedron Letters</i> , 2019, 60, 348-351.	1.4	8
46	Room-Temperature Tandem Condensation-Hydrogenation Catalyzed by Porous C <sub>3</sub> N <sub>4</sub> Nanosheet-Supported Pd Nanoparticles. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 3356-3363.	6.7	15
47	Inverse Adsorption Separation of CO <sub>2</sub> /C <sub>2</sub> H <sub>2</sub> Mixture in Cyclodextrin-Based Metal-Organic Frameworks. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 2543-2550.	8.0	134
48	Organocatalyzed cross-dehydrogenative coupling for C(sp <sup>3</sup> )-O bonds formation: a rapid access to $\alpha$ -aminoxyl isochromans. <i>Catalysis Letters</i> , 2019, 149, 574-579.	2.6	7
49	A calcium-based microporous metal-organic framework for efficient adsorption separation of light hydrocarbons. <i>Chemical Engineering Journal</i> , 2019, 358, 446-455.	12.7	75
50	MIL-101(Cr)-SO <sub>3</sub> H Catalyzed Transfer Hydrogenation of 2-Substituted Quinoline Derivatives. <i>Chinese Journal of Organic Chemistry</i> , 2019, 39, 1681.	1.3	4
51	Gas Separation: A Single-Molecule Propyne Trap: Highly Efficient Removal of Propyne from Propylene with Anion-Pillared Ultramicroporous Materials ( <i>Adv. Mater.</i> 10/2018). <i>Advanced Materials</i> , 2018, 30, 1870068.	21.0	3
52	Metal nanoparticles in ionic liquid-cosolvent biphasic systems as active catalysts for acetylene hydrochlorination. <i>AIChE Journal</i> , 2018, 64, 2536-2544.	3.6	18
53	A Single-Molecule Propyne Trap: Highly Efficient Removal of Propyne from Propylene with Anion-Pillared Ultramicroporous Materials. <i>Advanced Materials</i> , 2018, 30, 1705374.	21.0	133
54	Performance Comparison of Metal-Organic Framework Extrudates and Commercial Zeolite for Ethylene/Ethane Separation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 1645-1654.	3.7	45

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55	Fine Tuning and Specific Binding Sites with a Porous Hydrogen-Bonded Metal-Complex Framework for Gas Selective Separations. <i>Journal of the American Chemical Society</i> , 2018, 140, 4596-4603.	13.7	181
56	Highly efficient separation of strongly hydrophilic structurally related compounds by hydrophobic ionic solutions. <i>AIChE Journal</i> , 2018, 64, 1373-1382.	3.6	6
57	Pd-Ni nanoparticles supported on titanium oxide as effective catalysts for Suzuki-Miyaura coupling reactions. <i>Frontiers of Chemical Science and Engineering</i> , 2018, 12, 24-31.	4.4	23
58	MIL-101(Cr) as a synergistic catalyst for the reduction of imines with trichlorosilane. <i>Molecular Catalysis</i> , 2018, 445, 163-169.	2.0	18
59	Molecular Sieving of Ethane from Ethylene through the Molecular Cross-Section Size Differentiation in Gallate-based Metal-Organic Frameworks. <i>Angewandte Chemie</i> , 2018, 130, 16252-16257.	2.0	72
60	Molecular Sieving of Ethane from Ethylene through the Molecular Cross-Section Size Differentiation in Gallate-based Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16020-16025.	13.8	202
61	Determination and correlation of the solubility of L-arabinose and D-galactose in binary solvent mixtures from 278.15 to 333.15 K. <i>Korean Journal of Chemical Engineering</i> , 2018, 35, 2043-2051.	2.7	3
62	A thermostable anion-pillared metal-organic framework for C <sub>2</sub> H <sub>2</sub> /C <sub>2</sub> H <sub>4</sub> and C <sub>2</sub> H <sub>2</sub> /CO <sub>2</sub> separations. <i>Chemical Engineering Journal</i> , 2018, 352, 803-810.	12.7	85
63	Highly efficient separation of methane from nitrogen on a squarate-based metal-organic framework. <i>AIChE Journal</i> , 2018, 64, 3681-3689.	3.6	94
64	Visible-Light-Mediated Dealkylative Coupling of Trialkylamines with Dialkyl Acetylenedicarboxylates. <i>Synlett</i> , 2017, 28, 1116-1120.	1.8	6
65	Functionalized Metal-Organic Framework as a Biomimetic Heterogeneous Catalyst for Transfer Hydrogenation of Imines. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 9772-9777.	8.0	37
66	1-Ethyl-3-methylimidazolium acetate as a highly efficient organocatalyst for cyanosilylation of carbonyl compounds with trimethylsilyl cyanide. <i>Scientific Reports</i> , 2017, 7, 42699.	3.3	16
67	Cyclopentadiene-based Brønsted acid as a new generation of organocatalyst for transfer hydrogenation of 2-substituted quinoline derivatives. <i>Tetrahedron Letters</i> , 2017, 58, 2050-2053.	1.4	16
68	Fabrication of plasmonic Au-Pd alloy nanoparticles for photocatalytic Suzuki-Miyaura reactions under ambient conditions. <i>Nanoscale</i> , 2017, 9, 6026-6032.	5.6	70
69	Mechanistic studies of thiourea-catalyzed cross-dehydrogenative C-P and C-C coupling reactions and their further applications. <i>Tetrahedron</i> , 2017, 73, 3118-3124.	1.9	17
70	Organocatalytic Approach for Transfer Hydrogenation of Quinolines, Benzoxazines and Benzothiazines. <i>Catalysis Letters</i> , 2017, 147, 1673-1678.	2.6	8
71	Efficient oxidative N-dealkylative addition of trialkylamines to dimethyl acetylenedicarboxylate using BrCCl <sub>3</sub> as the terminal oxidant. <i>Tetrahedron Letters</i> , 2017, 58, 2707-2710.	1.4	6
72	Ultrahigh and Selective SO <sub>2</sub> Uptake in Inorganic Anion-Pillared Hybrid Porous Materials. <i>Advanced Materials</i> , 2017, 29, 1606929.	21.0	183

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73	Long-Chain Carboxylate Ionic Liquids Combining High Solubility and Low Viscosity for Light Hydrocarbon Separations. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 7336-7344.	3.7	25
74	Synthesis of anion-functionalized mesoporous poly(ionic liquid)s via a microphase separation-hypercrosslinking strategy: highly efficient adsorbents for bioactive molecules. <i>Journal of Materials Chemistry A</i> , 2017, 5, 14114-14123.	10.3	54
75	Efficient Synthesis of Cyclic Carbonates from Atmospheric CO <sub>2</sub> Using a Positive Charge Delocalized Ionic Liquid Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 2841-2846.	6.7	116
76	Gas Purification: Ultrahigh and Selective SO <sub>2</sub> Uptake in Inorganic Anion- pillared Hybrid Porous Materials ( <i>Adv. Mater.</i> 28/2017). <i>Advanced Materials</i> , 2017, 29, .	21.0	3
77	Efficient adsorption separation of acetylene and ethylene via supported ionic liquid on metal-organic framework. <i>AICHE Journal</i> , 2017, 63, 2165-2175.	3.6	62
78	Catalytic dehydration of glucose to 5-hydroxymethylfurfural with a bifunctional metal-organic framework. <i>AICHE Journal</i> , 2016, 62, 4403-4417.	3.6	104
79	CO <sub>2</sub> -Assisted Back-Extraction Method for Ionic Liquid Biphasic Systems. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 4403-4410.	6.7	2
80	New Insights into CO <sub>2</sub> Absorption Mechanisms with Amino-Acid Ionic Liquids. <i>ChemSusChem</i> , 2016, 9, 765-765.	6.8	0
81	Thiourea-Catalyzed Cross-Dehydrogenative Coupling of C(sp <sup>3</sup> )-H with Diethyl Phosphite. <i>European Journal of Organic Chemistry</i> , 2016, 2016, 3939-3942.	2.4	18
82	New Insights into CO <sub>2</sub> Absorption Mechanisms with Amino-Acid Ionic Liquids. <i>ChemSusChem</i> , 2016, 9, 806-812.	6.8	77
83	Separation of highly unsaturated fatty acid methyl esters from model bio-oils with ionic liquid-cosolvent as extractants. <i>RSC Advances</i> , 2016, 6, 60709-60716.	3.6	7
84	Adsorption separation of raffinose from sucrose by activated carbon: Equilibrium, kinetics and dynamic breakthrough. <i>Separation Science and Technology</i> , 2016, 51, 1636-1644.	2.5	2
85	Efficient removal of both basic and non-basic nitrogen compounds from fuels by deep eutectic solvents. <i>Green Chemistry</i> , 2016, 18, 157-164.	9.0	96
86	Nonaqueous Lyotropic Ionic Liquid Crystals: Preparation, Characterization, and Application in Extraction. <i>Chemistry - A European Journal</i> , 2015, 21, 9150-9156.	3.3	29
87	Immobilization of Ag(I) into a metal-organic framework with SO <sub>3</sub> H sites for highly selective olefin-paraffin separation at room temperature. <i>Chemical Communications</i> , 2015, 51, 2859-2862.	4.1	160
88	Long-Chain Fatty Acid-Based Phosphonium Ionic Liquids with Strong Hydrogen-Bond Basicity and Good Lipophilicity: Synthesis, Characterization, and Application in Extraction. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 309-316.	6.7	73
89	Adsorption behavior of Î±-tocopheryl succinate and Î±-tocopheryl polyethylene glycol succinate onto weakly basic anion exchange resins. <i>Korean Journal of Chemical Engineering</i> , 2015, 32, 511-520.	2.7	1
90	Self-assembly induced solubilization of drug-like molecules in nanostructured ionic liquids. <i>Chemical Communications</i> , 2015, 51, 13170-13173.	4.1	37

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91	Hyperbranched polyethylene-supported <sc>L</sc>-proline: a highly selective and recyclable organocatalyst for asymmetric aldol reactions. <i>Catalysis Science and Technology</i> , 2015, 5, 3798-3805.	4.1	16
92	Confining Noble Metal (Pd, Au, Pt) Nanoparticles in Surfactant Ionic Liquids: Active Non-Mercury Catalysts for Hydrochlorination of Acetylene. <i>ACS Catalysis</i> , 2015, 5, 6724-6731.	11.2	94
93	Insight into the catalytic properties and applications of metal-organic frameworks in the cyanosilylation of aldehydes. <i>RSC Advances</i> , 2015, 5, 79355-79360.	3.6	65
94	Selective separation of zwitterionic phospholipid homologues with functional ionic liquids as extractants. <i>RSC Advances</i> , 2015, 5, 77581-77588.	3.6	8
95	A general method for the separation of amphiphilic surface-active poly(ethylene glycol) mono- and di-esters with long-chain ionic liquid-based biphasic systems. <i>Green Chemistry</i> , 2014, 16, 102-107.	9.0	8
96	N,N'-Bis[3,5-bis(trifluoromethyl)phenyl]thiourea: a privileged motif for catalyst development. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 3151-3162.	2.8	73
97	Fabrication of cuprous nanoparticles in MIL-101: an efficient adsorbent for the separation of olefin-paraffin mixtures. <i>RSC Advances</i> , 2014, 4, 20230-20233.	3.6	79
98	Thiourea as an efficient organocatalyst for the transfer hydrogenation of 2-substituted quinoline derivatives. <i>RSC Advances</i> , 2014, 4, 42566-42568.	3.6	17
99	Adsorption of 2-Butyl-2-ethyl-1,3-propanediol from Aqueous Solutions on Activated Carbon: Salt-Out Effect on Equilibrium, Kinetics, and Dynamics. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 8592-8598.	3.7	9
100	(Thio)urea Organocatalyst Equilibrium Acidities in DMSO. <i>Organic Letters</i> , 2012, 14, 1724-1727.	4.6	226
101	Cooperative Thiourea-Bronsted Acid Organocatalysis: Enantioselective Cyanosilylation of Aldehydes with TMSCN. <i>Journal of Organic Chemistry</i> , 2011, 76, 9764-9776.	3.2	103
102	Asymmetric Transfer Hydrogenation of Ketimines with Trichlorosilane: Structural Studies. <i>Synthesis</i> , 2009, 2009, 1531-1544.	2.3	6
103	(Thio)urea organocatalysis: What can be learnt from anion recognition?. <i>Chemical Society Reviews</i> , 2009, 38, 1187.	38.1	998
104	Organocatalytic Biomimetic Reduction of Conjugated Nitroalkenes. <i>Synthesis</i> , 2007, 2007, 2559-2564.	2.3	9
105	Thiourea-Catalyzed Transfer Hydrogenation of Aldimines. <i>Synlett</i> , 2007, 2007, 1455-1457.	1.8	13
106	Hydrogen-Bonded Metal-Nucleobase Frameworks for Efficient Separation of Xenon and Krypton. <i>Angewandte Chemie</i> , 0, , .	2.0	4