Zhiguo Zhang

List of Publications by Year
in descending order

106 papers	5,413 citations	101543 36 h-index	85541 71 g-index
113 all docs	113 docs citations	113 times ranked	5341 citing authors

#	Article	IF	Citations
1	(Thio)urea organocatalysisâ€"What can be learnt from anion recognition?. Chemical Society Reviews, 2009, 38, 1187.	38.1	998
2	(Thio)urea Organocatalyst Equilibrium Acidities in DMSO. Organic Letters, 2012, 14, 1724-1727.	4.6	226
3	Molecular Sieving of Ethane from Ethylene through the Molecular Crossâ€Section Size Differentiation in Gallateâ€based Metalâ€"Organic Frameworks. Angewandte Chemie - International Edition, 2018, 57, 16020-16025.	13.8	202
4	Ultrahigh and Selective SO₂ Uptake in Inorganic Anionâ€Pillared Hybrid Porous Materials. Advanced Materials, 2017, 29, 1606929.	21.0	183
5	Fine Tuning and Specific Binding Sites with a Porous Hydrogen-Bonded Metal-Complex Framework for Gas Selective Separations. Journal of the American Chemical Society, 2018, 140, 4596-4603.	13.7	181
6	A Robust Squarate-Based Metalâ€"Organic Framework Demonstrates Record-High Affinity and Selectivity for Xenon over Krypton. Journal of the American Chemical Society, 2019, 141, 9358-9364.	13.7	162
7	Immobilization of Ag(<scp>i</scp>) into a metalâ€"organic framework with â€"SO₃H sites for highly selective olefinâ€"paraffin separation at room temperature. Chemical Communications, 2015, 51, 2859-2862.	4.1	160
8	Inverse Adsorption Separation of CO₂/C₂H₂ Mixture in Cyclodextrin-Based Metalâ€"Organic Frameworks. ACS Applied Materials & Interfaces, 2019, 11, 2543-2550.	8.0	134
9	A Singleâ€Molecule Propyne Trap: Highly Efficient Removal of Propyne from Propylene with Anionâ€Pillared Ultramicroporous Materials. Advanced Materials, 2018, 30, 1705374.	21.0	133
10	Efficient Synthesis of Cyclic Carbonates from Atmospheric CO₂ Using a Positive Charge Delocalized Ionic Liquid Catalyst. ACS Sustainable Chemistry and Engineering, 2017, 5, 2841-2846.	6.7	116
11	Deep Desulfurization with Record SO₂ Adsorption on the Metalâ€"Organic Frameworks. Journal of the American Chemical Society, 2021, 143, 9040-9047.	13.7	108
12	Catalytic dehydration of glucose to 5â€hydroxymethylfurfural with a bifunctional metalâ€organic framework. AIChE Journal, 2016, 62, 4403-4417.	3.6	104
13	Cooperative Thioureaâ€"BrÃ¸nsted Acid Organocatalysis: Enantioselective Cyanosilylation of Aldehydes with TMSCN. Journal of Organic Chemistry, 2011, 76, 9764-9776.	3.2	103
14	Efficient removal of both basic and non-basic nitrogen compounds from fuels by deep eutectic solvents. Green Chemistry, 2016, 18, 157-164.	9.0	96
15	Confining Noble Metal (Pd, Au, Pt) Nanoparticles in Surfactant Ionic Liquids: Active Non-Mercury Catalysts for Hydrochlorination of Acetylene. ACS Catalysis, 2015, 5, 6724-6731.	11.2	94
16	Highly efficient separation of methane from nitrogen on a squarateâ€based metalâ€organic framework. AIChE Journal, 2018, 64, 3681-3689.	3.6	94
17	Discrimination of xylene isomers in a stacked coordination polymer. Science, 2022, 377, 335-339.	12.6	94
18	A thermostable anion-pillared metal-organic framework for C2H2/C2H4 and C2H2/CO2 separations. Chemical Engineering Journal, 2018, 352, 803-810.	12.7	85

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19	Simultaneous interlayer and intralayer space control in two-dimensional metalâ˜organic frameworks for acetylene/ethylene separation. Nature Communications, 2020, 11, 6259.	12.8	85
20	Fabrication of cuprous nanoparticles in MIL-101: an efficient adsorbent for the separation of olefinâ€“paraffin mixtures. RSC Advances, 2014, 4, 20230-20233.	3.6	79
21	New Insights into CO₂ Absorption Mechanisms with Aminoâ€Acid Ionic Liquids. ChemSusChem, 2016, 9, 806-812.	6.8	77
22	A calcium-based microporous metal-organic framework for efficient adsorption separation of light hydrocarbons. Chemical Engineering Journal, 2019, 358, 446-455.	12.7	75
23	N,Nâ€²-Bis[3,5-bis(trifluoromethyl)phenyl]thiourea: a privileged motif for catalyst development. Organic and Biomolecular Chemistry, 2014, 12, 3151-3162.	2.8	73
24	Long-Chain Fatty Acid-Based Phosphonium Ionic Liquids with Strong Hydrogen-Bond Basicity and Good Lipophilicity: Synthesis, Characterization, and Application in Extraction. ACS Sustainable Chemistry and Engineering, 2015, 3, 309-316.	6.7	73
25	Molecular Sieving of Ethane from Ethylene through the Molecular Crossâ€Section Size Differentiation in Gallateâ€based Metalâ€“Organic Frameworks. Angewandte Chemie, 2018, 130, 16252-16257.	2.0	72
26	Engineering the Pore Size of Pillared-Layer Coordination Polymers Enables Highly Efficient Adsorption Separation of Acetylene from Ethylene. ACS Applied Materials & Interfaces, 2019, 11, 28197-28204.	8.0	71
27	Fabrication of plasmonic Auâ€“Pd alloy nanoparticles for photocatalytic Suzukiâ€“Miyaura reactions under ambient conditions. Nanoscale, 2017, 9, 6026-6032.	5.6	70
28	M-Gallate (M = Ni, Co) Metalâ€“Organic Framework-Derived Ni/C and Bimetallic Niâ€“Co/C Catalysts for Lignin Conversion into Monophenols. ACS Sustainable Chemistry and Engineering, 2019, 7, 12955-12963.	6.7	69
29	Insight into the catalytic properties and applications of metalâ€“organic frameworks in the cyanosilylation of aldehydes. RSC Advances, 2015, 5, 79355-79360.	3.6	65
30	Efficient adsorption separation of acetylene and ethylene via supported ionic liquid on metalâ€organic framework. AICHE Journal, 2017, 63, 2165-2175.	3.6	62
31	Tunable Confined Aliphatic Pore Environment in Robust Metalâ€“Organic Frameworks for Efficient Separation of Gases with a Similar Structure. Journal of the American Chemical Society, 2022, 144, 14322-14329.	13.7	56
32	Synthesis of anion-functionalized mesoporous poly(ionic liquid)s via a microphase separation-hypercrosslinking strategy: highly efficient adsorbents for bioactive molecules. Journal of Materials Chemistry A, 2017, 5, 14114-14123.	10.3	54
33	CoNi Alloy Nanoparticles Embedded in Metalâ€“Organic Frameworkâ€Derived Carbon for the Highly Efficient Separation of Xenon and Krypton via a Chargeâ€Transfer Effect. Angewandte Chemie - International Edition, 2021, 60, 2431-2438.	13.8	53
34	Performance Comparison of Metalâ€“Organic Framework Extrudates and Commercial Zeolite for Ethylene/Ethane Separation. Industrial & Engineering Chemistry Research, 2018, 57, 1645-1654.	3.7	45
35	Supramolecular Metalâ€“Organic Framework for CO₂/CH₄ and CO₂/N₂ Separation. Industrial & Engineering Chemistry Research, 2020, 59, 7866-7874.	3.7	42
36	Adsorptive Separation of Geometric Isomers of 2-Butene on Gallate-Based Metalâ€“Organic Frameworks. ACS Applied Materials & Interfaces, 2020, 12, 9609-9616.	8.0	38

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37	Self-assembly induced solubilization of drug-like molecules in nanostructured ionic liquids. Chemical Communications, 2015, 51, 13170-13173.	4.1	37
38	Functionalized Metalâ€“Organic Framework as a Biomimetic Heterogeneous Catalyst for Transfer Hydrogenation of Imines. ACS Applied Materials & Interfaces, 2017, 9, 9772-9777.	8.0	37
39	Hydrogenâ€Bonded Metalâ€“Nucleobase Frameworks for Efficient Separation of Xenon and Krypton. Angewandte Chemie - International Edition, 2022, 61, .	13.8	36
40	Calcium-Based Metalâ€“Organic Framework for Simultaneous Capture of Trace Propyne and Propadiene from Propylene. ACS Applied Materials & Interfaces, 2020, 12, 17147-17154.	8.0	34
41	Shellâ€like Xenon Nanoâ€Traps within Angular Anionâ€Pillared Layered Porous Materials for Boosting Xe/Kr Separation. Angewandte Chemie - International Edition, 2022, 61, .	13.8	34
42	Nonaqueous Lyotropic Ionic Liquid Crystals: Preparation, Characterization, and Application in Extraction. Chemistry - A European Journal, 2015, 21, 9150-9156.	3.3	29
43	Deciphering a Reaction Network for the Switchable Production of Tetrahydroquinoline or Quinoline with MOF-Supported Pd Tandem Catalysts. ACS Catalysis, 2020, 10, 5707-5714.	11.2	29
44	Adsorptive Separation of Acetylene from Ethylene in Isostructural Gallateâ€Based Metalâ€“Organic Frameworks. Chemistry - A European Journal, 2019, 25, 15516-15524.	3.3	27
45	Facile Fabrication of Hierarchical MOFâ€“Metal Nanoparticle Tandem Catalysts for the Synthesis of Bioactive Molecules. ACS Applied Materials & Interfaces, 2020, 12, 23002-23009.	8.0	27
46	Long-Chain Carboxylate Ionic Liquids Combining High Solubility and Low Viscosity for Light Hydrocarbon Separations. Industrial & Engineering Chemistry Research, 2017, 56, 7336-7344.	3.7	25
47	Separation of perfluorinated electron specialty gases on microporous carbon adsorbents with record selectivity. Separation and Purification Technology, 2022, 292, 121059.	7.9	25
48	Turnâ€On Photocatalysis: Creating Loneâ€Pair Donorâ€“Acceptor Bonds in Organic Photosensitizer to Enhance Intersystem Crossing. Advanced Science, 2021, 8, e2100631.	11.2	24
49	Pd-Ni nanoparticles supported on titanium oxide as effective catalysts for Suzuki-Miyaura coupling reactions. Frontiers of Chemical Science and Engineering, 2018, 12, 24-31.	4.4	23
50	EGFR TKIs impair lysosome-dependent degradation of SQSTM1 to compromise the effectiveness in lung cancer. Signal Transduction and Targeted Therapy, 2019, 4, 25.	17.1	23
51	Microporous Carbon Adsorbents Prepared by Activating Reagent-Free Pyrolysis for Upgrading Low-Quality Natural Gas. ACS Sustainable Chemistry and Engineering, 2020, 8, 977-985.	6.7	23
52	A pore-engineered metal-organic framework with mixed ligands enabling highly efficient separation of hexane isomers for gasoline upgrading. Separation and Purification Technology, 2021, 268, 118646.	7.9	23
53	Carbon dioxide capture in gallate-based metal-organic frameworks. Separation and Purification Technology, 2022, 292, 121031.	7.9	23
54	Allylic oxidation of olefins with a manganese-based metalâ€“organic framework. Green Chemistry, 2019, 21, 3629-3636.	9.0	22

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55	Porous Hydrogen-Bonded Frameworks Assembled from Metal-Nucleobase Entities for Xe/Kr Separation. CCS Chemistry, 2022, 4, 381-388.	7.8	22
56	Thioureaâ€Catalyzed Crossâ€Dehydrogenative Coupling of C(sp³)â€“H with Diethyl Phosphite. European Journal of Organic Chemistry, 2016, 2016, 3939-3942.	2.4	18
57	Metal nanoparticles in ionic liquidâ€cosolvent biphasic systems as active catalysts for acetylene hydrochlorination. AIChE Journal, 2018, 64, 2536-2544.	3.6	18
58	MIL-101(Cr) as a synergistic catalyst for the reduction of imines with trichlorosilane. Molecular Catalysis, 2018, 445, 163-169.	2.0	18
59	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
60	Molecular Sieving of Propylene from Propane in Metalâ€“Organic Framework-Derived Ultramicroporous Carbon Adsorbents. ACS Applied Materials & Interfaces, 2022, 14, 30443-30453.	8.0	18
61	Thiourea as an efficient organocatalyst for the transfer hydrogenation of 2-substituted quinoline derivatives. RSC Advances, 2014, 4, 42566-42568.	3.6	17
62	Mechanistic studies of thiourea-catalyzed cross-dehydrogenative C-P and C-C coupling reactions and their further applications. Tetrahedron, 2017, 73, 3118-3124.	1.9	17
63	Hyperbranched polyethylene-supported <scp>l</scp>-proline: a highly selective and recyclable organocatalyst for asymmetric aldol reactions. Catalysis Science and Technology, 2015, 5, 3798-3805.	4.1	16
64	1-Ethyl-3-methylimidazolium acetate as a highly efficient organocatalyst for cyanosilylation of carbonyl compounds with trimethylsilyl cyanide. Scientific Reports, 2017, 7, 42699.	3.3	16
65	Cyclopentadiene-based BrÃ¸nsted acid as a new generation of organocatalyst for transfer hydrogenation of 2-substituted quinoline derivatives. Tetrahedron Letters, 2017, 58, 2050-2053.	1.4	16
66	A robust ethane-trapping metal-organic framework for efficient purification of ethylene. Science China Chemistry, 2021, 64, 666-672.	8.2	16
67	Room-Temperature Tandem Condensation-Hydrogenation Catalyzed by Porous C3N4 Nanosheet-Supported Pd Nanoparticles. ACS Sustainable Chemistry and Engineering, 2019, 7, 3356-3363.	6.7	15
68	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
69	Cooperative Interplay of BrÃ¸nsted Acid and Lewis Acid Sites in MIL-101(Cr) for Cross-Dehydrogenative Coupling of Câ€“H Bonds. ACS Applied Materials & Interfaces, 2021, 13, 10845-10854.	8.0	14
70	Thiourea-Catalyzed Transfer Hydrogenation of Aldimines. Synlett, 2007, 2007, 1455-1457.	1.8	13
71	Gallate-Based Metalâ€“Organic Frameworks for Highly Efficient Removal of Trace Propyne from Propylene. Industrial & Engineering Chemistry Research, 2020, 59, 13716-13723.	3.7	13
72	Double-Accessible Open Metal Sites in Metalâ€“Organic Frameworks with Suitable Pore Size for Efficient Xe/Kr Separation. Industrial & Engineering Chemistry Research, 2022, 61, 7361-7369.	3.7	12

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73	CoNi Alloy Nanoparticles Embedded in Metalâ€"Organic Frameworkâ€Derived Carbon for the Highly Efficient Separation of Xenon and Krypton via a Chargeâ€Transfer Effect. Angewandte Chemie, 2021, 133, 2461-2468.	2.0	11
74	è¶…å¾®å¯"ç¢³å¸é™„å‰‚å®žçŽ°å©ç„¶æ°"ä¸ä¸™çƒ·å'Œä¹™çƒ·çš„é«˜é€‰æ‹©æ€§æå–. Science China Materials, 2023, 66, 319-326.	6.8	11
75	Crystal Structure Transformation in Hydrogenâ€bonded Organic Frameworks via Ion Exchange. Chemistry - an Asian Journal, 2021, 16, 3978-3984.	3.3	10
76	Organocatalytic Biomimetic Reduction of Conjugated Nitroalkenes. Synthesis, 2007, 2007, 2559-2564.	2.3	9
77	Adsorption of 2-Butyl-2-ethyl-1,3-propanediol from Aqueous Solutions on Activated Carbon: Salt-Out Effect on Equilibrium, Kinetics, and Dynamics. Industrial & Engineering Chemistry Research, 2014, 53, 8592-8598.	3.7	9
78	Progress in the Enantioseparation of Î²-Blockers by Chromatographic Methods. Molecules, 2021, 26, 468.	3.8	9
79	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. Green Chemistry, 2014, 16, 102-107.	9.0	8
80	Selective separation of zwitterionic phospholipid homologues with functional ionic liquids as extractants. RSC Advances, 2015, 5, 77581-77588.	3.6	8
81	Organocatalytic Approach for Transfer Hydrogenation of Quinolines, Benzoxazines and Benzothiazines. Catalysis Letters, 2017, 147, 1673-1678.	2.6	8
82	Visible-light-mediated direct access to Î±-ketoamides by dealkylative amidation of tertiary amines with benzoylformic acids. Tetrahedron Letters, 2019, 60, 151191.	1.4	8
83	New catalytic effect of thiourea on the oxidative cyanation of N-aryltetrahydroisoquinolines. Tetrahedron Letters, 2019, 60, 348-351.	1.4	8
84	Separation of highly unsaturated fatty acid methyl esters from model bio-oils with ionic liquid-cosolvent as extractants. RSC Advances, 2016, 6, 60709-60716.	3.6	7
85	Organocatalyzed cross-dehydrogenative coupling for C(sp3)â€"O bonds formation: a rapid access to Î±-aminoxyl isochromans. Catalysis Letters, 2019, 149, 574-579.	2.6	7
86	The Future of Biomass Utilization Technologies Special Issue Editorial. Industrial & Engineering Chemistry Research, 2020, 59, 16895-16898.	3.7	7
87	Highly efficient and anti-poisoning single-atom cobalt catalyst for selective hydrogenation of nitroarenes. Nano Research, 2022, 15, 10006-10013.	10.4	7
88	Asymmetric Transfer Hydrogenation of Ketimines with Trichlorosilane: Structural Studies. Synthesis, 2009, 2009, 1531-1544.	2.3	6
89	Visible-Light-Mediated Dealkylative Coupling of Trialkylamines with Dialkyl Acetylenedicarboxylates. Synlett, 2017, 28, 1116-1120.	1.8	6
90	Efficient oxidative N -dealkylative addition of trialkylamines to dimethyl acetylenedicarboxylate using BrCCl 3 as the terminal oxidant. Tetrahedron Letters, 2017, 58, 2707-2710.	1.4	6

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91	Highly efficient separation of strongly hydrophilic structurally related compounds by hydrophobic ionic solutions. AICHE Journal, 2018, 64, 1373-1382.	3.6	6
92	MIL-101(Cr)-SO₃H Catalyzed Transfer Hydrogenation of 2-Substituted Quinoline Derivatives. Chinese Journal of Organic Chemistry, 2019, 39, 1681.	1.3	4
93	Hydrogenâ€Bonded Metalâ€Nucleobase Frameworks for Efficient Separation of Xenon and Krypton. Angewandte Chemie, 0, , .	2.0	4
94	Gas Purification: Ultrahigh and Selective SO₂ Uptake in Inorganic Anionâ€Pillared Hybrid Porous Materials (Adv. Mater. 28/2017). Advanced Materials, 2017, 29, .	21.0	3
95	Gas Separation: A Singleâ€Molecule Propyne Trap: Highly Efficient Removal of Propyne from Propylene with Anionâ€Pillared Ultramicroporous Materials (Adv. Mater. 10/2018). Advanced Materials, 2018, 30, 1870068.	21.0	3
96	Determination and correlation of the solubility of L-arabinose and D-galactose in binary solvent mixtures from 278.15 to 333.15 K. Korean Journal of Chemical Engineering, 2018, 35, 2043-2051.	2.7	3
97	Shellâ€like Xenon Nanoâ€Traps within Angular Anionâ€Pillared Layered Porous Materials for Boosting Xe/Kr Separation. Angewandte Chemie, 2022, 134, .	2.0	3
98	CO₂-Assisted Back-Extraction Method for Ionic Liquid Biphasic Systems. ACS Sustainable Chemistry and Engineering, 2016, 4, 4403-4410.	6.7	2
99	Adsorption separation of raffinose from sucrose by activated carbon: Equilibrium, kinetics and dynamic breakthrough. Separation Science and Technology, 2016, 51, 1636-1644.	2.5	2
100	Titelbild: Hydrogenâ€Bonded Metalâ€“Nucleobase Frameworks for Efficient Separation of Xenon and Krypton (Angew. Chem. 11/2022). Angewandte Chemie, 2022, 134, .	2.0	2
101	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
102	Adsorption behavior of Î±-tocopheryl succinate and Î±-tocopheryl polyethylene glycol succinate onto weakly basic anion exchange resins. Korean Journal of Chemical Engineering, 2015, 32, 511-520.	2.7	1
103	Heterogeneous synthesis of tetrahydroquinoline derivatives via cascade Povarov reaction catalyzed by sulfonic acid functionalized metalâ€organic frameworks. Nano Select, 2021, 2, 1968.	3.7	1
104	Tandem synthesis of tetrahydroquinolines and identification of the reaction network by operando NMR. Catalysis Science and Technology, 2021, 11, 4332-4341.	4.1	1
105	Shapeâ€size sieving of transâ€•and <scp>cisâ€piperylene</scp> isomers with <scp>gallateâ€based metalâ€organic</scp> frameworks. AICHE Journal, 2022, 68, .	3.6	1
106	New Insights into CO2 Absorption Mechanisms with Amino-Acid Ionic Liquids. ChemSusChem, 2016, 9, 765-765.	6.8	0