Junfeng Bai

List of Publications by Year
in descending order

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96 papers	6,465 citations	53794 45 h-index	62596 80 g-index
100 all docs	100 docs citations	100 times ranked	4903 citing authors

#	Article	IF	Citations
1	Enhanced CO₂ Binding Affinity of a High-Uptake rht-Type Metalâ˜Organic Framework Decorated with Acylamide Groups. Journal of the American Chemical Society, 2011, 133, 748-751.	13.7	722
2	Synthesis of Inorganic Fullerene-Like Molecules. Science, 2003, 300, 781-783.	12.6	343
3	Fine-Tuning Pore Size by Shifting Coordination Sites of Ligands and Surface Polarization of Metalâ€“Organic Frameworks To Sharply Enhance the Selectivity for CO₂. Journal of the American Chemical Society, 2013, 135, 562-565.	13.7	329
4	Temperature Controlled Reversible Change of the Coordination Modes of the Highly Symmetrical Multitopic Ligand To Construct Coordination Assemblies: Experimental and Theoretical Studies. Journal of the American Chemical Society, 2008, 130, 7778-7779.	13.7	254
5	A new MOF-505 analog exhibiting high acetylene storage. Chemical Communications, 2009, , 7551.	4.1	231
6	Amide-functionalized metalâ€“organic frameworks: Syntheses, structures and improved gas storage and separation properties. Coordination Chemistry Reviews, 2019, 378, 2-16.	18.8	213
7	High and selective CO2 capture by two mesoporous acylamide-functionalized rht-type metalâ€“organic frameworks. Chemical Communications, 2012, 48, 7025.	4.1	174
8	Highly selective CO2 capture of an agw-type metalâ€“organic framework with inserted amides: experimental and theoretical studies. Chemical Communications, 2012, 48, 3058.	4.1	166
9	Unprecedented interweaving of single-helical and unequal double-helical chains into chiral metalâ€“organic open frameworks with multiwalled tubular structures. Chemical Communications, 2007, , 2293-2295.	4.1	142
10	Pentaphosphaferrocene as a Linking Unit for the Formation of One- and Two-Dimensional Polymers. Angewandte Chemie - International Edition, 2002, 41, 1737-1740.	13.8	141
11	Finely tuning MOFs towards high performance in C₂H₂ storage: synthesis and properties of a new MOF-505 analogue with an inserted amide functional group. Chemical Communications, 2016, 52, 7241-7244.	4.1	131
12	Finely tuning MOFs towards high-performance post-combustion CO₂ capture materials. Chemical Communications, 2016, 52, 443-452.	4.1	131
13	Fine Tuning of MOFâ€505 Analogues To Reduce Lowâ€Pressure Methane Uptake and Enhance Methane Working Capacity. Angewandte Chemie - International Edition, 2017, 56, 11426-11430.	13.8	119
14	Functionalization of Microporous Lanthanide-Based Metalâ€“Organic Frameworks by Dicarboxylate Ligands with Methyl-Substituted Thieno[2,3-b]thiophene Groups: Sensing Activities and Magnetic Properties. Inorganic Chemistry, 2016, 55, 5139-5151.	4.0	117
15	Synthesis, Structure, Water-Induced Reversible Crystal-to-Amorphous Transformation, and Luminescence Properties of Novel Cationic Spacer-Filled 3D Transition Metal Supramolecular Frameworks from N,Nâ€˜,Nâ€˜â€‰â€˜-Tris(carboxymethyl)-1,3,5-benzenetricarboxamide. Crystal Growth and Design, 2007, 7, 890-894.	3.0	111
16	Size-controlled synthesis and magnetic properties of NiFe2O4 hollow nanospheres via a gel-assistant hydrothermal route. Journal of Alloys and Compounds, 2010, 491, L33-L38.	5.5	110
17	Fullerene-Like Nanoballs Formed by Pentaphosphaferrocene and CuBr. European Journal of Inorganic Chemistry, 2005, 2005, 4023-4026.	2.0	102
18	Novel Alternating Ferro-Ferromagnetic Two-Dimensional (4,4) and Photoluminescent Three-Dimensional Interpenetrating PtS-Type Coordination Networks Constructed from a New Flexible Tripodal Ligand as a Four-Connected Node. Crystal Growth and Design, 2007, 7, 747-754.	3.0	102

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19	2D and 3D Cadmium(II) Coordination Polymers from a Flexible Tripodal Ligand of 1,3,5-Tris(carboxymethoxy)benzene and Bidentate Pyridyl-Containing Ligands with Three-, Eight- and Ten-Connected Topologies. European Journal of Inorganic Chemistry, 2006, 2006, 3041-3053.	2.0	99
20	Porous NbO-type metalâ€“organic framework with inserted acylamide groups exhibiting highly selective CO2 capture. CrystEngComm, 2013, 15, 3517.	2.6	99
21	Synthesis, structures and properties of nickel(ii) and cobalt(ii) metalâ€“organic frameworks based on a flexible tricarboxylate ligand H3TTG and different pyridyl-containing ligands. CrystEngComm, 2007, 9, 1084.	2.6	98
22	Higher Symmetry Multinuclear Clusters of Metalâ€“Organic Frameworks for Highly Selective CO₂ Capture. Journal of the American Chemical Society, 2018, 140, 17825-17829.	13.7	98
23	P2-Ligand Complexes as Building Blocks for the Formation of One-Dimensional Polymers This work was supported by the Deutsche Forschungsgemeinschaft and the Fonds der Chemischen Industrie.. Angewandte Chemie - International Edition, 2002, 41, 783.	13.8	90
24	Unprecedented 4264 Topological 2-D Rare-Earth Coordination Polymers from a Flexible Tripodal Acid with Additional Amide Groups. Inorganic Chemistry, 2007, 46, 8451-8453.	4.0	85
25	The Utilization of Amide Groups To Expand and Functionalize Metalâ€“Organic Frameworks Simultaneously. Chemistry - A European Journal, 2016, 22, 6277-6285.	3.3	83
26	New rht-Type Metalâ€“Organic Frameworks Decorated with Acylamide Groups for Efficient Carbon Dioxide Capture and Chemical Fixation from Raw Power Plant Flue Gas. ACS Applied Materials & Interfaces, 2016, 8, 31746-31756.	8.0	81
27	A dual-functional indiumâ€“organic framework towards organic pollutant decontamination via physically selective adsorption and chemical photodegradation. Journal of Materials Chemistry A, 2017, 5, 14182-14189.	10.3	80
28	Preparation of dual-function starch-based flocculants for the simultaneous removal of turbidity and inhibition of Escherichia coli in water. Water Research, 2016, 98, 128-137.	11.3	73
29	Synthesis and Enhanced H₂ Adsorption Properties of a Mesoporous Nanocrystal of MOFâ€5: Controlling Nanoâ€Mesostructures of MOFs To Improve Their H₂ Heat of Adsorption. Chemistry - A European Journal, 2010, 16, 13049-13052.	3.3	69
30	Water Stable Metalâ€“Organic Framework Evolutionally Formed from a Flexible Multidentate Ligand with Acylamide Groups for Selective CO₂ Adsorption. Crystal Growth and Design, 2012, 12, 1081-1084.	3.0	67
31	A Series of Four-Connected Entangled Metalâ€“Organic Frameworks Assembled from Pamoic Acid and Pyridine-Containing Ligands: Interpenetrating, Self-Penetrating, and Supramolecular Isomerism. Crystal Growth and Design, 2012, 12, 79-92.	3.0	66
32	Large-scale synthesis of uniform spinel ferrite nanoparticles from hydrothermal decomposition of trinuclear heterometallic oxo-centered acetate clusters. Materials Letters, 2009, 63, 1099-1101.	2.6	64
33	Assembly of a series of d¹⁰ coordination polymers of pamoic acid through a mixed-ligand synthetic strategy: syntheses, structures and fluorescence properties. CrystEngComm, 2014, 16, 10658-10673.	2.6	64
34	Synthesis, Structure, Luminescence, and Water Induced Reversible Crystal-to-Amorphous Transformation Properties of Lanthanide(III) Benzene-1,4-dioxylacetates with a Three-Dimensional Framework. Crystal Growth and Design, 2006, 6, 1221-1226.	3.0	63
35	Versatile lanthanide coordination assemblies due to the synergistic effect of lanthanide contraction and flexibility of a flexible tricarboxylate ligand. CrystEngComm, 2007, 9, 1051.	2.6	63
36	A nitro-decorated NbO-type metalâ€“organic framework with a highly selective CO₂ uptake and CH₄ storage capacity. CrystEngComm, 2014, 16, 6287-6290.	2.6	61

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37	Temperature-dependent supramolecular isomerism in three zinc coordination polymers with pamoic acid and 1,4-bis(imidazol-1-ylmethyl)-benzene. CrystEngComm, 2011, 13, 5313.	2.6	60
38	Controlling the shifting degree of interpenetrated metalâ€“organic frameworks by modulator and temperature and their hydrogen adsorption properties. Chemical Communications, 2011, 47, 2556.	4.1	56
39	Formation of a Metalâ€“Organic Framework with High Surface Area and Gas Uptake by Breaking Edges Off Truncated Cuboctahedral Cages. Angewandte Chemie - International Edition, 2013, 52, 11282-11285.	13.8	56
40	Hierarchically Micro- and Mesoporous Coordination Polymer Nanostructures with High Adsorption Performance. Crystal Growth and Design, 2010, 10, 2451-2454.	3.0	53
41	Novel symmetrical coralloid Cu 3D superstructures: Solid-state synthesis from a Cu-carboxylate MOF and their in-situ thermal conversion. Journal of Solid State Chemistry, 2009, 182, 2298-2306.	2.9	52
42	Stable Amide-Functionalized Metalâ€“Organic Framework with Highly Selective CO2 Adsorption. Inorganic Chemistry, 2019, 58, 2729-2735.	4.0	51
43	A hierarchical supra-nanostructure of HKUST-1 featuring enhanced H2 adsorption enthalpy and higher mesoporosity. CrystEngComm, 2011, 13, 3314.	2.6	48
44	Positional isomeric and substituent effect on the assemblies of a series of d10 coordination polymers based upon unsymmetric tricarboxylate acids and nitrogen-containing ligands. CrystEngComm, 2013, 15, 5476.	2.6	47
45	Pure-Supramolecular-Linker Approach to Highly Connected Metalâ€“Organic Frameworks for CO₂ Capture. Journal of the American Chemical Society, 2019, 141, 14539-14543.	13.7	47
46	An unprecedented nanoscale trilayered polythreading coordination array hierarchically formed from 2D square grid networks and induced by protonated 1,2-bis(4-pyridyl)ethane. CrystEngComm, 2009, 11, 271-273.	2.6	46
47	Synthesis, structures and properties of alkaline earth metal benzene-1,4-dioxylacetates with three-dimensional hybrid networks. Inorganica Chimica Acta, 2006, 359, 3257-3263.	2.4	45
48	New Reticular Chemistry of the Rod Secondary Building Unit: Synthesis, Structure, and Natural Gas Storage of a Series of Three-Way Rod Amide-Functionalized Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2021, 143, 12202-12211.	13.7	44
49	pH-Controlled change of the coordination modes of the highly symmetrical multitopic ligand and metalâ€“oxygen arrays for constructing coordination assemblies. CrystEngComm, 2010, 12, 49-51.	2.6	43
50	An unprecedented nanoporous and fluorescent supramolecular framework with an SrAl2 topology controllably synthesized from a flexible ditopic acid. Chemical Communications, 2007, , 4416.	4.1	41
51	A multi-dye@MOF composite boosts highly efficient photodegradation of an ultra-stubborn dye reactive blue 21 under visible-light irradiation. Journal of Materials Chemistry A, 2018, 6, 2148-2156.	10.3	40
52	Formation of a mixed-valence Cu(<scp>i</scp>)/Cu(<scp>ii</scp>) metalâ€“organic framework with the full light spectrum and high selectivity of CO₂ photoreduction into CH₄. Chemical Science, 2020, 11, 10143-10148.	7.4	40
53	High H₂ and CH₄ Adsorption Capacity of a Highly Porous (2,3,4)-Connected Metalâ€“Organic Framework. Crystal Growth and Design, 2013, 13, 2252-2255.	3.0	39
54	Luminescent Open-Framework Antiferromagnet â€“ Hydrothermal Syntheses, Structures, and Luminescent and Magnetic Properties of Two Novel Coordination Polymers: [Zn(pdoa)(bipy)]n and {[Mn(pdoa)(bipy)](bipy)}n [pdoa = 2,2â€²-(1,3-phenylenedioxy)bis(acetate); bipy = 4,4â€²-bipyridine]. European Journal of Inorganic Chemistry, 2006, 2006, 3659-3666.	2.0	37

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55	Fine Tuning of MOFâ€505 Analogues To Reduce Lowâ€Pressure Methane Uptake and Enhance Methane Working Capacity. Angewandte Chemie, 2017, 129, 11584-11588.	2.0	33
56	A highly porous agw-type metalâ€“organic framework and its CO2 and H2 adsorption capacity. CrystEngComm, 2013, 15, 9348.	2.6	32
57	Metal-dependent dimensionality in coordination polymers of a semi-rigid dicarboxylate ligand with additional amide groups: Syntheses, structures and luminescent properties. Inorganica Chimica Acta, 2010, 363, 3172-3177.	2.4	31
58	Solvent- and metal-directed lanthanide-organic frameworks based on pamoic acid: observation of slow magnetization relaxation, magnetocaloric effect and luminescent sensing. Science China Chemistry, 2016, 59, 948-958.	8.2	31
59	Fusing High Symmetric Coordination Polyhedrons of Cu6(PIP)4, Cu12(PIP)8, and Cu12(PIP)24 into an Unprecedented Porous MOF: Synthesis, Structure, and Its Remarkable CO2 Selectivity. Crystal Growth and Design, 2013, 13, 24-26.	3.0	29
60	Constructing and finely tuning the CO₂ traps of stable and various-pore-containing MOFs towards highly selective CO₂ capture. Chemical Communications, 2019, 55, 3477-3480.	4.1	29
61	Ligandâ€Conformerâ€Induced Formation of Zirconiumâ€“Organic Framework for Methane Storage and MTO Product Separation. Angewandte Chemie - International Edition, 2021, 60, 16521-16528.	13.8	29
62	Highly thermostable lanthanide(<scp>iii</scp>) MOFs constructed from 4,4â€²,4â€²â€²-s-triazine-2,4,6-triyl-tribenzoate ligand: synthesis, structure, and tunable white-light emission. CrystEngComm, 2016, 18, 7728-7736.	2.6	28
63	Topology diversity and reversible crystal-to-amorphous transformation properties of 3D cobalt coordination polymers from a series of 1D rodlike dipyridyl-containing building blocks and a flexible tripodal acid with additional amidegroups. CrystEngComm, 2010, 12, 70-72.	2.6	27
64	Metal disordering Cu(ii) supramolecular polymers constructed from a tripodal ligand possessing two different functional groups. CrystEngComm, 2007, 9, 228.	2.6	22
65	Synthesis and structure of color tunable and white-light emitting lanthanide metalâ€“organic framework materials constructed from conjugated 1,1â€²-butadiynebenzene-3,3â€²,5,5â€²-tetracarboxylate ligand. RSC Advances, 2016, 6, 103714-103723.	3.6	21
66	A low symmetry cluster meets a low symmetry ligand to sharply boost MOF thermal stability. Chemical Communications, 2020, 56, 11985-11988.	4.1	19
67	A S₄N₄-like [Co₄(Î¼-Cl)₄] based metalâ€“organic framework withsumtopology and selective CO₂uptake. CrystEngComm, 2016, 18, 9003-9006.	2.6	17
68	A Distorted [Mn₂(COO)₄N₂] Cluster Based Metalâ€“Organic Framework with (3,3,6) Topology and Selective Adsorption of CO₂. Crystal Growth and Design, 2017, 17, 2223-2227.	3.0	17
69	Solvents-Dependent Formation of Three MOFs from the Fe₃O Cluster and 3,3â€²,5,5â€²-Diphenyltetracarboxylic Acid and Their Selective CO₂ Adsorption. Inorganic Chemistry, 2019, 58, 13836-13842.	4.0	17
70	A (3,6)-Connected Metalâ€“Organic Framework with pyr Topology and Highly Selective CO₂ Adsorption. Crystal Growth and Design, 2017, 17, 16-18.	3.0	16
71	Single-Crystal Synthesis and Diverse Topologies of Hexanuclear Ce^{IV}-Based Metalâ€“Organic Frameworks. Inorganic Chemistry, 2020, 59, 11233-11237.	4.0	15
72	Formation of a N/O/F-Rich and Rooflike Cluster-Based Highly Stable Cu(I/II)-MOF for Promising Pipeline Natural Gas Upgrading by the Recovery of Individual C₃H₈ and C₂H₆ Gases. ACS Applied Materials & Interfaces, 2021, 13, 40713-40723.	8.0	15

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73	Anion Regulates scu Topological Porous Coordination Polymers into the Acetylene Trap. ACS Applied Materials & Interfaces, 2022, 14, 13550-13559.	8.0	14
74	A supramolecular assembly of {Fe10} molecular wheels with tubular structures. CrystEngComm, 2006, 8, 384.	2.6	13
75	Tuning Open Metal Site-Free ncb Type of Metalâ€“Organic Frameworks for Simultaneously High Gravimetric and Volumetric Methane Storage Working Capacities. ACS Applied Materials & Interfaces, 2021, 13, 44956-44963.	8.0	13
76	Double-Walled Zn₃₆@Zn₁₀₄ Multicomponent Senary Metalâ€“Organic Polyhedral Framework and Its Isoreticular Evolution. Journal of the American Chemical Society, 2021, 143, 17942-17946.	13.7	11
77	Synthesis, structure and high methane storage of pure D6R Yb(Y) nonanuclear cluster-based zeolite-like metalâ€“organic frameworks. Journal of Materials Chemistry A, 2022, 10, 14795-14798.	10.3	11
78	Synthesis, structures, and luminescence of two 2-D microporous metal-organic frameworks in the zinc (cadmium)-dicarboxylate-imidazolate system. Journal of Coordination Chemistry, 2016, 69, 1819-1827.	2.2	10
79	Syntheses, Structures and Sorption Properties of Three Isoreticular Trinuclear Indiumâ€Based Amideâ€Functionalized Metalâ€“Organic Frameworks. Chemistry - an Asian Journal, 2019, 14, 3603-3610.	3.3	9
80	Two New (3,6)-Connected MOFs with eea Topology and High CH₄ Uptake. Crystal Growth and Design, 2016, 16, 6156-6159.	3.0	8
81	Selective CO₂ or CH₄ adsorption of two anionic bcu-MOFs with two different counterions: experimental and simulation studies. Inorganic Chemistry Frontiers, 2020, 7, 4631-4639.	6.0	7
82	Modifying a partial corn-sql layer-based (3,3,3,3,4,4)-c topological MOF by substitution of OH^{â^'} with Cl^{â^'} and its highly selective adsorption of C2 hydrocarbons over CH₄. Dalton Transactions, 2021, 50, 4840-4847.	3.3	7
83	Synthesis, structure and highly selective C₃H₈/CH₄ and C₂H₆/CH₄ adsorption of a (4,8)-c ternary flu-metalâ€“organic framework based upon both [Sc₄O₂(COO)₈] and [Cu₄OCl₆] clusters. CrystEngComm, 2022, 24, 2298-2302.	2.6	6
84	Synthesis, structure, novel topology and reversible crystal-to-amorphous transformation of calcium coordination polymers from a flexible tripodal acid with additional amide groups. Inorganica Chimica Acta, 2012, 383, 305-311.	2.4	5
85	Ligandâ€Conformerâ€Induced Formation of Zirconiumâ€“Organic Framework for Methane Storage and MTO Product Separation. Angewandte Chemie, 2021, 133, 16657-16664.	2.0	5
86	Time-delay analysis of a magnetorheological elastomer actuator for semi-active control. , 2017, , .		4
87	Development and simulation evaluation of a magnetorheological elastomer isolator for transformer vibration control. , 2018, , .		4
88	Molecular Spheres Inspired Self-Assembly of Hydrolytically Stable Mesoporous Zirconium-Based Metalâ€“Organic Frameworks. Crystal Growth and Design, 2020, 20, 8015-8020.	3.0	4
89	Synthesis, crystal structures, and photoluminescence of two novel zinc coordination polymers built from 2,2â€™-(ethyne-1,2-diyl)diterephthalate. Inorganic Chemistry Communication, 2012, 17, 173-176.	3.9	3
90	A porous amide-functionalized pto-type MOF exhibiting selective capture and separation of cationic MB dye. Journal of Coordination Chemistry, 2021, 74, 241-251.	2.2	3

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91	Synthesis, structure and optical limiting properties of a new S-methylated derivative of a nickel dithiolene, bis[2-ethoxycarbonylsulfanyl-1,2-bis (methylthio)-1-ethenethiolato]nickel. Journal of Coordination Chemistry, 2006, 59, 421-427.	2.2	2
92	The Utilization of Amide Groups to Expand and Functionalize Metalâ€Organic Frameworks Simultaneously. Chemistry - A European Journal, 2016, 22, 6129-6129.	3.3	2
93	Crystal Structure of trans-Bis(2-benzamido)oxazoline nickel(II). Analytical Sciences: X-ray Structure Analysis Online, 2006, 22, X119-X120.	0.1	1
94	Crystal Structure of Bis((-)-2-benzamido-4-phenyl-2-oxazoline)copper(II). Analytical Sciences: X-ray Structure Analysis Online, 2006, 22, X153-X154.	0.1	0
95	Crystal Structure of (S)-1-(4-Chlorobenzoyl)-3-(1-hydroxy-3-phenylpropan-2-yl)thiourea. Analytical Sciences: X-ray Structure Analysis Online, 2008, 24, X59-X60.	0.1	0
96	Self-tuning fuzzy control for time-varying excitation vibration isolation system with magnetorheological elastomer actuator. , 2017, , .		0